MOUALY ISMAIL UNIVERSITY
SCHOOL OF ARTS & HUMANITIES
DEPARTMENT OF ENGLISH

Research Seminar 1

Semester 6

Instructor: Mohammed Yachoulti

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S6: Research Seminar

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I. DESCRIPTION

As a follow up to Semester 5 Study skills and Research Methods course, this course will provide an opportunity for participants to establish or advance their understanding of research through critical exploration of research language, and approaches used in conducting research. The course introduces the language of research, and the elements of the research process within quantitative, qualitative, and mixed methods approaches.

II. OBJECTIVES

- Understand research terminology
- Be aware of the ethical principles of research, ethical challenges and approval processes
- Describe quantitative, qualitative and mixed methods approaches to research
- Identify the components of a literature review process
- Critically analyze published research

III. COURSE CONTENTS

Weeks	Modules
	- **Orientation week** - **Research Proposal**
	Module 1: Quantitative Research **Module 2: Qualitative Research** **Module 3: Mixed Methods Research** **Module 4: Data collection techniques:** **a. Interviews** **b. Questionnaire** **c. Documents** **d. Observation**
	Exams

IV. ASSESSMENT

- The end of the semester, the two-hours written exam will consist of a variety of exercises similar to those seen and done in class

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RESEARCH PROPOSAL

I. DEFINITION

- The goal of a research proposal is to present and justify the need to study a research problem and to present the practical ways in which the proposed study should be conducted. Research proposals contain extensive literature reviews. They must provide persuasive evidence that a need exists for the proposed study. In addition to providing a rationale, a proposal describes detailed methodology for conducting the research consistent with requirements of the professional or academic field and a statement on anticipated outcomes and/or benefits derived from the study's completion.

II. ELEMENTS OF A RESEARCH PROPOSAL

❖ COVER PAGE

- Follow the style prescribed by the style manual suggested by the university, department or adviser.

❖ TITLE

- Should contain key words or phrases to give a clear and concise description of the scope and nature of the report, and key words should allow bibliographers to index the study in proper categories (Van Dalen, 1979:406).
    - Indicate major variables
    - Indicate nature of research
        * descriptive
        * correlational
        * experimental
    - Indicate target population
    - Avoid words like:
        - "A Study of....."
        - "An Investigation of ....."
        - "A Survey of ....."

❖ TABLE OF CONTENTS

- Follow appropriate style
- Gives bird's-eye view of the research

❖ CHAPTER ONE: INTRODUCTION TO THE STUDY

- "The introduction is the part of the paper that provides readers with the background information for the research reported in the paper. Its purpose is to establish a framework for the research, so that readers can understand how it is related to other research" (Wilkinson, 1991, p. 96)
- In an introduction, the writer should
    1. create reader interest in the topic,
    2. lay the broad foundation for the problem that leads to the study,
    3. place the study within the larger context of the scholarly literature, and
    4. reach out to a specific audience. (Creswell, 1994, p. 42)

- The introduction should include:

1- <u>Statement of the Problem</u>

- "The problem statement describes the context for the study and it also identifies the general analysis approach" (Wiersma, 1995, p. 404)
- It is important in a proposal that the problem stand out—that the reader can easily recognize it. Sometimes, obscure and poorly formulated problems are masked in an extended discussion. In such cases, reviewers and/or committee members will have difficulty recognizing the problem.
- A problem statement should be presented within a context, and that context should be provided and briefly explained, including a discussion of the *conceptual or theoretical framework* in which it is embedded.
- Effective problem statements answer the question "Why does this research need to be conducted." If a researcher is unable to answer this question clearly and succinctly, and without resorting to hyperspeaking then the statement of the problem will come off as ambiguous and diffuse.

2- <u>Purpose of the study</u>

- The purpose statement should provide a specific and accurate synopsis of the overall purpose of the study" (Locke, Spirduso, & Silverman, 1987, p. 5). If the purpose is not clear to the writer, it cannot be clear to the reader.
- Briefly define and delimit the specific area of the research. You will revisit this in greater detail in a later section.
- Key points to keep in mind when preparing a purpose statement.
    - ➢ Try to incorporate a sentence that begins with "The purpose of this study is . . ." This will clarify your own mind as to the purpose and it will inform the reader directly and explicitly.
    - ➢ Clearly identify and define the central concepts or ideas of the study. Some committee Chairs prefer a separate section to this end. When defining terms, make a judicious choice between using descriptive or operational definitions.
    - ➢ Identify the specific method of inquiry to be used.
    - ➢ Identify the sample in the study.

3- <u>Research Questions and Hypothesis</u>

- What is the hypothesis that you are testing? What are the questions that you seek to answer? Based on what is known in this field, explain what you expect to see and hope to show through your result? This is where you share your thoughts.

4- Significance of the Study

- Indicate how your research will refine, revise, or extend existing knowledge in the area under investigation. Note that such refinements, revisions, or extensions may have either substantive, theoretical, or methodological significance. Think pragmatically (i.e., cash value).
- Think about *implications*—how results of the study may affect scholarly research, theory, practice, educational interventions, curricula, counseling, policy.
- When thinking about the significance of your study, ask yourself the following questions.
    - i- What will results mean to the theoretical framework that framed the study?
    - ii- What suggestions for subsequent research arise from the findings?
    - iii- What will the results mean to the practicing educator?
    - iv- Will results influence programs, methods, and/or interventions
    - v- Will results contribute to the solution of educational problems?
    - vi- Will results influence educational policy decisions?
    - vii- What will be improved or changed as a result of the proposed research?
    - viii- How will results of the study be implemented, and what innovations will come about?

❖ CHAPTER TWO: REVIEW OF THE LITERATURE

- The chapter should be sufficiently comprehensive to map out the literature foundation on which the study is situated. The review should be organized conceptually or thematically, which establishes a framework for the investigation.
- "The review of the literature provides the background and context for the research problem. It should establish the need for the research and indicate that the writer is knowledgeable about the area" (Wiersma, 1995, p. 406)
- The literature review accomplishes several important things.
    - i- It shares with the reader the results of other studies that are closely related to the study being reported (Fraenkel & Wallen, 1990)
    - ii- It relates a study to the larger, ongoing dialogue in the literature about a topic, filling in gaps and extending prior studies (Marshall & Rossman, 1989).
    - iii- It provides a framework for establishing the importance of the study, as well as a benchmark for comparing the results of a study with other findings.
    - iv- It "frames" the problem earlier identified.
    - v- In a proposal, the literature review is generally brief and to the point. Be judicious in your choice of exemplars—the literature selected should be pertinent and relevant (APA, 2001). Select and reference only the more appropriate citations. Make key points clearly and succinctly.
    - vi- Committees may want a section outlining your search strategy—the procedures you used and sources you investigated (e.g., databases, journals, test banks, experts in the field) to compile your literature review. Check with your Chair.

❖ CHAPTER TWO: THEORETICAL FRAMEWORK

- The theoretical or conceptual framework identifies variables impacting on the research questions and their interrelationships and/or identifies theoretical and philosophical assumptions underpinning the study. The theoretical framework is often summarised as a flow-chart diagram, which shows relationships between theories, concepts and variable of the study
- Theories, theoretical frameworks, and lines of inquiry may be differently handled in quantitative and qualitative endeavors.
    - "In quantitative studies, one uses theory deductively and places it toward the beginning of the plan for a study. The objective is to test or verify theory. One thus begins the study advancing a theory, collects data to test it, and reflects on whether the theory was confirmed or disconfirmed by the results in the study. The theory becomes a framework for the entire study, an organizing model for the research questions or hypotheses for the data collection procedure" (Creswell, 1994, pp. 87-88).
    - In qualitative inquiry, the use of theory and of a line of inquiry depends on the nature of the investigation. In studies aiming at "grounded theory," for example, theory and theoretical tenets emerge from findings. Much qualitative inquiry, however, also aims to test or verify theory, hence in these cases the theoretical framework, as in quantitative efforts, should be identified and discussed early on.

❖ CHAPTER THREE: METHODOLOGY AND PROCEDURES

- "The methods or procedures section is really the heart of the research proposal. The activities should be described with as much detail as possible, and the continuity between them should be apparent" (Wiersma, 1995, p. 409).
- Indicate the methodological steps you will take to answer every question or to test every hypothesis illustrated in the Questions/Hypotheses section.
    - Research Design- describe and justify the design choice (e.g. experimental, survey, case study, phenomenology, ethnography, descriptive,)
    - Site and Participant Selection
    - Data Collection techniques : Outline the general plan for collecting the data. This may include survey administration procedures, interview or observation procedures. Include an explicit statement covering the field controls to be employed. If appropriate, discuss how you obtained *entré*.
    - Data Analysis techniques: This section describes how you will use the data you collect. It is often useful to organise this section according to the research questions, explaining how you will analyse the data to answer each question. This section must be planned before any data is collected, otherwise it may be impossible to analyse the data in such a way as to answer the questions.
    - Ethical Considerations
    - Limitations and Delimitations
        - A *limitation* identifies potential weaknesses of the study. Think about your analysis, the nature of self-report, your instruments, the sample. Think about threats to internal validity that may have been impossible to avoid or minimize—explain.

- A *delimitation* addresses how a study will be narrowed in scope, that is, how it is bounded. This is the place to explain the things that you are not doing and why you have chosen not to do them—the literature you will not review (and why not), the population you are not studying (and why not), the methodological procedures you will not use (and why you will not use them). Limit your delimitations to the things that a reader might reasonably expect you to do but that you, for clearly explained reasons, have decided not to do.

❖ CONCLUSION

The conclusion reiterates the importance or significance of your proposal and provides a brief summary of the entire study. This section should be only one or two paragraphs long, emphasizing

Module 1: Quantitative Research Approach

I. The definition of quantitative research:

Quantitative research is a research in which the researcher decides what to study, asks specific, narrow questions, collects numerical (numbered) data from participants, analyzes these numbers using statistics, and conducts the inquiry in an unbiased, objective manner.

II. The characteristics of quantitative research:

- *Sample size:* Quantitative research is conducted on a significant sample size that represents the target market. Appropriate sampling methods have to be used when deriving the sample so as to fortify the research objective.
- *Structured tools:* Structured tools such as surveys, polls or questionnaires are used to gather quantitative data. Using such structured tools helps in collecting in-depth and actionable data from the survey respondents.
- *Close-ended questions:* Closed-ended questions are created in accordance with the objective of research. These questions help collect quantitative data and hence are extensively used in quantitative research.
- *Prior studies:* Various factors related to the research topic are studied before collecting feedback from respondents.
- *Generalization of results:* Results of this research method can be generalized to an entire population to take appropriate actions for improvement.
- *Quantitative data:* Usually, quantitative data is represented in tables, charts, graphs or any other non-numerical form. This makes it easy to understand the data that has been collected as well as prove the validity of the market research.

III. The main steps of a quantitative research

1. Theory:

The first step in quantitative research is the theory which signifies that a broadly deductive approach to the relationship between theory and research is taken.

