STAT630 FINAL TERM SOLVED CURRENT PAPERS (SPRING 2020)

1. What is meant by 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.

i. 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.

ii. Second, probing may be necessary in situations in which the respondent begins to ramble or lose track of the question. In such cases the 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.

2. Criteria for selecting sampling technique.

Sampling Criteria is one must remember that two costs are involved in a sampling analysis viz., the cost of collecting the data and the cost of an incorrect inference resulting from the data. Researcher must keep in view the two causes of incorrect inferences viz., systematic bias and sampling error.

3. Probability and non probability.

Probability:

In probability sampling every element in the population has a known nonzero probability of selection. The simple random is the best known probability sample, in which each member of the population has an equal probability of being selected. Probability sampling designs are used when the representativeness of the sample is of importance in the interest of wider generalizability.

Non Probability:

In non-probability sampling the probability of any particular element of the population being chosen is unknown. The selection of units in non-probability sampling is quite arbitrary, as researchers rely heavily on personal judgment.

It should be noted that there are no appropriate statistical techniques for measuring random sampling error from a non-probability sample. Thus projecting the data beyond the sample is statistically inappropriate. When time or other factors, rather than generalizability, become critical, non-probability sampling is generally used.

4. 5 suggestions for better interview

- 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.

5. Frequency distribution table of 2 variables

Several useful techniques for displaying data are in use. The easiest way to describe the numerical data of one variable is with a frequency distribution. It can be used with nominal-, ordinal-, interval-, or ratio-level data and takes many forms.

Note: Solution depends upon the given data

6. Types of Quasi experimental designs.

<u>One-shot Case Study Design:</u>

Also called the one-group posttest-only design, the one-shot case study design has only one group, a treatment, and a posttest. Because it is only one group, there is no random assignment. For example, a researcher shows a group of students a horror film, and then measures their attitude with a questionnaire. A weakness of this design is that it is difficult to say for sure that the treatment caused the dependent variable. If subjects were the same before and after the treatment, the researcher would not know it.

<u>One Group Pretest-posttest Design:</u>

This design has one group, a pretest, a treatment, and a posttest. It lacks a control group and random assignment. Continuing with the previous example, the researcher gives a group of students an attitude questionnaire to complete, shows a horror film, then has them complete the same questionnaire second time. This is an improvement over the one-shot case

study because the researcher measures the dependent variable both before and after the treatment. But it lacks the control group for comparison. The researcher cannot know whether something other than the treatment occurred between the pretest and the posttest to cause the outcome.

Two Groups Posttest-only Design:

It has two groups, a random assignment of subjects, a posttest, and a treatment. It has all parts of the classical design except a pretest. Continuing with our previous example, the researcher forms two groups through randomization process. He shows group a horror film to one group i.e. the experimental group. The other group is not shown any film. Both groups then complete the questionnaire. The random assignment reduces the chance that the groups differed before the treatment, but without a pretest, a researcher cannot be as certain that the groups began the same on the dependent variable.

7. Limitations of Simple Random sampling.

Random sampling does not guarantee that every random sample perfectly represents the population. Instead, it means that most random samples will be close to the population most of the time, and that one can calculate the probability of a particular sample being inaccurate.

8. Survey interview

1. It has clear beginning and end.
2. The same standard questions are in which asked of all respondents in the same sequence.
3. The interviewer appears neutral all the time.
4. The interviewer asks questions, and the respondent answers questions
5. It is almost always with one respondent alone.
6. It has a professional tone and businesslike focus, diversions are ignored,
7. Closed-ended questions are common, with rare probes\
8. The interviewer alone controls the pace and direction of interview
9. The social context in which the interview occurs is ignored and assumed to make little difference
10. The interviewer attempts to mold the communication pattern into a standard framework.

