MEDIA RESEARCH METHODOLOGY

Any research is a quest for knowledge. It may be study of natural phenomenon or the rational study of the relation between the concepts in which these phenomena are expressed. The knowledge should be gathered, organized and systematized, tested and validated with the help of observation. If the observations are precise, the results will be more reliable.

The term research is thus a systematic way of collecting, classifying and analyzing information, both quantitative and qualitative. Rusk said, 'Research is a point of view, an attitude of enquiry or a frame of mind'. Research is an attempt to elicit facts and analyze them once they have been collected to get solutions for a variety of problems.

Research has to be a professional affair involving systematic, accurate and expert handling of the research information. Data has to be gathered through systematic planning. It has to be done by having control on data collecting procedures. The collected data has to be subjected to rigorous analysis.

A Good Research has:

1. **A focus on facts**- facts becomes significant only when interpreted in the light of accepted standards and assumptions, which are normative in character.
2. **Insight and imagination of the researcher**- these are needed to interpret, explain and draw inferences. Using insight and foresight can solve many puzzles.
3. **Approach to the study of man and society and provides solutions to problems**- the research should contribute to the widening of knowledge and to the solution of problems confronting human society.

As a result of advance in science, technology and other fields, research has become imperative. The development and discrimination of knowledge is not possible without research. **Research contributes to new facts and generalizations**. It keeps the professional researcher abreast with the latest in discipline. It helps him to develop, interpret and reinterpret facts and concepts in the light of changing situations. **Research creates an urge for further strides in one's discipline.** It modifies all partial theories and helps dispel myths by examining them scientifically. **Without research there is no progress and no growth knowledge.**

Media Research Methodology

STEP 1: Select Your Topic

1. Choose an area of interest to start your topic selection
2. Use the **Best of the Library** to drill down into subject areas for more specific ideas
3. Search for publications related to your topic
4. Search every page of the entire Question library for relevant books and articles
5. Narrow down your topic to refine search results
6. Organize your results by media or publication date; focus your research by using "Search within Results".
7. You can also refer to Question's **Best of the Library** for ideas

STEP 2: Gather Information

1. Formulate a research questions to guide your researc h. Scan books to see if they are relevant
2. Use Table of Contents, index and Find function to quickly locate useful information
3. Highlight interesting passages as you encounter them
4. Highlight in up to 7 different colors. All highlights are saved, with links back to sources
5. Make notes to capture thoughts, questions, and ideas as you read
6. Place notes directly into the text with "Add a Note" function
7. Refine your research question and do further information gathering

STEP 3: Write Your Paper

1. Write down your working thesis or research question
2. Review and reflect on work done
3. All your work, including bookmarks, notes, and highlights, is saved in your Workspace, where it is easily organized and printed.
4. Construct your argument, with main points organized in an outline
5. Write a rough draft, expanding outline to fulfill paper length requirements
6. Use your Bookshelf to quickly return to books later for additional material.

STEP 4: Finalize Your Paper

1. Revise rough draft to ensure strong, logical argument
2. Document referenced works by creating a bibliography
3. Let Question create a bibliography from your sources, in your choice of citation style Revise paper for spelling, punctuation and grammar errors
4. Print out final revision of your paper and bibliography

Methods of Research

All methods of research can be classified as **quantitative** and **qualitative**.

Quantitative methods: many studies concentrate on numbers. In such studies, observations are expressed in numerical terms. Quantitative research is basically explanatory in nature and mostly involves experiments. Such studies attempt to use precise statistical models to achieve comprehensive understanding of communication behavior and phenomena. The best examples are surveys and opinion polls. Such methods often try to interpret the present behavior or predict future behavior in various communication situations. In such studies statistical methods and numerical data are used as a means to an end. Quantitative methods help in providing precise explanation about processes and help measure communication behavior.

Qualitative methods: here the emphasis is not on numerical data. Rather these methods depend on description and interpretation of meanings of communication messages by way of subjective treatment. Instead of going for large number of examples, qualitative research concentrates on individual examples. Qualitative research does not try to find patterns. It makes intensive inquiries about single events, individuals and social or communication units.

METHODS OF MEDIA RESEARCH

A lot of methods for research are used in media or communication research. These include **Census, Survey, Observation, Case Studies, interviews**, etc.

Census Method: this method involves studying the entire population or universe of study and is a quantitative method. No single element of the universe is left uncovered in this method. Thus the result is always good. Also there is less danger of biases or prejudices being introduced. The main drawbacks of the census method are, it is highly expensive and also involves large manpower and a lot of

efforts. For these reasons, the census method is rarely used for media research. One good example of census method is the **population census** of different countries.