2. Hypothesis:

It is common for outlines of the main steps of quantitative research to suggest that a hypothesis is deduced from the theory and is tested.

3. Research design:

The next step concerns the selection of a research design. The selection of research design has implications for a variety of issues, such as the external validity of findings and researchers' ability to impute causality to their findings.

4. Devising measurements of concepts:

This step entails devising measures of the concepts in which the researcher is interested. This process is often referred to as operationalization.

5. Select research sites, subjects and respondents:

These two steps entail the selection of a research site or sites and then the selection of respondents. (Experimental researchers tend to call the people on whom they conduct research 'subjects', whereas social survey researchers typically call them 'respondents.)

6. Administering research instruments and the collection of data:

In experimental research, this is likely to entail pre-testing subjects, manipulating the independent variable for the experimental group, and post-testing respondents.
In cross-sectional research using social survey research instruments, it will involve interviewing the sample members by structured interview schedule or distributing a self-completion questionnaire. In research using structured observation, this step will mean an observer watching the setting and the behavior of people and then assigning categories to each element of behavior.

7. Processing the data:

Once information has been collected, it must be transformed into 'data'. In the context of quantitative research, this is likely to mean that it must be prepared so that it can be quantified.
For other variables, quantification will entail coding the information.

8. The analysis of the data:

In this step, the researcher is concerned to use a number of techniques of quantitative data analysis to reduce the amount of data collected, to test for relationships between variables, to develop ways of presenting the results of the analysis to others, and so on.
On the basis of the analysis of the data, the researcher must interpret the results of the analysis.

9. Findings/ Conclusions:

It is at this stage that the 'findings' will emerge. The researcher will consider the connections between the findings that emerge out of Step 8 and the various preoccupations that acted as the impetus of the research. If there is a hypothesis, is it supported? What are the implications of the findings for the theoretical ideas that formed the background to the research?

10. Writing up the findings and conclusions:

The last step in the process is the writing of the research.

IV. Concepts and measurement in quantitative research

❖ *Defining the concept:*

- Concepts are the building blocks of theory and represent the points around which social research is conducted.
- If a concept is to be employed in quantitative research, it will have to be measured.
- Once they are measured, concepts can be in the form of independent or dependent variables.
- In other words, concepts may provide an explanation of a certain aspect of the social world, or they may stand for things we want to explain.

❖ ***Why measure?***

- There are three main reasons for the preoccupation with measurement in quantitative research
    - Measurement allows us to delineate fine differences between people in terms of the characteristic in question.
    - It gives us a consistent device for making such distinctions. A measurement device provides a consistent instrument for guessing differences. This consistency relates to two things: our ability to be consistent over time and our ability to be consistent with other researchers.
    - Measurement provides the basis for more precise estimates of the degree of relationship between concepts (for example, through correlation analysis).

Indicators:

- In order to provide a measure of a concept it is necessary to have an indicator or indicators that will stand for the concept. Indicators can be devised in different ways:
    - Through a question or questions that are part of a structured interview schedule or self-completion questionnaire.
    - Through the recording of individuals' behavior using a structured observation schedule (for example, pupil behavior in a classroom);
    - Through official statistics, such as the use of Home Office crime statistics to measure criminal behavior;
    - Through an examination of mass media content through content analysis for example, to determine changes in the salience of an issue.

- Indicators, then, can be derived from a wide variety of different sources and methods

Using multiple-indicator measures

- What are the advantages of using a multiple-indicator measure of a concept?
    - One indicator may capture only a portion of the underlying concept or be too general, a single question may need to be of an excessively high level of generality and so may not reflect the true state of affairs for the people replying to it.
    - Alternatively, a question may cover only one aspect of the concept in question.

V. The issues of reliability and validity in quantitative research

Reliability

- The term reliability in quantitative research refers to whether the results of the study are repeatable.
- It is used mostly related with the question of whether the measures used for concepts in social sciences are consistent.
- Reliability is fundamentally concerned with issues of consistency of measures.
    - There are three different meanings of the term reliability:
        a. Stability:
- It entails asking whether a measure is stable over time.
- The results for a measure for a sample of respondents do not fluctuate.

- Administering a measure and re-administering it will foster little variations over time.

b. 2. Internal reliability:

- It deals with the question of whether the indicators that make up the scale or index are consistent.
- Whether the respondents' scores on any indicator are related to their scores on the other indicators.

Validity

- "It refers to the issue of whether an indicator (or a set of indicators) that is devised to gauge a concept really measures that concept."
  - There are four types of validity:
    a. *Measurement validity:* It is to do with the question of whether a measure that is devised of a concept really does reflect the concept that it is supposed to be denoting.
    b. *Internal validity*: It relates mainly to the issue of causality, it is concerned with the question of whether a conclusion that incorporates a causal relationship between two or more variables holds true.
    c. *External validity:* It is concerned with the question of whether the results of a study can be generalized beyond the specific research context.
    d. *Ecological validity:* It is concerned with the question of whether social scientific findings are applicable to people's every day, natural social settings.

VI. The main preoccupations of quantitative research

Four distinctive preoccupations that can be discerned in quantitative research are examined: measurement, causality, generalization, and replication.

❖ ***Measurement:***

- The most obvious preoccupation is with measurement. From the position of quantitative research, measurement carries a number of advantages.
- Issues of reliability and validity are a concern for quantitative researchers, though this is not always manifested in research practice

❖ ***Causality:***

- There is a very strong concern in most quantitative research with explanation.
- Quantitative researchers are rarely concerned merely to describe how things are, but are keen to say why things are the way they are

❖ ***Generalization:***

- In quantitative research the researcher is usually concerned to be able to say that his or her findings can be generalized beyond the confines of the particular context in which the research was conducted.
- Thus, if a study is carried out by a questionnaire with a number of people who answer the questions, we often want to say that the results can apply to individuals other than those who responded in the study.

❖ ***Replication***

- The results of a piece of research should be unaffected by the researcher's special characteristics or expectations.
- If there was a failure to replicate, so that a scientist's findings repeatedly could not be reproduced, serious questions would be raised about the validity of his or her findings.
- Consequently, scientists often attempt to be highly explicit about their procedures so that an experiment is capable of replication.

VII. The advantages of quantitative research

- The use of statistical data as a tool for saving time and resources.
- The use of scientific methods for data collection and analysis make generalization possible with this type of approach. Interaction made with one group can be generalized.
- It gives room for the use of control and study groups.

VIII. The Criticisms of quantitative research

- The measurement process possesses an artificial and spurious sense of precision and accuracy.
- The reliance on instruments and procedures hinders the connection between research and everyday life.
- The analysis of relationships between variables creates a static view of social life that is independent of people's lives.
- Detachment from the participants is also a weakness within the quantitative research approach. Researcher detachment means that he is an "observer" or an "outside looking in". With this type of researcher/participant relationship, it will extremely be difficult to get the in-depth study of the phenomena within its natural settings.

IX. Sampling in quantitative sampling

Random/ probability sampling

- *Simple random sample:* The simple random sample is the most basic form of probability sample. With random sampling, each unit of the population has an equal probability of inclusion in the sample.
- *Systematic sample:* A variation on the simple random sample is the systematic sample. With this kind of sample, you select units directly from the sampling frame—that is, without resorting to a table of random numbers
- *Stratified Sampling:* In stratified random sampling, a researcher first divides the population into subpopulations (strata: defined as a characteristic of the population). After dividing the population into strata, the researcher draws a random sample from each 25 subpopulation.
- *Cluster Sampling:* A cluster is a unit that contains final sampling elements but can be treated temporarily as a sampling element itself. In other words, the researcher randomly samples clusters, and then randomly samples elements from within the selected clusters; this has a big practical advantage. He or she can create a good sampling frame of clusters, even if it is impossible to create one for sampling elements. Once the researcher gets a sample of clusters, creating a sampling frame for elements within each cluster becomes more manageable.

X. ***Research designs in quantitative research***

- Designing a research study requires making a number of decisions on the steps you will take to answer your research question.

There are three designs in quantitative research:

- ❖ *Experimental design:* with an intervention, control group and randomization of participants into groups.
- ❖ *Quasi-experimental design*: with an intervention bit no randomization.
- ❖ *Descriptive designs:* do not have an intervention or treatment and are considered nonexperimental.

Experimental study designs:

To be an experimental design, the following must be present:

1. *An intervention or treatment:* the researcher manipulates the independent variable by, for example, requiring the intervention group to eat a diet that has been modified, take supplement containing a nutrient.
2. *Control for extraneous variable:* various control techniques such as randomization and having a control group, are use. Having a control group allows the researcher to compare and evaluate the performance of the experimental group on the outcome (dependent) variable.
3. *Randomization:* The researcher randomly assigns each participant to a group so that each parson has an equal chance of being in either group. This removes the problem of selection bias so that comparable, balanced groups of similar size are formed. Randomization also forms the basis for statistical testing. To randomize participants, researchers first generate random numbers and use them to assign each participant to a group.

Quasi-experimental design

- Quasi-experimental designs have an intervention and manipulation of the independent variable but they lack a key feature of experimental studies which is randomization. Because we are unsure if the groups are truly equivalent, quasi-experimental designs are ranked lower than experimental studies as sources of evidence.

Descriptive designs

- Descriptive designs collect information about variables without changing the environment or manipulating any variable, so they do not look at possible cause and effect.
- They are different from observational designs in that they do not include comparison groups. Descriptive designs maybe used to develop theory, identify problems with current practices, justify current practices, make judgement, ore determine what others in similar situations are doing
- Descriptive designs range from cross-sectional surveys to comparative designs to correlations.

XI. ***Research methods used in quantitative research***

1. ***Questionnaires***

- A questionnaire (also called a survey) is a series of questions, usually written on paper or a digital form. Researchers give the questionnaire to their sample, and each participant answers the questions. The questions are designed to gather data that will help researchers answer their research questions.
- A questionnaire can have open or close ended questions:
    - Open questions: With an open question respondent are asked a question and can reply however they wish.
    - Closed questions: With a closed question they are presented with a set of fixed alternatives from which they have to choose an appropriate answer.
- Understanding closed and open-ended questions is crucial to designing a great survey and collecting high quality data.
- A good questionnaire should have clear language, correct grammar and spelling, and a clear objective.

NB: Postal / mail questionnaire: a questionnaire is sent through the post to the respondent. The latter, following completion of the instrument, is usually asked to return it by post; an alternative form of return is when respondents are requested to deposit their completed questionnaires in a certain location, such as a box in a school common room or in a supervisor's office in a firm.

2. Interviews

- An interview for quantitative research involves verbal communication between the participant and researcher, whose goal is to gather numerical data.
- The interview can be conducted face-to-face or over the phone, and it can be structured or unstructured.
- In a structured interview, the researcher asks a fixed set of questions to every participant. The questions and their order are pre-decided by the researcher. The interview follows a formal pattern.

