LESSON 19

RESEARCH DESIGN

A research design is a master plan specifying the methods and procedures for collecting and analyzing the data. It is a strategy or blueprint that plans the action for carrying through the research project data.

A research design involves a series of rational decision-making choices depending upon the various options available to the researchers. Broadly it is composed of different elements like: the purpose of the study, the unit of analysis, time dimension, mode of observation, sampling design, observation tools, data processing, and data analysis. Let us look at each one of these elements.

1. Purpose of the Study

From the perspective of purpose of the study, a research can be exploratory, descriptive, and explanatory (the distinctions we have already discussed). As we have already covered a number of steps in the research process, at this stage it is assumed that we are pretty sure about what we are looking for whereby we have gone much beyond the stage of an exploratory study (all studies have elements of exploration in them).

Beyond the exploratory stage now we are entering into the formal stage of delineating the plan for data collection, data processing, and data analysis. Here our focus is on whether our study is going to be a *descriptive* or *explanatory.* The essential difference between descriptive and explanatory studies lies in their objectives. If the research is concerned with finding out *who, what, where, when, or how much*, then the study is **descriptive.** If it is concerned with learning why – that is how one variable produces changes in another – it is causal. Research on crime as such is descriptive when it measures the types of crimes committed, how often, when, where, and by whom. In a **explanatory study**, we try to explain relationships among variables – for instance, why the crime rate is higher in locality A than in locality B. Every explanatory study in the beginning is likely to be descriptive as well.

Methodological rigor increases as one moves from exploratory study to explanatory study, which may encompass hypothesis testing involving multiple methods of data collection, sophistications in sampling designs, formulation of instruments of data collection, data processing, and data analysis. Since the purpose of the study is likely to determine how rigorous the research design is likely to be, therefore, the researcher would decide very early on about the purpose of his/her study.

Within the explanatory study, researcher may further decide about the type of investigation i.e. causal versus correlational. The researcher must decide whether a causal or correlational study is needed to find an answer to the issue at hand. The former is done when it is necessary to establish a definitive cause-and-effect relationship. If the researcher just wants a mere identification of important factors "associated with" the problem, then a correlational study is called for. Whether the study is basically a correlational or causal will help in deciding about the mode of observation – survey study or an experimental study.

2. Unit of Analysis

The unit of analysis refers to the level of aggregation of the data collected during the subsequent data analysis stage. If, for instance, the problem statement focuses on how to raise the motivational levels of employees in general, then we are interested in individual employees in the organization and would have to find out what we can do to raise their motivation. Here the unit of analysis is the **individual**. We will be looking at the data gathered from each individual and treating each employee's response as an individual data source.

If the researcher is interested in studying two-person interactions, then several two-person groups (also known as dyads) will become the unit of analysis. Analysis of husband-wife interactions in families and

supervisor-subordinate relationship at the work place, teacher-student relationship in the educational institution are good examples of dyads as unit of analysis.

If the problem statement is related to group effectiveness, the unit of analysis would be at group level. In other words, even though we may gather relevant data from all individuals comprising, say six groups, we would aggregate the individual data into group data so as to see the differences among six **groups.** If we compare different departments in the organization, then data analysis will be done at the department level – that is, the individuals in the department will be treated as one unit – and comparisons made treating the department as a unit of analysis.

The research question determines the unit of analysis. Keeping the research question in view, it is necessary to decide on the unit of analysis since the data collection methods, sample size, and even the variables included in the framework may sometimes be determined or guided by the level at which the data are aggregated for analysis.

Units of analysis in a study are typically also the *units of observation*. Thus, to study voting intentions, we would interview (observe) individual voters. Sometimes, however, we "observe" our units of analysis indirectly. For example, we might ask husbands and wives their individual voting intentions, for purpose of distinguishing couples who agree and disagree politically. We might want to find out whether political disagreements tend to cause family disharmony, perhaps. In this case, our unit of analysis would be families, though the *unit of observation* would be the individual wives and husbands.

3. Time Dimension

Do we make the observations more or less at one time or over a long period, former called as cross-sectional studies and the latter as longitudinal studies. While planning the strategy for data collection the time dimension may be an important component.

Cross-Sectional Studies are carried out **o**nce and represent a snapshot of one point in time. Data are collected just once, perhaps over a period of days or weeks or months, in order to answer the research question.

Longitudinal Studies are repeated over an extended period. The advantage of longitudinal studies is that it can track changes over time. For example, the researcher might want to study employees' behavior before and after a change in the top management, so as to know what effects the change accomplished. Here, because data are gathered at two different points in time, the study is not cross-sectional or of the one-shot kind, but is carried longitudinally across a period of time. Such studies, as when data on the dependent variable are gathered at two or more points in time to answer the research question, are called longitudinal. Longitudinal studies can be *panel studies* and *cohort studies* which were discussed earlier.

4. Researcher Control of Variables

In terms of researcher's ability to manipulate variables, we can differentiate between experimental and ex post facto design. In an **experiment**, the researcher attempts to control and/or manipulate the variables in the study. It is enough that we can cause variables to be changed or held constant in keeping with our research objectives. Experimental design is appropriate when one wishes to discover whether certain variables produce effects in other variables. Experimentation provides the most powerful support possible for hypothesis of causation.

Experimental studies can be contrived and non-contrived. Research can be done in the natural environment where work proceeds normally (i.e. in non contrived setting) or in artificial, contrived setting. Correlational studies are invariably conducted in non contrived settings, whereas most rigorous causal studies are done in contrived lab settings. Correlational studies doe in organizations are called

field studies. Studies conducted to establish cause-and-effect relationship using the same natural environment are called **field experiments.** Here the researcher does not interfere with the natural occurrence of events in as much as independent variable is manipulated.

Experiments done to establish cause and effect relationship beyond the possibility of the least doubt require the creation of an artificial, contrived environment in which all the extraneous factor are strictly controlled. Similar subjects are chosen carefully to respond to certain manipulated stimuli. These studies are referred to as **lab experiments**.

With an **ex post facto** design, investigators have no control over the variables in the sense of being able to manipulate them. They can only report what has happened or what is happening. It is important that the researchers using this design not influence the variables; to do so introduces bias. The researcher is limited to holding factors constant by judicious selection of subjects according to strict sampling procedures and by statistical manipulation of findings. Survey research is an example of such study.

5. Choice of Research Design: Mode of Observation

There could be number of ways to collect the data depending upon whether the study is quantitative or qualitative, descriptive or explanatory, cross-sectional or longitudinal, and contrived or non-contrived, the researcher decides about the mode of observation. The modes could be like: survey, experiment, communication analysis (content analysis) field observation, case study, focus group discussion.

6. Sampling Design

The basic idea of sampling is that by selecting some of the elements in population, we may draw conclusions about the entire population. A population element is the subject on which the measurement is being taken. It is the unit of analysis. Sampling has its own advantages and disadvantages. Depending upon the nature of the study the researchers decides about following appropriate type of sampling design.

7. Observation Tools

Observation tool mostly used by social researchers are: questionnaire, interview schedule,
Interview guide, and check list. In the research design, the researcher will specify the tools of data collection along the logic justifying the appropriateness of the selected tool.

8. Field Data Collection

Depending upon the mode of observation, the researcher will outline the procedure for field operations. The researcher will try to look after the questions like: How the data will be collected? Who will be responsible for the collections of data? What training will be imparted to the field functionaries? How will the quality control of data be maintained?

9. Data Processing and Data Analysis

In the research design the researcher is required to tell how the data shall be processed (manually, mechanically), and analysis plans explicated. In case the qualitative data are to be quantifies the procedures should be spelled out. The procedures for the construction of score
Indexes, if any, should be explained.

The research design should also say something about the analysis plan, the use of statistics, and the inferences to be drawn.