Survey: survey means looking at things in its entirety. The term survey comes from two words '***sure*** and ***vor***' which mean to see a particular thing from a high place. But this term is used differently in different sciences. In communication research, it means looking at something proce ss, behavior, etc) in its entirety. In quantitative communication research, a survey is an empirical study that uses questionnaires or interviews to discover descriptive characteristics of communication phenomena.

The people mostly think that surveys are means of studying large number of people. However, relatively smaller groups-like the employees of an office can be surveyed. Surveys can be used for all kinds of communication studies. There are two basic forms of surveys-**questionnaire surveys** and **interview based surveys.**

Questionnaire surveys involve the following steps: -

- **Sampling subjects** respondents -one can rarely study the entire population or the universe. A representative sample is thus selected. Many methods are used for this purpose. Whatever the method is, the researcher should justify the size and method of sampling.

- **Selecting and framing questions**-developing or framing question is often a difficult task. It requires extensive reading on the subject, composing a rough draft, putting them into a proper format. Questions can be direct or indirect, specific or general. Also there could be questions or statements to which reactions are sought. Again questions can be closed or open ended. The research is free to adopt one type of questions or a variety of question types. The second opinion would obviously result in a broad variety of response modes.

- **Formatting**-the basic format of questionnaires includes a brief statement about the study at the beginning, request for participation, assurance of confidentiality if required. Then come the questions regarding socio - economic-demographic information about gender, age, academics, income, etc). Next come the questions on the topic. Usually questions of same response modes like *yes* or *no* questions ar e grouped together. Some researchers put questions on the same issue together. Researchers usually try

to have less number of questions. However, some studies require long questionnaires of 30 to 40 questions. Putting large number of questions in a proper format becomes a big problem.

- **Determining validity and reliability**-after framing questions and formatting them, researchers must test the validity relevance) and reliability consistency of the questions. For this, researchers often put *check questions* in the questionnaire. This involves putting the same questions in different ways at different places. Many methods of testing validity and reliability are available. These ***include test scales, polarity rotation***, etc.

- **Administering the questionnaire**-questionnaires can be delivered by mail, through fax or personally. However, it is always good to get the questionnaire filled up personally.

- **Analyzing and interpreting results**-mostly researchers use statistical means for analyzing data collected through the questionnaire. They try to show averages or spread of data. Whatever means used, this form of research tries to reveal to the problems posed in the study.

Observation Method: observation means seeing things with a purpose. In research terms observation is perception with a purpose. Observation is the process of acquiring knowledge through the use of the sense organs.
Observation involves three components: -

a. Sensation or experiencing through the sense organs
b. Attention or the ability to concentrate on the subject matter
c. Perception or the ability to recognize facts and putting them in proper perspective

The observation methods usually look into an occurrence, event or phenomena as it is taking place. It is basically a qualitative method. The two basic types of observation are **participatory** and **non-participatory**.

Participatory observation- this is also called naturalistic studies as the studies are conducted in natural environment or settings. These are non-experimental studies or inquires that are conducted as the subjects people are engaged in the natural course of their lives. Participatory observation is the most important form of fieldwork. Here researchers study groups by becoming a part of the group. Researchers try to establish close relationships with the group members and

observe and record their behavior. Such studies produce both qualitative and quantitative data. Researchers try to use non-intrusive methods to gather information regardless of the fact that whether it is qualitative or quantitative. Researchers try to get close and personal with the group members. They do not ask questions as in case of surveys. They join the group and **'observe'.**

Non-participatory-sometimes researchers don't try to become part of the group they are studying. They observe the group's behavior from the outside and not as a part of the group. Here the chances of getting personal details of behavior are less. In case of participative observation, the interpretations become more subjective. But in case of outside observation, which involves no close relationship between the group and the researchers, the interpretations are more or less objective. In full participative observation, the researcher's sympathy and concern are reflected in the interpretations. In case of non-participatory observation the researcher observes from a distance. This kind of observation is detached and does not provide any firsthand experience.

The accuracy of observation depends on the precise and clear formulation of the problem, studying items and issues individually objectivity of inquiry and application of the five Ws and one H formula *what, where, who, when, why and how*. The reliability of the observation depends on the techniques and tools used, the situation, setting or environment being observed and of course the quality of the observer. It also depends on the quality of sampling. A lot of cross checking is required to make sure that relevant and valid information is being collected. Along with objectivity, the observer should have relevant experiences, knowledge, maturity, un-biasness, and alertness. Observation should be noted down immediately and should be properly categorized.