3. Observation

- Observation is a systematic way to collect data by observing people in natural situations or settings. Though it is mostly used for collecting qualitative data, observation can also be used to collect quantitative data.
- Simple observation can be a good way to collect numerical data. This can be done by pre-defining clear numerical variables that can be collected during observation — for example, what time employees leave the office. This data can be collected by observing employees over a period of time and recording when each person leaves.

4. Records

- Since quantitative research depends on numerical data, records (also known as external data) can provide critical information to answer research questions. Records are numbers and statistics that institutions use to track activities, like attendance in a school or the number of patients admitted in a hospital.

- For example, the Government of India conducts the Census every 10 years, which is a record of the country's population. This data can be used by a researcher who is addressing a population-related research problem.

XII. Title, introduction and language of a quantitative research

❖ *Title:*

- It should capture the essence and describe the content or the main results of the paper, when it was conducted and where.
- The better the title, the easier it is for those interested in your study to find it.
- A good title for a quantitative paper should include the following items:
    - The most important key words/concepts in your study
    - The methodology used
    - The samples/areas studied
    - Your most important finding
    - The primary variables
    - Certain phrases such as a comparison of, or the relationship between, or prediction of signal quantitative studies.

- Three examples of quantitative titles are listed here:
    - Strategies for Increasing Mammography Screening in Primary Care in Chile: Results of a Randomized Clinical Trial
    - Affirmation of Personal Values Buffers Neuroendocrine and Psychological Stress Responses
    - Academic Performance Gap Between Summer-Birthday and Fall-Birthday

- The title page includes the authors' names, institutional affiliations and details for correspondence.

❖ *The introduction:*

- It should contain the following sections: problem statement, the purpose of the study, the objective of the study, the research question (s) and hypothesis (es), the significance of the study and the structure of the research.

❖ *Quantitative Titles*

- For quantitative study titles, investigators typically compare groups or relate variables. In fact, the primary variables are evident in the title, as are the participants and possibly the site for the research study. Certain phrases in a title, such as a comparison of, or the relationship between, or prediction of, signal quantitative studies. Sometimes researchers mention the theory being tested, the quantitative approach, the prediction being made in the study, or the foreshadowed results. As with qualitative titles, quantitative titles are short and concise. Three examples of quantitative titles are listed here:
    - ❖ "Strategies for Increasing Mammography Screening in Primary Care in Chile: Results of a Randomized Clinical Trial"
    - ❖ "Affirmation of Personal Values Buffers Neuroendocrine and Psychological Stress Responses"
    - ❖ ***Quantitative research questions***

- Quantitative research questions are generally used to set the scene for an entire study or industry report. For quantitative business research it is imperative that the research questions used allow your respondents to answer succinctly. With that in mind there are three common types of quantitative research questions: Descriptive research questions, Comparative research questions or Relationship-based research questions

1. **Descriptive research questions:** Descriptive survey questions are designed to uncover a respondent's response towards a particular question or variable. Put simply, it's the easiest way to quantify the particular variable(s) you're interested in on a large scale. Common descriptive research questions will begin with "How much?", "How regularly?", "What percentage?", "What time?", "What is?" Primarily, a descriptive research question will be used to quantify a single variable, but there's nothing stopping you covering multiple variables within a single question.

Question	Variable	Demographic
How often do you buy mobile apps for fitness purposes?	Number of mobile apps bought	Smartphone users Fitness enthusiasts
How regularly do you go abroad for a holiday?	Number of times respondents go on holiday abroad	Families & adults aged 18-and-over

2. **Comparative research questions** Comparative survey questions are designed to help you identify clear differences between two or more groups based on one or more variables. For instance, a typical comparative research question will begin by asking respondents for the "difference between" a particular variable e.g. mobile apps bought between two or more groups e.g. teenage boys and teenage girls. On the whole, a comparative research question will only be used to quantify a single variable, but depending on the needs of your market research it's plausible to use two or more if necessary.

Question	Variable	Demographic
What is the difference in the daily calorie intake between men and women in London?	Daily calorific intake	Men based in London Women based in London
What are the differences in attitudes towards online banking between Millennial adults and older people?	Attitudes towards online banking	Millennial adults Adults born prior to 1982

3. **Relationship-based research questions:** A relationship-based research question can be misleading to some as it doesn't mean you've got to ask respondents about their love life! Here, the term relationship is used more to describe an association or trend between two or more variables within one or more demographic groups.

Question	Dependent	Independent	Demographic

	variable	**variable**	
What is the relationship between gender and A Level exam results amongst 6th Form students?	Gender	A Level exam results	6th Form students
What is the relationship between job satisfaction and salary amongst London residents?	Job satisfaction	Salary	London residents

❖ ***Language***

- Quantitative research may involve the use of descriptive statistics and a great extent of objectivity: the use of Researcher instead of personal pronouns "I" or "we" and the use of simple past instead of simple present

Module 2: qualitative research approach

I. *The definition of qualitative research*

- Qualitative research is a research strategy that usually emphasizes words rather than quantification in the collection and analysis of data. As a research approach, it is broadly inductivist, constructionist, and interpretivist.
- Qualitative procedures demonstrate a different approach to scholarly inquiry than methods of quantitative research.
- Qualitative procedures rely on text and image data, have unique steps in data analysis, and draw on diverse strategies of inquiry.
- Qualitative research is a type of research in which the researcher relies on the views of participants, asks broad, general questions, collects data consisting largely of words from participants, describes and analyses these words for themes, and conducts the inquiry in a subjective, biased manner.

II. *Characteristics of a qualitative research*

❖ Natural setting:

- Qualitative researchers tend to collect data in the field at the site where participants experience the issue or problem under study.
- They do not bring individuals into a lab (a contrived situation), nor do they typically send out instruments for individuals to complete.

❖ Researcher as key instrument:

- Qualitative researchers collect data themselves through examining documents, observing behavior, or interviewing participants.
- They do not tend to use or rely on questionnaires or instruments developed by other researchers.

❖ Multiple sources of data:

- Qualitative researchers typically gather multiple forms of data.
- Then the researchers review all of the data, make sense of it, and organize it into categories or themes that cut across all of the data sources.

❖ Inductive and deductive data analysis:

- Qualitative researchers build their patterns, categories, and themes from the bottom up by organizing the data into increasingly more abstract units of information.
- Then deductively, the researchers look back at their data from the themes to determine if more evidence can support each theme or whether they need to gather additional information.

❖ **Emergent design:**

- The research process for qualitative researchers is emergent.
- For example, the questions may change, the forms of data collection may shift, and the individuals studied and the sites visited may be modified.
- The key idea behind qualitative research is to learn about the problem or issue from participants and to address the research to obtain that information.

❖ **Reflexivity:**

- In qualitative research, the inquirer reflects about how their role in the study and their personal background, culture, and experiences hold potential for shaping their interpretations, such as the themes they advance and the meaning they ascribe to the data.
- This aspect of the methods is more than merely advancing biases and values in the study, but how the background of the researchers actually may shape the direction of the study.

❖ **Participants' meanings:**

- In the entire qualitative research process, the researcher keeps a focus on learning the meaning that the participants hold about the problem or issue, not the meaning that the researchers bring ***to the research or that writers express in the literature.***

❖ **Holistic account:**

- Qualitative researchers try to develop a complex picture of the problem or issue under study. This involves reporting multiple perspectives, identifying the many factors involved in a situation, and generally sketching the larger picture that emerges.

III. The main steps of a qualitative research

1. **General research question(s):** The first step is formatting the research questions which are going to be answered through the study.
2. **Selection of relevant site(s) and subject(s):** Here, the research provides the location of the study and participants (sample) of study.
3. **Collection of relevant data:** The step where the research collects the data that is going to be used in the study.
4. **Interpretation of data:** The phase in giving interpretations and explanations of the results of the data
5. **Conceptual and theoretical work:**
   - *1.1.1. Tighter specification of the research question(s)*
   - *1.1.2. Collection of further data*
6. **Writing up findings/conclusions**

IV. The issues of validity and reliability in qualitative research

❖ **Validity:**

1. *Internal validity:* It indicates whether there is a good match between researchers' observations and the theoretical ideas they develop.
2. *External validity:* It refers to the degree to which findings can be generalized across social settings. Unlike internal validity, external validity creates problems for qualitative research because of its tendency to employ case studies and small samples.

❖ **Reliability:**

1. *External reliability:* It refers to the degree in which a study can be replicated which is something difficult to achieve in qualitative research. That's because it is impossible to freeze the social setting or the circumstances of a previous study and replicate them.
2. *Internal reliability:* It refers to the situation when there is more than one observer, members of the research team agree about what they see and hear.

V. Discussions about quality criteria for qualitative research:

1. *Sensitivity to context:* Sensitivity not just to the context of the social setting in which the research is conducted but also to potentially relevant theoretical positions and ethical issues.
2. *Commitment and rigour:* Substantial engagement with the subject matter, having the necessary skills, and thorough data collection and analysis.
3. *Transparency and coherence:* Research methods clearly specified, clearly articulated argument, and a reflexive stance
4. *Impact and importance:* Importance of having an impact on and significance for theory, the community on which the research is conducted and for practitioners.

VI. The main preoccupations

❖ **Seeing through the eyes of the people being studied:** The social world must be interpreted from the perspective of the people being studied, rather than as though those subjects were incapable of their own reflections on the social world.

❖ **The risk of 'going native' and losing sight of what you are studying.** The problem of how far the researcher should go, such as the potential problem of participating in illegal or dangerous activities, which could be a risk in research. The possibility that the researcher will be able to see through the eyes of only some of the people who form part of a social scene but not others, such as only people of the same gender.

❖ **Description and the emphasis on context:** Qualitative researchers are much more inclined to provide a great deal of descriptive detail when reporting the results of their research. These details are important because of their significance for their subjects and also because the details provide an account of the context within which people's behavior takes place.

❖ **Emphasis on process:** One of the main ways is that there is often a concern to show how events and patterns unfold over time. As a result, qualitative evidence often conveys a strong sense of change and flux.

- **The emphasis on process can be achieved through:** Participant observation (the ways in which events develop over time or the ways in which the different elements of a social system interconnect). Semi-structured and unstructured interviewing, by asking participants to reflect on the processes leading up to or following on from an event.

- **Flexibility and limited structure:** Many qualitative researchers are disdainful of approaches to research that entail the imposition of predetermined formats on the social world. They prefer a research orientation that entails as little prior contamination of the social world as possible. Keeping structure to a minimum is supposed to enhance the opportunity of genuinely revealing the perspectives of the people you are studying.

- **Concepts and theory grounded in data** Concepts and theories are usually inductively arrived at from the data that are collected.

VII. The critique of qualitative research

- Quantitative researchers sometimes criticize qualitative research as being too impressionistic and subjective.
- Qualitative research is unstructured and often reliant upon the qualitative researcher's ingenuity.
- It is almost impossible to conduct a true replication, since there are hardly any standard procedures to be followed.
- The responses of participants to qualitative researchers are likely to be affected by the characteristics of the researcher.
- Because of the unstructured nature of qualitative data, interpretation will be profoundly influenced by the subjective leanings of a researcher.
- It is often suggested that the scope of the findings of qualitative investigations is restricted.
- It is sometimes difficult to establish from qualitative research what the researcher actually did and how he or she arrived at the study's conclusions.
- The process of qualitative data analysis is frequently unclear.