Survey Research: An Overview

Surveys require asking people, who are called **respondents**, for information, using either verbal or written questions. Questionnaires or interviews are utilized to collect data on the telephone, face-to-face, and through other communication media. The more formal term **sample survey** emphasizes that the purpose of contacting respondents is to obtain a representative sample of the target population. Thus, a **survey** is defined as a method of gathering **primary data** based on communication with a representative sample of individuals.

Steps in Conducting a Survey

The survey researcher follows a deductive approach. He or she begins with a theoretical or applied research problem and ends with empirical measurement and data analysis. Once a researcher decides that survey is an appropriate method, basic steps in a research project can broadly be divided into six sub-steps.

1. **Develop the hypothesis; decide on type of survey (mail, interview, telephone); write survey questions (decide on response categories, design lay out)**. The researcher develops an instrument – a survey questionnaire or interview schedule – that he or she uses to measure variables. Respondents read the questions themselves and mark answers on a *questionnaire*. An *interview schedule* is a set of questions read to the respondent by an interviewer, who also records the responses. To simplify the discussion, we will use only thee term *questionnaire.*

2. **Plan how to record data; pilot test survey instrument.** When preparing the questionnaire, the researcher thinks ahead to how he or she will record and organize data for analysis. The questionnaire is pilot tested on a small set of respondents similar to those in the final survey.

3. **Decide on target population; get sampling frame; decide on sample size; select the sample.**

4. **Locate respondents; conduct interviews; carefully record data.** The researcher locates sampled respondents in person, by telephone, or by mail. Respondents are given information and instructions on completing the questionnaire or interview.

5. **Enter data into computers; recheck all data; perform statistical analysis on data.**

6. **Describe methods and findings in research report; present findings to others for critique and evaluation.**

LESSON 20

SURVEY RESEARCH

Research Design can be classified by the *approach* used to gather primary data. There are really two alternatives. We can *observe* conditions, behavior, events, people, or processes. Or we can *communicate* with people about various topics, including participants' attitudes, motivations, intentions, and expectations.

The **communication approach** involves surveying people and recording their responses for analysis. The great strength of the survey as a primary data collecting approach is its versatility. What media do we use for communicating with people? The traditional face to face communication (interview) for conducting surveys is still in vogue. Nevertheless, the digital technology is having a profound impact on the society as well as on research. Its greatest impact is on the creation of new forms of communication media.

Human Interactive Media and Electronic Interactive Media

When two people engage in conversation, human interaction takes place. **Human interactive media** are personal forms of communication. One human being directs a message to and interacts with another individual (or a small group). When they think of interviewing, most people envision this type of face-to-face dialogue or a conversation on telephone.

Electronic interactive media allows researchers to reach a large audience, to personalize individual messages, and to interact with members of the audience using digital technology. To a large extent electronic interactive media users are controlled by the users themselves. In the context of surveys, respondents are not passive audience members. They are actively involved in a two-way communication when electronic interactive media are utilized.

The Internet, the medium that is radically altering many organizations' research strategies, provides a prominent example of the new electronic interactive media.

Non-Interactive Media

The traditional questionnaire received by mail and completed by the respondent does not allow a dialogue or exchange of information for immediate feedback. Self-administered questionnaires printed on paper are also non-interactive.

CHOOSING A COMMUNICATION MEDIA

Once the researcher has determined that surveying is the appropriate data collection approach, various means may be used to secure information from individual. A research can conduct a survey by personal interview, telephone, mail, computer, or a combination of these media.

Personal Interviewing

A personal interview (i.e. face to face communication) is a two way conversation initiated by an interviewer to obtain information from a respondent. The differences in the roles of the interviewer and the respondent are pronounced. They are typically strangers, and the interviewer generally controls the topics and patterns of discussion. The consequences of the event are usually insignificant for the respondent. The respondent is asked to provide information and has little hope of receiving any immediate or direct benefit from this cooperation.

Personal interviews may take place in a factory, in a homeowner's doorway, in an executive's office, in a shopping mall, or in other settings.

Advantages of Personal Interviewing:

The face-to-face interaction between interviewer and respondent has several characteristics that help researchers obtain complete and precise information. Personal interviews offer many advantages.

1. The Opportunity for Feedback

Personal interviews allow for feedback. For example, an employee who is reluctant to provide sensitive information about his workplace may be reassured by the interviewer that his answers will be strictly confidential. The interviewer may also provide feedback in clarifying any questions an employee or any other respondent has about the instructions or questions. Circumstances may dictate that at the conclusion of the interview, the respondent be given additional information concerning the purpose of the study (part of debriefing). This is easily accomplished in personal interview.

2. Probing Complex Questions

An important characteristic of personal interview is the opportunity to follow up, by probing. If a respondent's answer is brief or unclear, the researcher may ask for a clearer or more comprehensive explanation. Probing implies the verbal prompts made by the interviewer when the respondent must be motivated to communicate his or her answer more fully. Probing encourages respondents to enlarge on, clarify, or explain answers. Probing becomes all the more important when the questions don't have structured response categories. The complex question that cannot easily be asked in telephone or mail surveys can be handled by skillful interviewers.

3. Length of Interview

If the research objective requires an extremely lengthy questionnaire, personal interviews may be the only alternative. Generally, telephone interviews last fewer than 10 minutes, whereas a personal interview can be much longer, perhaps more than an hour. A rule of thumb for mail questionnaire is that it should not be more than six pages.

4. High Completion Rate

The social interaction between a well-trained interviewer and a respondent in personal interview increases the likelihood that the respondent will answer all items on the questionnaire. The respondent who grows bored with a telephone interview may terminate the interview at his or her discretion simply by hanging up the phone. A respondent's self administration of a mail questionnaire requires more effort. Rather than writing a long explanation, the respondent may fail to complete some of the questions on the self administered questionnaire. This will be an **item non-response** – that is, failure to provide an answer to a question. It is less likely to happen with an experienced interviewer and in a face to face situation.

5. Props and Visual Aids

Interviewing respondents face to face allows an investigator to show them a new product sample, a sketch of proposed office, or some other visual aid. The respondents can even taste samples of different products and can give their evaluations. Such an evaluation cannot be done in telephone interview or mail survey.

6. High Participation Rate

While some people are reluctant to participate in a survey, the presence of an interviewer generally increases the percentages of people willing to complete the interview. Respondents are not required to do any reading or writing – all they have to do is to talk. Most people enjoy sharing information and

insights with friendly and sympathetic interviewers. Certainly, in personal interviews there is a higher rate of participation rate of the respondents compared with mail surveys and telephone interviews.

7. Observation of the Non-Verbal Behavior

In a personal interview, the interviewer can catch the facial expressions, body movements, and, depending upon the goals of the study, the environment of the respondent. Such observations may supplement the verbal information.

8. Non-Literates can participate in Study

Since the respondent has neither to read nor to write, therefore, an illiterate or a functionally illiterate person can also take part in the survey study.

9. Interviewer can Prescreen Respondent

In order to ensure that the respondent fits the sampling criteria, the interviewer can do some prescreening of the respondent. In personal interview the interviewer makes it sure that only the relevant respondent provides the information. In case of mail survey we are not sure who actually filled out the questionnaire, but in personal interview, the interview may be able to have some control over the environment of the information providers. In case there are other people around, he may make an excuse from other because he is interested in the true opinion of the sampled person.

10. CAPI – Computer Assisted Personal Interviewing

With the use of such modern technology the responses of the respondents can be entered into a portable microcomputer to reduce error and cost.