9. Field research adopt different social role why?

Field researchers study people in a location or setting. It has been used to study entire communities. Field research has a distinct set of methodologies. Field researchers directly observe and interact with community members in natural settings to get inside their perspectives. They embrace an activist or social constructionist perspective on social life. They do not see people as a neutral medium through which social forces

operate, nor do they see social meanings as something "out there" to observe. Instead they believe that people create and define the social world through their interactions. Human experiences are filtered through a subjective sense of reality, which affects how people see and act on events. Thus they replace the positivist emphasis on "objective facts" with a focus on the everyday, face-toface social processes of negotiation, discussion, and bargaining to construct social meaning.

10. Content analysis superior over survey experiment explain 5 points

1. **Can use large sample size:** Larger the sample closer the results to the population. In experimentation as well as in survey research there could be limitations due to the availability of the subjects or of the resources but in document analysis the researcher could increase the sample and can have more confidence in generalization. Let us assume that a researcher is studying the matrimonial advertisements in the newspapers over a long period of time, there should be no problem in drawing a sample as large as several thousand or more.
2. **Spontaneity:** The spontaneous actions or feelings can be recorded when they occurred rather than at a time specified by the researcher. If the respondent was keeping a diary, he or she may have been recording spontaneous feelings about a subject whenever he or she was inspired to do so. The contents of such personal recording could be analyzed later on.
3. **Confessions:** A person may be more likely to confess in a document, particularly one to be read only after his or her death, than in an interview or mailed questionnaire study. Thus a study of documents such as diaries, posthumously published autobiographies, and suicide notes may be the only way to obtain such information.
4. **Relatively low cost:** Although the cost of documentary analysis can vary widely depending on the type of document analyzed, how widely documents are dispersed, and how far one must travel to gain access to them, documentary analysis can be inexpensive compared to large-scale surveys. Many a time's documents are gathered together in a centralized location such as library where the researcher can study them for only the cost of travel to the repository.
5. **High quality:** Although documents vary tremendously in quality, many documents, such as newspaper columns, are written by skilled commentators and may be more valuable than, for example, poorly written responses to mailed questionnaires.

11. Ex post factor experimental better than one shot experiment design, explain.
12. Population v/s targeted population define

Population:

A population is the theoretically specified aggregation of study elements. It is translating the abstract concept into workable concept. For example, let us look at the study of "college students."

Targeted population:

Out of the conceptual variations what exactly the researcher wants to focus on. This may also be called a target population. Target population is the complete group of specific population elements relevant to the research project. Target population may also be called survey population i.e. that aggregation of elements from which the survey sample is actually selected.

13. Ways to reduce Interview bias

1. Standardize the Process

Before you even start interviewing people, create a standard list of questions you plan to ask. Of course, there may be aspects of each candidate's background you want to learn more about or get specific details on, but the more you can level the playing field, the more you'll give everyone an equal chance of impressing you.
Similarly, attempt to have the interview in the same place for all your candidates. Don't let some come in person to the interview and others Skype in. Keep the process as similar as possible each and every time.

Good to note: The time and order of interviews matters as well—but more often than not, there's less you can do about it.

2. Take Good Notes

Human memory is notoriously unreliable. So, rather than relying on your recall abilities and opening yourself up to unintentional biases, try to take brief notes as candidates respond to questions. Ideally, write down as much of the interviewee's exact response as possible without your own interpretations. Then immediately post-interview, jot down your thoughts on the interviewee before you get too scattered and you're forced to trust your own unpredictable memory.

3. Use a Rubric

Ability and fit are both hard to quantify, but you're better off at least trying than avoiding it all together. Ideally, prior to the interview stage of the hiring

process, create a rubric for what you're seeking in the new hire. Include qualifications like specific skills and experiences, soft skills like communication and teamwork, and cultural fit with the company.
After interviewing all the candidates, select a numerical range and rate each person. Rubrics helps you avoid giving too much credit for one particular experience or qualification—it keeps things balanced.