VIII. Sampling in qualitative research

- Qualitative research is mainly associated with non-probability sampling because probability sampling is not feasible.
- Researchers who conduct qualitative research typically want to gain access to a wide range of individuals who are relevant to their research field.

- ***Convenience sampling:*** it is the weakest procedure of sampling, it is an accidental type of choosing a sample. It can be beneficial in questionnaires and pilot testing or exploratory research.
- ***Snowball sampling:*** The researcher chooses at first a small group of participants relevant to the to the research, and these participants propose or suggest other participants who have the experience or characteristics relevant to the research.
- ***Purposive or Judgement Sampling:*** The research selects sample elements that (s)he judges to be typical or representative of the selected population. The goal of purposive sampling is

to sample cases/participants in a strategic way, so that those sampled are relevant to the research questions.

IX. Research designs in qualitative research

- The design of qualitative research is probably the most flexible of the various experimental techniques, encompassing a variety of accepted methods and structures.
- Five major types of qualitative research design are the most commonly used. They are:
    1. Phenomenology
    2. Ethnography
    3. Grounded theory
    4. Case study
    5. Narrative design

❖ *Phenomenology*

- The terminology used by different authors can be very confusing and the use of the term phenomenology is one example.
- However, it is also used to describe a particular type of qualitative research. Literally we know that phenomenology means the study of phenomena. Phenomena may be events, situations, experiences or concepts.
- Phenomenology is a way of describing something that exists as an integral part of the world in which we are living. We are surrounded by many phenomena. Sometimes it happens that our lack of understanding in respect to these phenomena may exist because the phenomenon has not been overtly described and explained or our understanding of the impact it makes may be unclear.

❖ *Ethnography*

- The social science that studies the origins and social relationships of human beings is known as anthropology.
- Ethnography is a branch of anthropology that provides scientific description of individual human societies.
- The term means “portrait of a people” and it is a methodology for descriptive studies of cultures and peoples.
- According to Van Maanen, "ethnography fieldwork usually means living with and living like those who are studied. In its broadest, most conventional sense, fieldwork demands the full-time involvement of a researcher over a lengthy period of time
- and consists mostly of ongoing interaction with the human targets of study on their home ground". The cultural parameter is that the people under investigation have something in common. The cultural parameters include:
    - Geographical (a particular region or country)
    - Religious
    - Tribal (a family construction or its types)
    - Shared experience
    - Life style (a manner to live together)

- Ethnographic studies require widespread fieldwork by the investigator in the current sceneries. It makes use of several techniques for data collection.
- These data collection techniques include both formal and informal interviewing.
- Often, interviewing individuals on several occasions and participant observation are used for data collection.
- Because of this, ethnography is extremely time consuming as it involves the researcher spending long periods of time in the field.
- Ethnographic research can be problematic when researchers are not sufficiently familiar with the social mores of the people being studied or with their language.
- Interpretation from an outsider perspective may be a misinterpretation causing confusion.
- For this reason, the ethnographic researcher usually returns to the field to check his interpretations with informants there by validating the data before presenting the findings.

❖ ***Grounded theory***

- Grounded theory is a type of qualitative research methodology that allows theory/theories to emerge from the data that is collected.
- Grounded theory research follows a systematic yet flexible process to collect data, code the data, make connections and see what theory/theories are generated or are built from the data.
- In grounded theory, the researcher does not commence the process of research with a predetermined theory in mind, the formulation of theories stem from the data that allows one to explain how people experience and respond to events.
- The main feature of Grounded theory research is the development of new theory through the collection and analysis of data about a phenomenon.
- It goes beyond phenomenology because the explanations that emerge are genuinely new knowledge.
- There are so many techniques for the data collection are used to develop grounded theory, particularly interviews and observation although literature review and relevant documentary analysis make important contributions.
- Basically, grounded theory is the simultaneous collection and analysis of data using a process known as constant comparative analysis.
- In this process, data are transcribed and examined for content immediately following data collection. Ideas which emerge from the analysis are included in data collection when the researcher next enters the field.
- For this reason, a researcher collecting data through semi structured interviews may gradually develop an interview schedule in the latter stages of a research project which looks very different to the original schedule used in the first interview.
- New theory begins its conception as the researcher recognizes new ideas and themes emerging from what people have said or from events which have been observed.

❖ ***Case study***

- Case studies are analyses of persons, events, decisions, periods, projects, policies, institutions, or other systems that are studied holistically by one or more methods.
- The case study can be done in social sciences and life sciences.
- Case studies may be descriptive or explanatory.
- Like surveys, case study research approaches can be treated as a qualitative or quantitative.

- Case study research is used to describe an entity that forms a single unit such as a person, an organization or an institution. Some research studies describe a series of cases. The latter type is used to explore causation in order to find underlying principles.
- They may be prospective, in which criteria are established and cases fitting the criteria are included as they become available, or retrospective, in which criteria are established for selecting cases from historical records for inclusion in the study.
- The case that is the subject of the inquiry will be an instance of a class of phenomena so as to provide an analytical frame an object within which the study is conducted and which the case illuminates and explicates.

❖ ***Narrative Research Design***

- It describes the lives of individuals, collect and tell stories about people's lives, and write narratives of individual experiences.

X. ***Research methods used in qualitative research***

There are different types of qualitative research methods like an in-depth interview, focus groups, ethnographic research, content analysis, case study research that are usually used.

- Qualitative researchers use their own eyes, ears, and intelligence to collect in-depth perceptions and descriptions of targeted populations, places, and events.
- Their findings are collected through a variety of methods, and often a researcher will use at least two or several of the following while conducting a qualitative study:

❖ **Direct observation**

- With direct observation, a researcher studies people as they go about their daily lives without participating or interfering.
- This type of research is often unknown to those under study, and as such, must be conducted in public settings where people do not have a reasonable expectation of privacy.
- For example, a researcher might observe the ways in which strangers interact in public as they gather to watch a street performer.

❖ **Open-ended surveys**

- While many surveys are designed to generate quantitative data, many are also designed with open-ended questions that allow for the generation and analysis of qualitative data.

❖ **Focus group**

- In a focus group, a researcher engages a small group of participants in a conversation designed to generate data relevant to the research question.
- Focus groups can contain anywhere from 5 to 15 participants. Social scientists often use them in studies that examine an event or trend that occurs within a specific community.

❖ **In-depth interviews**

- Researchers conduct in-depth interviews by speaking with participants in a one-on-one setting.
- Sometimes a researcher approaches the interview with a predetermined list of questions or topics for discussion but allows the conversation to evolve based on how the participant responds.
- Other times, the researcher has identified certain topics of interest but does not have a formal guide for the conversation, but allows the participant to guide it.

❖ **Oral history**

- The oral history method is used to create a historical account of an event, group, or community, and typically involves a series of in-depth interviews conducted with one or multiple participants over an extended period.

❖ **Participant observation**

- This method is similar to observation, however with this one, the researcher also participates in the action or events to not only observe others but to gain the first-hand experience in the setting.

❖ **Ethnographic observation**

- Ethnographic observation is the most intensive and in-depth observational method. Originating in anthropology, with this method, a researcher fully immerses themselves into the research setting and lives among the participants as one of them for anywhere from months to years.
- By doing this, the researcher attempts to experience day-to-day existence from the viewpoints of those studied to develop in-depth and long-term accounts of the community, events, or trends under observation.

❖ **Content analysis**

- This method is used by sociologists to analyze social life by interpreting words and images from documents, film, art, music, and other cultural products and media.
- The researchers look at how the words and images are used, and the context in which they are used to draw inferences about the underlying culture.
- Content analysis of digital material, especially that generated by social media users, has become a popular technique within the social sciences.

XI. Title, introduction, question of qualitative research

❖ ***The title***

- Qualitative titles include several components: the central phenomenon (or concept) being examined, the study participants, and the site at which the study will occur. In addition, a qualitative title might include the type of qualitative research being used, such as ethnography or grounded theory. Qualitative titles do not suggest a comparison of groups or a relationship among variables. Instead, they explore one idea (the central phenomenon) to achieve an in-depth understanding (Creswell, 2015c). These sample titles illustrate these components:
  - "'If I Feel Something Wrong, Then I Will Get a Mammogram': Understanding Barriers and Facilitators for Mammography Screening Among Chilean Women"
  - "Waiting for a Liver Transplant"
  - "How Rural Low-Income Families Have Fun: A Grounded Theory Study"

- Qualitative research is concerned with '...developing explanations of social phenomena...'
  a. The world in which we live
  b. Why things are the way they are
  c. Concerned with social aspects of our world
  d. Seeks to answer questions about
     i. Why people behave the way they do
     ii. How opinions and attitudes are formed
     iii. How people are affected by the events that go on around them

iv. How and why cultures have developed in the way they have
v. The differences between social groups

e. Qualitative questions:
i. How
ii. Why
iii. What

- Qualitative research is empirical research where the data are not in the form of numbers. (Punch, 1998: 4)

Module 3: Mixed Research Method

I. Definition of mixed methods research

- Mixed method research is the type of research in which a researcher or a team of researchers combine elements of qualitative and quantitative research approaches (use if qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the purposes of breadth and depth of understanding and corroboration.
- Mixed methods began in the late 1980s, and emerged because of the complexity of research questions, a need of both forms of data and quanti-quali shortcomings. It had different names: Integrated/ Combined methods, hybrid research, mixed research, mixed methods research.

II. Why mixed methods approach?

- **One data source may not be insufficient:** one type of evidence may not tell the whole story, or the researcher may lack confidence in the ability of one type of evidence to address the problem. The results from the qualitative and quantitative may be contradictory, which couldn't be known by collecting one type of data.
- **Results need to be explained:** sometimes the results of a study may provide an incomplete understanding of a research problem and there is a need for further explanation.
- **Exploratory findings need to be generalized:** in situations where researchers do not know what to ask, what variables to measure, and what theories to guide the study, it is best to explore qualitatively to know the previous aspects and then to follow up with a quantitative study to test and generalize what was learned from the exploration
- **A second method is needed to enhance a primary method:** in some situations, a second research method can be added to the study to provide an enhanced understanding of some phase of the research. For example researchers can enhance a quantitative design by adding qualitative data or by adding quantitative data to a qualitative design.
- **A theoretical stance needs to be employed:** a theoretical perspective provides a framework for the need to gather both quantitative and qualitative data in a mixed methods study. The theoretical perspective could seek to bring about change or simply provide a lens through which the entire study might be viewed.
- **An overall research objective can be best addressed with multiple phases, or projects:** in projects that span several years and have many components, such as evaluation studies and multiyear health investigations, the researcher may need to connect several studies to reach an overall objective.

III. Advantages of using mixed method Approach

- The mixed method research provides strengths which offset the weaknesses of both the qualitative and quantitative research methods. Thus, the combination of both methods give strength to the study, if one research method is weak, this weakness is equated by the strength of the other research method.