Case Studies- these are intensive inquiries about single events, individuals, social units, or institutions. Case studies throw light on individual events or processes. The results are not generalized able in the statistical sense. Case studies help the research know precisely the factors and causes of a particular phenomenon. It is a kind of qualitative analysis. Whether an individual, an institution, or a social unit or an entire community is studies, the subject is considered as a whole or a unit. The case study method covers every aspect of the unit very intensively.

In the case study method, information is collected through personal interviews, interview with people close to the subject or unit being studied, documents personal and official as in case of individuals and institutions respectively.

Unlike most other methods where only general aspects are covered, the case study method covers emotional and psychological aspects too. The case study method involves subjective treatment unlike in other methods where the emphasis is on numbers.

While case studies generate adequate and comprehensive information, which help solve many problems, this method has some disadvantages also. These include a false sense of confidence. Researchers often become over confident as they cover all the aspects. However, case studies are used as a highly effective method of research both in the social sciences and communication fields.

Interviews- like in the participative observation method, collection of information in the interview method is done personally by the researcher. Many people use questionnaire to collect information. But this is an impersonal method as questionnaires are often distributed through mail. Also many people ignore the questionnaire and do not respond. But interviews are not generally ignored. Also the researchers can observe and record such information about the manner, behavior and non-verbal actions of the respondents. These things are usually lost if questionnaires are being sent through mail. The interview method involves the following steps.

The first and foremost thing for an interview is to select questions. The key here is relevance. Sometimes interviewers use specially prepared formats as in case of questionnaires. These are called questionnaire schedules. Here, the questions are selected, framed and organized in a particular format. These are called **structured interviews**. In some other cases, the interviewer does not have a set of pre-framed questions. This method is called **unstructured interviewing.** Unstructured interviews offer a lot of flexibility. Here the respondents are free to give their reactions on the topic and related issues. This method also allows extended explorations and follows ups. Researchers use a variety of strategies to organize their questions. Some put the demographic questions at the end, unlike in case of questionnaires. For initial questioning two strategies are used- **funnel questioning** and **inverted funnel questioning.** Funnel questioning starts with a general and open-ended question followed by narrow or specific questions. Inverted funnel questioning begins with a very specific question, which is then followed by general questions.

WRITING SUPPORT MATERIALS OF RESEARCH

Media research materials include a whole range of discussions about the development of media, their achievements and effects during the past fifty years. It includes the methods used in collecting and analyzing information in regard to newspapers, magazines, radio, T.V. cinema or other modern and traditional media of communication. It also concerns with an expanded discussion of the scientific method of research.

Various writing support materials of Media research are:

- **Questionnaire**
- **Case study**
- **Interviews**
- **Surveys**
- **Observations**

Questionnaire- preparation of a questionnaire involves the following steps-

1. **Sampling subjects**

2. **Selecting and framing questions**- Developing or framing question is often a difficult task. It requires extensive reading on the subject, composing a rough draft, putting them into proper format. Questions can be direct or indirect, specific or general. Again questions can be close or open ended. The researcher is free to adopt one type of questions or a variety of question types.

3. **Formatting**- the basic format of questionnaires includes a brief statement about the study at the beginning and assurance of confidentiality if required. Some researchers put questions on the same issue together. Researchers usually try to have less number of questions. However some studies require long questionnaires of 30 to 40 questions.

4. **Determining validity and reliability**- after framing question and formatting them, researchers must test the validity and reliability of the questions. For this, researchers often put check questions in the questionnaire. This involves putting the same question in different ways at different places.

5. **Administering the questionnaire**-questionnaire can be delivered by mail, through fax or personally. However, it is always good to get the questionnaire filled up personally.

6. **Analyzing and interpreting results**-mostly researcher use statistical means for analyzing data collected through the questionnaire. They try to show average or spread of data. Whatever means used this form of research tries to reveal answers to the problems posed in the study.

Designing Evaluation Tools and Techniques

As with any other empirical reasearch, the first step of the research process is the collection of data. Since the late 1990s, more and more newspapers issue online editions, which are frequently archived. In addition, a number of databases for newspaper data exist. Collection of news data has thus become much less labor intensive. However, not all tools for data collection are equally suited the harvest of data. And the wealth of data that can be collected naturally also requires new tools for data organization.