4. Justify Your Decision

You might think a rubric is only marginally different than going with a gut feeling—and you would be right. Rubrics are only useful if you're able to justify your scores. Going through the process of reasoning out why you believe something is a huge help in trying to avoid all the subconscious business going on when interviewing and evaluating a job candidate. Get real evidence—such as the notes you took of the interviewee's responses—to back up your beliefs in order to avoid falling into the trap of cognitive biases.

5. Get Input From Others

Other people can have a huge influence on your decision. While you're going through your rubric and justifying your choices, it's best to do this alone to avoid the outside influence. But, once you're done with that, it's worth seeing what everyone else thought, too. Ideally, you want to receive feedback from others to add to the data you've already collected, not to *impact* the data you've collected

It's hard to admit that we can be biased even when we're trying not to be. But studies have shown that it takes more than intention to overcome them, it takes action to right them. For example, when symphonies introduced "blind auditions" by using opaque screens to hide the musician auditioning, the rate of women accepted into symphonies increased dramatically. In the end, the process might be more cumbersome, but it'll also be fairer—plus you'll be more likely to get the best candidate for the job.

14. Reactive, non-reactive research,

Experiments and surveys research are both **reactive**; that is, the people being studied are aware of the fact that they are being studied.

In non-reactive research, those being studied are not aware that they are part of a research project. Such a research is largely based on positivistic principles but is also used by interpretive and critical researchers.

15. content analysis,

Content analysis is a technique for gathering and analyzing the content of a text. The content refers to words, meanings, pictures, symbols, ideas, themes, or any message that can be communicated. The text is anything written, visual, or spoken that serves as a medium of communication. Possible artifacts for study could be books, newspaper or magazine articles, advertisements, poems, letters, laws, constitutions, dramas, speeches, official documents, films or videotapes, musical lyrics, photographs, articles of clothing, or works of arts. All these works may be called as documents. The documents can be:

- Personal – letters, diary, autobiography.
- Non-personal – interoffice memos, official documents, proceedings of a meeting.
- Mass media – newspapers, magazines, fiction, films, songs, poems, works of arts.

Content analysis goes back nearly a century and is used in many fields – literature, history, journalism, political science, education, psychology, sociology, and so on. It is also called a study of communication, which means who says what, to whom, why, how, and with what effect.

In content analysis, the researcher uses objective and systematic counting and recording procedures to produce a quantitative description of the symbolic content in a text. It may also be called "textual coding." There are qualitative versions of content analysis. The emphasis here is quantitative data about a text's content.

Content Analysis is Non-Reactive: It is non-reactive because the placing of words, messages, or symbols in a text to communicate to the reader or receiver occurs without influence from the researcher who analyzes its contents. There is no interaction between the researcher and the creator of the text under analysis.

Content analysis lets a researcher reveal the contents (i.e. messages, meanings, symbols, etc.) in a source of communication (i.e. a book, article, movie, etc.). It lets him/her probe into and discover content in a different way from ordinary way of reading a book or watching a television program.

With content analysis, a researcher can compare content across many texts and analyze it with quantitative techniques (table, charts). In addition, he or she can reveal aspects of the text's content that are difficult to see. For example, you might watch television commercials and feel that women are

mostly portrayed working in the house, cooking food, using detergents, looking after children. Content analysis can document – in objective, quantitative terms – whether or not your vague feelings based on unsystematic observation are true. It yields repeatable, precise results about the text.

Content analysis involves random sampling, precise measurement, and operational definitions for abstract constructs. Coding turns aspects of content that represent variables into numbers. After a content analysis researcher gathers the data, he or she enters them into computers and analyzes them with statistics in the same way that an experiment or survey researcher would.

16. Loaded question,

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.

17. Historical comparative research limitations, 5 marks

18. researchers ny teachers k unsolved questions ko mid-value satisfaction dy di, apna stand point btaen, 5 marks ka

19. Cause and effect relationship, 3 marks

A cause-effect relationship is a relationship in which one event causes another to happen. ... Whenever the cause occurs, the effect must also occur. There must not be another factor that can explain the relationship between the cause and effect.