- The mixed method provides more evidence for studying a research problem than either quantitative or qualitative research alone.
- The mixed method research helps answer questions that cannot be answered by quantitative or qualitative approached only.
- The mixed method provides a bridge across the adversarial divide between quantitative and qualitative researchers.
- It encourages the use of multiple worldviews or paradigms rather than the typical associations of certain paradigms with quantitative research and others for qualitative research.
- The mixed method is practical in a sense that the researcher is free to use all the methods possible to address a research problem. Individuals tend to solve problems using both numbers and words.

IV. Challenges in using mixed methods Approach

The use of a mixed method approach requires the following:

1. *The question of skills:* The researcher has to gain first experience with both qualitative research and quantitative research separately before undertaking a mixed method. They should be familiar with the data collection and analysis of both approaches.
2. *The question of time and resources:* Even though the research has basic knowledge about the qualitative and quantitative research methods, he/she should ask the question of whether the idea of conducting a mixed method approach is feasible or not given the time and resources. The mixed method may require extensive time, resources, and effort on the part of the researcher.
3. *The question of convincing others:* The approach of mixed methods is relatively new in terms of the methodology available to the researchers. As a result, others may not be convinced or understand the value of a mixed approach. Some might say that it is a new approach and some may feel that they do not have the time to deal with learning a new approach from the ground up.

V. Principles for Designing a Mixed Methods Study:

1- Mixed methods designs can be:
   - **Fixed:** The use of quantitative and qualitative methods are predetermined and planned at the start of the research process.
   - **Emergent:** are found in mixed methods studies where the use of mixed methods arises due to issues that develop during the process of conducting the research.

2- The design should match the research problem, purpose and questions: Researchers should articulate them carefully so as to choose a design that matches the problem and the research questions.

3- We should identify an approach to design

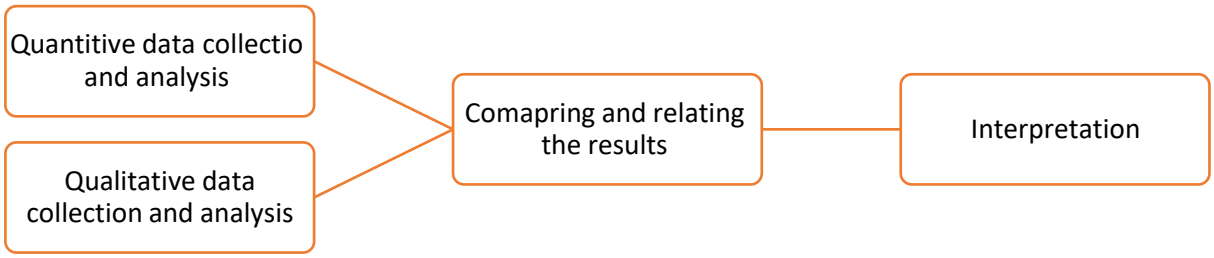
4- The researcher should be explicit about the reasons for mixing methods: such as: To seek corroboration, convergence from different methods, to seek elaboration, enhancement, clarification of results from one method with results from another, to use one method to improve the development of another, to deliberately seek new perspective, paradox, to extend breadth and range of inquiry.

VI. Key Decisions in Choosing a Mixed Methods Design:

- The priority of the two strands: both are equally important, quantitative approach is dominant, qualitative approach is dominant.
- The Timing of the two strands: Concurrent timing: collecting and analyzing both quantitative and qualitative data at the same time or, sequential timing: collecting and analyzing the data one after the other, or multiphase combination timing: combines concurrent timing and sequential timing.
- Where and How to Mix the strands: The point of interface may occur at four possible points during the research process: Interpretation, analysis, data collection, and design.
  Mixing strategies: Merging the two data sets or Connecting from the analysis of one set of data to the collection of a second set of data, embedding of one form of data within a larger design or procedure, or using a framework to bind together the data sets.

VII. Mixed research method designs:

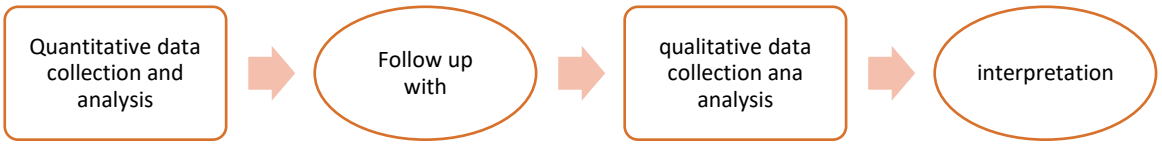
- **The convergent parallel design**: (also called the convergent design) it is used when the researcher uses concurrent timing to implement the quantitative and qualitative strands during the same phase of the research process, it prioritizes both methods equally, and keeps the strands independent during the analysis and then mixes the results in the interpretation phase.



The purpose:

1. The need or a more complete understanding of a topic
2. The need to validate or corroborate quantitative scales

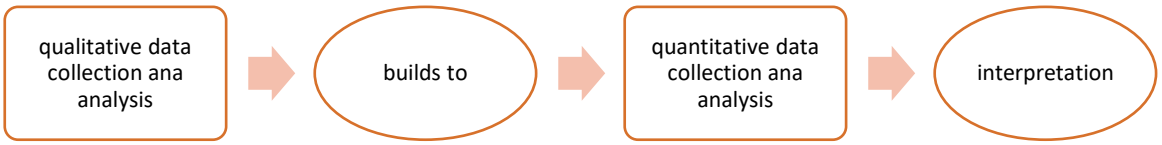
- **The explanatory sequential design:** it occurs in two distinct interactive phases. It starts with the collection and analysis of quantitative data to address the study's questions. The next phase is the collection of the qualitative data as a follow up for the quantitative results. Then the researcher interprets how the qualitative results help to explain the initial quantitative results



The purpose: the need to explain quantitative results

- **The exploratory sequential design:** it also uses sequential timing. It begins and prioritizes the collection and analysis of qualitative data in the first phase. Building on the previous

results, the research conducts a second quantitative phase to test and generalize the initial findings, then he interprets how the quantitative results build on the initial qualitative results.



The purpose: the need to test or measure qualitative exploratory findings

- **The embedded design:** it occurs when the researcher collects and analyzes both quantitative and qualitative data within a traditional quantitative or qualitative design, the researcher may add a qualitative strand within quantitative design such as experiments or as a quantitative strand within the qualitative design like a case study. The supplemental strand is added to enhance the overall design of the research.

The purpose:

1. The need for preliminary exploration before an experimental trial
2. The need for a more complete understanding of an experimental trial
3. The need for a follow up explanations after an experiment

DATA COLLECTION TECHNIQUES: INTERVIEWS

I. WHAT IS AN INTERVIEW

- Interviews are an attractive proposition for project researchers. At first glance, they do not seem to involve challenges. The reality, though, is not quite so simple.
- Although there are a lot of superficial similarities between a conversation and an interview, interviews are actually something more than just a conversation. Interviews involve a set of assumptions and understandings about the situation which are not normally associated with a casual conversation. When someone agrees to take part in a research interview:

1. ***There is consent to take part***. From the researcher's point of view this is particularly important in relation to research ethics. The interview is not done by secret recording of discussions or the use of casual conversations as research data. It is openly a meeting intended to produce material that will be used for research purposes – and the interviewee understands this and agrees to it.
2. ***Interviewees' words can be treated as 'on the record' and 'for the record'***. It is, of course, possible for interviewees to stipulate that their words are not to be attributed to them, or not to be made publicly available. The point is, though, that unless interviewees specify to the contrary, the interview talk is 'on record' and 'for the record'.
3. ***The agenda for the discussion is set by the researcher.*** Although the degree of control exercised by the researcher will vary according to the style of interviewing, there is a tacit agreement built into the notion of being interviewed that the proceedings and the agenda for the discussion will be controlled by the researcher.

II. WHEN IS IT APPROPRAITE TO USE INTERVIEWS

- Interviews – in particular in-depth interviews – lend themselves to the collection of data based on:
  1. ***Opinions, feelings, emotions and experiences.*** The nature of these means that they need to be explored in depth and in detail rather than simply reported in a word or two.
  2. ***Sensitive issues.*** When the research covers issues that might be considered sensitive or rather personal there is a case to be made for using interviews. Using a careful and considerate approach, participants can be encouraged to discuss personal and sensitive issues in open and honest manner.
  3. ***Privileged information.*** Here, the justification for interviews is based on the value of contact with key players in the field who can give privileged information. The depth of information provided by interviews can produce best 'value for money' if the informants are willing and able to give information that others could not – when what they offer is an insight they have as people in a special position 'to know'.

III. TYPES OF INTERVIEWS

1- Structured interviews

- Structured interviews involve tight control over the format of the questions and answers. In essence, the structured interview is like a questionnaire which is administered face-to-face with a respondent. The researcher has a predetermined list of questions, to which the respondent is invited to offer limited option responses. The tight control over the wording of the questions, the order in which the questions occur and the range of answers that are on offer have the advantage of 'standardization'. Each respondent is faced with identical questions. And the range of pre-coded answers on offer to respondents ensures that data analysis is relatively easy. The structured interview, in this respect, lends itself to the collection of quantitative data.

2- Semi-structured interviews

- With semi-structured interviews, the interviewer still has a clear list of issues to be addressed and questions to be answered. However, with the semi-structured interview the interviewer is prepared to be flexible in terms of the order in which the topics are considered, and, perhaps more significantly, to let the interviewee develop ideas and speak more widely on the issues raised by the researcher. The answers are open-ended, and there is more emphasis on the interviewee elaborating points of interest.

3- Unstructured interviews

- Unstructured interviews go further in the extent to which emphasis is placed on the interviewee's thoughts. The researcher's role is to be as unintrusive as possible – to start the ball rolling by introducing a theme or topic and then letting the interviewee develop their ideas and pursue their train of thought.
- Semi-structured and unstructured interviews are really on a continuum and, in practice, it is likely that any interview will slide back and forth along the scale. What they have in common, and what separates them from structured interviews, is their willingness to allow interviewees to use their own words and develop their own thoughts. Allowing interviewees to 'speak their minds' is a better way of discovering things about complex issues and, generally, semi-structured and unstructured interviews have as their aim 'discovery' rather then 'checking'.

4- One-to-one interviews

- The most common form of interview is the one-to-one variety which involves a meeting between one researcher and one informant.
    1. One reason for its popularity is that it is relatively easy to arrange. Only two people's diaries need to coincide.
    2. Another advantage is that the opinions and views expressed throughout the interview stem from one source: the interviewee. This makes it fairly straightforward for the researcher to locate specific ideas with specific people.
    3. A third advantage is that the one-to-one interview is relatively easy to control. The researcher only has one person's ideas to grasp and interrogate, and one person to guide through the interview agenda.
    4. And a fourth advantage of conducting one-to-one interviews becomes evident when the researcher embarks on transcribing the interview tape: it is far easier to transcribe

a recorded interview when the talk involves just one interviewee. There is only one voice to recognize and only one person talking at a time.