Market Research

Evaluation and field testing of programmes

This mainly deals with "*Know Your Audience"* and, is divided into three parts:
1. Samples and populations
2. Selecting a sample
3. Sampling households and people

Sampling is the key to survey research. No matter how well a study is done in other ways, if the sample has not been properly found, the results cannot be regarded as correct. It applies mainly to surveys, but is also important for planning other types of research.

1. Populations

The first concept you need to understand is the difference between a population and a sample.

To make a sample, you first need a population. In non-technical language, **population** means **"the number of people living in an area."** This meaning of population is also used in survey research, but this is only one of many possible definitions of population. The word **universe** is sometimes used in survey research, and means exactly the same in this context as population.

The **unit of population** is whatever you are counting: there can be a population of people, a population of households, a population of events, institutions, transactions, and so forth. Anything you can count can be a population unit. But if you can't get information from it, and you can't measure it in some way, it's not a unit of population that is suitable for survey research. For a survey, various limits geographical and otherwise) can be placed on a population.

Even though some populations can't be questioned directly, they're still populations. For example, schools can't fill in questionnaires, but somebody can do so on behalf of each school.

Often, the population you end up surveying is not the population you really wanted, because some part of the population cannot be surveyed. For example, if you want to survey opinions among the whole population of an area, and choose to do the survey by telephoning people at home, the population you actually survey will be people with a telephone in their home. If the people with no telephone have different opinions, you will not discover this.

As long as the surveyed population is a high proportion of the wanted population, the results obtained should also be true for the larger population. For example, if 90% of homes have a telephone, the 10% without a phone would have to be very different, for the survey's results not to be true for the whole population.

Sampling frames

A sampling frame can be one of two things: **either a list of all members of a population, or a method of selecting any member of the population**. The term **general population** refers to everybody in a particular geographical area. Common sampling frames for the general population are electoral rolls, street directories, telephone directories, and customer lists from utilities which are used by almost all households: water, electricity, sewerage, and so on.

It is best to use the list that is most accurate, most complete, and most up to date. This differs from country to country. In some countries, the best lists are of

households, in other countries, they are of people. For most surveys, a list of households especially if it is in street order) is more useful than a list of people. Another commonly used sampling frame which is not recommended for sampling people) is a **map.**

3. Samples

A sample is a part of the population from which it was drawn. Survey research is based on sampling, which involves getting information from only some members of the population.

If information is obtained from the whole population, it's not a sample, but a census. Some surveys, based on very small populations such as all members of an organization in fact are censuses and not sample surveys. When you do a census, the techniques given in this book still apply, but there is no sampling error - as long as the whole group participates in the census. **Samples can be drawn in several different ways, such as probability samples, quota samples, purposive samples, and volunteer samples.**

Choosing the sampling unit

Now you need to choose your sampling unit: what will you sample? It seems obvious at first: your sample will be people, because only people can be interviewed. In fact, it's not that simple, especially with door to door surveys. **Most door to door surveys begin by sampling dwellings**. A dwelling is the place where the household lives: households are people, dwellings are homes. Dwellings are easier to find than people: they don't move around. Even if you make your initial sample from a list of people, such as an electoral roll, you'll find that some people have moved since the list was compiled. It's much easier to sample dwellings, and then, as a second stage, interview the people who live in those selected dwellings.

Sometimes it's more appropriate to sample households than people. For example, one can organize an Indian survey about media usage. Part of this survey asked about the types of media equipment that were available in households. In each household, the interviewers asked for the person who knew most about technology. This person was then asked questions such as "How many radios in this household can receive FM programs?" The average numbers reported in the survey were then applied to the whole population of Indian households. We were

able to make statements such as "there are between 29 and 31 million FM radios in India."

When the sampling unit is people, some parts of the population are usually excluded. Usually, children below some minimum age are excluded - because they don't do the activity the survey deals with e.g. reading newspapers, and also because interviews with children must be done differently. Normal questionnaires are usually too difficult for them. Depending on the subject of the survey, the minimum age is usually between 10 and 18 - most commonly, 15. Children under 10 seldom listen to radio, or read newspapers, so there's no problem excluding them if this is the subject of your survey. But children as young as 2 watches TV, so any TV survey that does not involve young viewers will be incomplete. The best solution is usually to survey only people aged 10 or over, acknowledges the lack of data from younger viewers, and to do a separate study among children aged under 10, using observation instead of questionnaires.