20. Guideline of interviewing

- **Have integrity and be honest.** This is the 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 the answer

unless you fully understand it yourself. Probe for clarification and to get detailed 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.

21. Differentiate bw ethnography and ethno-methodology

Ethnography comes from cultural anthropology. Ethno means people or a folk distinct by their culture and graphy refers to describing something. Thus ethnography means describing a culture and understanding another way of life from the native point of view. It is just an understanding the culture of people from their own perspective.

Ethno-methodology implies how people create reality and how they interpret it. Ethnomethodologists examine ordinary social interaction in great detail to identify the rules for constructing social reality and common sense, how these rules are applied, and how new rules are created. They try to figure out how certain meanings are attached to a reality.

22. What are the limitations of tri-variate tables? Explain any two

Trivariate tables have three limitations.

1. First, they are difficult to interpret if a control variable has more than four categories.
2. Second, control variables can be at any level of measurement, but interval or ratio control variables must be grouped (i.e. converted to an ordinal level), and how cases are grouped can affect the interpretation of effects.
3. Finally, the total number of cases is a limiting factor because the cases are divided among cells in partials. The number of cells in the partials equals the number of cells in the bivariate relationship multiplied by the number of categories in the control variables.

   For example if the control variable has three categories, and a bivariate table has 12 cells, the partials have 3 X 12 = 36 cells. An average of five cases per cell is recommended, so the researcher will need 5 X 36 = 180 cases at minimum.

23. What do you mean by double barrelled questions? Give example

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.

24. Enlist the steps in field research.

1. Prepare yourself, read the literature and defocus.
2. Select a site and gain access.
3. Enter the field and establish social relations with members.
4. Adopt a social role, learn the ropes, and get along with members.
5. Watch, listen, and collect quality data.
6. Begin to analyze data, generate and evaluate working hypothesis.
7. Focus on specific aspects of the setting and use theoretical sampling.
8. Conduct field interviews with member informants.
9. Disengage and physically leave the setting.
10. Complete the analysis and write the report.

25. Identify type of sampling in which researcher gets information from Salma and Salma also refer other respondents?

26. **Write dilemmas of field research**.\

The direct personal involvement of a field researcher in the social lives of other people raises many ethical dilemmas. The dilemmas arise when the researcher is alone in the field and has little time to make a moral decision. Although he or she may be aware of general ethical issues before entering the field, they arise unexpectedly in the course of observing and interacting in the field. Let us look at some of these dilemmas:

i. **Deception:** Deception arises in several ways in field research: The research may be covert; or may assume a false role, name, or identity; or may mislead members in some way. The most hotly debated of the ethical issues arising from deception is that of covert versus overt field research. Some support it and see it as necessary for entering into and aiming a full knowledge of many areas of social life. Others oppose it and argue that it undermines a trust between researchers and society. Although its moral status is questionable, there are some field sites or activities that can only be studied covertly. One may have to look into the cost and benefit equation; where the researcher is the best judge.

Covert research is never preferable and never easier than overt research because of the difficulties of maintaining a front and the constant fear of getting caught.

ii. **Confidentiality:** A researcher learns intimate knowledge that is given in confidence. He or she has a moral obligation to uphold the confidentiality of data. This includes keeping information confidential from others in the field and disguising members' names in field notes. Involvement with deviants: Researchers who conduct research on deviants who engage in illegal behavior face additional dilemmas. They know of and are sometimes involved in illegal activity. They might be getting 'guilty knowledge.' Such knowledge is of interest not only to law enforcement officials but also to other deviants. The researcher faces a dilemma of building trust and rapport with the deviants, yet not becoming so involved as to violate his or her basic personal moral standards. Usually, the researcher makes an explicit arrangement with the deviant members.