5- Group interviews

- The group interview as distinctive in the way that it can get the participants to respond as part of a group, rather than as individuals.
    1. A disadvantage of the one-to-one interview is that it limits the number of views and opinions available to the researcher. Listening to one person at a time effectively restricts the number of voices that can be heard and the range of views that can be included within a research project. Group interviews, however, provide a practical solution to this.
    2. By interviewing more than one person at a time the researcher is able to dramatically increase the number and range of participants involved in the research.
    3. A group interview can be undertaken very much like a one-to-one interview in the sense that the interviewer remains the focal point of the interaction that takes place. The questions and answers are channelled through the interviewer. The difference is that instead of each question prompting a response from just one interviewee the researcher can get perhaps four responses from four people during the interview.
    4. Increasing the numbers involved can have benefits in terms of the representativeness of the data. The inclusion of more participants is likely to mean that a broader spectrum of people is covered by the research and that there might be a greater variety of experiences and opinions emerging from the investigation. Indeed, under certain circumstances researchers can deliberately select participants who are very different in order to gather widely differing views and experiences on the topic of the interview.

6- Focus groups

- Focus groups consist of small groups of people who are brought together by a 'moderator' (the researcher) to explore attitudes and perceptions, feelings and ideas about a specific topic.
- Typically they last for 1½ to 2 hours and are useful for gauging the extent to which there are shared views among a group of people in relation to a specific topic. Ideally, focus groups have six to nine people in them. This is a large enough number to allow a range of views and opinions to be present among the group but not too large as to be unmanageable in terms of the discussion. In small-scale research projects the numbers are often smaller. The reason for this is that focus groups can be costly and time consuming to arrange. It is not easy to organize a venue for the meeting and get six or more people to turn up on time. Nor is it necessarily inexpensive if the researcher needs to fund travel and pay for the room.
- Focus groups make particular use of group dynamics and have three distinctive features:
    - there is a focus to the session, with the group discussion being based on an item or experience about which all participants have similar knowledge;
    - particular emphasis is placed on the interaction within the group as a means of eliciting information;
    - The moderator's role is to facilitate the group interaction rather than lead the discussion.

7- Internet interviews

- Interviews and focus groups can be conducted using the Internet. There is an obvious advantage in terms of eliminating the time and costs of travelling to meet interviewees face to face, and the technology is now easily available. Using Skype, for instance, it is possible to conduct face-to-face interviews with anyone who has an Internet connection at virtually no cost – provided, of course, that the interviewee has the required software. Using a webcam means that these interviews can include visual contact with the interviewee. There are some practical issues concerned with online interviews and there are, indeed, alternative ways of conducting them. These are outlined in a separate section later in this chapter. Conducting focus groups online can prove to be rather more difficult in terms of the necessary software and these issues are considered in Appendix 4

IV. THE INTERVIWER EFFECT

1. Personal identity

- Research on interviewing has demonstrated fairly conclusively that people respond differently depending on how they perceive the person asking the questions. In particular, the sex, the age and the ethnic origins of the interviewer have a bearing on the amount of information people are willing to divulge and their honesty about what they reveal. The data, in other words, are affected by the personal identity of the researcher. This point applies whether the interview is conducted face to face or online. In the case of online interviews, although interviewees might not be able to see the interviewer, their perception of the person who is collecting the data can still influence their willingness to divulge information.
- The impact of the researcher's personal identity, of course, will depend on who is being interviewed. It is not, strictly speaking, the identity in its own right that affects the data, but what the researcher's identity means as far as the person being interviewed is concerned. Interviewees, and interviewers come to that, have their own preferences and prejudices, and these are likely to have some impact on the chances of developing rapport and trust during an interview.
- The effect of the researcher's identity, in practice, will also depend on the nature of the topic being discussed. On sensitive issues or on matters regarded as rather personal, the interviewer's identity assumes particular importance. If the research is dealing with religious beliefs, with earnings, with sexual relationships, with personal health or any of a host of similar issues, the sex, age and ethnicity of the interviewer in relation to the sex, age and ethnicity of the interviewee are very likely to influence the nature of the data that emerge – their fullness and their honesty. On some questions people can be embarrassed. They can feel awkward or defensive. Whenever this is the case, there is the possibility that interviewees might supply answers which they feel fit in with what the researcher expects from them – fulfilling the perceived expectations of the researcher. Or the answers might tend to be tailored to match what the interviewee suspects is the researcher's point of view, keeping the researcher happy. Either way, the quality of the data suffers.
- From the perspective of the small-scale project researcher there is a limit to what can be done about this. Although interviews conducted over the Internet, and to a lesser extent interviews conducted by phone, do provide some possibilities for disguising who we are, there are definite limits to the extent that researchers can disguise their 'self' during face-to-face interviews. We bring to such interviews certain personal attributes which are 'givens' and which cannot be altered on a whim to suit the needs of the research interview. *Our sex, our age, our ethnic origin, our accent, even our occupational status, all are aspects of our 'self' which, for practical*

purposes, cannot be changed. We can make efforts to be polite and punctual, receptive and neutral, in order to encourage the right climate for an interviewee to feel comfortable and provide honest answers. What we cannot do is change these personal attributes.

2. *Self-presentation*

- Conventional advice to researchers has been geared to minimizing the impact of researchers on the outcome of the research by having them adopt a passive and neutral stance. The idea is that the researcher:
    1. presents himself or herself in a light which is designed not to antagonize or upset the interviewee (conventional clothes, courtesy, etc.);
    2. remains neutral and non-committal on the statements made during the interview by the interviewee.
- Passivity and neutrality are the order of the day. The researcher's 'self', adopting this approach, is kept firmly hidden beneath a cloak of cordiality and receptiveness to the words of the interviewee. To a certain degree, this is sound advice. The researcher, after all, is there to listen and learn, not to preach. The point is to get the interviewee to open up, not to provoke hostility or put the interviewee on the defensive.

3. Personal involvement

- One line of reasoning argues that a cold and calculating style of interviewing reinforces a gulf between the researcher and the informant, and does little to help or empower the informant. Now, if the aims of the research are specifically to help or empower the people being researched, rather than dispassionately learn from them, then the approach of the interviewer will need to alter accordingly (Oakley 1981). Under these circumstances, the researcher will be inclined to show emotion, to respond with feeling and to engage in a true dialogue with the interviewee. The researcher will become fully involved as a person with feelings, with experiences and with knowledge that can be shared with the interviewee. A word of warning, though. This style of interviewing remains 'unconventional', and the researcher needs to be confident and committed to make it work. The researcher also needs to feel sure that his or her audience understand and share the underlying logic of the approach rather than expecting the researcher to adopt the cool and dispassionate stance.

V. PLANNING AND PREPARTION FOR THE INTERVIEW

1. The topics for discussion

- With the use of unstructured interviews, it might be argued that the researcher should not have preconceived ideas about the crucial issues and direction the interview should take. In practice, however, it is not very often that researchers operate at the extreme end of the continuum with unstructured interviews. In the vast majority of cases, researchers approach an interview with some agenda and with some game-plan in mind. In such cases it would be tempting fate to proceed to a research interview without having devoted considerable time to thinking through the key points that warrant attention. This does not necessarily mean that the researcher needs to have a rigid framework of questions and issues in mind – though this will be the case when using structured interviews. It does mean that there is likely to be more benefit from the interview if he

or she is well informed about the topic and has done the necessary homework on the issues that are likely to arise during the interview

2. Choice of informants

- In principle, there is nothing to stop researchers from selecting informants on the basis of random sampling. In practice, though, this is unlikely to happen.
- Interviews are generally conducted with lower numbers than would be the case with questionnaire surveys, and this means that the selection of people to interview is more likely to be based on non-probability sampling. People tend to be chosen deliberately because they have some special contribution to make, because they have some unique insight or because of the position they hold. It is worth emphasizing, though, that there is no hard and fast rule on this. It depends on whether the overall aim of the research is to produce results which are generalizable (in which case the emphasis will be on choosing a representative sample of people to interview) or the aim is to delve in depth into a particular situation with a view to exploring the specifics (in which case the emphasis will be on choosing key players in the field).
- In the case of group interviews, researchers can decide to select interviewees in order to get a cross-section of opinion within the group, or, perhaps, to ensure that group members hold opposing views on the topic for discussion.

3. Authorization

- In many, if not most, research situations, it will be necessary to get approval from relevant 'authorities'. This will be necessary in any instance of research where the people selected to participate in the interviews are either:
    1. working within an organization where they are accountable to others higher up the chain of command;
    2. or potentially vulnerable, and therefore protected by responsible others – the young, the infirm and some other groups are under the protection of others whose permission must be sought (e.g. school children).
- Organizations, authorities and Internet moderators who grant permission will wish to be persuaded that it is bona fide research, and they will also be influenced by the personal/research credentials of the researcher. Letters of contact, therefore, should spell out the range of factors which will persuade the organization or authority that the researcher is both (1) trustworthy and (2) capable. Research which can call on suitable referees or which will be conducted under the auspices of a suitable organization (e.g. a university) is at an advantage for these. To emphasize what ought to be obvious, such authorization to conduct the interviews must be gained before the interviews take place.

4. Arranging the venue

- In the case of face-to-face interviews, securing an agreement to be interviewed is often easier if the prospective interviewee is contacted in advance. This also allows both parties to arrange a mutually convenient time for the interview. At this point, of course, the researcher will probably be asked how long the interview will take, and should therefore be in a position to respond. It is most unlikely that busy people will feel comfortable with a suggestion that the interview will 'take as long as it takes'. The researcher needs to make a bid for an agreed length of time whether it be 15 minutes, half an hour, 45 minutes or an hour.

- Where a face-to-face interview takes place 'on site', the researcher cannot always control events as they might want. This means there is an added danger that things can go wrong. Through whatever means, though, the researcher needs to try to get a location for the interview which will not be disturbed, which offers privacy, which has fairly good acoustics and which is reasonably quiet. This can prove to be a pretty tall order in places like busy organizations, schools, hospitals, and so on. But at least the desirability of such a venue should be conveyed to the person arranging the interview room.
- Within the interview room, it is important to be able to set up the seating arrangements in a way that allows comfortable interaction between the researcher and the interviewee(s). In a one-to-one interview the researcher should try to arrange seating so that the two parties are at a 90 degree angle to each other. This allows for eye contact without the confrontational feeling arising from sitting directly opposite the other person. With group interviews, it is important to arrange the seating to allow contact between all parties without putting the researcher in a focal position and without hiding individuals at the back of the group or outside the group.