Door-to-door surveys usually exclude people who don't live in private households: visitors in hotels, troops in barracks, homeless people, and so on. These people are usually only a few percent of the population, so excluding them makes very little difference to the survey results. For any proposed door-to-door survey, you should try to find out how many people you will not be able to reach, and whether these people are likely to give different answers from the others.

In the 1980s, an Australian government department did a telephone survey with teenagers, and found a surprisingly low rate of unemployment - because it mainly reached teenagers who were living with their parents, in households rich enough to have telephones. At the time, only 10% of households had no telephones - but these were the poorest households.

KNOW YOUR AUDIENCE

Principles of questionnaires

Here we explain how to construct a questionnaire, mainly for use in surveys. Other types of audience research don't use questionnaires much.

A questionnaire is a strange type of communication. It's like a play, in which one actor **the interviewer** is following rules and reading from the script, while the other actor **the respondent** can reply however he or she likes - but only certain types of reply will be recorded. This is an unnatural social situation, and in

countries with no tradition of this kind of conversation, respondents may need to have the principles explained to them. Though it is easy to write a questionnaire, you need a lot of skill and experience to write a good questionnaire: one in which every question is clear, can be answered accurately, and has usable results.

Planning the Questionnaire

1. Working out what you need to know

It seems to be a natural human tendency to jump into action: to start writing a questionnaire the moment you decide to do a survey. However **better questionnaires result from planning the structure before you start writing any questions.** If you simply start writing questions, you are likely to find out, too late, that some important questions were omitted, and other questions were not asked in a useful way.

Some of your internal questions might be:

- What sorts of people tune in to our station?
- How long do they tune in for?

2. Question wording

Of all parts of survey research, it is the wording of questions that is least a science and most an art. Here are some principles for question wording, divided into two sections: **What to Do**, and **What Not To Do**.

3. What to do

Keep questions short and simple.

It is suggested to have a 25-word limit for a survey question. In a spoken survey, this limit should any multiple-choice answers that form part of the question.

4. Always encourage multiple answers for questions beginning "Why"

People do things for many reasons. If you ask "Why did you watch that TV program?" one respondent might give any or all of these answers:

- ✓ My husband wanted to watch it, so I watched it with him.
- ✓ I always watch it
- ✓ I thought I could learn something from it
- ✓ It's an excellent program
- ✓ I like it

- ✓ I didn't like the program on the other channel

Any open-ended question that asks for reasons will probably produce almost as many reasons as there are respondents. Most people have several reasons for doing whatever they do. So any person could probably answer a question beginning **"Why"** with ten completely different answers, all of them true.

If a respondent is asked to give only one answer to a "Why" question, it will be the answer he or she thought of first. With such questions, the interviewer must try to get all the reasons that apply. After a respondent gives each reason, the interviewer should ask "Do you have any more reasons?" and allow the respondent a little time to think of more reasons.

5. Beware of the implied "always"

"Should police carry guns?" This question is ambiguous: does it mean "Should all police always carry guns?" or "Should some police sometimes carry guns?" — or something in between? Make it specific, so that everybody can answer the same question, not what they guess it might be asking.

6. Beware of implied regularity

"Do you ever listen to FM radio?" is not the same as "Have you ever listened to FM radio?" The first implies a regularity that may not exist for many people. The second version is more specific. Other suitable versions include "When did you last listen to FM radio?" Which may not produce a very accurate answer, if it was not recently, and "Have you listened to FM radio in the last week?" Ask about the last week, and some people will answer for the last two weeks.

7. Habits are not always the same as behaviour

"Do you listen to FM radio every day?" may be answered 'Yes' by the same person who answers No to "Did you listen to FM radio yesterday?" Most people have a mental picture of their habits, which may differ quite sharply from their actual behaviour. They see themselves as often doing things that in practice they rarely do.

8. Ask precise questions

Avoid vague terms, and those that have different meaning to different people. Don't ask "Are you a listener to FM radio?", or you'll get answers like "Well I listen now and then, but I'm not really a FM radio listener." Other common words to be wary of are "local" and "community": if these are used in a question, the

exact geographical scope should be made clear. **So spell out exactly what you mean.**

To get highly accurate answers to questions about behaviour, you need to specify as much detail as respondents can stand. For example, even a simple question on the number of radios in a household can produce answers that depend very much on exact wording. For example, compare these four sets of wording:
1 "How many radios are there in your household?"
2 "How many radios are owned by people in your household?"
3 "How many working radios are there in your household, including car radios?"

9. when asking about radio, define "listening" explicitly
Be careful with any questions about listening to radio. Compared with most other types of behaviour, listening is less of an on/off activity. Partial listening is very common. Thus the exact meaning of "listening" needs to be defined within the question.