iii. **The powerful:** Field researchers tend to study those without power in society (e.g., street people, the poor, children, and lower level workers). Powerful elites can block access and have effective gatekeepers. Researchers are criticized for ignoring the powerful, and they are also criticized by the powerful for being biased toward the less powerful.

iv. **Publishing field reports:** The intimate knowledge that a researcher obtains and reports creates a dilemma between the right of privacy and the right to know. A researcher does not publicize member secrets, violate privacy, or harm reputations. Yet if he or she cannot publish anything that might offend or harm someone, some of what the researcher learned will remain hidden, and it may be difficult for others to believe the report if critical details are omitted.
Some researchers suggest asking members of the group under study to look at a report to verify its accuracy and to approve of their portrayal in print. For marginal groups (addicts), this may not be possible, but the researchers must always respect member privacy. On the other hand, censorship or self-censorship can be a danger. A compromise position is that truthful but unflattering material may be published only if it is essential to the researchers' larger arguments.

27. What are the consequences if the interview is not properly terminate?

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.

28. In a study researcher observe one group and measure the variables before and after changes. What type of quasi experimental design it is and how?

It is One Group Pretest-posttest Design. This design has one group, a pretest, a treatment, and a posttest.

29. Explain the specification pattern with the help of example?

It occurs when one partial replicate the initial bivariate relationship but other partials do not. For example, we find a strong (negative) bivariate relationship between age of the respondents and attitude towards women empowerment. We control for gender and discover the relationship holds only for males (i.e. the strong negative relationship was in the partial for males, but not for females). This is specification because a researcher can specify the category of the control variable in which the initial relationship persists.

30. The researchers want to study the crisis team management cell. Scenario base question. Identify unit of analysis and unit of observation also provide explanation.

31. What are filtered question?

Filter question is that question which screens out respondents not qualified to answer a second question.

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

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.

32. Different between field editing and in home editing

Field Editing

In large projects, field supervisors are often responsible for conducting preliminary field edits. The purpose of field editing the same day as the interview is to catch technical omissions (such as a blank page), check legibility

of the handwriting, and clarify responses that are logically or conceptually inconsistent. If a daily field editing is conducted, a supervisor who edits completed questionnaires will frequently be able to question the interviewers, who may be able to recall the interview well enough to correct any problems. The number of "no answers," or incomplete answers can be reduced with a rapid follow-up simulated by a field edit. The daily edit also allows fieldworkers to re-contact the respondent to fill in omissions before the situation has changed. The field edit may also indicate the need for further training of interviewers.

In-House Editing

Although almost simultaneous editing in the field is highly desirable, in many situations (particularly with mail questionnaires), early reviewing of the data is not possible. In-house editing rigorously investigates the results of data collection. The in-house editor's task is to ensure that inconsistent or contradictory responses are adjusted and that answers will not be a problem for coders and keyboard punchers.

33. Which type of research is used to compare Indian and Pakistani culture?

Historical comparative research: Historical-comparative research is a collection of techniques and approaches. It is a distinct type of research that puts historical time and /or cross-cultural variation at the center of research – that is, which treats what is studied as part of the flow of history and situated in cultural context.

34. Data transformation with examples

Data transformation is the process of changing data from their original form to a format that is more suitable to perform a data analysis that will achieve the research objectives.

Researchers often modify the values of a scalar data or create new variables. **For example** many researchers believe that response bias will be less if interviewers ask consumers for their year of birth rather than their age, even though the objective of the data analysis is to investigate respondents' age in years. This does not present a problem for the research analyst, because a simple data transformation is possible. The raw data coded at birth year can be easily transformed to age by subtracting the birth year from the current year.