VI. THE INTERVIEW SKILLS

- ***The good interviewer needs to be attentive*.** This may sound obvious, but it is all too easy to lose the thread of the discussion because the researcher needs to be monitoring a few other things while listening closely to what the informant has to say: writing the field notes, looking for relevant nonverbal communication, checking that the recorder is working.
- ***The good interviewer is sensitive to the feelings of the informant***. This is not just a matter of social courtesy, though that is certainly a worthy aspect of it. It is also a skill which is necessary for getting the best out of an interview. Where the interviewer is able to empathize with the informant and to gauge the feelings of the informant, they will be in a better position to coax out the most relevant information
- ***The good interviewer is able to tolerate silences during the talk, and knows when to shut up and say nothing***. Anxiety is the main danger. Fearing that the interview might be on the verge of breaking down, the researcher can feel the need to say something quickly to kick-start the discussion. Worrying about cramming in every possible gem of wisdom in the allotted time, the interviewer can be inclined to rush the informant on quickly to the next point. But, most of all, feeling uncomfortable when the conversation lapses into silence, the interviewer can be all too quick to say something when a more experienced interviewer would know that the silence can be used as a wonderful resource during interviews
- ***The good interviewer is adept at using prompts***. Although silences can be productive, the interviewer needs to exercise judgement on this. There are times during an interview when the researcher might feel that it is necessary to spur the informant to speak. Listed below are some examples of how this can be done. What the examples share is a degree of subtlety. It is not normally acceptable for research interviewers to demand that the informant answers the questions. Research interviews are not police interviews. The idea is to nudge the informant gently into revealing their knowledge or thoughts on a specific point.
- ***The good interviewer is adept at using probes*.** There are occasions during an interview when the researcher might want to delve deeper into a topic rather than let the discussion flow on to the next point. An informant might make a point in passing which the researcher thinks should be explored in more detail. Some explanation might be called for, or some justification for a comment. Some apparent inconsistency in the informant's line of reasoning might be detected,

an inconsistency which needs unravelling. Examples of how this can be done are listed below. Again, they attempt to be subtle and avoid an aggressive stance.

- ***The good interviewer is adept at using checks*.** One of the major advantages of interviews is that they offer the researcher the opportunity to check that he or she has understood the informant correctly. As an ongoing part of the normal talk during interviews, the researcher can present a summary of what they think the informant has said, which the informant can then confirm as an accurate understanding, or can correct if it is felt to be a misunderstanding of what has been said. Such checks can be used at strategic points during the interview as a way of concluding discussion on one aspect of the topic.
- ***With focus groups, the good facilitator manages to let everyone have a say*.** It is vital to avoid the situation where a dominant personality hogs the discussion and bullies others in the group to agree with his or her opinion.
- ***The good interviewer is non-judgemental.*** As the researcher enters the interview situation they should, as far as is possible, suspend personal values and adopt a non-judgemental stance in relation to the topics covered during the interview. This means not only biting your lip on occasion, but also taking care not to reveal disgust, surprise or pleasure through facial gestures. The good researcher must also respect the rights of the interviewee. This means accepting if a person simply does not wish to tell you something and knowing when to back off if the discussion is beginning to cause the interviewee particular embarrassment or stress. This is a point of personal sensitivity and research ethics.

VII. CONDUCTING THE INTERVIEW

- In the intensity of a research interview it is not easy to attend to all the points that should be remembered and, in any case, interviews are 'live' events which require the interviewer to adjust plans as things progress. Nevertheless, there are some pretty basic formalities that need to be observed. There are also a number of skills the researcher should exercise and, despite the fluid nature of interviews, it is worth spelling out a list of things that go towards a good interview

1. Introduction and formalities

- At the beginning there should be the opportunity to say 'Hello', to do some introductions, to talk about the aims of the research and to say something about the origins of the researcher's own interest in the topic. During the initial phase, there should also be confirmation that you have permission to record the discussion and reassurances about the confidentiality of comments made during the interview. The aim is to set the tone for the rest of the interview – normally a relaxed atmosphere in which the interviewee feels free to open up on the topic under consideration. Trust and rapport are the keywords. During the pre-interview phase, the interviewer should do two other things:
    - prepare the recording equipment;
    - as far as possible, arrange the seating positions to best advantage.

2. Starting the interview

- The first question takes on a particular significance for the interview. It should offer the interviewee the chance to settle down and relax. For this reason it is normally good practice to kick off with an 'easy' question: something on which the interviewee might be expected to have

well-formulated views and something that is quite near the forefront of their mind. Two tactics might help here.

- Ask respondents, in a general way, about themselves and their role as it relates to the overall area of the interview. This allows the researcher to collect valuable background information about informants while, at the same time, letting informants start off by covering familiar territory.
- Use some 'trigger' or 'stimulus' material, so that the discussion can relate to something concrete, rather than launch straight into abstract ideas.

3. Monitoring progress

- During the interview, the researcher should keep a discreet eye on the time. The good researcher needs to wind things up within the allotted time and will have covered most of the key issues during that time. While doing this, the good interviewer also needs to attend to the following things during the progress of the interview itself:
    - Identify the main points being stated by the interviewee and the priorities as expressed by the interviewee. With focus groups, what consensus is emerging about the key points?
    - Look for the underlying logic of what is being said by the informant. The interviewer needs to 'read between the lines' to decipher the rationale lying beneath the surface of what is being said. The interviewer should ask 'What are they really telling me here?' and, perhaps more significantly, 'What are they not mentioning?'
    - Look for inconsistencies in the position being outlined by the interviewee. If such inconsistencies exist, this does not invalidate their position. Most people have inconsistencies in their opinions and feelings on many topics. However, such inconsistencies will be worth probing as the interview progresses to see what they reveal.
    - Pick up clues about whether the informant's answers involve an element of boasting or are answers intended to please the interviewer.
    - Be constantly on the look-out for the kind of answer that is a 'fob-off'.
    - Get a feel for the context in which the discussion is taking place. The priorities expressed by the interviewee might reflect events immediately prior to the interview, or things about to happen in the near future. They might be 'issues of the moment', which would not assume such importance were the interview to be conducted a few weeks later. The researcher needs to be sensitive to this possibility and find out from the interviewee if there are events which are influencing priorities in this way.
    - Keep a suitable level of eye contact throughout the interview and make a note of non-verbal communication which might help a later interpretation of the interview talk.

4. Finishing the interview

- Interviews can come to an end because the interviewee has run out of things to say and the interviewer cannot elicit any more information from the person. This is not a good state of affairs unless the interview has no outside time limit. It is better for the interview to come to a close in

some orderly fashion guided by the interviewer. Having kept an eye on the time, and having ensured that most of the required areas for discussion have been covered, the interviewer should draw events to a close making sure that:

- the interviewee is invited to raise any points that they think still need to be covered and have not been covered so far;
- the interviewee is thanked for having given up the time to participate in the interview.

VIII. RECORDING THE INTERVIEW

- The researcher wishing to capture the discussion that happens during the interview can rely on memory. However, the human memory is rather unreliable as a research instrument. As psychologists tell us, human memory is prone to partial recall, bias and error. Interviewers, instead, can call on other more permanent records of what was said.

1. Field notes

- Under certain circumstances researchers will need to rely on field notes written soon after the interview or actually during the interview. Sometimes interviewees will decline to be recorded. This means that what was actually said will always remain a matter of recollection and interpretation. There will never be an objective record of the discussion. This suits the needs of certain interviewees, particularly where the discussion touches on sensitive issues, commercially, politically or even personally.
- Notes taken during the interview, however, offer a compromise in such situations. The interviewer is left with some permanent record of their interpretation of what was said, and can refer back to this at various later stages to refresh the memory.
- The notes also act as some form of permanent record. However, from the interviewee's point of view, it is always possible to deny that certain things were said and to argue that the researcher might have 'misinterpreted' a point should the interviewee wish to dissociate himself/herself from the point at some later date. A crucial advantage of taking field notes at an interview, however, is that they can fill in some of the relevant information that a recording alone might miss.
- Field notes can cover information relating to the context of the location, the climate and atmosphere under which the interview was conducted, clues about the intent behind the statements and comments on aspects of non-verbal communication as they were deemed relevant to the interview.
- Field notes need to be made during the interview itself or, if this is not feasible, as soon afterwards as possible. They need to be made while events are fresh in the mind of the interviewer

2. Audio recording

- In practice, most research interviewers rely on audio recordings backed up by written field notes. Initially, interviewees can feel rather inhibited by the process of recording but most participants become more relaxed after a short while. When used sensitively, audio recording does not pose too much of a disturbance to interview situations, and it has certain clear benefits. Audio recordings offer a permanent record and one that is fairly complete in terms of the speech that occurs. They also lend themselves to being checked by other researchers.
- However, the downside is that they capture only speech, and miss non-verbal communication and other contextual factors.

- Video recordings, for their part, capture non-verbal as well as verbal communications and offer a more complete record of events during the interview. And, as with audio recordings, they provide a permanent record that can be checked by other researchers. The use of video recordings, however, tends to be the exception rather than the rule. It is not the cost factor that explains this because video equipment is not particularly expensive.
- Generally, it is the intrusiveness of video recordings that deters researchers from using them. For practical purposes, most interviewers would consider that audio recordings provide sufficient data, data that are good enough for the purpose of research, and that benefits gained through the video recording of an interview are outweighed by the extra disruption that video recording brings to the setting
    - Good practice: recording equipment
    - Use equipment which is good enough to supply adequate sound (or visual) reproduction.
    - Be certain that the equipment is functioning well before the interview.
    - Have a reliable power source plus back-up in case of emergency.
    - Choose storage devices that have enough memory, or last long enough, to cover the planned duration of the interview without the need to 'reload' the recorder.

IX. THE VALIDAITY OF INTERVIEW DATA: HOW DO I KNOW THAT THE INFORMANT IS TELLING THE TRUTH

- This is a crucial question facing the researcher who uses interview data. When the interview is concerned with gathering information of a factual nature, the researcher can make some checks to see if the information is broadly corroborated by other people and other sources.
- When the interview concerns matters such as the emotions, feelings and experiences of the interviewee, it is a lot more difficult to make such checks. Ultimately, there is no absolute way of verifying what someone tells you about their thoughts and feelings.
- Researchers are not 'mind readers'. But there are still some practical checks researchers can make to gauge the credibility of what they have been told. It should be stressed, though, that these are not watertight methods of detecting false statements given during interviews. They are practical ways of helping the researcher to avoid being a gullible dupe who accepts all that he or she is told at face value. They help the researcher to 'smell a rat'.
- By the same token, if the following checks are used, the researcher can have greater confidence in the interview data, knowing that some effort has been made to ensure the validity of the data

1. Check the data with other sources

- The researcher should make efforts to corroborate the interview data with other sources of information on the topic. Triangulation should be used.
- Documents and observations can provide some back-up for the content of the interview, or can cast some doubt on how seriously the interview data should be taken. Interview content can even be checked against other interviews to see if there is some level of consistency. The point is that interview data should not be taken at face value if it is at all possible to confirm or dispute the statements using alternative sources.