10. Always try to include points of comparison
To find out about your own programme, you also need to ask about other programmes. To measure a response to a program, that program must be compared with others. "So 59% like the program? Is that hig h or low?" Therefore, try to build up a context for the main question; without comparisons, survey results have little meaning.

What to do: Summary

The main principle of writing questionnaires is to try and see an organizational problem from a respondent's point of view - to make a link between the world of the audience member, and the world of the media publisher. If there seems to be any conflict here, remember that it's the audience who will be answering the questions, so the audience's view of the world should predominate in a questionnaire.

What not to do in Questionnaires

1 Avoid questions beginning "Why don't"
These are even more difficult than questions beginning "Why". Here it is important to distinguish between an internal question what the o rganization wants to know and a survey question what each respondent is asked.

Your internal question may be "Why don't more people listen to our marvelous programs?" If this is converted directly into a questionnaire question such as "Why don't you listen to more programs on Radio?" many respondents won't know how to answer. Some will make the first excuse that comes into their head. Some will say "I'm too busy".

You could even distinguish between strong and weak reasons, instead of just ticking one box when a respondent said that reason applied. And in case you forgot to list some important reasons, the question could conclude with the open-ended section: "Are there any other reasons I haven't mentioned? If so, what are they?"

2 Avoid industry jargon

Don't assume that respondents share your knowledge of your industry. For example, many terms are not well understood. These include **"live"** as in live broadcast, "call sign", "regional", and "network". In countries where the 24 -hour clock e.g. showing 1pm as 1300 is not widely used, many people think 1700 hours is 7pm.

3 Never ask two questions in one.

Combining two questions to save space or time will cause more problems than it solves. Whenever a question contains the words "and" or "or", examine it carefully to make sure it really is one question and not two. Sometimes it can be difficult to realize that what you see as one question can be interpreted by respondents as two questions. You'll know that this has happened when you expect one answer, but get two.

4 Never use double negatives

For example, questions beginning "Don't you think X should not ..." Many people will answer Yes when they should have said No, and vice versa. Double negatives are particularly bad when you are asking a group of questions using the same scale - e.g. agree/neutral/disagree.

5 Don't expect memory feats

Memory feats include asking people exactly what they did a week ago. Sometimes you have no alternative - but don't expect accurate answers. For many, memory

has a telescoping effect, by which two months seems like one, a year ago seems like six months, and so on.

6 Avoid questions beginning If

If you ask hypothetical questions - such as "What station would you listen to at 9 a.m. if your favorite RJ was no longer on FM radio?" — you will get hypothetical replies, such as "It would depend who replaced him." Similarly, if you have a new program in mind, and describe it in a survey, and get a favourable response, don't be too surprised if it turns out to be unpopular.

7 Avoid tongue-twisters

If interviewers will have to read the questions aloud, the questionnaire writer should also each question aloud quickly before finalizing the wording.

8 Avoid Ambiguity

Sometimes it's hard to realize that a question you intend to have one meaning can be understood to have quite a different meaning. For example, an ABC survey a few years ago, at a time when industrial action had caused occasional news blackouts, asked "Which channel's news do you have most confidence in?" Later, we realized that "confidence" is ambiguous — we'd taken it to mean credibility, but some respondents assumed it referred to regularity.

In fact, "confidence" almost comes under the heading of Vague Term, To Be Avoided. A better wording would have been "If you saw differing reports of the same event, in news bulletins on channels 2, 7, 9, and 10, which channel would you believe most?"

9 Avoid leading questions

Leading questions are those that make it clear by their wording that one answer is preferred. An example appeared in an advertisement in major Australian newspapers, opposing the UN convention on eliminating discrimination against women. One question in this pseudo-questionnaire was "Do you want Soviet-style laws on women's rights imposed on Australia?" Who would dare answer Yes to a question including words like "Soviet-style" and "imposed"? Try to avoid such statements.

10 Avoid easy escapes

By an "**easy escape**" it means an alternative answer seemingly so obvious that many respondents will accept it without thinking. This applies mainly to multiple choice questions. If you ask a difficult question, which requires some thought, and offer an alternative that seems to cover all the others, many people will choose that one.

Try not to offer people a choice of answers which includes "it depends," or words to that effect. This is such an easy choice that many respondents will choose that answer, without considering the other possibilities.