Disadvantages of Personal Interviewing:

1. **High Cost**

Personal interviews are generally more expensive than mail, internet, and telephone surveys. The geographic proximity of respondents, the length of the questionnaire, and the number of people who are non-respondents because they could not be contacted all influence the cost of the personal interviews. The training of the field interviewers, supervision, and other logistical support cost may add up the total cost of the study. People usually estimate the cost of personal interviews is usually 15 times higher than the mail survey

2. **Scarcity of Highly Trained Interviewers**

In case of a big study (especially a sponsored study) there shall be a need of highly trained interviewers, who are not easily available. Using unqualified and untrained interviewers are likely to have a negative effect on the quality of the data and the subsequent generalizations.

3. **Lack of Anonymity of Respondent**

Because the respondent in a personal interview is not anonymous therefore he/she may be reluctant to provide confidential information to another person. Though the interviewer provides all the assurance for the confidentiality of the information (by not asking the name or address) but the mere fact the respondent has been located, therefore he/she may not trust.

4. **Callbacks – a Labor Intensive Work**

When the person selected to be in the sample cannot be contacted on the first visit, a systematic procedure is normally initiated to call back at another time. **Callbacks** or attempts to re-contact individuals selected for the sample are the major means to reducing non-response error. It is a labor intensive work and definitely increases the cost.

5. Interviewer Influence

There is some evidence that the demographic characteristics of the interviewer influence respondents' answers. Respondent's sex, age, and physical appearance can have an effect on the responses of the respondent.

6. Interviewer Bias

Interviewer's personal likings and dis-likings, the environment, and cultural biases can affect the understanding of the responses, its recording, and its interpretation.

7. No Opportunity to Consult

The interview may take place anywhere – place of work, in the shopping mall, at home – the respondent may be unable to consult record, incase he/she has to do so for any specific question.

8. Less Standardized Wording

Despite the fact that the questions have been printed and have a specified order, these questions are read by the interviewer. The interviewers intentionally or unintentionally may not be able to use the standardized wording which may bias the data. Similarly the order of the questions may be altered.

9. Limitations in Respondents' Availability and Accessibility

Some executive officers or VIPs may not be available or accessible to interviewers. Some of them may not be willing to talk to strangers for security reasons.

10. Some Neighborhoods are Difficult to Visit

Just for security reasons some neighborhoods may not allow outsiders to enter the premises. Even the formal permission may be denied because thee residents don't want to contact any strangers.

Door to Door Interviews

These are the personal interviews conducted at respondent's home or place of work. It is likely to provide more representative sample of the population than mail questionnaire. Some people may prefer to give a verbal response rather than in writing. People who do not have telephones, who have unlisted numbers, or who are otherwise difficult to contact may be reached through door to door interviews.

Door to door interview may exclude individuals living in multiple dwelling units with security systems, such as high rise apartment dwellers, or executives who are too busy to grant a personal interview during business hours.

People, who are at home and willing to participate, especially if interviews are conducted in the day time, are somewhat more likely to be stay-at-home "moms" or retired people. These and other variables related to respondents' tendencies to stay at home may affect participation.

Intercept Interviews in Malls and Other High-Traffic Areas

Personal interviews conducted in shopping malls are referred to as mall intercept interviews. Interviewers generally stop and attempt to question shoppers at a central point within the mall or at the entrance. These are low cost. No travel is required to the respondent's home – instead the respondent

comes to the interviewer, and thus many interviews can be conducted quickly. The incidence of refusal is high, however, because individuals may be in a hurry.

In mall intercept interviews the researcher must recognize that he or she should not be looking for representative sample of the total population. Each mall will have its own customer characteristics of customers.

Personal interviews in the shopping mall may be appropriate when demographic factors are not likely to influence the survey's findings or when target group is a special population segment, such as the parents of children of bike-riding age.

LESSON 21

INTERCEPT INTERVIEWS IN MALLS AND OTHER HIGH-TRAFFIC AREAS

Personal interviews conducted in shopping malls are referred to as mall intercept interviews. Interviewers generally stop and attempt to question shoppers at a central point within the mall or at the entrance. These are low cost. No travel is required to the respondent's home – instead the respondent comes to the interviewer, and thus many interviews can be conducted quickly. The incidence of refusal is high, however, because individuals may be in a hurry.

In mall intercept interviews the researcher must recognize that he or she should not be looking for representative sample of the total population. Each mall will have its own customer characteristics of customers.

Personal interviews in the shopping mall may be appropriate when demographic factors are not likely to influence the survey's findings or when target group is a special population segment, such as the parents of children of bike-riding age.

Telephone Interviewing

Telephone interviewing has been a mainstay of commercial survey research. The quality of data obtained by telephone may be comparable to that collected in personal interviews. Respondents may even be more willing to provide detailed and reliable information on a variety of personal topics over the telephone than in personal interviews. Telephone surveys can provide representative samples of general population in most industrialized countries.

Central Location Interviewing

Research agencies and interviewing services typically conduct all telephone interviews from central location. WATS (Wide-Area Telecommunications Service) lines, provided by long distance telephone service at fixed rates, allow interviewers to make unlimited telephone calls throughout the entire country or within a specific geographic area. Such central location interviewing allows firms to hire staffs of professional interviewers and to supervise and control the quality of interviewing more effectively. When telephone interviews are centralized and computerized, the research becomes even more cost-effective.

Computer-Assisted Telephone Interviewing (CATI)

Advances in computer technology allow responses to telephone interviews to be entered directly into a computer in a process known as **computer assisted telephone interviewing (CATI).**Telephone interviewers are seated at computer terminals. A monitor displays the questionnaire, one question at a time, along with pre-coded possible responses to each question. The interviewer reads each question as it is shown on the screen. When the respondent answers, the interviewer enters the response into the computer, and it is automatically stored in the computer's memory when the computer displays the next question on the screen. A computer assisted telephone interviewing requires that answers to the questions be highly structured. A lot of computer programming facilitates telephone interviewing.

The Strengths of Telephone Interviewing:

1. High Speed

The speed of data collection is a major advantage of telephone interviewing. For example, union officials who wish to survey members' attitudes toward a strike may conduct a telephone survey during the last few days of the bargaining process. Whereas data collection with mail or personal interviews

can take several weeks, hundreds of interviews can be conducted literally overnight. When the interviewer enters the respondents' answers directly into a computerized system, data processing can be done even faster.

2. Saves Cost

As the cost of personal interviews continues to increase, telephone interviews are becoming relatively inexpensive. It is estimated the cost of telephone interviewing is less than 25% of the door to door personal interviews.

3. Callbacks

An unanswered call, a busy signal, or a respondent who is not at home requires a callback. Telephone callbacks are substantially easier and less expensive than personal interview callbacks.

4. Can Use Computerized Random Digit Dialing

Use of

5. Expanded Geographic Area Coverage without Increasing the Cost

6. uses fewer but highly Skilled Interviewers

7. Reduced Interviewer Bias

8. Better Access to hard-to-reach respondents through repeated callbacks

In some neighborhoods, people are reluctant to allow stranger to come inside their house, or even stop on the doorstep. The same people, however, may be preferably willing to cooperate with a telephone survey request. Likewise, interviewers may be somewhat reluctant to conduct face-to-face interviews in certain neighborhoods, especially during the evening hours. Telephone interviewing avoids these problems.

9. Use Computer Assisted Telephone Interviewing (CATI)

Responses can be directly entered into computer file to reduce error and cost.

Weaknesses of Telephone Interviewing

1. Absence of Face-to-Face Contact

Telephone interviews are more impersonal than face-to-face interviews. Respondents may answer embarrassing or confidential questions more willingly in a telephone interview than in a personal interview. People may be more comfortable to answer sensitive and threatening questions through mail surveys.

Absence of face-to-face contact can be a liability. The interviewer and the respondent don't see each other what they are doing (Responding still responding when he/she is thinking and not speaking. Has the interviewer finished recording the information)?

2. Response Rate is lower than for Personal Interviews

Some individuals refuse to participate in telephone interviews. Telephone researchers can run into several roadblocks when trying to obtain executives' cooperation at work. Participants find it easier to terminate a phone interview.

