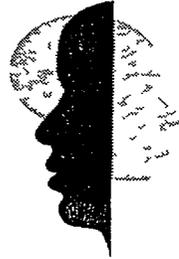

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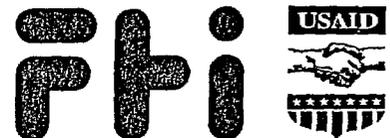
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AIDSCAPE

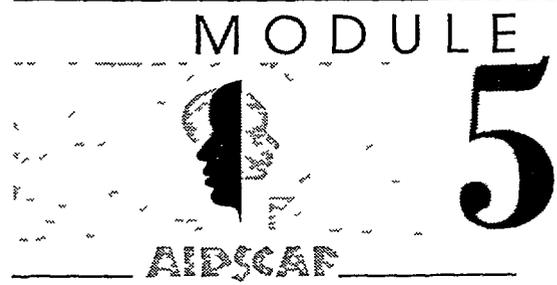
EVALUATION TOOLS

QUALITATIVE METHODS
FOR EVALUATION
RESEARCH IN
HIV/AIDS
PREVENTION
PROGRAMMING

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Jan Hogle
Michael Sweat

Additional support

Tobi Saidel
Joe Amon
Kathi Kotellos
Thomas Rehle
Kathleen Shears
Maryce Ramsey

Graphic Design

Sandy Paul

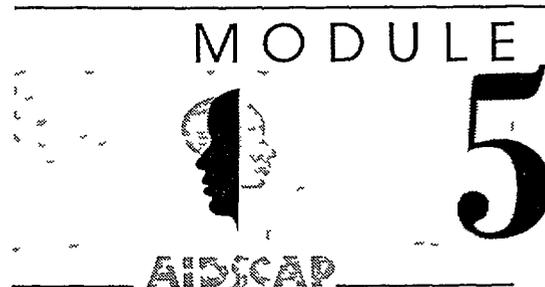


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SECTION



1

AIDSCAP

Introduction

The Modules

The AIDSCAP Evaluation Tools Module series is designed as a practical reference primarily for AIDSCAP project monitors, managers, and field staff who are designing, implementing and evaluating HIV/AIDS prevention programming. The first module, **Introduction to AIDSCAP Evaluation**, explains AIDSCAP's approach to evaluating interventions in priority and associate countries, reviews the types of evaluation, discusses various methodologies in general terms, and outlines types of indicators used to measure progress in AIDSCAP interventions.

The second module, **Conducting Effective Focus Group Discussions**, is a general overview of this data collection technique, which is most commonly used in AIDSCAP projects to complement quantitative evaluation research measuring sexual behavior change in targeted populations. The third module, **A Framework for Incorporating Evaluation into Project Design**, provides a detailed step-by-step methodology for designing an HIV/AIDS intervention and its evaluation plan, including an outline of the logical framework technique for identifying project objectives and their indicators of achievement.

The fourth module, **Application of a Behavioral Surveillance Survey Tool**, describes AIDSCAP's experiences conducting a behavioral surveillance survey in Bangkok, Thailand, and how the methodology has been used to assist in evaluating comprehensive HIV/AIDS and sexually transmitted disease (STD) prevention programming in the city.

This fifth tools module consists of an overview of concepts and methods used in qualitative evaluation research of HIV/AIDS prevention programs. The qualitative data from AIDSCAP's evaluation research enables researchers to understand and interpret the contexts in which HIV prevention programming and sexual behavior change take place. This overview is not intended to be a "how-to" training manual and

should not be a substitute for evaluation research technical assistance. Rather, it should function as an information resource for resident advisors and project managers in making decisions about evaluating HIV/AIDS interventions. In designing sub-project evaluation plans, project managers will want to incorporate appropriate qualitative methods to complement the quantitative approaches used to answer specific evaluation questions. The information in this module should encourage more effective use of qualitative research to assist in evaluating AIDSCAP's prevention programs.

Although AIDSCAP evaluates a variety of types of activities, this module focuses narrowly on qualitative techniques used to evaluate direct interventions with target groups in specific geographic areas—interventions aimed at reducing high-risk sexual behavior among target group members. Thus, the evaluation research referenced here focuses on measuring and assessing sexual behavior change, as well as changes in knowledge and attitudes about transmission and prevention of HIV.

Defining “evaluation”

Before moving on to a discussion of different types of qualitative techniques used in evaluation, it's useful to be clear about definitions. “**Evaluation**” is a word with multiple meanings. AIDSCAP's approach to evaluating HIV/AIDS prevention programming closely matches Michael Quinn Patton's description:

*“I use the term **evaluation** quite broadly to include any effort to increase human effectiveness through systematic data based inquiry. Human beings are engaged in all kinds of efforts to make the world a better place. These efforts include assessing needs, formulating policies, passing laws, delivering programs, managing people and resources, providing therapy, developing communities, changing organizational culture, educating students, intervening in conflicts, and solving problems. In these and other efforts to make the world a better place, the question of **whether the people involved are accomplishing what they want to accomplish** arises. When one examines and judges accomplishments and effectiveness, one is engaged in evaluation. When this examination of effectiveness is conducted systematically and empirically through careful data collection and thoughtful analysis, one is engaged in evaluation research. Evaluation is applied research, or a type of “action science” (Argyris et al 1985). This distinguishes evaluation research from basic academic research. The purpose of applied research and evaluation is to inform action, enhance decision making, and apply knowledge to solve human and societal problems. Applied evaluative research is judged by its usefulness in making human actions and interventions more effective and by its practical utility to decision makers, policymakers and others who have a stake in efforts to improve the world.”*

The key concept highlighted above—knowing whether a project is accomplishing what project stakeholders want to accomplish—should be kept in the forefront of readers' minds. In order to verify achievements, project implementors must be very clear about

the specific objectives of the project. At the project design stage, stakeholders should be able to state clearly how they will know that their objectives have been achieved. Module 3, *A Framework for Incorporating Evaluation into Project Design*, explains these ideas in more detail.

Defining “qualitative”

Since the word “qualitative” is an adjective, it is difficult to define without also describing the nouns the adjective frequently modifies.

- qualitative **data** consist of words describing non-structured or semi-structured observations of reality, resulting in in-depth information of high validity about a relatively small number of cases (i.e., respondents, interviewees, people) from the point of view of the people studied,
- qualitative **research** does not attempt to generalize to larger populations since it usually involves smaller numbers of non-randomly selected respondents,
- qualitative **information** provides insights into attitudes, beliefs, motives, and behaviors of target populations, including in-depth understanding about what people think and how they feel, using the actual words of the people being interviewed or observed,
- qualitative **methodologies** attempt to answer the “why” questions and deal with the emotional and contextual aspects of response, adding “feel,” “texture,” and nuance to quantitative findings, again, from the point of view of the people being studied.

Sometimes it is easier to define “qualitative research” by describing what it is *not*. Qualitative research is any kind of research “that produces findings not arrived at by means of statistical procedures or other means of quantification” (Strauss and Corbin 1990:17). Some of the data may be quantified, but the analysis itself is qualitative. Or the data may be textual (qualitative) but may be coded in such a way that computerized content analysis might produce quantitative or statistical results. However, for our purposes, AIDSCAP uses the term “qualitative” to refer to *nonmathematical analytical procedures* resulting in findings derived from data gathered by a variety of means that might include observations, interview, documents, books, videotapes, and even data that have been quantified for other purposes such as census data (Strauss and Corbin 1990:18).

Objectives of qualitative evaluation research

In his book “Qualitative Evaluation and Research Methods,” Patton discusses the importance of being “clear about purpose” as a first step in the research process. He distinguishes between different types of purposes, or objectives, in conducting qualitative research (1990: 150).

- basic research contributes to fundamental knowledge and theory, with the purpose of understanding and explaining,
- applied research illuminates a societal concern, with the purpose of generating potential solutions to human and societal problems,
- summative evaluation determines program effectiveness,
- formative evaluation improves a program, and
- action research solves a specific problem.

These five different types of research have different standards for judging quality, different expectations and audiences, different reporting and dissemination approaches—in short, different objectives. Clarity about objectives is critical to subsequent decisions about methods and techniques of research ranging from sampling to data collection to analysis, dissemination, and reporting.

While basic researchers try to understand the fundamental nature of some phenomenon, applied researchers seek to understand how to address a particular problem. Once solutions to a particular problem (such as increasing rates of HIV infection) have been identified, policies and programs are then designed and implemented to intervene and bring about change. The objective is that the intervention will cause changes that will help solve the problem. The effectiveness of any given intervention is, as Patton writes, “a matter subject to study.” And this is where evaluation research comes in. “While applied research seeks to understand societal problems and identify potential solutions, evaluation research studies the processes and outcomes aimed at attempted solutions. Evaluators study programs, policies, personnel, organization and products” (Patton 1990: 155). The most effective studies use a variety of data sources and multiple techniques, including various types of qualitative evaluation approaches. According to Patton (1990: 10), there are three basic types of qualitative techniques: in-depth interviews, direct observation, and examining written documents.

SOURCES OF DATA:	CONSISTING OF...
in depth, open ended interviews with individuals or in groups	direct quotations from people about their experiences, opinions, feelings, knowledge,
direct observation	detailed descriptions of people's activities, behaviors, actions, and the interpersonal interactions and organization processes that are part of observable human experience,
written documents	excerpts, quotations, or entire passages from organizational, clinical, or program records, memoranda and correspondence, official publications and reports, personal diaries, open ended written responses to questionnaires and surveys,

AIDSCAP country programs and subprojects have collected data from all the categories listed above while conducting formative, process, outcome and summative evaluation studies. The objectives of specific qualitative evaluation research conducted under the various subprojects and country programs are derived directly from the objectives of the interventions themselves. Most commonly, findings from qualitative evaluation research are triangulated with quantitative knowledge, attitudes, beliefs and practices (KABP) survey results to assess changes in trends in sexual behavior among target groups served by AIDSCAP interventions. Of equal importance are efforts to better understand the implementation process—what works and what doesn't work in terms of designing and conducting interventions to change behavior among members of target groups. Finally, qualitative techniques are especially useful in evaluating capacity building and institutional development among implementing agencies collaborating with AIDSCAP.