11 Avoid ranking

Sometimes a questionnaire will include a question like this:
"Please indicate how much you like these programs by writing 1 beside the program you like most, 2 beside the program you like next most, and so on, down to 8.

Respondents hate this type of question. They keep changing their minds, they can't decide, and they become very frustrated. In spoken questionnaires, they ask the interviewer for help. In written questionnaires, answers to this type of question are often unreadable, because of all the crossings-out.

PROGRAM TESTING

A common purpose for audience research is to find out how to improve a radio or TV programs, by interviewing people who listen to or watch the station. Stations with small audiences usually have less money than stations with large audiences, so cannot afford surveys with such large samples. However**, the smaller the audience a station has, the more expensive it is to survey.**

Format of Questionnaires

Questionnaires that are intended to be read aloud should be laid out quite differently from questionnaires which respondents will fill in themselves. With spoken questionnaires, the interviewers are trained in using the questionnaire for each survey, and will repeat it many times, interviewing a variety of different people. When interviewers are used, **a spoken questionnaire can omit a lot of**

detail. Interviewers don't need to be shown how to indicate answers, how to follow arrows to skip destinations, and so on.

But a written questionnaire is read and filled in by the respondent. Each respondent will see only one questionnaire for a particular survey, so everything has to be explained in detail - but not so much detail that the respondent gets bored with reading it all.

The method of answering each question needs to be spelled out. Does the question need one answer only, or all answers that apply, or some limited number of answers? Is the question answered by ticking a box, circling a code, or writing in a full answer? A written questionnaire needs to explain all this clearly. It must look easy, attractive, interesting, error-free, and professional - otherwise the response rate and completion quality will suffer.

A spoken questionnaire should make allowance for the difficulty that interviewers have in recording answers while they are standing up, perhaps outdoors in wind or rain or poor light, resting the questionnaire on a clipboard. If you don't leave enough space between codes, some interviewers may circle the wrong code by mistake.

Therefore spoken questionnaires shouldn't try to cram too much onto each page. You may spend a little more on paper with this type of layout, but repeating a single interview may cost more than hundreds of sheets of paper.

Qualitative Analysis: a process that is often the precursor to quantitative, statistical work; a process to make the tacit underpinnings of an issue explicit; a process you can use to deepen your understanding of complex social and human factors that cannot be understood with numbers; a process that helps you figure out what to count and what to measure.

Qualitative Research is a process we can use to deepen our understanding of complex social and human factors in ways that cannot be understood with numbers. Qualitative research has many faces, each with its own theoretical and epistemological orientation, each exploring different issues, and positing different kinds of questions.

SURVEY

A **public survey** is a list of questions aimed at extracting specific data from a particular group of people. Surveys may be conducted by phone, mail, via the internet, and sometimes face-to-face on busy street corners or in malls. The census is the most widely-known form of public survey. Some form of census is performed with varying degrees of accuracy in almost every nation, with the results used to determine governmental budgets and taxation. Law enforcement and other public services such as public schools depend upon accurate census information.

Whenever using a survey in a story, journalists need to obtain basic methodological information on the data. They are:

1. Who commissioned the survey?
2. Who conducted the survey?
3. The purpose of the survey
4. The universe the survey covers
5. Sampling method and procedures
6. Non-response rate
7. Sample size number of cases
8. Weighting procedures
9. Data collection method
10. When data collected
11. Results
12. Characteristics of interviewers and coders and their training
13. Copy of questionnaire
14. Results for sub-samples vs. whole sample
15. Precision of findings and sampling error when applicable
16. Standard, scientific use of technical terms

The following information about surveys should be disclosed:

- Who conducted the survey?
- Sample Design
- Sample Size
- Mode of Data Collection
- When Collected/Dates
- Question Wording
- Sample Population
- Response Rate

As many of these essential facts as possible should be included in news reports using surveys. Typically all of this information can be covered in two-to-three sentences. When it is not possible to include all of the information, journalists should be prepared to provide it upon request.

Conducting a survey is often a useful way of finding something out, especially when `**human factors'** are under investigation. Although surveys often investigate subjective issues, a well-designed survey should produce ***quantitative*****,** rather than ***qualitative*****,** results. That is, the results should be expressed numerically, and be capable of rigorous analysis.

The most important issue to keep in mind when planning a survey is that you are trying **to find something out**. If you don't know in advance what the survey's objectives are, then you should question whether you really need the survey. The objectives of a survey can usually be phrased in the form of questions. On the whole questions that start with `Why...?' tend to be harder to answer than those that start with `Which...?' or `What...?'. They usually have to be translated into a series of `What?' and `How?' questions to be capable of rigorous interpretation.