3. Lack of Visual Medium

Since visual aids cannot be utilized in telephone interview, research that requires visual material cannot be conducted by phone..

4. Limited Duration

Length of the interview is limited. Respondents who feel they have spent too much time in the interview will simply hang up. (a good rule of thumb is to plan telephone interviews to be approximately 10 minutes long).

5. Many Numbers are unlisted or not working

6. Less Participant Involvement
Telephone surveys can result in less thorough responses, and those interviewed by phone find the experience to be less rewarding than a personal interview. Participants report less rapport with telephone interviewers than with personal interviewers.

7. Distracting Physical Environment

Multiple phones distract the interview situation which may affect the quality of the data.

Self-Administered Questionnaires

The self administered questionnaire has become ubiquitous in modern living. Service evaluations of hotels, restaurants, car dealerships, and transportation providers furnish ready examples. Often a short questionnaire is left to be completed by thee participants in a convenient location or is packed with thee product. Self-administered mail questionnaires are delivered not only through postal services, but also via fax and courier service. Other modalities include computer-delivered and intercept studies.

Mail Questionnaire

A mail survey is a self administered questionnaire sent to respondents through the mail. This paper-and-pencil method has several advantages and disadvantages.

Advantages of Mail Questionnaire

1. Geographic Flexibility

Mail questionnaires can reach a geographically dispersed sample simultaneously and at a relatively low cost because interviewers are not required. Respondents in isolated areas or those who are otherwise difficult to reach (executives) can be contacted more easily by mail.

2. Sample Accessibility

Researchers can contact participants who may otherwise be inaccessible. Some people, such as major corporate executives and physicians, are difficult to reach in person or by phone, as gatekeepers limit access. But the researchers can often access these special participants by mail or computer.

3. Self-Administered Questionnaires save Time

Self-administered questionnaires can be widely distributed to a large number of employees, so organizational problems may be assessed quickly and inexpensively. Questionnaires may be administered during group meetings as well as in the class rooms. The researcher can establish rapport with the respondents, can stay there for any clarifications, and may also be for any debriefing.

4. Saves Cost

Mail questionnaires are relatively inexpensive compared to personal interviews and telephone surveys. However, these may not be so cheap. Most include a follow-up mailing, which requires additional postage and printing of additional questionnaires.

5. Respondent Convenience

Mail surveys and self administered questionnaires can be filled out whenever the respondent has time. Thus there is a better chance that respondents will take time to think about their response. Many hard-to-reach respondents place high value on responding to surveys at their own convenience and are best contacted by mail. In some situations, particularly in organizational research, mail questionnaires allow respondents time to collect facts (such as records of absenteeism) that they may not be able to recall without checking. In the case of household surveys, the respondents may provide more valid and factual information by checking with family members compared with if they are giving a personal interview.

6. Anonymity

Mail surveys are typically perceived as more impersonal, providing more anonymity than the other communication modes, including other methods for distributing self administered questionnaires. Absence of interviewer can induce respondents to reveal sensitive or socially undesirable information.

7. Standardized Questions

Mail questionnaires are highly standardized, and the questions are quite structured.

Disadvantages of Mail Questionnaire

1. Low Response Rate

Mail questionnaire has very low rate of return of thee filled questionnaires.

2. Low Completion Rate

There are chances that respondents leave many questions as unanswered, either because they did not understand the question or they shied away.

3. Increases Cost

The researcher keeps on waiting for the return. When enough response is not there, then the reminders are sent, and again there is a waiting time. With the reminders copies of the questionnaires are sent. All this adds to the cost of the study.

4. Interviewer's Absence

Respondent may have different interpretations of the questions. Due to the absence of the interviewer, the respondents are unable to get any help for needed clarifications.

5. No Control on Question Order

In a self administered/mail questionnaire, the respondent usually reads the whole of the questionnaire prior to answering the questions. The latter questions may influence the answers to the earlier questions; thereby it is likely to bias the data. In interview the questionnaire remains in the hands of the

interviewer, and the respondent does not know what question is likely to follow. Therefore, in interview there is a control in the question order.

6. Cannot Use Lengthy Questionnaire

Mail questionnaires vary considerably in length, ranging from extremely short postcard questionnaires to lengthy, multi-page booklets requiring respondents to fill thousands of answers. Lengthy questionnaires are usually avoided by thee respondents. A general rule of thumb is that it should not exceed six pages.

7. No Control over the Environment

The researcher does not know about who filled the questionnaire

8. Cannot Catch the Non-Verbal Behavior

9. Non-Literates cannot participate

For participation in he mail/self administered questionnaire related studies, the respondents have to be educated up to a certain level. Hence the non-educated people are in a way excluded from the study.

Increasing Response Rate

Here are some guidelines for increasing the response rate. Response rate is the number of questionnaires returned or completed, divided by the total number of eligible people who were contacted or asked to participate in the survey.

Cover Letter

The cover letter that accompanies the questionnaire or is printed on the first page of the questionnaire is an important means of inducing a reader to complete and return the questionnaire. In the letter tell why the study is important, who is sponsoring the study, how was the respondent selected, assuring the anonymity of the respondent could help in establishing rapport and motivating the respondent to respond.

A personalized letter addressed to a specific individual shows the respondent that he or she is important. Including an individually typed letter on letterhead versus printed form is an important element in increasing the response rate in mail surveys.

Money Helps

The respondent's motivation for returning a questionnaire may be increased by offering monetary incentives or premiums. Although pens, lottery tickets, and variety of premiums have been used, monetary incentives appear to be thee most effective and least biasing incentive. It attracts the attention and creates a sense of obligation. Money incentive works for all income categories.

Interesting Questions

The topic of the research and thus the point of the questions cannot be manipulated without changing thee problem definition. However, certain interesting questions can be added to the questionnaire, perhaps in the beginning, to stimulate the respondents' interest and to induce cooperation.

LESSON 22

SELF ADMINISTERED QUESTIONNAIRES (CONTINUED)

Increasing Response Rate

Here are some guidelines for increasing the response rate. Response rate is the number of questionnaires returned or completed, divided by the total number of eligible people who were contacted or asked to participate in the survey.

Cover Letter

The cover letter that accompanies the questionnaire or is printed on the first page of the questionnaire is an important means of inducing a reader to complete and return the questionnaire. In the letter tell why the study is important, who is sponsoring the study, how was the respondent selected, assuring the anonymity of the respondent could help in establishing rapport and motivating the respondent to respond.

A personalized letter addressed to a specific individual shows the respondent that he or she is important. Including an individually typed letter on letterhead versus printed form is an important element in increasing the response rate in mail surveys.

Money Helps

The respondent's motivation for returning a questionnaire may be increased by offering monetary incentives or premiums. Although pens, lottery tickets, and variety of premiums have been used, monetary incentives appear to be the most effective and least biasing incentive. It attracts the attention and creates a sense of obligation. Money incentive works for all income categories.

Interesting Questions

The topic of the research and thus the point of the questions cannot be manipulated without changing thee problem definition. However, certain interesting questions can be added to the questionnaire, perhaps in the beginning, to stimulate the respondents' interest and to induce cooperation.

Follow-Ups

Follow-up implies the communication of the message to respondents through different means for the return of questionnaire. After responses from the first wave of mailing begin to trickle-in, most studies use follow-up, reminder for getting the response. A follow-up may include a duplicate questionnaire or may merely be a reminder to return thee original questionnaire. Multiple contacts almost always increase response rates. The more attempts made to reach people, the greater the chances of their responding.

Preliminary Notification

Advance notification, by either letter or telephone, that a questionnaire will be arriving has bee successful in increasing the response rates in some situations. Advance notices that go out close to the questionnaire mailing time produce better results than those sent too far in advance. This technique presupposes a certain level of development of the country where such facilities are available. Even otherwise, it depends upon the nature of the study as well as the type of respondents selected for the study.