Evaluators and implementing agencies working on AIDSCAP projects have used qualitative methods to

- develop, translate, and refine questions on survey instruments through focus groups with target group members in Bangkok while conducting the Behavioral Surveillance Surveys (BSS),
- identify the explanatory categories of sexually transmitted diseases specific to a local culture, using a rapid ethnographic approach called Targeted Intervention Research (TIR), in order to improve design of STD prevention programming, in Senegal, Ethiopia, and South Africa,
- develop appropriate educational messages and materials for commercial sex workers (CSWs) and their clients using focus groups and individual interviews in Calabar, Cross River State, Nigeria,

- collect primary descriptive (ethnographic) data on the transport industry in Papua New Guinea and on the commercial sex industry in the Nepal Terai and in Morogoro, Tanzania, to gain a better understanding of the conditions under which high-risk sexual behavior is occurring in order to develop and refine program strategies,
- explore and explain the findings of a KABP survey with men who have sex with men (MWM) through focus groups in Jamaica,
- assist in end-of-project evaluation of sexual behavior change among target groups reached by implementing agencies in all AIDSCAP country programs through focus groups with target group members,
- describe experiences from the field and identify lessons learned from implementing HIV prevention programs through key informant interviews with project managers in all AIDSCAP countries,
- contribute to understanding and interpreting field-based experiences connected with implementing behavior change interventions in Haiti and Cameroon

More detail on many of these studies appears in Section 2. This module focuses primarily on qualitative interviewing and observation techniques, and not on interpreting secondary data from written documents. As a reminder to readers, the objectives of the AIDSCAP project are to build local capacity to prevent HIV/AIDS by providing funding and technical assistance to government ministries and nongovernmental organizations (NGOs) to design, implement and evaluate prevention programs. By accomplishing this objective, stakeholders can influence individual behavior and social norms, which, over the long term, can succeed in reducing the prevalence of HIV and other STDs that enhance the spread of HIV. These project-wide objectives have been adapted at the country program and subproject level to meet the unique needs of individual local situations, but in general, these objectives are very similar across the countries and regions where AIDSCAP works. The following descriptions of techniques (sometimes called approaches or methodologies) focus on those most commonly used when designing or evaluating AIDSCAP prevention programming.



Tools and techniques for qualitative data collection

During the 1990s, evaluation specialists have engaged in lively debate about the relative merits of qualitative and quantitative methodologies and whether or not the two approaches can complement each other on the same evaluation project (Reichardt and Rallis 1994, Rossi and Freeman 1993 437) Many researchers believe that multiple methodologies used to collect data on the same topic are necessary and can contribute to a more thorough and complete understanding of the issues in question (for example, Glaser and Strauss 1967, Strauss and Corbin 1990, Schensul and Schensul 1990, Miles and Huberman 1994) The rationale for the AIDSCAP Project's mixed methodological approach to evaluating sexual behavior change is simple: sexual behavior is an extraordinarily difficult area of human behavior to research and understand, therefore, using multiple techniques—"triangulation"—to document and interpret reported behaviors will help project managers design better HIV prevention programs to combat this challenging disease Although this module focuses exclusively on qualitative techniques, its focus is not meant to imply that AIDSCAP uses only qualitative methods to evaluate the achievements of its prevention programming in reducing high-risk sexual behavior Evaluation data must be representative as well as in-depth, so all AIDSCAP country programs track trends in behavior change among target populations using quantitative methods

The techniques described in more detail below have been used in AIDSCAP to help assess changes in sexual behavior, knowledge about HIV/AIDS and STDs, beliefs about transmission and prevention, and attitudes towards various aspects of the epidemic The concurrent use of qualitative research to complement KAP surveys provides a comprehensive, in depth understanding of the context in which specific behaviors occur In addition, formative qualitative research conducted at the beginning of interventions has contributed to solid project design and materials development Complementing survey data, qualitative techniques help to track and assess, at key points in time, the shifts in trends in sexual behavior that will lead in the long term to reduced HIV incidence The protocols and instruments for measuring capacity

building of the NGOs and government institutions with whom AIDSCAP works also incorporate qualitative data collection techniques

Participant observation

The major source of qualitative data is what people say in interviews or write in documents. However, major differences often exist between what people say or write and what they actually do. Direct participation in and observation of the phenomenon of interest is likely to yield more accurate data. However, in HIV/AIDS prevention, the phenomenon of interest is sexual behavior, putting certain limits on the level of participation of the researcher or evaluator. Tracking trends in sexual behavior change is a challenging task because of the sensitive subject matter and the non-public nature of the settings in which such behavior occurs. There are, however, other behaviors occurring in the wider context of sexual behavior in which a researcher can participate and observe.

Simply described, participant observation involves unstructured interviews (everyday conversation) and unstructured observation that are recorded in great detail in written field notes. Many anthropologists use the term to mean living in or “hanging around” in the community or culture under study (WHO 1994:28). Participant observation means that the researcher participates in the lives of the people under study while at the same time maintaining enough professional distance to allow adequate observation and recording of data (Fetterman 1989:45). Distinctions are frequently drawn between degrees of participation and degrees of observation—how far researchers go to participate, or how removed they remain in order to observe (Atkinson and Hammersley 1994). For evaluating HIV interventions, participant observation means immersion to some degree in the setting in which interventions occur—physical presence in the environments in which high-risk sexual behavior is likely to occur or to be initiated. Participant observation produces textual descriptions (words, paragraphs, and pages) describing the daily life and events of the study population.

“Classic” participant observation, as defined by anthropologists, means that the ethnographer lives and works for six months to a year or more in the community under study, learning the language and viewing behavior patterns over time. The emphasis on the “long term” is critical in order for the researcher to internalize the beliefs, fears, hopes, and expectations of the people under study. Realistically, such a long term approach to evaluation research is seldom possible, therefore, participant observation in its strict traditional sense is not an approach commonly used by AIDSCAP in evaluating the outcome or impact of HIV prevention programming. Rapid ethnographic techniques that incorporate participant observation are often more practical and still extremely useful, particularly in formative or baseline research conducted in order to design intervention strategies.

Understanding the behavioral context of AIDS interventions involves focused description and systematic note taking. In order to rapidly construct an accurate

descriptive context, researchers must already be part of the culture, know the language, and have an established network of contacts or gatekeepers who can assist in putting a description together. Their application of the technique of participant observation at the design stage of an intervention, or even during a final evaluation, thus builds on their past participatory history with the target population and geographic location in question. In short, participant observation contributes to an accurate (qualitative) context in which one can interpret the meaning of (quantitative) indicators of program achievement.

Sexual networking in Nepal In an AIDSCAP study of sexual networking in urban areas of the Nepal Terai (Cox and Suvedi 1994), Nepali and expatriate researchers found themselves defining “participation” in a special way that allowed them better access to certain kinds of commercial sex workers (CSWs). They had to participate as potential customers of prostitutes.

“ interviews with CSWs were most sensitive. Prostitution is illegal (with the exception of the Badi community) in Nepal and therefore not practiced openly. Thus, exploring the sex industry presented a special challenge. In two sites, for example, the team was impeded from meeting CSWs by local pimps who told their workers that the researchers were actually law enforcement officials working undercover.”

“As a result of these barriers, a major change in the research strategy was implemented. It was decided that in some situations, male interviewers would ‘go undercover,’ posing as clients in order to make contact with CSWs and bring them to their hotel to be interviewed. CSWs were paid for interviews at the same rate that their clients were charged. In addition to facilitating contacts with CSWs, working ‘undercover’ enabled the researchers to gain valuable insight into the context of prostitution in the surveyed areas. Most importantly, working in this way permitted the use of participant observation techniques without disturbing the usual flow of activity. In one site, for example, members of the research team, posing as potential clients of CSWs, undertook lengthy conversations with a pimp over beer and fish at a local restaurant. The restaurant, owned by the pimp and used as a meeting area for clients and CSWs, offered important opportunities to unobtrusively observe interactions between clients and CSWs and between the pimp and her workers.” (Cox and Suvedi 1994: 7-8)

What exactly do participant observers do? Participant observation involves attention to all the elements that are normally needed to tell a story. Those elements (adapted by Bogdewic 1992 from Goetz and LeComte 1984) include the following:

Who is present? How can you describe them? What roles are they playing? How did they become part of the group? Who directs the group?

What is happening? What are people doing and saying? How are they behaving? How and what are they communicating? What body language are they using?

When does this activity occur? How is it related to other activities or events? How long does it last? What makes it the right or wrong time for this to happen?

Where is this happening? How important is the physical surrounding? Can and does this happen elsewhere?

Why is this happening? What precipitated this event or interaction? Are there different perspectives on what is happening? What contributes to things happening in this manner?

How is this activity organized? How are the elements of what is happening related? What rules or norms are evident? How does this activity or group relate to other aspects of the setting?

A participant observer, then, takes notes on all of these aspects during and following time spent in a setting, and writes up the notes into a coherent record of his or her experiences participating in and observing the context under study. How does a researcher define success?

“If you are a successful participant observer you will know when to laugh at what your informants think is funny, and when informants laugh at what you say it will be because you meant it to be a joke.” (Bernard 1988 148)

Participant observation, conducted in a relatively rapid fashion, is a technique useful to evaluators in many of the locations frequented by groups targeted for AIDS prevention. It is the basic technique used in combination with other techniques by researchers conducting rapid ethnographic studies, described in more detail below. Mapping the key locations frequented by target group members is an important complement to other qualitative techniques, especially participant observation.