35. Pre test and post test

Pretests and Posttests: Frequently a researcher measures the dependent variable more than once during an experiment. The pretest is the measurement of the dependent variable prior to the introduction of the

treatment. The posttest is the measurement of the dependent variable after the treatment has been introduced into the experimental situation

36. Differentiate between parameters and statistics

Parameter

A parameter is the summary description of a given variable in a population. The mean income of all families in a city and the age distribution of the city's population are parameters. An important part portion of survey research involves the estimation of population parameters on the basis of sample observation.

Statistic

A statistic is the summary description of a given variable in a survey sample. Thus the mean income computed from the survey sample and the age distribution of that sample are statistics. Sample statistics are used to make estimates of the population parameters.

37. Sampling and its types

Sampling

Sampling is the process of using a small number of items or parts of a larger population to make conclusions about the whole population. It enables the researchers to estimate unknown characteristics of the population.

38. Types of probability and non probability/ Types of sampling

Types of Non probability

- Convenience sampling
- Purposive Sampling
- Quota Sampling
- Snowball Sampling
- Sequential Sampling
- Theoretical Sampling

Types of probability

- Simple Random Sample
- Systematic Random Sample
- Stratified Random Sample
- Cluster Sampling
- Double Sampling

39. Parts of interview

Stages of an Interview

1. 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.

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 the 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 the caller is trustworthy

2. 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 the 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.

3. 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 the respondent begins to ramble or lose track of the question. In such cases the 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 the response, he or she may repeat the 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 the respondent's motives should be clarified, he or she might ask, "Why do you feel that way?" If the nterviewer feels that there is a need to clarify a word or phrase, then he/she might ask, "What do you mean by _____?"

4. 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 the suggestions are:

 Record responses during the interview.

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

5. 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 the fieldworker may be required to re-interview the respondent at some future time, he or she should leave the respondent with positive feeling about having cooperated in a worthwhile undertaking. It is extremely important to thank the respondent for his or her cooperation. The interviewer then goes to a quiet 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.

Experimental research

Experimental research builds on the principles of positivist approach more directly than do the other research techniques. Researchers in the natural sciences (e.g. chemistry and physics), related applied fields (e.g. engineering, agriculture, and medicines) and the social sciences conduct experiments.

The purpose of experimental research is to allow the researcher to control the research situation so that causal relationships among variables may be evaluated. The experimenter, therefore, manipulates a single variable in an investigation and holds constant all other, extraneous variables.

40. Exclusive and exhaustive

Exhaustive – that is, coding categories should be provided for all subjects or objects or responses. With a categorical variable such as sex, making categories exhaustive is not a problem. However, when the response represents a small number of subjects or when the responses might be categorized in a class not typically found, there may be a problem.

Mutually exclusive and independent:

This means that there should be no overlap between the categories, to ensure that a subject or response can be placed in only one category. This frequently requires that an "other" code category be included, so that the categories are all inclusive and mutually exclusive. For example, managerial span of control might be coded 1, 2, 3, 4, and "5 or more." The "5 or more" category ensures everyone a place in a category.

41. Participants-non participants observations

In **participant observation** because of the much familiarity with the events, sometimes the **observer** does not realize the significance of same events and neglects them. But in **non- participant observation**the researcher does not even miss a minute thing

42. Double blinding

The double-blind experiment is designed to control experimenter expectancy. In it, people who have direct contact with subjects do not know the details of the hypothesis or the treatment. It is double blind because both the subjects and those in contact with them are blind to details of the experiment. For example a researcher wants to see if new drug is effective. Using capsules of three colors – green, yellow, and pink -- the researcher puts the new drug in the yellow capsule, puts an old drug in the pink one, and take the green capsule a placebo – a false treatment that appears to be real (e.g., a sugar capsule without any physical effects). Assistants who give the capsules and record the effects do not know which color contains the new drug. Only another person who does not deal with subjects directly knows which colored capsule contains the drug and examines the results.