Survey Sponsorship

Sponsorship of the study makes a difference for motivating the respondents to return thee questionnaires. It depends upon the goodwill of the sponsoring agency that can activate/deactivate the respondent to fill the questionnaire and return it. There is some evidence that "official" and "respected"

sponsorship increases the response rate. Sponsorship by well-known and prestigious organizations, such as universities or government agencies, may significantly influence response rates.

Return Envelopes

The inclusion of a stamped, self addressed envelop encourages response because it simplifies questionnaire return.

Postage

The existing evidence shows that expedited delivery is very effective in increasing response rate. First class or third class mail, stamped mail or metered mail may make a difference.

Personalization

Personalization of the mailing has no clear-cut advantage in terms of improved response rates. Neither personal inside addresses nor individually signed cover letters significantly increased response rates; personally typed cover letters proved to be somewhat effective.

Size, Reproduction, and Color

The size of the paper, the printing, and color may have some effect, though not significant, on the response rate. It is recommended to use the A-4 size paper and while sending it do not fold it. The attractive printing may be another factor influencing the return rate. If questionnaire has different parts, the use of different colors of paper may motivate the respondents to take interest in the study and return the questionnaire.

The manipulation of one or two techniques independently of all others may do little to stimulate response. May be the researcher has to make use of all the possible techniques simultaneously, so that the response rate could be increased. Such an effort is referred to as Total Design Effort (TDE).

E-Mail Surveys

Questionnaires can be distributed via e-mail. E-mail is relatively new method of communication, and many individuals cannot be reached this way. However, certain projects lend themselves to, such as internal surveys of employees or satisfaction surveys of retail buyers who regularly deal with an organization via e-mail.

The benefits of an e-mail include speed of distribution, lower distribution and processing cost, faster turnaround time, more flexibility, and less handling of paper questionnaires.

Many respondents may feel that they can be more candid in e-mail than in person or on telephone, for the same reason they are candid on other self administered questionnaires.

In many organizations the employees know that their e-mails are not secure, that “eves-dropping” by a supervisor could occur. Further maintaining the respondent’s anonymity is difficult, because a reply to an e-mail message typically includes the sender’s address. Researchers designing e-mail surveys should assure respondents that their responses will be confidential.

Not all e-mail systems have the same capacity: some handle color and graphics well; others are limited to text. The extensive differences in the capabilities of respondents’ computers and email software limit the types of questions and the layout of thee questionnaire.

Internet Surveys

An internet survey is a self-administered questionnaire posted on a Web site. Respondents provide answers to questions displayed on screen by highlighting a phrase, clicking an icon, or keying in an answer. Like any other survey, Internet surveys have both advantages and disadvantages.

Advantages of Internet Surveys

Speed and Cost Effectiveness: Internet survey allow the marketers to reach a large audience (possible a global one), to personalize the individual messages, and to secure confidential answers quickly and cost effectively. The computer to computer self administered questionnaires eliminate the cost of paper, postage, data entry, and other administrative costs. Once an Internet questionnaire has been developed, the incremental cost of reaching additional respondents is marginal. Hence samples can be larger than with interviews or other types of self-administered questionnaires.

Visual Appeal and Interactivity: Surveys conducted on Internet can be interactive. The researcher can use more sophisticated lines of questioning based on the respondents' prior answers. Many of this interactive survey utilize color, sound, and animation, which may help to increase the respondents' cooperation and willingness to spend more time answering questions. The Internet is an excellent medium fort he presentation of visual materials, such as photographs or drawings of product prototypes, advertisements, and movie trailers.

Respondent Participation and Cooperation: Participation in some Internet surveys occurs because computer users intentionally navigate to a particular Web site where questions are displayed. In some instances individuals expect to encounter a survey at a Web site; in other cases it is totally unexpected.

Accurate Real-Time Data Capture: The computer to computer nature of Internet surveys means that each respondent's answers are entered directly into the researcher's computer as soon as the questionnaire is submitted. In addition, the questionnaire software may be programmed to reject improper data entry.

Real-time data capture allows for real-time data analysis. A researcher can review up-to-the –minute sample size counts and tabulation data from an Internet survey in real time.

Callbacks: When the sample for Internet survey is drawn from a consumer panel, it is easy to recontact those who have not yet completed the questionnaire. Computer software can also identify the passwords of those respondents who completed only a portion of the questionnaire and send those people customized messages.

Personalized and Flexible Questioning: There is no interviewer in Internet surveys but thee respondent interacts directly with thee software on a Web site. In other words the computer program asks questions in sequence determined by a respondent's previous answer. The questions appear on the computer screen, and answers are recorded by simply pressing a key clicking an icon, thus immediately entering the data into thee computer's memory. This ability to sequence the question based on previous responses is a major advantage of computer-assisted surveys.

Respondent Anonymity: Respondents are more likely to provide sensitive information when they can remain anonymous. The anonymity of thee Internet encourages respondents to provide honest answers to sensitive questions.

Most respondents do not feel threatening to enter information into the compute because of thee absence of the interviewer. They may be assured that no human will ever see their individual responses.

Response Rate: Response rate can be increased by sending e-mail friendly reminders.

Disadvantages of Internet Surveys

All People cannot Participate: Many people in thee general public cannot access to Internet. And, all people with Internet access do not have the same level of technology. Many lack powerful computers or software that is compatible with advanced features programmed into many Internet questionnaires. Some individuals have minimum computer skills. They may not know how to navigate through and provide answers to an Internet questionnaire.

No Physical Incentive: Unlike mail surveys, Internet surveys do not offer the opportunity to send a physical incentive to the respondent.

SELECTING THE APPROPRIATE SURVEY RESEARCH DESIGN

The choice of communication method is not as complicated as it might appear. By comparing the research objectives with the strengths and weaknesses of each method, the researcher will be able to choose one that is suited to thee needs. Nevertheless, there no "best" form of survey. Each has advantages and disadvantages. A researcher who must ask highly confidential questions ay conduct a mail survey, thus trading off the speed of data collection to avoid any possibility of interviewer bias.

To determine the appropriate technique, thee researcher must ask questions such as "Is the assistance of an interviewer necessary? Are respondents likely to be interested in the issues being investigating? Will cooperation be easily attained? How quickly the information is needed? Will the study require a ling complex questionnaire? How large is the budget?" The criteria – cost, speed, anonymity, and the like – may be different for each project.

If none of the choices turns out to be a particularly good fit, it is possible to combine the best characteristics of two or more alternatives into a *mixed mode.* Although this decision will incur the costs of the combined modes, thee flexibility of tailoring a method to the unique need of the project is often an acceptable trade off.

LESSON 23

TOOLS FOR DATA COLLECTION

Broadly there are tools of data collection as part of communication surveys. These are:

1. Interview schedule
2. Questionnaire
3. Interview Guide

As discussed earlier interview schedule and questionnaires both are predesigned list of questions used for communication with the respondents. In the case of *interview schedule*, the list of questions remains in the hands of the interviewer who asks questions from the respondent, gets his/her response, and records the responses. *Questionnaire* is also a list of questions, which is handed over to the respondent, who reads the questions and records the answers himself. For purposes of convenience *questionnaire* will refer to both interview schedule as well as questionnaire.

Interview guide is list of topics that are to be covered during the course of interview. Interview guide is used for purposes of an in-depth interviewing. Questions on the topics are formulated on the spot. Most of the questions are open ended. The interviewer may not use the same wording for each respondent; the number of questions may be different; the sequence of questions may also be different.