Mapping

Creating maps of geographic areas in which research is conducted is an important data collection technique frequently used at the beginning of participant observation and ethnographic studies. Maps can show major action settings, social divisions of a community, directions and distances between key sites, and natural features of the landscape such as mountains, rivers, or forests (Pelto and Pelto 1978 193).

Occasionally, lists and maps of locations of key gathering points for target group members, such as brothels, bars, massage parlors, truck stops, hotels, or other locations, may exist (e.g., Bangkok, Thailand). Sources of STD diagnosis and treatment services, condom sales outlets, or community distribution points for contraceptives are additional types of locations for which data may already exist. In most settings, however, there is likely to be no geographic orientation to key points of existing or potential interaction with target group members. In those cases, implementing agencies conducting formative research prior to intervention design or at the begin

ning of implementation should create maps that identify the locations important to the intervention

For example, in a rapid assessment of the transport industry conducted in Papua New Guinea, and described in more detail below, researchers constructed 12 maps of major ports, truck stops, and several ships' interiors. The maps provided a way to visualize the spatial arrangements where sex could be negotiated and performed. They also showed the relationship between the locations of markets, trade stores, and other current or potential outlets for condoms or venues for educational activities and the movements of the transport workers (Jenkins 1994: 4)

The AIDSCAP-supported "Bangkok Fights AIDS" program used mapping for a community mobilization subproject to identify occupational networks and their leaders, including pilot sites and numbers of workers at each site, in six districts. The mapping process required two months and relied on both primary and secondary data. First, aerial maps of the districts were obtained through the design office of the local district administration. The maps with blank streets and structure markings were enlarged and systematically filled out using symbols to represent places of employment, low-income residences, and popular gathering sites. The local post office staff were particularly helpful in this phase, but ultimately the mapping teams had to canvass the district on foot and by motorcycle taxi and other means to verify and update the map entries. The community network inventory for each district enumerated target sites and included information on number of workers per type of site (Supammatas 1993)

Individual in-depth/key informant interviewing

Individual interviewing means that a single researcher interviews one other person, most often referred to as an "informant." Other terms used include interviewee, respondent, source, participant, actor, consultant, or friend. The term "informant" sometimes has a pejorative connotation in English, but is used by qualitative researchers to mean simply "the individual who provides information" (Galchrist 1992: 71)

"Key informants" are respondents who have special knowledge, status, or access to observations denied to the researcher and who are willing to share their knowledge and skills. Because these types of informants tend to be especially observant, reflective, and articulate, they are usually consulted more than once or regularly by the research team. Informants' abilities to describe events and actions may or may not feature analytical interpretation. In other words, some key informants may simply describe things without offering their thoughts on meaning or significance.

The process of "interviewing" can be highly structured, with a precoded questionnaire, or completely unstructured and open ended. Something in between might be a one-page list of topics to be covered in an interview or a set of questions without precoded answers. Interviewers might record the interview and have a tape tran-

scribed later, or they might take notes during the interview and then expand and formalize the notes just after the interview. The kinds of individual interviews that have been conducted in an evaluative context in AIDSCAP tend to be fairly unstructured and open ended, using question topic guides.

The difference between structured and unstructured interviewing is not simply a matter of style, but rather depends on the objectives of the research. Structured survey data can help researchers *explain* a phenomenon while unstructured open-ended data can help them *understand* the phenomenon.

“The former aims at capturing precise data of a codable nature in order to explain behavior within preestablished categories, whereas the latter is used in an attempt to understand the complex behavior of members of society without imposing any a priori categorization that may limit the field of inquiry.” (Fontana and Frey 1994: 366)

AIDSCAP evaluation research has used individual interviewing less often than other types of qualitative techniques. In Bangkok, individual interviews turned out to be a more appropriate methodology than focus group discussions for talking about sexual behavior with young women. Researchers found that young married and single women would not talk in groups about sexual norms among their peers, but that they would talk individually with same-sex interviewers about the same topics and even about their own past sexual history. For the individual interviews about sexual norms, interviewers used the same question topic guide that had been used in focus groups. Certainly the nature of the information obtained changes when substituting one-on-one discussion for group interaction, however, in this case, talking about sexual behavior in a group setting with young women produced no data at all.

Evaluative data collected via individual interviews also can be used to assess the project implementors' opinions about projects' effect on communities, about the successes and challenges of implementation, about lessons learned, and about future directions interventions could or should take. “Project implementors” can include project managers at various levels, community outreach workers, peer health educators, trainers, decision makers, community leaders and other categories of individuals connected with an intervention. Their opinions, observations and interpretations add a qualitative component to quantitative process data that concentrates on people trained, people educated, condoms distributed and sold, and materials produced and distributed.

Question topic guides for these kinds of individual interviews can range from the most simple set of five or six open-ended questions that might take 20 minutes to administer, to a more complex and detailed topic guide of specific implementation related questions. A general and open-ended set of simple questions could include the following:

- 1 How do you feel members of this community have responded to this intervention [wording could be specifically tailored to the intervention]?
- 2 What have been the strengths of this project from your perspective?
- 3 What have been the weaknesses of this project and how could they be addressed in future activities?
- 4 What are the lessons to be learned from this community's experience with the project that the implementing agency can use in future projects? How would you do things differently?
- 5 How do you think this community would respond to a community-based condom distribution and sales program—in other words, do you think it would be a good idea to have condoms available for sale at the village level in this country? How do you think such a program should be implemented?

These five questions were used during an end-of-project evaluation of a USAID-funded intervention with rural Muslim Ugandans in order to collect information from key individuals who had participated as family AIDS workers, trainers, or coordinators in the project. Six members of the evaluation team conducted about four to five interviews each during three weeks of collecting survey data on a sample of the population within the target area. Each interviewer made notes on the comments from respondents, then summarized the notes from interviews into one document. Then the team worked together to discuss the various responses to each question in a group analysis exercise that resulted in a single document summarizing the results. Interviewers made a special effort to preserve short direct quotes from respondents in their notes so that the exact words of individuals could complement the summary statements made about the answers to the questions. Because the topic guide was very short and specific, the interviews did not last a long time and the analysis time was minimal. The questions were very open-ended, allowing respondents to interpret the meaning of the questions in their own way (Kagimu et al 1995).

As part of the 1995 final evaluation of the AIDSCAP/Haiti country program, 42 individual interviews were conducted with a variety of project implementors, including project managers, community outreach workers, peer health educators, and other fieldworkers. The focus of the interviews was identifying “lessons learned” in the area of behavior change communication for HIV/AIDS prevention by collecting information on experiences from the field. The interviews were conducted in either Creole, French, or English by two communication officers, one based in the country office and one from AIDSCAP headquarters, over a two week period. Following that period, the interviews were transcribed, translated into English, and typed into WordPerfect, then imported into the Ethnograph software for analysis of textual data. Experiences described by the respondents illustrating principles, trends, and innovations were coded, analyzed, and reported (Damier and Mahler 1996).

Focus group discussions

Focus groups involve a skilled moderator or facilitator who leads an informal but structured discussion or conducts an interview with a group of six to twelve people. There should also be an assistant moderator who takes notes, operates the tape recorder, and deals with interruptions. Sometimes there are observers. Focus groups are used to gain an in-depth, but not representative, understanding of the attitudes, beliefs, and perceptions of a specific group of people in their own language. Reports of group discussions should contain a wealth of direct quotes from the participants that illustrate the summary points presented by the researchers. The role of the moderator is critical and challenging: a moderator should attempt to maintain the group discussion among the participants rather than between the participants and the moderator, and needs to be skilled in stimulating participation, guiding discussion, and probing for detail and depth (Shedlin and Schreiber 1994:3).

Focus group discussions (FGDs) can be used for types of research where there is a need to explore unknown aspects of experiences, feelings, and beliefs in such a way that the information is useful to researchers and program managers. Focus groups can offer an opportunity to probe people's perspectives on some set of topics, rather than assuming that the researcher already knew what the appropriate categories or issues were. The group setting is particularly useful because the moderator can listen to interaction between people and observe agreement, disagreement, and clarification.

These group discussions can be used in a variety of ways as components of evaluation research. They are commonly used in the planning stages of research and in the design of interventions. Focus group data can inform the content and language of survey questionnaires or can be used at the midpoint of a project to assess participants' feelings about how the project is going or where things need to change. Data from FGDs can be very useful to assist in explaining confusing findings or further clarifying the meaning of statistical results from KABP surveys. They are also useful at the end of projects to assess project implementors' views about project successes, strengths, lessons learned, and how challenges were overcome. Focus groups can be used at the end of projects to assess target group members' opinions about behavior change in their communities and about response to programs. Ideally they should be used along with other techniques and sources of data for cross-validating (triangulating) information.

Moderators can tell that focus groups generally are not working well when the "discussion" becomes a formal series of questions by the moderator and short answers by the participants. The job of moderator is very difficult, requiring the skills of probing and subtle direction without seeming to dominate the discussion. The moderator must also be able to manage overbearing participants and draw shy participants into the conversation.

A key point to be made about helping the discussion flow is that in focus groups, participants are not expected to reveal personal experiences. The emphasis should be on the participants' opinions about what "people like them" are doing or might do,

rather than on the participants' personal behavior (VanLandingham 1994:88). So, for example, instead of posing a question in a group discussion with university students such as "How many people here have ever used a condom?", the moderator might say, "In general, how do students at this university feel about condom use?" The focus is on the participants' opinions about how other students like them feel about condom use. The discussion should reveal something about social norms at the university as well as the language students use to talk about sexual behavior and condoms.

Sensitive topics, such as sexuality and AIDS, can prove quite difficult, or relatively easy, to discuss in focus groups depending on the target group and the cultural setting. In Thailand, young women workers and students were more comfortable talking about sexual behavior (their peers' or their own) in individual, open-ended interviews rather than group settings. CSWs and military personnel, however, did not seem reluctant to discuss these sensitive issues in group settings. Other researchers in Thailand encountered no resistance at all in focus groups with males and females on the topic of male extramarital sexual behavior (VanLandingham et al 1994). Pretesting focus group question topic guides can provide researchers with insight into how their target group members will react to certain lines of questioning.