43. Code book

A book that identifies each variable in a study and its position in the data matrix is called as code book. The book is used to identify a variable's description, code name, and field. Here is a sample:

Q/V No.	Field/ col. No.	Code values
--	1-5 Study number	- 6 City
		1 = Lahore
		2 = Rawalpindi
		3 = Karachi
	7 -9	Interview No.
Sex	10	1 = Male
		2 = Female
Age	11-12	Actual

• Education 13 1 = Non literate
2 = Literate

44. In which situation researcher can select historical comparative research (3marks)

Historical-comparative research is suited for examining the combination of societal factors that produce a specific outcome (e.g., civil war). It is also appropriate for comparing entire social system to see what is common across societies and what is unique, and to study long term change. An H-C researcher may apply a theory to specific cases to illustrate its usefulness. And he or she compares the same social processes and concepts in different cultural or historical contexts

45. Three parts of appendix (3marks

Appended Parts

Appendix: The appendix presents the "too …" material. Any material that is too technical or too detailed to go to the body should appear in appendix. This includes materials of interest only to some readers, or subsidiary materials not directly related to the objectives. Some examples of appendix material are data collection forms (instruments), detailed calculations, discussions of highly technical questions, detailed or comprehensive tables of results, and a bibliography (if appropriate).

46. Difference between purposive and sequential sampling (3marks

Sequential sampling is similar to purposive sampling with one difference. In purposive sampling, the researcher tries to find as many relevant cases as possible, until time, financial resources, or his or her energy is exhausted. The principle is to get every possible case. In sequential sampling, a researcher continues to gather cases until the amount of new information or diversity is filled. The principle is to gather cases until a saturation point is reached.

47. Disadvantages of content analysis (5marks)

Disadvantages

1. Bias: Many documents used in research were not originally intended for research purposes. The various goals and purposes for which documents are written can bias them in various ways.

For example, personal documents such as confessional articles or autobiographies are often written by famous people or people who had some unusual experience such as having been a witness to a specific event. While often providing a unique and valuable research data, these documents usually are written for the purpose of making money. Thus they tend to exaggerate and even fabricate to make good story. They also tend to

include those events that make the author look good and exclude those that cast him or her in a negative light.

2. Selective survival: Since documents are usually written on paper, they do not withstand the elements well unless care is taken to preserve them. Thus while documents written by famous people are likely to be preserved, day-to-day documents such as letters and diaries written by common people tend either to be destroyed or to be placed in storage and thus become inaccessible. It is relatively rare for common documents that are not about some events of immediate interest to the researcher (e.g., suicide) and not about famous occurrence or by some famous person to be gathered together in a public repository that is accessible to researchers.

3. Incompleteness: Many documents provide incomplete account to the researcher who has had no prior experience with or knowledge of the events or behaviour discussed. A problem with many personal documents such as letters and diaries is that they were not written for research purposes but were designed to be private or even secret. Both these kinds of documents often assume specific knowledge that researcher unfamiliar with certain events will not possess. Diaries are probably the worst in this respect, since they are usually written to be read only by the author and can consist more of "soul searching" and confession than of description. Letters tend to be little more complete, since they are addressed to a second person. Since many letters assume a great amount of prior information on the part of the reader.

4. Lack of availability of documents: In addition to the bias, incompleteness, and selective survival of documents, there are many areas of study for which no documents are available. In many cases information simply was never recorded. In other cases it was recorded, but the documents remain secret or classified, or have been destroyed.

5. Sampling bias: One of the problems of bias occurs because persons of lower educational or income levels are less likely to be represented in the sampling frames. The problem of sampling bias by educational level is more acute for document study than for survey research.

It is a safe generalization that a poorly educated people are much less likely than well educated people to write documents.

6. Limited to verbal behavior: By definition, documents provide information only about respondent's verbal behavior, and provide no direct information on the respondent's nonverbal behavior, either that of the document's author or other characters in the document.