Guidelines for Questionnaire Design

A survey is only as good as the questions it asks. Questionnaire design is one of the most critical stages in the survey research process. While common sense and good grammar are important in question writing, more is required in the art of questionnaire design. To assume that people will understand the questions is common error. People may not simply know what is being asked. They may be unaware of topic of interest, they may confuse thee subject with something else, or the question may not mean the same thing to every respondent. Respondents may simply refuse to answer personal questions. Further, properly wording the questionnaire is crucial, as some problems may be minimized or avoided altogether if a skilled researcher composes the questions.

A good questionnaire forms an integrated whole. The researcher weaves questions together so they flow smoothly. He or she includes introductory remarks and instructions for clarification and measures each variable with one or more survey questions.

What should be asked?
The problem definition will indicate which type of information must be collected to answer the research question; different types of questions may be better at obtaining certain type of information than others.

1. Questionnaire Relevancy

A questionnaire is relevant if no unnecessary information is collected and if the information that is needed to solve the problem is obtained.
Asking the wrong or an irrelevant question is a pitfall to be avoided. If the task is to pinpoint compensation problems, for example, questions asking for general information about morale may be inappropriate. To ensure information relevancy, the researcher must be specific about data needs, and there should be a rationale for each item of information.

2. Questionnaire Accuracy

Once the researcher has decided what should be asked, the criterion of accuracy becomes of primary concern. Accuracy means that the information is reliable and valid. While experienced researchers believe that one should use simple, understandable, unbiased, unambiguous, and nonirritating words. Obtaining accurate answer from respondents is strongly influenced by the researcher's ability to design a questionnaire that facilitates recall and that will motivate the respondent to cooperate. Therefore avoid

jargon, slang, and abbreviations. The respondents may not understand some basic terminology. Respondents can probably tell thee interviewer whether they are married, single, divorced, separated, or widowed, but providing their "marital status" may present a problem. Therefore, asking somebody about his/her *marital status* while the person may not understand the meaning of marital status is likely to mess up the information. Words used in the questionnaire should be readily understandable to all respondents.

3. Avoid Ambiguity, Confusion, and Vagueness.

Ambiguity and vagueness plague most question writers. A researcher might make implicit assumptions without thinking of respondents' perspectives. For example, the question, "what is your income?" could mean weekly, monthly, or annual: family or personal; before taxes or after taxes; for this year or last year; from salary or from all sources. The confusion causes inconsistencies in how different respondents assign meaning to and answer the question.

Another source of ambiguity is the use indefinite words or response categories. Consider the words such as *often, occasionally, usually, regularly, frequently, many, good, fair,* and *poor*. Each of these words has many meanings. For one person frequent reading of *Time* magazine may be reading six or seven issues a year; for another it may be two issues a year. The word *fair* has great variety of meanings; the same is true for many indefinite words.

4. Avoid Double-Barreled Questions

Make each question about one and only one. A double barreled question consists of two or more questions joined together. It makes the respondent's answer ambiguous. For example, if asked, "Does this company have pension and health insurance benefits?" a respondent at the company with health insurance benefits only might answer either yes or no. The response has an ambiguous meaning and the researcher cannot be certain of the respondent's intentions. When multiple questions are asked in one question, thee results may be exceedingly difficult to interpret.

5. Avoid Leading Questions

Make respondents feel that all responses are legitimate. Do not let them aware of an answer that the researcher wants. A leading question is the one that leads the respondent to choose one response over another by its wording. For example, the question, "you don't smoke, do you?" leads respondents to state that they do not smoke. "Don't you think that women should be empowered?" In most the cases the respondent is likely to agree with the statement.

6. Avoid Loaded Questions

Loaded questions suggest a socially desirable answer or are emotionally charged. "Should the city government repair all the broken streets?" Most of the people are going to agree with this question simply because this is highly socially desirable. A question which may be challenging the traditionally set patterns of behavior may be considered as emotionally charged i.e. it is loaded with such material which may hit the emotions of the people. Look at some behaviors associated with masculinity in Pakistani society. Let us ask a husband "Have you ever been beaten up by your wife?" Straight away this question may be considered to be a challenge to the masculinity of the person. Hence it may be embarrassing for the person to admit such an experience. Therefore, even if the husband was beaten up by his wife, he might give a socially desirable answer.

7. Avoid Burdensome Questions that may Tax the Respondent's Memory

A simple fact of human life is that people forget. Researchers writing questions about past behavior or events should recognize that certain questions may make serious demand on the respondent's memory.

"How did you feel about your brother when you were 6 years old?" It may very difficult to recall something from the childhood.

8. Arrange Questions in a Proper Sequence

The order of question, or the question sequence, may serve several functions for the researcher. If the opening questions are interesting, simple to comprehend, and easy to answer, respondent's cooperation and involvement can be maintained throughout the questionnaire. If respondent's curiosity is not aroused at the outset, they can become disinterested and terminate the interview.

Sequencing specific questions before asking about broader issues is a common cause of question order bias. In some situations it may be advisable to ask general question before specific question to obtain the freest opinion of the respondent. This procedure, known as **funnel technique,** allows the researcher to understand the respondent's frame of reference before asking specific questions about thee level of respondent's information and intensity of his or her opinions.

9. Use Filter Question, if Needed

Asking a question that doesn't apply to the respondent or that the respondent is not qualified to answer may be irritating or may cause a biased response. Including filter question minimizes the chance of asking questions that are inapplicable. Filter question is that question which screens out respondents not qualified to answer a second question. For example the researcher wants to know about the bringing up of one's children. "How much time do you spend playing games with your oldest child?" What if the respondent is unmarried? Even if the respondent is married but does not have the child. In both these situations the question is inapplicable to him/her. Before this question the person may put a filter question whether or not the respondent is married.

10. Layout of the questionnaire

There are two format or layout issues: the overall physical layout of the questionnaire and the format of questions and responses.
Good lay out and physical attractiveness is crucial in mail, Internet, and other self-administered questionnaires. For different reason it is also important to have a good layout in questionnaires designed for personal and telephone interviews.
Give each question a number and put identifying information on questionnaire. Never cramp questions together or create a confusing appearance.
Make a cover sheet or face sheet for each, for administrative use. Put the time and date of the interview, the interviewer, the respondent identification number, and interviewer's comments and observations on it. Give interviewers and respondents instructions on the questionnaire. Print instructions in a different style from question to distinguish them.
Lay out is important for mail questionnaires because there is no friendly interviewer to interact with thee respondent. Instead the questionnaire's appearance persuades the respondents. In mail surveys, include a polite, professional cover letter on letterhead stationery, identifying the researcher and offering a telephone number for any questions. Always end with "Thank you for your participation."

LESSON 24

PILOT TESTING OF THE QUESTIONNAIRE

Pilot testing also called pre-testing means small scale trial run of a particular component; here we are referring to pilot testing of the questionnaire.

Conventional wisdom suggests that pre-testing not only is an established practice for discovering errors but also is useful for extra training the research team. Ironically, professionals who have participated in scores of studies are more likely to pretest an instrument than is a beginning researcher hurrying to complete a project. Revising questions five or more times is not unusual. Yet inexperienced researchers often underestimate the need to follow the design-test-revise process.

It is important to pilot test the instrument to ensure that the questions are understood by the respondents and there are no problems with the wording or measurement. Pilot testing involves the use of a small number of respondents to test the appropriateness of the questions and their comprehension. Usually, the draft questionnaire is tried out on a group that is selected on a convenience and that is similar in makeup to the one that ultimately will be sampled. Making a mistake with 25 or so subjects can avert the disaster of administering an invalid questionnaire to several hundred individuals. Hence the main purpose of pilot testing is to identify potential problems with the methods, logistics, and the questionnaire.

Administering a questionnaire exactly as planned in the actual study often is not possible. For example, mailing out a questionnaire might require several weeks. Pre-testing a questionnaire in this manner might provide important information on response rate, but it may not point out why questions were skipped or why respondents found certain questions ambiguous or confusing. The ability of personal interviewer to record requests for additional explanation and to register comments indicating respondent's difficulty with question sequence or other factors is the primary reason why interviewers are often used for pretest work.