Choosing participants can be tricky. The idea is to have a homogeneous group according to the characteristics important to the research questions. Generally age, gender, and status are key for any group—participants should be of similar ages, the same gender, and similar status in terms of education, occupation, political status, or authority. In a focus group discussion with STD clinic staff, for example, it would be a mistake to combine counselors, nurses, and the clinic medical director in one group. If the focus group is to be with university students, it probably would not work nearly as well if the group combined sexually active individuals with students who have not yet become sexually active. An FGD convened to explore transport workers' attitudes about condom use would work better if men who used condoms frequently were gathered in one group and other men who never used condoms talked together in a second group. Mixing ethnic groups may or may not work well, depending on the cultural and linguistic situation. HIV serostatus may be an important characteristic, again depending on the objectives of the research. Researchers reporting on a focus group conducted in Tanzania with mixed-gender participants described the group dynamics in the following way:

"In a mixed group, girls rarely spoke and even when they made excellent contributions they were rather apologetic. On the other hand when girls were interviewed alone a lot of useful information was generated." (Sangiwa and Hogan 1995:12)

The level of detail or instruction in the question topic guide depends on the amount of direction and information needed by the moderator. It is very important to avoid recreating a survey questionnaire in a focus group topic guide. Even though a focus group topic guide may be designed to gain an understanding of people's perceptions of their peer's sexual behavior change, the wording of the questions will not be the

same as when individuals are being interviewed about their own behavior. If the moderator is very familiar with the research objectives and the target population, the question guide could simply be a list of topics with reminders about when to probe and key words needed to explore particular issues. Some topic guides may be as simple as five or six or a dozen questions, while others may be much longer. Again, the length depends on the research objectives involved. The topic guide should always be pretested with at least one group to determine whether the length of time is appropriate for the participants.

Focus group data are usually recorded on audio cassette tapes, which must be transcribed (word for word) into a word processor and sometimes translated. The assistant moderator's notes are a very important complement to the transcription because they contain descriptions of nonverbal communication during the session, information on the environment in which the discussion takes place (including timing, distractions, or other descriptive information), and information about the demographic characteristics of the participants. Analyzing these data is very labor intensive and demanding of the principle investigators, whose understanding of the objectives of the research drives the analysis process. Computer-assisted data analysis is helpful for organizing and retrieving textual data, but preparing the text to be used by the software and coding the data is time consuming. The quality of the analysis is enhanced by the use of an "overview grid," or matrix that summarizes a set of themes broken down by group, and also by the use of a team approach to interpreting the transcripts. External sources of information on the issues involved, such as ethnographic material or survey results, should be used to check the plausibility of the focus group findings (Knodel 1994: 100).

Analysis of FGDs should begin immediately after a discussion with a review of the session by the moderator and notetaker, describing the atmosphere and identifying striking statements made by participants. The next step is to listen to taped discussions and complete the notes taken during these discussions. Some researchers recommend typing the notes into a word processor, reviewing the notes using the topic guide questions to organize them, identifying themes and trends, selecting supporting quotations, and interpreting the findings in the written report (Jato et al 1994: 94). Jato also recommends having transcribers act as notetakers and work in pairs so that the transcriptions contain notes about non verbal behaviors as well as the quoted responses to questions.

Focus group discussions are perhaps the most common qualitative methodology used in AIDSCAP projects. Some examples include:

- A Jamaican NGO called JAS (Jamaica AIDS Support) that works with men who have sex with men (MWM) conducted six focus group discussions in two locations in Jamaica with MWM between April and June 1995 in order to further explore some of the issues raised by the results of a 1993 KAP survey. The issues examined included knowledge of AIDS, belief in myths about HIV transmission, condom use, multiple partner sexual networking,

risk perception, and aspects of MWM relationships that contribute to risk of HIV infection (HOPE 1994c)

- The AIDSCAP multicenter counseling and testing efficacy study used five focus group discussions with individuals seeking counseling and testing services as part of formative research for developing questions to be used in survey instruments. The group discussions sought to identify different types of partners and descriptive terms used, identify terminologies used for different sexual relationships and behavior, explore the popular understanding of the concept of randomization, and explore the local/popular construct of being HIV-positive (Sangwa et al 1995)
- The Bangkok Behavioral Surveillance Survey (BSS) used focus group discussions with target group members to review the wording in Thai of the BSS questionnaire, discuss the perceived meanings of the questions, revise the wording, and find out how target group members might respond to the very personal questions about sexual behavior. In particular, the discussions with young married women helped the researchers design an appropriate strategy for obtaining valid information from these women while protecting their sensitivities (Bennett et al 1995)
- In Cross River State, Nigeria, researchers from the Society Against the Spread of AIDS (SASA) conducted 10 focus groups in mid-1995 to assist them in developing culturally appropriate IEC materials that could promote increased condom use and positive behavior change among long-distance transport workers and women and young girls who live and work in areas where drivers stop over. Specifically, the research (which also included individual interviews) was designed to assess HIV/AIDS awareness, determine preferred communication channels, assess factors responsible for use and non-use of condoms, and determine STD health-seeking patterns (Emah 1995b)
- In Haiti in 1995, the AIDSCAP country office hired a consultant firm, Professional Management Services, to conduct 22 focus group discussions among a variety of target groups as part of the end-of-project evaluation process. The group discussions used a story-format topic guide to focus on sexual behavior changes during the past few years among youth and adults in several different locations in Haiti. The consultants produced separate reports for each implementing agency as well as a summary report of the results of all the group discussions (Clerisme 1996)

The FGD technique is discussed in more detail in Module 2 of the AIDSCAP Evaluation Tools Series, "Conducting Effective Focus Group Discussions." There are also a number of good "how to" manuals useful for understanding focus group discussion techniques, especially Krueger 1988, Morgan 1988 and 1993, and Stewart and Shamdasani 1990.

Rapid ethnographic studies

“Ethnography is what those of us who are not anthropologists think anthropologists do. The popular image is captured by the vision of Margaret Mead in her tent, taking notes from the natives.” (Gilchrist 1992: 73)

Traditional ethnography evolved over the past century as a way of describing exotic, remote, and culturally different people and environments. Although ethnographic research is no longer limited to “non-Western” cultures, the original process of ethnography remains that of discovering, describing, and analyzing a group’s culture, way of life, or shared sense of reality (Vidich and Lyman 1994: 25, Fetterman 1989: 11, Gilchrist 1992: 75, Schensul and Schensul 1990: 54). Traditionally, ethnographers conducted fieldwork over extended periods of time—a year or more—and attempted to describe all aspects of a culture as it existed in a small community setting among nonliterate societies in remote locations. Following the year of fieldwork, an anthropologist frequently spent many additional months analyzing data and producing a monograph. Except for the time frame, the methodology is very similar to that of an investigative journalist, but whereas the journalist seeks out unusual events, the ethnographer “writes about the routine, daily lives of people—the more predictable patterns of human thought and behavior” (Fetterman 1989: 11). In addition, the ethnographer approaches fieldwork outfitted with several years of scientific training, an identified problem, a theory or model, a research design, specific data collection techniques, and a specific writing style.

Ethnographers’ primary methodology is participant observation conducted during intensive fieldwork. The findings are then interpreted from a cultural perspective (Wolcott 1980: 59)—the assumption that all human groups evolve a culture. “Culture” is a difficult concept to define precisely, although many anthropologists have spent hundreds of pages trying. One definition describes culture as patterned beliefs and behaviors that constitute “standards for deciding what is, standards for deciding what can be, standards for deciding how one feels about it, standards for deciding what to do about it, and standards for deciding how to go about doing it” (Goodenough 1971: 21–22 cited in Patton 1990: 68).

“Ethnography” is an ambiguous term, suggesting a process as well as a product. Traditionally, the product was a book. When ethnography is used as an applied methodology, the product is usually a report of the research conducted. Ethnography as a process is an attempt by researchers to comprehensively understand the “lifeways” of a human group in a specific geographic setting.

The concept of “rapid ethnography” evolved as a result of the need to make ethnographic data available to program managers in a more timely fashion (Bentley et al 1988, Scrimshaw and Hurtado 1987, Scrimshaw et al 1991). Applied anthropologists have also used the term “rapid assessment procedures” (RAP) to refer to the application of anthropological methods to a rapid understanding of health-related beliefs, behaviors, and practices at the household level (Scrimshaw and Gleason

1992) “Focused ethnographic study (FES) or assessment” is another term that seems to mean the same thing, with the objective of providing information useful for planning intervention programs (G Pelto and Gove 1992, P Pelto 1994) The FES methodology “focuses” or targets the investigation by beginning with a set of questions identified by program managers The definitions of these terms overlap, and this module will not attempt to distinguish fine degrees of definitional differences The methodological focus is essentially the same—that of using mainly qualitative (or anthropological) data-gathering techniques in a relatively short period of time (e g , a few weeks) to describe a cultural setting, usually within specific demographic and geographic boundaries In addition, an ethnographic perspective attempts to interpret the meanings behind observed behaviors, such as responses to disease (Schensul and Schensul 1990) The objectives of such rapid research are to provide contextual information helpful to interventions or programs and to provide that information in a timely manner

Using ethnography in the context of evaluating programs presupposes a desire “to seek expanded and unanticipated outcomes, accept and explore negative outcomes, and recognize that the target population is diverse and unknown and that the program is likely to affect that population in different and not fully predictable ways Ethnography is most useful in examining and explaining differential outcomes and variation in outcomes among individuals or across subgroups within the target population” (Schensul and Schensul 1990 55-56)