To ask questions of a large number of people, many experimenters make use of questionnaires. In most cases, only a small number of people surveyed will respond, and the more complex the questionnaire the fewer responses there will be. The design of questionnaires is an issue about which complete books have been written.

Here are a few general guidelines.

- If you are personally **able to supervise the filling-in of each questionnaire, your survey group is probably inadequate**. It is unlikely that `family and friends of the experimenter' will be a representative sample of anything.
- If you are expecting people to reply by post, you will need to **enclose a self-addressed envelope.** Otherwise the recipient will almost certainly throw the questionnaire straight in the bin.
- If you can collect adequate results anonymously, then you should. In this case you should make it clear to potential respondents that anonymity will be assured. Even if you don't explicitly asks for a person's name, **the statement of confidentiality will reassure people.**
- If you can get meaningful results even if some questions are not answered, make this clear. **A busy person is more likely to answer part of the questionnaire than all of it.**

- You *must* **ask the respondent for enough personal information to check that your sample group is adequately composed.** If you are asking a person to reply on behalf of an organization, then you need to ask these questions about the organization. Alternatively, you can mark or number the forms in some way that you can tell who has responded. However, doing say may deter potential responders.
  It is very easy **to ask questions that are self-biasing**. A trivial example is a question like `do you object to filling in questionnaires?' If everyone replies `no' you can't claim that this generalizes: there could be any number of potential `yes' replies in people's waste paper baskets. While it is unlikely that anyone would make such an obvious mistake, more subtle examples exist to trap the unwary. For example, if you ask a group of people how much time they spend playing computer games at work, you will probably obtain a larger average than really exists. Why? Because people that have time to play computer games at work are more likely to find time to fill in your questionnaire.
- People will not find time to fill in your questionnaire **if they think it is a waste of time.** People are more likely to think this if the questionnaire is poorly presented or ungrammatical. If your grammar and spelling are weak, get the questionnaire checked by someone else before you send it off.
- If you ask questions that have a bearing on a company's financial position, even trivial ones, you should not trust the replies. A person who is prepared to answers the questions is unlikely to have accurate information to answer them with. The people who are really in a position to answer such questions will not want to, as they will feel that this information could compromise the company's trading position. What's more, if there is even one question of this type, **it will probably result in the whole questionnaire being discarded.**

Sampling and the population

In almost all cases we would like to be able to *generalize* the results of a survey, that is, to estimate how the results might apply outside the survey group. We call this larger group the *population*. It isn't necessarily the same as the population of a country or the world; it simply means the group of people to whom the survey results should be extendable. Beginners often forget that results of a small survey do not automatically extend to the population. There are two main reasons why this is so.

First, there is **sampling variation**. Second, in practice the second group surveyed **will not be identical** in all respects to the first. The group may consist of people of

different ages, with different proportions of men and women, with different occupations, and so on. The result will be more accurate if the composition of the sample group is the same in all important respects to the composition of the population. If the sample group is very different to the population, we say it is ***non-representative***. **Non-representative sampling is one of the most frequent causes of error in surveys**. If you carry out a survey by selecting people whom it's convenient to question, then you have to accept that the results of the survey will only apply to the population of which this group is representative.

Certainty and Confidence

So how many people does one need to survey to be **certain** that the survey results will apply to the whole population? The answer is that for certainty, we must survey the entire population. It's as simple as that. Of course in practice we usually can't do this, because there isn't enough time or money for such an undertaking.

Because we can't have **certainty** we have to settle for **confidence.** The more people we survey, the more confident we become that the results apply to the population. A typical target is that of 95% confidence. Expressed simply, **this means that we survey enough people that we can be 95% sure that the outcome applies to the population as well as the survey group.**

You can estimate the confidence level after carrying out the survey, but you must decide in advance what level of confidence will be acceptable. If your survey does not give this level of confidence you can use the results to plan a new, larger survey.

Estimating confidence levels from a given set of data is a standard statistical procedure. Estimating the size of the survey that will be needed to give the required confidence level is much more difficult, and requires consideration of the **statistical power** of your survey. **Statistical power is a measure of how sensitive the survey result is to variations in the population**.

Because it is difficult to estimate in advance how many people you need to survey, in many large projects there will be a ***pilot study***, which purpose is to find out enough about the population to plan the survey properly.

Confidence levels are nearly always improved by increasing the size of the survey, but often a change in the survey design can give an improved confidence with much less expense.