What aspects to be evaluated during pilot testing?

1. Reactions of Respondents:

The reactions of the respondents can be looked at from different angles. The researcher may be familiar with the local culture; still getting the first hand experience is always useful. Going to the field, contacting the people, and their reactions to the different aspects of research may be a learning experience.

- **Availability of study population timing.** In case we are doing interviewing then pre-testing might help to find out the most appropriate time when the respondent shall be available. The researcher can plan the interviewing accordingly.
- **Acceptability of the questions asked.** An important purpose of pre-testing is to discover participants' reaction to the questions. If the participants do not find the experience stimulating when an interviewer is physically present, how will they react on the phone, or in the self administered mode? Pre-testing should help to discover where repetitiveness or redundancy is bothersome or what topics were not covered that the participant expected. An alert interviewer will look for questions or even sections that the participant perceives to be sensitive or threatening or topics about which the participant knows nothing.

- **Pre-tes**ting will also provide the opportunity to see the acceptability of the wording of the questions in the local cultural context. Some of the issues may be discussed openly while for others people use a disguised language. If people consider the use of certain phrases as offensive, then it is high time to change the wording.

- **Willingness of the respondents to co-operate.** Field testing of the questionnaire will give the idea about the level of cooperation the research team is likely to get from the respondents, particularly if they have to interview them.

2. Discovering errors in the instrument:

- **Do the tools provide you the information? Reliability. Suitability for analysis.** Tabulation of the results /of a pretest helps determine whether the questionnaire will meet the objectives of the research. A preliminary analysis often illustrates that although respondents can easily comprehend and answer a given question, it is an inappropriate question because it does not help solving the issue. The information may not be suitable for analysis.
- **Time taken/needed to interview/conduct the observation.** Pre-testing can indicate the time taken for interview or to conduct the observation. Too long questionnaires may not be recommended and, therefore, need modification. It can also help in estimating average time being taken to collect information form a respondent. Such an exercise can help in budget estimations.
- **If there is any need to revise the format of the tool.** Question arrangement can play a significant role in the success of the instrument. May be we should start with stimulating questions and place sensitive questions last. Such a situation might be handled through pre-testing. Therefore, pre-testing may help in putting questions in proper **sequence, using acceptable wording, doing appropriate translation, question spacing, structuring of answers, coding system, and needing instructions for interviewers (probing).**

3. Sampling procedure can be checked:

- **The extent to which instructions given are followed.** Field functionaries are given the instructions for following a sampling procedure. Depending upon the type of sampling to be followed, the field worker must follow the guidelines otherwise the quality of the study will be hampered. During the pre-testing one could see not only the extent to which the instructions are being followed but also locate the problems in carrying out those instructions. Also what could be the solutions to those problems?
- **How much time is needed to locate the respondents?** By following the instructions how easy it is to locate the respondents, and how much time is needed to do that activity. It could help in calculating the overall time for data collection, having relevancy for budgeting thee resources.

4. Staffing and activities of research team can be checked:

- **How successful the training has been?** Pre-testing can be seen as a period of extra training. The pre-testing exercise can provide a good opportunity to make an evaluation of the achievement of the objectives of training. For any deficiencies additional training may be provided.
- **What is the work output of each member?** The researcher can calculate the average output of each fieldworker and accordingly calculate the number of workers needed to finish the work on time. It can also help in making the budget estimates.
- **How well the research team works together?** It is a good opportunity to observe the kind of coordination the research team has. The integrated work is likely affect the efficiency of the team. Any shortcomings could be looked after.
- **Is the logistical support adequate?** Of course we are leaving the field functionaries in isolation. They shall be in need of other logistical support like the transportation, boarding, lodging, guidance and supervision. Some of these aspects could also be appraised during the pre-testing

5. Procedure for data processing and analysis can be evaluated:

- **Make dummy tables.** See how can we tabulate the data and use the appropriate statistics for purposes of interpretations

LESSON 25

INTERVIEWING

A personal interviewer administering a questionnaire door to door, a telephone interviewer calling from a central location, an observer counting pedestrians in a shopping mall, and others involved in the collection of data and the supervision of that process are all **fieldworkers.** The activities they perform vary substantially. The supervision of data collection for a mail survey differs from the data collection in an observation study. Nevertheless there are some basic issues in all kinds of fieldwork. Just for convenience, in this session we shall focus on the interviewing process conducted by personal interviewers. However, many of the issues apply to all fieldworkers, no matter what their specific setting.

Who conducts the fieldwork?

Data collection in a sponsored study is rarely carried out by the person who designs the research project. For a student, depending upon the sample size, data collection is usually done by the student himself/herself. However, the data collection stage is crucial, because the research project is no better than the data collected in the field. Therefore, it is important that the research administrator selects capable people who may be entrusted to collect the data.

There are Field Interviewing Services, who specialize in data gathering. These agencies perform door-to-door surveys, central location telephone interviewing, and other forms of fieldwork for fee. These agencies typically employ field supervisors who oversee and train interviewers, edit questionnaires completed in the field, and confirm that the interviews have been conducted.

Whether the research administrator hires in-house interviewers or selects a field interviewing service, it is desirable to have fieldworkers meet certain job requirements. Although the job requirements for different types of surveys vary, normally interviewers should be healthy, outgoing, honest, accurate, responsible, motivated, and of pleasing appearance – well groomed and properly dressed.
An essential part of the interviewing process is establishing rapport with the respondent.

In-House Training

After personnel are selected, they must be trained. The training that the interviewer will receive after being selected by a company may vary from virtually no training to one week program. Almost always there will be a **briefing session** on the particular project.

The objective of training is to ensure that the data collection instrument is administered uniformly by all fieldworkers. The goal of training session is to ensure that each respondent is provided with common information. If the data are collected in a uniform manner from all respondents, the training session will have been success.

More extensive training programs are likely to cover the following topics:

1. How to make initial contact with the respondent and secure the interview?
2. How to ask survey questions?
3. How to probe?
4. How to record responses? How to terminate the interview?

The Role of the Interviewer

Survey research interviewing is a specialized kind of interviewing. As with most interviewing, its goal is to obtain accurate information from another person.

The survey interview is a social relationship. Like other social relationships, it involves social roles, norms, and expectations. The interview is a short-term, secondary social interaction between two strangers with thee explicit purpose of one person's obtaining specific information from the other. The social roles are those of the interviewer and the interviewee or respondent. Information is obtained in a structured conversation in which the interviewer asks prearranged questions and records answers, and the respondent answers.

The role of interviewer is difficult. They obtain cooperation and build rapport, yet remain neutral and objective. They encroach on respondents' time and privacy for information that may not benefit the respondents. They try to reduce embarrassment, fear, and suspicion so that respondents feel comfortable revealing information. They explain the nature of the survey research or give hints about social roles in an interview. Good interviewers monitor the pace and direction of the social interaction as well as content of the answers and the behavior of thee respondents.

Survey interviewers are nonjudgmental and do not reveal their opinions, verbally or nonverbally. If the respondent asks for an interviewer's opinion, he or she politely redirects the respondent and indicate that such questions are inappropriate.

Stages of an Interview

Making Initial Contact and Securing the Interview

The interview proceeds through stages, beginning with introduction and entry. Interviewers are trained to make appropriate opening remarks that will convince the person that his or her cooperation is important.

Asslaam-o-Alaykum, my name is _____ and I am working for a National Survey Company. We are conducting a survey concerning "women empowerment." I would like to get a few of your ideas.

For the initial contact in a telephone interview, the introduction might be:

Asslaam-o-Alaykum, my name is _____. I am calling from Department of Social Research, Virtual University.