Rapid ethnographic research has been particularly useful to AIDSCAP country programs in several locations during formative evaluation stages The Nepal program provides a good example Early in 1993, at the request of the Nepal USAID Mission, an AIDSCAP design team drafted a plan for an HIV/AIDS prevention project focusing on at-risk behavior among commercial sex workers and their clients in Nepal’s Terai Region, the southernmost districts adjacent to Nepal’s border with India Since no data existed on the commercial sex industry in Nepal’s international border areas, a rapid ethnographic assessment was conducted from August to October 1993 to explore the social and behavioral context of commercial sexual interaction in five border cities The results of the study helped refine the design of the overall intervention

The assessment used qualitative and semi-quantitative methodologies to interview a total of 56 CSWs, 100 clients, and 80 potential AIDS educators (health workers, education professionals, NGO staff, pharmacists, and social workers) These interviews were conducted by an assessment team consisting of an expatriate anthropologist with long-term experience in Nepal, a Nepalese physician with long-term experience in HIV/AIDS prevention programming, and male and female field interviewers

Interviews with potential AIDS educators and clients of sex workers were relatively easy to obtain compared to interviews with the sex workers themselves The commercial sex industry in Nepal operates in an “underground” context, public officials continue to underplay the existence and size of the industry Sex workers lead a very mobile lifestyle and tend to be suspicious of researchers Prostitution in Nepal varies

widely by ethnicity, religion, caste, and degree of organization. Prostitution is a social norm and respected profession among the Badi ethnic group, but among non-Badi women, persecution, transience, and isolation characterize the practice of the profession. Levels of knowledge of HIV/AIDS, awareness, and access to and use of condoms differed between Badi and non-Badi sex workers, suggesting a need for different approaches to prevention.

The rapid assessment provided better definition of the population group and helped focus the program design on a comprehensive, mutually reinforcing set of interventions (STD service improvement, condom distribution and use, targeted behavior change communication and outreach education). The research revealed that the commercial sex industry operated in remote areas as well as urban centers, and provided new insights into the organization, lifestyle, and difficulties of Nepali sex workers. The range of variation among geographic locations and ethnic groups was surprisingly extensive.

Perhaps the most important finding resulting from the client research was a mapping technique used by the study's co-principal investigator. During interviews with transport workers, each respondent was asked to draw on a road map of Nepal the preferred locations for commercial sex. The maps identified small rest stops along the major east-west and north-south transport routes leading from India into Nepal. Transport workers preferred remote, highway-based tea shops, restaurants, and lodges as rest and entertainment sites over similar establishments in large urban locations. In Nepal, truck drivers and their assistants say they would rather rest and relax at small roadside locations where there is plenty of space to park and maintain their trucks and they are not bothered by police and others.

Given men's preferences for remote, out-of-the-way locations and sex workers' identification with transient lifestyles, it was determined that Nepal's geographical focus should expand beyond Nepal's major urban centers to include smaller commercial centers, transport bazaars, and small rest stops adjacent to Nepal's major highways.

As the Nepal strategy refined its focus to the nation's primary transport routes, other related factors were also considered, most importantly the start-up of new and large donor initiatives—AmFAR's funding of 17 NGOs in Kathmandu Valley and the far eastern and western highways, and the European Community's plan to develop a public sector STD clinic targeting transport workers along the central region highway. These factors, combined with a more realistic analysis of available project financial, human, and NGO resources, refocused the AIDSCAP/Nepal program from a strategy covering the nation east-to-west, to one focused on the country's primary transport routes leading to and from India, all located in the Central Development Region—a more manageable area covering a road distance of 435 kilometers.

AIDSCAP has developed a specialized methodology for conducting rapid or focused ethnographic methodology—**Targeted Intervention Research (TIR)** (Helitzer-

Allen and Allen 1994, Helitzer-Allen et al 1996)—designed to help STD program managers understand their communities' perspectives on STDs, including HIV/AIDS. The longer-term objectives of improved understanding include more effective and sustainable STD diagnosis, treatment, and prevention services. Like other types of ethnographic research, the TIR uses mainly qualitative methods, but also includes a quantitative survey of to provide data that can also be generalized.

As a specialized type of FES, the TIR is designed to be used without outside technical assistance. It begins with the formation of a technical advisory group (TAG) that includes the STD program manager, someone responsible for the provision of STD services, a local communication expert, and a local social science researcher who supervises fieldwork. Led by the STD program manager, the TAG identifies the critical programmatic questions and concerns, then designs the details of the research, refining the nine draft guides in the TIR manual to suit the specific local situation. The TIR is designed to be conducted over a period of three months, including one month start-up, one month of data collection, and a third month for data analysis and write-up.

The TIR methodology attempts to build consensus among TAG members about local programmatic priorities for STD control and to obtain information about the most common illnesses affecting adults, illnesses affecting the “nether area,” and illnesses transmitted through sexual intercourse. These descriptions of illnesses—“explanatory models”—include information on peoples' perceptions about transmission modes, causes and symptoms along with their timing and mode of onset, severity, and appropriate treatments. Explanatory models are constructed by combining information about an illness from the descriptions of many individuals, including community members and clinic workers, thus triangulating information to increase the validity of the data.



Analysis and dissemination

“Analysis is just an old Greek word that means undoing’ Analysis is no more than the undoing of something already put together, something ready to be undone Picking out things to know and to talk about in fact is the main way in which analysis has always been done Analysis, the undoing of things, picking things apart, is a commonplace worldly procedure of selection” (Rose 1991 cited in The Ethnograph manual, Seidel et al , 1995)

Most texts on qualitative data collection techniques spend a minimum of pages on analysis, interpretation, and reporting of qualitative data There seem to be few clear conventions or ground rules for avoiding bias in the process of reducing mountains of data in the form of hundreds or thousands of pages of text to a reasonable number of pages of description, interpretation, and meaning Decisions about public health programming cannot wait for years while researchers produce carefully thought out, lengthy documents that program managers have no time to read However, speed and brevity further compound the very real concerns about sampling and generalizability of findings, the possibilities of researcher bias, and replicability of analyses that already plague qualitative research

The data: field notes and fieldwork

As Patton has written, “The gathering of field data involves very little glory and an abundance of nose-to-the-grindstone drudgery” (1990 265) Maintaining notebooks full of field notes involves hard work, enormous discipline, and concentration on mundane details of description almost to the point of boredom

“Field notes, then, contain the ongoing data that are being collected They consist of descriptions of what is being experienced and observed, quotations from the people observed, the observer’s feelings and reactions to what is observed, and field generated insights and interpretations The field notes are the fundamental data base of case studies and qualitative research ” (cited in Patton 1990 242)

Field notes are to qualitative research what a set of questionnaires is to survey research. Field notes are the source of the data—description and direct quotations—that support the conclusions and interpretations that will ultimately be presented by the researchers. Even when using a tape recorder, the interviewer must take notes of key phrases, major points made by the respondent, and key words shown in quotation marks that capture the speaker’s own language used. If, for some reason, a tape recorder cannot be used or if it malfunctions, it is even more critical to take detailed notes, especially of actual quotations as often as possible. It’s perfectly acceptable to say to a respondent, “Could you repeat for me exactly what you said so I can write it down word for word. I don’t want to lose that particular quote. Let me read back to you what I have written to make sure it is exactly what you said.” Capturing what people say in their own words is the most important contribution of qualitative research to understanding human behavior.

In summary, qualitative data come from fieldwork in which the researcher or evaluator spends time in the setting under study—whether the setting is a program, an organization, or a community (Patton 1990:10). AIDSCAP settings for HIV prevention programming might include an STD clinic, a brothel, a truck stop, a factory, an antenatal clinic, a youth center, a women’s group, a restaurant, a hotel, a roadside cafe, a university or secondary school, a family planning clinic, a theater, or a marketplace. Within these settings, researchers might participate and observe, talk to people or with groups, take voluminous notes, record conversations or discussions, review documents and records, or even videotape activities.

The raw data of the field notes must then be reduced in quantity to a readable, narrative description organized into major themes and categories and illustrated with case examples and direct quotations from respondents. A summary of the results, either alone or in combination with quantitative results, should be presented to project stakeholders, disseminated with an emphasis on lessons learned, and referenced again during the design of future interventions.

Definitions of “analysis” and other terms

This section of the module is not intended to substitute for the classic texts in the field of qualitative research, but rather should provide project managers some insight into the difficulties inherent in analyzing qualitative data and describe some of the analysis solutions that AIDSCAP staff and consultants have used in recent evaluation research. Analysis of evaluation data should proceed under the direction of someone trained in qualitative data management. We like Miles and Huberman’s (1994:10) definition of “analysis” as “consisting of three concurrent flows of activity: data reduction, data display, and conclusion drawing/verification.”

“Data reduction” means summarizing or coding large amounts of text into smaller amounts of text, and it occurs continuously throughout the evaluation research process. It involves selecting, focusing, simplifying, abstracting, and transforming the

“raw” data of field notes or transcriptions into typed summaries organized around themes or patterns based on the original objectives of the evaluation research. Data reduction continues to occur until the final report is written.

“Data display” is defined as “an organized assembly of information” that allows conclusions to be drawn and actions to be taken (Miles and Huberman 1994: 11). Most frequently, qualitative data is displayed as narrative text, which tends to overload peoples’ information-processing capabilities. Matrices, graphs, networks, and charts can present information in more compact forms that make the data more accessible to program managers.

“Conclusion drawing/verification” refers to the process of deciding what things mean, noting themes, regularities, patterns, and explanations. Conclusion drawing occurs in draft form throughout the entire data collection exercise but eventually becomes more explicit and firm at the point when the “final” report is written. Conclusions must also be verified as analysis proceeds. As researchers try to explain what the data mean, they should continually examine their explanations for plausibility and validity—do their explanations make sense within the context of the study? In the context of AIDSCAP projects, it might be possible to test the validity of conclusions during presentations of preliminary research findings and interpretations to project stakeholders and/or members of target populations. Researchers could incorporate this feedback into a final version of the written report.