7. Lack of standardized format: Documents differ quite widely in regard to their standardization of format. Some documents such as newspapers appear frequently in a standard format. Large dailies always contain such

standard components as editorial page, business page, sports page, and weather report. Standardization facilitates comparison across time for the same newspapers and comparison across different newspapers at one point in time. However, many other documents, particularly personal documents have no standard format. Comparison is difficult or impossible, since valuable information contained in the document at one point in time may be entirely lacking in an earlier or later documents.

8. Coding difficulties: For a number of reasons, including differences in purpose for which the documents were written, differences in content or subject matter, lack of standardization, and differences in length and format, coding is one of the most difficult tasks facing the content analyst. Documents are generally written arrangements, rather than numbers are quite difficult to quantify. Thus analysis of documents is similar to analysis of open-ended survey questions.

9. Data must be adjusted for comparability over time: Although one of the advantages of document study is that comparisons may be made over a long period of time, since external events cause changes so drastic that even if a common unit of measure is used for the entire period, the value of this unit may have changed so much over time that comparisons are misleading unless corrections are made. Look at the change in measuring distance, temperature, currency, and even literacy in Pakistan.

48. How to eliminate selection bias during experiment

Selection bias is the threat that subjects will not form equivalent groups. It is a problem in design without random assignment, hence differential selection of the subjects for the comparison groups. It occurs when subjects in one experimental group have a characteristic that affects the dependent variable. For example, in an experiment on physical aggressiveness, the experimental group unintentionally contains subjects who are sportsmen, whereas the control group is made up of musicians, chess players, and painters.

49. About facilitator in focus group discussion

Functions of the Facilitator:

The facilitator should not act as an expert on the topic. His or her role is to stimulate and support discussion. He should perform the following functions:

1. **Introduce the session:**

He or she should introduce himself/herself as facilitator and introduce the recorder. Introduce the participants by name or ask them to introduce themselves (or develop some new interesting way of introduction). Put the participants at ease and explain the purpose of the FGD, the kind of

information needed, and how the information will be used (e.g., for planning of a health program, an education program, et.).

2. **Encourage discussion:**
   The facilitator should be enthusiastic, lively, and humorous and show his/her interest in the group's ideas. Formulate questions and encourage as many participants as possible to express their views. Remember there is no "right" or "wrong" answers. Facilitator should react neutrally to both verbal and nonverbal responses.
3. **Encourage involvement:** \
   Avoid a question and answer session. Some useful techniques include: asking for clarification (can you tell me more?); reorienting the discussion when it goes off the track (saying: wait, how does this relate to the issue? Using one participant's remarks to direct a question to another); bringing in reluctant participants (Using person's name, requesting his/her opinion, making more frequent eye contact to encourage his participation); dealing with dominant participants (avoiding eye contact or turning slightly away to discourage the person from speaking, or thanking the person and changing the subject).
4. **Avoid being placed in the role of expert**:
   When the facilitator is asked for his/her opinion by a respondent, remember that he or she is not there to educate of inform. Direct the question back to the group by saying: "What do you think?" "What would you do?" Set aside time, if necessary, after the session to give participants the information they have asked. Do not try to give comments on everything that is being said. Do not feel you have to say something during every pause in the discussion. Wait a little and see what happens.
5. **Control the timing of the meeting but unobtrusively**:
   Listen carefully and move the discussion from topic to topic. Subtly control the time allocated to various topics so as to maintain interest. If the participants spontaneously jump from one topic to the other, let the discussion continue for a while because useful additional information may surface and then summarize the points brought up and reorient the discussion.
6. **Take time at the end of the meeting to summarize, check for agreement and thank the participants:**
   Summarize the main issues brought up, check whether all agree and ask for additional comments. Thank the participants and let them know that their ideas had been valuable contribution and will be used for planning the proposed research/intervention/or whatever the purpose of FGD was.Listen to the additional comments made after the meeting. Sometime some valuable information surfaces, which otherwise may remain hidden.

Important topics

Interview

Validity

Central tendency

Sampling measures

Two questions was based on scenario

Element

Population