By indicating that telephone call is a long distance, interviewers attempt to capitalize on the fact that most people feel a long distance call is something special, unusual, or important. Giving one's personal name personalizes thee call.

Personal interviewers may carry a letter of identification that will indicate that the study is bona fide research project and not a salesman's call. The name of the research agency is used to assure the respondent that thee caller is trustworthy.

Asking the Questions

The purpose of the interview is, of course, to have the interviewer ask questions and record the respondent's answers. Training in the art of stating questions can be extremely beneficial, because interviewer bias can be a source of considerable error in survey research.

There are five major principles for asking questions:

- Ask the questions exactly as they are worded in the questionnaire.
- Read each question very slowly.
- Ask the question in the order in which they are presented in the questionnaire.

- Repeat questions that are misunderstood or misinterpreted.

Although interviewers are generally trained in these procedures, when working in thee field many interviewers do not follow them exactly. Do not take shortcuts when the task becomes monotonous. Interviewers may shorten questions or rephrase unconsciously when they rely on their memory of the question rather than reading the question as it is worded.

If the respondents do not understand a question, they will usually ask for some clarification. The recommended procedure is to repeat the question, or if the respondent does not understand a word, the interviewer should respond with "just whatever it means to you.

Often the respondents volunteer information relevant to a question that is supposed to be asked at a later point in the research. In this situation the response should be recorded under the question that deals specifically with that subject. Then rather than skip the question that was answered out of sequence, the interviewers should be trained to say something like "We have briefly discussed this, but let me ask you …." By asking every question, the interviewer can be sure that complete answers are recorded.

Probing

Probing means the verbal prompts made by field worker when the respondent must be motivated to communicate his or her answer or to enlarge on, clarify or explain an answer. Probing may be needed for two types of situations. First, it is necessary when the respondent must be motivated to enlarge on, clarify, or explain his or her answer. The interviewer must encourage the respondent to clarify or expand on answers by providing a stimulus that will not suggest the interviewer's own ideas. The ability to probe with neutral stimuli is the mark of an experienced interviewer. Second, probing may be necessary in situations in which he respondent begins to ramble or lose track of the question. In such cases thee respondent must be led to focus on specific content of the interview and to avoid irrelevant and unnecessary information. Probing is also needed when the interviewer recognizes an irrelevant or inaccurate answer.

He interviewer has several possible probing tactics to choose from, depending on the situation:

- *Repetition of the question.* The respondent who remains completely silent may not have understood the question or may not have decided how to answer it. Mere repetition may encourage the respondent to answer in such cases. For example, if the question is "What is there that you do not like about your supervisor?" and the respondent does not answer, the interviewer may probe: "just to check, is there anything you do not like about your supervisor?"
- *An expectant pause*. If the interviewer believes the respondent has more to say, the "silent probe," accompanied by an expectant look may motivate the respondent to gather his/her thoughts and give a complete response.
- *Repetition of the respondent's reply.* As the interviewer records thee response, he or she may repeat thee respondent's reply verbatim. This may stimulate the respondent to expand on the answer.
- *Neutral questions or comments.* Asking neutral question may indicate the type of information that the interviewer is seeking. For example, if the interviewer believes that thee respondent's motives should be clarified, he or she might ask, "Why do you feel that way?" If the interviewer feels that there is a need to clarify a word or phrase, then he/she might ask, "What do you mean by _____?"

Recording the Responses

The rules for recording responses to closed ended questions vary with the specific question. The general rule, however, is to place a check in the box that correctly reflects the respondent's answer.

The general instructions for recording answers to open-ended response questions is to record the answer verbatim, a task that is difficult for most people. Some of thee suggestions are:

- Record responses during the interview.
- Use the respondent's own words.
- Do not summarize or paraphrase thee respondent's answer.
- Include everything that pertains to the question objectives.
- Include all your probes.

Terminating the Interview

Fieldworkers should not close the interview before all the information has been secured. The interviewer whose departure is hasty will not be able to record those spontaneous comments respondents sometimes offer after all formal questions have been asked. Avoiding hasty departures is also a matter of courtesy.

Fieldworkers should also answer to the best of their ability any questions the respondent has concerning the nature and purpose of the study. Always leave by observing the local cultural customs. "Don't burn your bridges." Because thee fieldworker may be required to re-interview the respondent at some future time, he or she should leave thee respondent with positive feeling about having cooperated in a worthwhile undertaking. It is extremely important t thank the respondent for his or her cooperation.

The interviewer then goes to a quite and private place to edit the questionnaire and record other details such as the date, time, and place of interview; a thumbnail sketch of the respondent and interview situation, the respondent's attitude; and any unusual circumstances. The interviewer also records personal feelings and anything that was suspected.

Principles of Interviewing

The Basics

Have integrity and be honest. This is thee cornerstone of all professional inquiry, regardless of its purpose.

Have patience and tact. Interviewers ask for information from people they do not know. Thus all the rules of human relations that apply to inquiry situations – patience, tact, courtesy – apply "in spades" to interviewing.

Have attention to accuracy and detail. Among the greatest interviewing "sins" are inaccuracy and superficiality, for the professional analyst can misunderstand, and in turn mislead, a client. Do not record thee answer unless you fully understand it yourself. Probe for clarification and detailed full answers.

Exhibit a real interest in the inquiry at hand, but keep your opinions to yourself. Impartiality is imperative.

Be a good listener. Some interviewers talk too much, wasting time when respondents could be supplying more pertinent facts or opinions on the topic.

Keep the inquiry and respondents' responses confidential. Do not discuss the studies you are doing with relatives, friends, or associates. Never quote one respondent's opinion to another.

Respect others' rights. Survey research depends on the goodwill of others to provide information. There should be no coercion. Impress on prospective respondents that their cooperation is important and valuable.

Interview Bias

- Information obtained during interview should be as free as possible of bias.
- Bias could be introduced by the interviewer, interviewee, or the situation. Interviewer bias falls into six categories:

Interviewer Bias

1. Interviewer could bias the data if proper rapport is not established Errors by the respondent – forgetting, embarrassment, misunderstanding, or lying because of the presence of others.
2. Unintentional errors or interviewer sloppiness – contacting the wrong person, misreading a question, omitting questions, reading questions in the wrong order, recording wrong answer, or misunderstanding the respondent.
3. Intentional subversion by the interviewer – purposeful alteration of answers, omission or rewording of questions, or choice of an alternative respondent.
4. Influence due to the interviewer's expectations about a respondent's appearance, living situation, or other answers.
5. Failure of an interviewer to probe or to probe properly.
6. Influence on the answers due to the interviewer's appearance, tone, attitude, reactions to answers, or comments made outside of the interview schedule.

Interviewee Bias

- Errors made by the respondent –

1. Interviewees can bias the data when they do not come out with their true opinion but provide information that they think what the interviewer expects of them or would like to hear.
2. They do not understand the question, they may feel difficult or hesitant to clarify.
3. Some interviewees may be turned off because of the personal liking, or the dress of the interviewer, or the manner in which questions are put. So they may not provide truthful answers.
4. Some may provide socially undesirable answers.

Situational Bias

- Situational biases in terms of:

1. Non-participants – Unwillingness or inability to participate. Bias the sample.
2. Trust levels and rapport established by different interviewers. Elicit answers of different degrees of openness.
3. The physical setting of the interview. Respondent may not feel comfortable to be interviewed at work.

Some Tips for Interviewing

- Know the culture of the people in advance.
- Appearance – wear acceptable dress.
- Pleasantness and flexibility.
- Carry the letter of authority.
- Establish credibility and rapport. Motivating individuals to respond.
- Familiarity with the questionnaire.
- Following the question wording/ question order
- Recording responses exactly.
- Probing for responses.
- Closing the interview. No false promises. Also don't burn your bridges.
- Edit the questionnaire in the first available opportunity.