There are important differences in the role of the principal investigator conducting qualitative research compared to survey research. As Knodel (1994: 103) explains:

“In survey research, the coding of questionnaires is a routine matter of data processing to be relegated to assistants, and tabulations can be run by a programmer. In contrast, in focus group research, code mapping and overview grid construction are essential parts of the analysis process itself. It is exactly through these time-consuming and somewhat tedious tasks that the researcher comes to understand what the data are revealing. They can only be relegated to an assistant at the cost of detracting from the quality of the analysis.”

In developing a budget for focus group discussions, a sufficient amount of time must be included for analysis by the principle investigator.

These three components of analysis—data reduction, data display and conclusion drawing/verification—need better documentation in the final reports of evaluation research so that readers can better understand how researchers arrive at certain conclusions. Only by understanding just what it is we do during “data analysis” of qualitative data can we delineate more reproducible methods.

Using computers for content analysis of qualitative data

The biases and subjectivity inherent in qualitative data analysis, compounded by humans' inability to process large amounts of information, can be reduced somewhat by using computer software to assist in organizing, sorting, and categorizing textual data. Although computer-organized text may improve the reliability and validity of the analysis, there can be trade-offs in terms of the time and effort required to complete the analysis and final reports. Evaluation activities usually need to produce results quickly to meet various deadlines, so researchers should make a realistic assessment of timing and budget resources before using computer software in qualitative data analysis.

Misconceptions People often associate computerized data analysis with quantitative or statistical approaches. This makes sense given that computers are needed to efficiently process the calculations required for many statistical procedures and for large sample sizes. However, computers are also valuable tools for analyzing qualitative data. As with statistical analysis, rigorous qualitative analysis can be time-consuming, but many of the basic procedures can be streamlined and enhanced through the appropriate use of computers and software designed for content analysis. It is important to recognize that using a computer to assist in conducting qualitative analysis does not somehow render the results "quantitative." The computer simply assists the researcher in organizing the process of coding and interpreting the data. The skill of analysis continues to be a function of the person using the computer. Though a word processor program on a computer can assist a writer in drafting text, it cannot make a poor writer into a Pulitzer Prize winner. Computers can help researchers do routine and repetitive tasks and organize large amounts of data, but they do not change the basic processes of data interpretation.

The following sections review some of the basic concepts and procedures involved in using computers to analyze qualitative data. This review cannot take the place of hands-on experience in conducting content analysis or of a systematic review of the manuals that accompany software for textual data analysis.

What is content analysis? Content analysis is the systematic coding and interpretation of text. The process of content analysis includes developing a plan for collecting the data, designing a coding scheme, coding data, analyzing and interpreting results, and cross-checking for bias and validity. The text analyzed can include such data as literature, transcripts of discussion groups, notes from interviews, official reports (such as AIDSCAP's quarterly narrative reports), or any material that can be typed as text. "Coding" data refers to associating a code word with pieces of the text that represent a certain theme. This allows the analyst to search for the codes rather than the words in the text.

What are the advantages of using computers for content analysis? Using computers to assist with analysis of qualitative data is advantageous because it allows you to (1) be very systematic with the data analysis, (2) search data according to

predefined codes and combinations of codes, (3) use the coding from a second person who analyzed the data to identify biases in your coding, and (4) manage large amounts of text and associated codings

What are the disadvantages and limitations of using computers for content analysis? Some disadvantages of using computers to analyze qualitative data include (1) it is time-consuming to set up and code the data, (2) it may be necessary to learn to use a computer and software, (3) the computer hardware can malfunction, (4) data can be lost due to computer failures, (5) it can be time-consuming to use a computer, and (6) the computer and software are expensive. Most of the hardware and software disadvantages can be easily dealt with through planning, training, and patience. Disadvantages related to cost and time must be weighed against the advantages of using computers for analysis. Clearly for many small projects, especially if you never intend to use the computer approach again, it is best to conduct your analysis manually.

Again, using a computer to assist with analysis still requires skill in qualitative data analysis and some expertise in the subject area. Moreover, planning the process is crucial; the final analysis will only be as sound as the logic that grounds the research. Finally, *interpretation of the findings* is not something that the computer can do for you. As with statistical analysis, it is incumbent on the researcher to carefully interpret the findings, place the analysis in context, and relate findings to theory.

How to control for bias in the data or in the interpretation of the data It is important that findings not be biased by the personal opinions of the researcher. Rather, research findings should be based on an objective interpretation of the data. It can, however, be difficult to analyze qualitative data objectively, since so much is open to interpretation. Using computers to assist in analysis of qualitative data can help reduce bias and identify bias when it does occur. If a systematic plan of analysis is followed, there is less chance for biases in interpreting results. For example, an analyst who finds that the interpretation of the content of a text has few coded responses to substantiate the findings should be suspect of the unbiased nature of the coding. Also, if a second person who codes the same data has different coding patterns (i.e., codes the same passages differently), the analyst should be especially careful in interpreting those particular findings.

Developing a plan of action The research plan helps researchers develop a concise set of activities necessary to complete the research in a timely fashion. The first important set of issues to consider revolves around data collection and is based on the objectives of the research (why the research is being done). In order to plan a timeline and budget for data collection, the research team must be very clear about

- the major research questions,
- the hypotheses connected to the research questions,

- the best way to collect the information needed to answer the research questions,
- how many people or groups to include in the analysis,
- how to separate people into groups,
- how different group configurations will affect the findings,
- the specific questions to be asked of each group

The plan of action should also include details about data collection logistics—interviewer training, pretesting, printing, transport, housing, meals, and supplies. Action plans often do not consider data analysis issues in enough detail. Some important points include

- the concepts that must be coded,
- how many people should code the data,
- how variations in data coding will be resolved, and
- how long it will take to code and analyze the data

These kinds of questions are, of course, not unique to qualitative research but should also be applied to evaluation research using survey techniques or any other quantitative methods.

Once a plan and budget are in place, actual collection of data is the next step. Data collection can take the form of taped discussion groups, analysis of preexisting text, or through note taking during interviews, among other sources. During and after data collection, data management and data reduction are the next major activities.

What are the steps involved in using a computer to code and analyze the data?

Several computer programs are available for use in coding and analyzing data, and all are different. However, using most of the commercially available software packages to assist in conducting content analysis involves a few basic steps. These include

- transcription (and sometimes translation),
- formatting,
- coding data, and
- interpretation of data

Once the first piece of data has been collected (one group discussion or a single interview), it can then be transcribed into computer-readable format (usually ASCII) to be used by the computer program. Occasionally, it will be necessary to translate the

text into another language. Translation should be undertaken carefully — normally with the text translated twice for comparison, or back translated (language to English, French, or Spanish, and back to language) to detect differences in translations. The data are then formatted to be used with the particular software program. Next, the data are systematically coded using a predetermined coding scheme. Note that the coding scheme can, and should, be modified as the coding progresses. Normally you will start with a basic set of issues to code and, as the process of reading the text progresses, you will add new codes to the list based on your reading. Once the data are coded, you use the software together with the coded data to produce interpretations and conclusions.

Again, it is probably best to have a second person also code the data, using the same set of code words, and compare the findings for discrepancies. When discrepancies are found, you should have a system for resolving difference—such as having a third person also read and code the text.

Which software package? Weitzman and Miles (1994) reviewed 22 different software programs for qualitative data analysis that cover a wide range of analysis needs and computer operating systems. They emphasize that computer software is a fast-moving field and that reviews of programs rapidly become out of date as programs are refined and new ones appear. As always, the objectives of the research and the level of analysis needed should dictate the analysts' choice of software. Evaluation researchers may find that "code-and-retrieve" programs are sufficient for the level of analysis required for project evaluation data. These software programs were developed specifically by qualitative researchers and help the analyst divide text into segments or chunks, attach codes to the chunks, and find and display all instances of coded chunks (or combinations of coded chunks) (Miles and Weitzman 1994: 312). Examples of code-and-retrieve programs include ATLAS/ti, HyperQual, Kwalitan, MAX, NUDIST, QUALPRO, and The Ethnograph. A researcher's final choice of a software program depends on his or her computer's operating system (Macintosh or Windows) as well as on the analyst's familiarity with the various programs. The analysis will proceed more quickly if the investigators are using a program they already know well.

“Triangulation” and the role of qualitative research

The concept of “triangulation” is taken from land surveying—being able to identify where you are on a map. By taking bearings on two different landmarks, you can locate yourself at their intersection. The two landmarks and the surveyor become the three points of a triangle. In evaluation research, triangulation can be of four different types (Denzin 1978 cited in Patton 1990 187)

- 1 *data* triangulation—using several data sources in a study,
- 2 *investigator* triangulation—using several different researchers or evaluators,
- 3 *theory* triangulation—using multiple perspectives to interpret a single set of data,
- 4 *methodological* triangulation—using multiple methods to study a single problem or program

Evaluation requires multiple sources of information because

“no single source of information can be trusted to provide a comprehensive perspective on the program. By using a combination of observations, interviewing, and document analysis, the fieldworker is able to use different data sources to validate and cross-check findings. Each type and source of data has strengths and weaknesses. Using a combination of data types increases validity as the strengths of one approach can compensate for the weaknesses of another approach. By using a variety of sources and resources, the evaluator/observer can build on the strengths of each type of data collection while minimizing the weaknesses of any single approach. A multimethod, triangulation approach to fieldwork increases both the validity and the reliability of evaluation data.” (Patton 1990 244-245, Marshall and Rossman 1989 79-111)

While triangulation is ideal, it is also expensive and poses problems for evaluators’ limited budgets, short time frames, and political realities. Nevertheless, most evaluation experts agree that triangulation greatly reduces systematic bias in the data. “Triangulation is a process by which the researcher can guard against the accusation that a study’s findings are simply an artifact of a single method, a single source, or a single investigator’s biases” (Patton 1990 470)

In assessing and measuring behavior change resulting from interventions, AIDSCAP staff have most commonly used KABP survey data and focus group data to compare and contrast perceptions of trends in behavior change. As country programs begin to make the transition from AIDSCAP support to other sources of funding, program managers are faced with the task of self-evaluating achievements in subprojects and in the country program overall. Assessing experiences from the field—“lessons learned”—has involved group interviews with peer health educators and individual interviews with project managers. These qualitative sources of information, con-

trusted and compared with survey data on common behavioral indicators, provides multiple methods as well as multiple interpreters as multidisciplinary teams write the country program and subproject final reports

Interpreting, reporting, and disseminating data results

The definition of the English word “interpret” is “to clarify the meaning of by explaining or restating.” This means that the researcher “clarifies the meaning” of observed behavior or descriptions (data) by restating the observations made or the things that respondents tell the interviewer. The evaluation researcher uses his or her training and expertise to explain and clarify the data for people who have not participated in the data collection experience. “Interpretation” is really an art that requires a degree of sophistication, maturity, and wisdom. “Interpretation” means *explaining* what is happening, whether the events are observed firsthand or described by someone else. Interpretation is part of analysis and goes beyond data description and data reduction.

“Description must be carefully separated from interpretation. Interpretation involves explaining the findings, answering ‘why’ questions, attaching significance to particular results, and putting patterns into an analytic framework. The discipline and rigor of qualitative analysis depend on presenting solid descriptive data, what is often called ‘thick description’ in such a way that others reading the results can understand and draw their own interpretations.” (Patton 1990 375)

“Interpretation means attaching significance to what was found, offering explanations, drawing conclusions, extrapolating lessons, making inferences, building linkages, attaching meanings, imposing order, and dealing with rival explanations, disconfirming cases, and data irregularities as part of testing the viability of an interpretation. All of this is expected—and appropriate—as long as the researcher owns the interpretation and makes clear the difference between description and interpretation.” (Patton 1990 423)

When the evaluation researcher explains and interprets the meaning of information, he or she is doing so from a certain personal perspective and in a certain context. That perspective and its context should be identified at the beginning of the written report in order to enhance the readers’ abilities to understanding the research results.

Since the purpose of evaluation research is making a difference in decision making and programmatic action, a researcher is obliged to report and present the results of his or her data reduction efforts and to share his or her interpretations with project stakeholders. Ideally the evaluator provides stakeholders with description and analysis, verbally and informally, and includes the stakeholders’ reactions as part of the data in the written report. Stakeholders expect evaluators to “confirm what they know that is supported by data, to disabuse them of misconceptions, and to illuminate important things that they didn’t know but should know” (Patton 1990 423).

Public presentation of the results of the **Papua New Guinea Behavioral Risk Assessment** (Jenkins 1994) illustrates the complex interaction of situational realities, funding opportunities, and political climates. In Papua New Guinea, AIDSCAP sponsored a qualitative assessment of behavioral risk for HIV among transport industry workers (truckers, sailors, and dockside workers) to identify potential opportunities for interventions. Specifically, the four-and-a-half-month study described transport workers' high-risk behaviors, identified language used by these workers to talk about sex and behaviors related to risk taking, assessed workers' knowledge, beliefs, and experiences with STDs, HIV/AIDS, and condoms, explored situational and individual determinants of risk-taking behavior, and assessed the structures and values of associated industries with regard to willingness to implement workplace prevention programs.

Fieldwork was conducted over a three and a half month period, following a month for recruitment and training of interviewers. One principal investigator supervised 10 interviewers, who were trained in how to obtain observations, maps, key informant interviews, and personal interviews with transport workers and sex workers in several different sites. The fieldwork produced 101 observations, 18 key informant interviews, 106 personal interviews with industry personnel, three focus group discussions, five journals, and 16 maps.

An important piece of this research involved formal dissemination of results at a luncheon meeting with members of the maritime industry in Port Moresby, and at two workshops for truckers and sailors in Lae. Due to urgent negotiations with landowners and stevedore companies, members of the maritime union did not attend the meeting in Port Moresby. In Lae, the trucking industry was in turmoil at the time the workshop was held, but several representatives from Umi Bridge truck stop were present, along with most of the relevant researchers. The maritime industry workshop was better attended, with representatives from the union and from a stevedore firm that distributes the only socially marketed brand of condoms in PNG.

Despite cooperative attitudes during the course of the study, it was apparent that AIDS prevention was not able to compete with more immediate threats to industry profits. The national government also was not ready to act on AIDS issues because AIDS was still not a visible threat in PNG. However, a representative from AIDAB (Australian International Development Assistance Bureau) attended each workshop, and AIDAB accepted a proposal for a comprehensive intervention for CSWs, truckers, and maritime workers to be integrated into their larger HIV prevention program in PNG. In this case, less than desirable attendance by key representatives at public meetings to discuss research results did not interfere with funding efforts, but could in the future pose problems for program implementation.

Tips on writing up qualitative research results

Writing can be a real struggle for evaluation researchers. The two key pieces of information that guide a report writer are the statement of purpose (the objectives of the research) and a written outline that becomes the table of contents of the report. These two things should be written first and, in fact, may be written even before the research is conducted. Wolcott (1990) provides several practical suggestions for researchers writing up the results of qualitative studies.

How to “keep going” when writing up qualitative research (adapted from Wolcott 1990)

1. Keep focus in mind at all times, but be skeptical about it. Keep an open mind to the possibility that you are not quite “on the mark.” Use as a guiding question, “What is this really a study of?” It is definitely not sufficient to say that the purpose of the focus groups was to complement survey data, and it’s probably not sufficient to say that the purpose of the interviews was to assess changes in sexual behavior. Objectives of evaluation research in AIDSCAP need to be stated in more specific terms.
2. Get rid of data, as you focus progressively and home in on your topic. Indicate in notes or asides what is important and interesting but can be dealt with in another article or paper. AIDSCAP evaluation research generates a great deal of data covering many more areas than just the core indicators of knowledge of prevention methods, numbers of partners, and condom use with nonregular partners. Some of the domains of information (such as intermediate steps on the road from knowledge to behavior change) are important to include in the evaluation research report. Other areas may be best addressed in separate papers or appendices.
3. Don’t get stuck because of data you don’t have or elements you don’t understand or can’t interpret. Indicate that you don’t have it or can’t do it, and move on. It’s always fine to identify areas that need further research.
4. Use concrete examples and direct quotes as often as possible. Don’t include generalized statements such as, “Knowledge of HIV prevention is high among members of this target group.” Knowledge about what aspects of prevention?
5. Write for an audience that does not already know what you’re talking about and who may not know much of anything about your country and culture. Write for an international audience with the longer-term objective of sharing your findings with the international HIV/AIDS/STD prevention community.

Conclusion

The examples of AIDSCAP-supported evaluation research included in this module represent only a few of the many pieces of qualitative research conducted under the project. As this module goes to press, the evaluation unit at AIDSCAP headquarters is creating a database inventory of all AIDSCAP research (qualitative and quantitative) in order to facilitate the process of report retrieval. Each record in the database represents a document and includes fields identifying program area, target group, research methodology, and other descriptive fields, as well as an abstract of key findings. The inventory will give readers an idea of the focus of each report and enable them to request specific types of documents. For further information about AIDSCAP-supported research and the research inventory, please contact

Evaluation Unit
AIDSCAP Project
Family Health International
2101 Wilson Blvd , Suite 700
Arlington, VA 22201
phone 703/516 9779
fax 703/516-9781
email jhogle@fhi.org

For searches on the research inventory, contact the Documentation and Information Management Services (DIMS) at AIDSCAP (email mjohnson@fhi.org)

SECTION



4

AIDSCAP

Appendices

**SUGGESTED OUTLINE FOR AN AIDSCAP QUALITATIVE
RESEARCH REPORT**

**REFERENCES AND RESOURCES FOR QUALITATIVE
EVALUATION RESEARCH**

SUGGESTED OUTLINE FOR AN AIDSCAP QUALITATIVE RESEARCH REPORT

(focus group discussions, key informant interviews, rapid ethnography)

Report Cover

Include title of report, date, AIDSCAP and USAID logos and contract numbers

Title Page

Include title of project, FCO#, country name, authors of the report, implementing agency name(s), AIDSCAP and USAID logos and contract numbers, and the date of the report

Executive Summary

Include summary of objectives, date of data collection, target groups, how respondents were chosen to be interviewed, geographic location of data collection, summary of procedures followed for data collection, bulleted summary of major findings, and bulleted summary of results and recommendations

Table of Contents *(with page numbers)*

List of tables and figures *(with page numbers)*

I Background

Include role of the qualitative research in subproject implementation, relationship to other data collection methods being used, concise description of the context in which the research takes place, map of the relevant geographic area, description of objectives/purpose of the research

II Methods

Include a brief description of the details of the research, i.e., number of focus group discussions, key informant interviews and/or observations, maps produced, methods of selecting participants/respondents, location(s), logistics, dates and other details of data collection, demographics of participants/respondents, details on how respondents were chosen, describe interviewer choice and training, length of time of data collection, quality assurance methods used, problems encountered in conducting research, potential biases, how analysis was done translations, transcription, use of computer software

III Research findings

Present data organized around key questions or main ideas in the interview or on the topic discussion guides, combine raw data and descriptive summaries, use plenty of quotes from transcripts

IV Discussion and interpretation

Describe what the findings mean in the context of that subproject, highlight unexpected findings, discuss potential problems with the data, compare findings to other research, especially quantitative studies that may be closely linked to the qualitative research

V Recommendations

Include bulleted list with recommendations for subproject implementation, designing educational materials, reaching target members, policy implications, redesign of instruments for future research

VI Dissemination Plan

Describe plans for oral presentations to stakeholders, presentations at international meetings and/or publications

APPENDICES

Include copies in English and in language of administration

Moderator's topic guides (for FGDs)

Question topic guides (for key informant interviews)

Screening questionnaire (if used)

Other instruments (e.g., survey instrument that might be used during a rapid ethnographic assessment)

Additional quotes

REFERENCES AND RESOURCES FOR QUALITATIVE EVALUATION RESEARCH

- Agar, M H
1980 The professional stranger An informal introduction to ethnography
New York Academic Press
- AIDSCAP
1992 (FHI) The AIDSCAP technical strategy AIDS Control and
Prevention Project/Family Health International and USAID
- AIDSCAP/Bangkok Comprehensive Program
1993 Community mobilization working paper #1 The community network
diagnosis, June, Bangkok AIDSCAP Asia Regional Office
- Argyris, C , R Putman, and D M Smith
1985 Action science San Francisco Jossey-Bass Inc
- Atkinson, P and M Hammersley
1994 Ethnography and participant observation In Denzin and Lincoln
1994, pp 248 261
- Basch, C E
1987 Focus group interview An underutilized research technique for
improving theory and practice in health education Health Education
Quarterly 14(4) 411-448
- Bennett, T , P Benjarattanaporn, S Mills
1995 Application of a behavioral surveillance survey tool Module 4,
AIDSCAP Evaluation Tools Module Series AIDSCAP/FHI
- Bentley, M E , G H Pelto, W L Straus, D A Schumann, C Adegbola, et al
1988 Rapid ethnographic assessment applications in a diarrhea
management program Social Science & Medicine 27(1) 107 116
- Bogdewic, S
1992 Participant observation In Crabtree and Miller 1992, pp 45 69
- Cox, T and B K Suvedi
1994 Sexual networking in five urban areas in the Nepal Terai AIDS and
STDs Prevention Network, Valley Research Group, Kathmandu,
Nepal AIDSCAP/FHI

- Clerisme, C
 1996 Evaluation qualitative des connaissances, attitudes, et comportements concernant les MST/SIDA en Haiti Synthese globale Professional Management Services, Project ABA-SIDA, AIDSCAP/Haiti, FHI
- Crabtree, B F and W L Miller
 1992 Doing qualitative research Research Methods for Primary Care Volume 3 Newbury Park, California Sage Publications
- Denzin, N K and Y S Lincoln
 1994 Handbook of qualitative research Thousand Oaks, California Sage Publications
- Emah, E J
 1995a Qualitative research for media materials development Containing the spread of HIV/STD among commercial sex workers and their clients in Cross River State Nka Iban Uko (Women of Courage), AIDSCAP/Nigeria, FHI
 1995b Qualitative research for media materials development Prevention of sexual transmission of HIV/AIDS among long distance transport workers in Cross River State Society Against the Spread of AIDS (SASA), AIDSCAP/Nigeria, FHI
- Fetterman, D M
 1989 Ethnography step by step Applied Social Research Methods Series Volume 17 Newbury Park, California Sage Publications
- Fontana, A and J H Frey
 1994 Interviewing the art of science In Denzin and Lincoln 1994, pp 361-376
- Gilchrist, V J
 1992 Key informant interviews In Crabtree and Miller 1992, pp 70-89
- Glaser, B G and A L Strauss
 1967 The discovery of grounded theory Strategies for qualitative research Hawthorne, New York Aldine de Gruyter
- Goodenough, W
 1971 Culture, language and society Reading, Massachusetts Addison-Wesley Longman

- Hedrick, T E
 1994 The quantitative-qualitative debate Possibilities for integration In Reichardt and Rallis 1994, pp 45-52
- Helitzer-Allen, D L and H A Allen
 1994 The manual for targeted intervention research (TIR) on sexually transmitted illnesses with community members Arlington AIDSCAP/FHI
- Helitzer-Allen, D L , H Allen, M L Field and G Dallabetta
 1996 Targeted intervention research on sexually transmitted illnesses Practicing Anthropology 18(3) 20-23
- Hope Enterprises, Ltd
 1994a Sexual decision making and barriers to initiating condom use in main relationships—a female perspective Findings of group discussions held with Jamaican women AIDSCAP and the National HIV/STD Control Program, Jamaica
 1994b Findings of an in-depth study carried out among male STD clinic attenders AIDSCAP, The Association for the Control of Sexually Transmitted Disease (ACOSTRAD), and the National HIV/STD Control Program, Jamaica
 1994c Findings of focus group discussions held with Jamaican men who have sex with men AIDSCAP and the National HIV/STD Control Program, Jamaica
- Jato, M , A van der Straten, O M Kumah and L Tsitsol
 1994 Using focus-group discussions to explore the role of women's groups (tontines) in family planning information dissemination in Yaounde, Cameroon Health Transition Review 4(1) 90-95
- Kagimu M , E Marum, E Wabwire-Mangen, N Nakyanjo, Y Walakira, J Hogle, H Muro, I Kasozi, R Munyagwa, T Wierzba and I Lutalo
 1995 Family AIDS education and prevention through Imams (FAEPTI) project, follow-up evaluation report Islamic Medical Association of Uganda (IMAU), March 1995 World Learning Inc /Kampala
- Knodel, J
 1994 Conducting comparative focus-group research cautionary comments from a coordinator Health Transition Review 4(1) 99-104
- Lettenmaier C , P Langlois, O M Kumah, K Kiragu, M Jato, J Zacharias, A Kols and P T Piotrow
 1994 Focus-group research for family planning lessons learned in sub Saharan Africa Health Transition Review 4(1) 95-99

- Leviton, L C , A M Hegedus and A Kubrin
 1990 Evaluating AIDS prevention contributions of multiple disciplines
 San Francisco Jossey-Bass Inc
- Marshall, C and G Rossman
 1989 Designing qualitative research Newbury Park, California Sage
 Publications
- Miles, M B and A M Huberman
 1994 Qualitative data analysis an expanded sourcebook Second edition
 Thousand Oaks, California Sage Publications
- Miles, M B and E A Weitzman
 1994 Choosing computer programs for qualitative data analysis In Miles
 and Huberman 1994, pp 311-317
- O'Connor, P
 1992 Guidelines on planning and conducting rapid ethnographic research
 Issues program managers need to consider AIDSTECH/FHI
 Unpublished
- Patton, M Q
 1990 Qualitative evaluation and research methods Second edition
 Newbury Park, California Sage Publications
- Pelto, G H and S Gove
 1992 Developing a focused ethnographic study for the WHO acute
 respiratory infection (ARI) control programme In Scrimshaw and
 Gleason 1992, pp 215-225
- Pelto, P J
 1993 Situation Assessment Ethnographic methods in AIDS intervention
 programmes WHO/GPA Draft manual
 1994 Focused ethnographic studies on AIDS/STDs Unpublished
- Pelto, P J and G H Pelto
 1978 Anthropological research The structure of inquiry Cambridge
 University Press
- Reichardt, C S and S F Rallis
 1994 The qualitative-quantitative debate new perspectives New
 Directions for Program Evaluation, Number 61 American
 Evaluation Association San Francisco Jossey-Bass Inc

- Rose, E
 1991 The first book of the world the world undone Boulder, CO The Waiting Room Press
- Rossi, P H and H E Freeman
 1993 Evaluation a systematic approach, Fifth Edition Newbury Park, California Sage Publications
- Sangiwa, G and M Hogan
 1995 Formative research to form a basis for the development of questions for the study instruments, Dar es Salaam, Tanzania, Dec 1994 to Jan 1995 AIDSCAP/GPA HIV Multicenter Counseling and Testing Efficacy Study Tanzania Site Global Program on AIDS/FHI/Center for AIDS Prevention Studies/Muhimbili University College of Health Sciences (MUCHS)
- Schensul, J J and S L Schensul
 1990 Ethnographic evaluation of AIDS prevention programs Better data for better programs In Leviton, Hegedus and Kubrin 1990, pp 51-62
- Scrimshaw, N S and G R Gleason, editors
 1992 Rapid assessment procedures Qualitative methodologies for planning and evaluation of health related programmes Boston International Nutrition Foundation for Developing Countries (INFDC)
- Scrimshaw, S C M , M Carballo, L Ramos, B A Blair
 1991 The AIDS rapid anthropological assessment procedures A tool for health education planning and evaluation Health Education Quarterly 18(1) 111-123
- Scrimshaw, S C M , M Carballo, L Ramos, R G Parker
 1991 HIV/AIDS rapid assessment procedures Boston International Nutrition Foundation for Developing Countries (INFDC) Draft manual
- Seidel, J , S Friese, D C Leonard
 1995 The Ethnograph v4 0 A user's guide Amherst, MA Qualis Research Associates
- Shafritz, L B and A Roberts
 1994 The value of focus-group research in targeting communication strategies an immunization case study Health Transition Review 4(1) 81-85

Shedlin, M G and J M Schreiber

- 1994 Using focus groups in drug abuse and HIV/AIDS research Paper prepared for the National Institute on Drug Abuse (NIDA) Technical Review Qualitative Methods in Drug Abuse and HIV Research Washington, DC

Supammatas, S

- 1993 Community Mobilization Working Paper #1, The Community Network Diagnosis Faculty of Public Health, Mahidol University AIDSCAP/FHI

Weitzman, E A and M B Miles

- 1994 Computer programs for qualitative data analysis Thousand Oaks, California Sage Publications

WHO

- 1994 Qualitative research for health programmes World Health Organization, Division of Mental Health, Geneva

Wolcott, H F

- 1990 Writing up qualitative research Thousand Oaks, California Sage Publications

Valadez, J and M Bamberger, editors

- 1994 Monitoring and evaluating social program in developing countries A handbook for policymakers, managers, and researchers Washington, DC The World Bank, Economic Development Institute

VanLandingham, M , J Knodel, C Saengtienchai and A Pramualratana

- 1994 Aren't sexual issues supposed to be sensitive? Health Transition Review 4(1) 85-90

Vidich, A J and S M Lyman

- 1994 Qualitative methods their history in sociology and anthropology In Denzin and Lincoln 1994, pp 23-59