2. Checking the transcript with the informant

- Where possible, the researcher should go back to the interviewee with the transcript to check with that person that it is an accurate statement. Now, of course, checking for accuracy is not strictly what is going on here. Unless the interviewer also sends a copy of the recording, the interviewee has no way of knowing if what appears on the transcript is actually what was said. The point of the exercise is more to do with 'putting the record straight'. If the researcher is solely concerned with gathering facts from the interview, this is an opportunity to ensure that the facts are correct and that the interviewer has got the correct information. That is a nice safeguard. If, alternatively, the interview is concerned with a person's emotions, opinions and experiences, the exercise invites the interviewee to confirm that what was said at the time of the interview was what was really meant, and not said 'in the heat of the moment'. Either way, there is an initial check on the accuracy of the data.

3. Check the plausibility of the data

- Some people are interviewed specifically because they are in a position to know about the things that interest the researcher. The 'key players' are picked out precisely because they are specialists, experts, highly experienced – and their testimony carries with it a high degree of credibility. This is not necessarily the case with those chosen for interview on some other grounds. When assessing the credibility of information contained in an interview, the researcher needs to gauge how far an informant might be expected to be in possession of the facts and to know about the topic being discussed. The researcher should ask if it is reasonable to suppose that such a person would be in a position to comment authoritatively on the topic – or is there a chance that they are talking about something of which they have little knowledge?

4. Look for themes in the transcript(s)

- Where possible, avoid basing findings on one interview – look for themes emerging from a number of interviews. Where themes emerge across a number of interviews, the researcher does not have to rely on any one transcript as the sole source of what is 'real' or 'correct'. A recurrent theme in interviews indicates that the idea/issue is something which is shared among a wider group, and therefore the researcher can refer to it with rather more confidence than any idea/issue which stems from the words of one individual

X. INTERNET INTERVIEWS

- Internet interviews can be conducted with anyone who has access to a computer with a webcam, who is online and who has communication software like Skype installed.
    1. The costs are negligible and this mode of conducting interviews allows the researcher to interview people across the world without worrying about the time and costs of travel. This is obviously an attractive proposition.
    2. The interviews take place in real time and, include visual contact between the interviewer and the interviewee. The same can be said of videoconferencing links but here the costs of the equipment and communication can prove to be substantial.
- A form of interviewing can also be conducted using mailing lists. Mailing lists operate through an automated email program that, when it receives a message, simply forwards that message on to the email addresses of all the subscribers to the list. The mailing list contains email addresses for those who share an interest in specific topics or items. Some lists are moderated, some are

not. And some list servers keep on file all the messages that are posted – thus being able to trace, and deter, the sending of messages that are rude, offensive or inappropriate for the specific list.

XI. ADVANTAGES OF INTERVIEWS

- *Depth of information.* Interviews are particularly good at producing data which deal with topics in depth and in detail. Subjects can be probed, issues pursued and lines of investigation followed over a relatively lengthy period.
- *Insights.* The researcher is likely to gain valuable insights based on the depth of the information gathered and the wisdom of 'key informants'.
- *Equipment.* Interviews require only simple equipment and build on conversation skills which researchers already have.
- *Informants' priorities*. Interviews are a good method for producing data based on informants' priorities, opinions and ideas. Informants have the opportunity to expand their ideas, explain their views and identify what they regard as the crucial factors.
- *Flexibility.* As a method for data collection, interviews are probably the most flexible. Adjustments to the lines of enquiry can be made during the interview itself. Interviewing allows for a developing line of enquiry.
- *High response rate.* Interviews are generally prearranged and scheduled for a convenient time and location. This ensures a relatively high response rate.
- *Validity.* Direct contact at the point of the interview means that data can be checked for accuracy and relevance as they are collected. In the case of Internet interviews, there is also the elimination of errors at the data entry stage. The researcher is no longer faced with passages in a tape-recorded interview where voices cannot be heard clearly and where there is consequently some doubt about what was actually the interviewee. This eliminates inaccuracies in the data arising from the process of transcription.

XII. DISADVANTAGES OF INTERVIEWING

- *Time-consuming.* Analysis of data can be difficult and time-consuming. Data preparation and analysis are 'end-loaded' compared with, for instance, questionnaires which are pre-coded and where data are ready for analysis once they have been collected. The transcribing and coding of interview data are a major task for the researcher which occurs after the data have been collected.
- *Data analysis.* The interview method tends to produce non-standard responses. Semi-structured and unstructured interviews produce data that are not pre-coded and have a relatively open format.
- *Reliability.* The impact of the interviewer and of the context means that consistency and objectivity are hard to achieve. The data collected are, to an extent, unique owing to the specific context and the specific individuals involved. This has an adverse effect on reliability.
- *Interviewer effect.* The data from interviews are based on what people say rather than what they do. The two may not tally. What people say they do, what they say they prefer and what they say they think cannot automatically be assumed to reflect the truth. In particular, interviewee statements can be affected by the identity of the researcher. Internet interviews, with their lack of visual and verbal clues, can go a long way towards avoiding this problem. The absence of visual and verbal clues, some researchers argue, democratizes the research process by equalizing the status of researcher and respondent, lowering the status differentials linked with sex, age, appearance and accent, and giving the participant greater control over the process of data

collection. The lack of such clues, equally, can help to overcome embarrassment on topics and allow the respondent to open up in a way that is unlikely to happen in the physical presence of a researcher.

- *Inhibitions.* In the case of face-to-face interviews, the audio recorder (or video recorder) can inhibit the informant. Although the impact of the recording device tends to wear off quite quickly, this is not always the case. The interview is an artificial situation (as, of course, are experiments) where people are speaking for the record and on the record, and this can be daunting for certain people
- *Invasion of privacy.* Tactless interviewing can be an invasion of privacy and/ or upsetting for the informant. While interviews can be enjoyable, the other side of the coin is that the personal element of being interviewed carries its own kinds of dangers as well.
- *Resources.* With face-to-face interviews the costs of interviewer's time and travel can be relatively high, particularly if the informants are geographically dispersed.

S6 Research Seminar 1
Instructor: Mohammed Yachoulti

DATA COLLECTION TECHNIQUES: QUESTIONNAIRE

I. WHAT IS A QUESTIONNAIRE

- A questionnaire is a "set of printed or written questions with a choice of answers, devised for the purpose of a survey or statistical study"
- There are many types of questionnaires. They can vary enormously in terms of their purpose, their size and their appearance. To qualify as a research questionnaire, however, they should:
    1. Be designed to collect information which can be used subsequently as data for analysis. As a research tool, questionnaires do not set out to change people's attitudes or provide them with information. Though questionnaires are sometimes used for this purpose – for instance, as a way of marketing a product – it is not strictly in keeping with the spirit of a research questionnaire, whose purpose is to discover things.
    2. Consist of a written list of questions. The important point here is that each person who answers the particular questionnaire reads an identical set of questions. This allows for consistency and precision in terms of the wording of the questions, and makes the processing of the answers easier. (Occasionally, pictures might be used instead of written questions.)
    3. Gather information by asking people directly about the points concerned with the research. Questionnaires work on the premise that if you want to find out something about people and their attitudes you simply go and ask them what it is you want to know, and get the information 'straight from the horse's mouth'.
- There is an assumption in this chapter that the kinds of research questionnaire being considered are the postal type and the Internet type – not the face-to-face clipboard questionnaire that involves more personal, interactional factors. If a clipboard-style questionnaire is being considered, the effect of such interactional factors must be considered in addition to many of the points related here.

II. WHEN IS IT APPROPRAITE TO USE THE QUESTIONNAIRE?

- Different methods are better suited to different circumstances, and questionnaires are no exception. Although they can be used, perhaps ingeniously, across a wide spectrum of research situations, questionnaires (both postal and Internet) are at their most productive:
    1. When used with large numbers of respondents in many locations;
    2. When what is required tends to be fairly straightforward information – relatively brief and uncontroversial;
    3. When there is a need for standardized data from identical questions – without requiring personal, face-to-face interaction;
    4. When the respondents can be expected to be able to read and understand the questions – the implications of age, intellect, language, and eyesight need to be considered;

5. When the social climate is open enough to allow full and honest answers.

III. WHAT KINDS OF DATA ARE COLLECTED BY QUESTIOANNAIRES?

- Questionnaires rely on written information supplied directly by people in response to questions asked by the researcher. In this respect, the kind of data is distinct from that which could be obtained from interviews, observation or documents. The information from questionnaires tends to fall into two broad categories – 'facts' and 'opinions' – and it is vital that at all stages of using questionnaires the researcher is clear about whether the information being sought is to do with facts or to do with opinions.
    1. Factual information does not require much in the way of judgement or personal attitudes on the part of respondents. It just requires respondents to reveal straightforward information (such as their address, age, sex, marital status or number of children). An example of a 'fact' question might be 'Which TV programmes did you watch last night?'
    2. Opinions, attitudes, views, beliefs, preferences, etc. can also be investigated using questionnaires. In this case, though, respondents are required to reveal information about feelings, to express values and to weigh up alternatives in a way that calls for a judgement about things rather than the mere reporting of facts. An example of an 'opinion' question might be 'Which is your favourite TV programme?'
- It is worth stressing that, in practice, questionnaires are very likely to include questions about both facts and opinions. Political opinion polls, for instance, might include factual questions about how people actually voted at the last election as well as questions about feelings of support for particular political parties' policies, and market researchers might want to know factual information about the age, social class, sex, etc. of the people whose opinions, attitudes and preferences they are investigating

IV. PLANINING THE USE OF THE QUESTIOANNIRE

- The successful use of questionnaires depends on devoting the right balance of effort to the planning stage, rather than rushing too early into distributing the questionnaire. If the questionnaire is to produce worthwhile results, the researcher needs to have a clear plan of action in mind and some reasonable idea of the costs and timescale involved in the venture
- Planning, right from the start, involves the researcher in consideration of the following points:

    - **Costs:** What are the likely costs of producing, distributing, collecting and analysing the results of the questionnaire? Production might entail printing costs. There might be postal charges and the need for envelopes (increased by the need to follow up non-respondents). Will the costs include supplying a stamped addressed envelope? Is there the intention to use a computer to analyse the results and, if so, what costs might emerge in terms of the necessary software, web hosting services and data preparation? The shrewd researcher works out the resource implications before embarking on the use of questionnaires.
    - **The preparation time:** The production of a well-designed questionnaire can take time. First, there is the lead-in time of developing the suitable questions and piloting the questionnaire. Second, if using a large postal survey, there can be time delays arising from the process of printing and production
    - **Organization:** The process for distribution, collection and analysis of results from questionnaires demands an eye on organization. A fundamental skill of good research is

tight organization, and nowhere is this needed more than in the use of a questionnaire survey. From the outset the researcher must keep a record of how many questionnaires are sent out, to whom they are sent and when they were sent. Unless the questionnaire is anonymous, responses can then be checked off against the mailing list and an accurate follow-up survey of nonrespondents undertaken at an appropriate time. Obviously, a filing system of some sort is vital.

- **Schedule:** Questionnaires, especially when used as part of a broad postal survey, do not supply instant results. The researcher, therefore, needs to consider what timescale is likely to be involved before the results from the questionnaire are available for analysis. The timescale for the research, it should be stressed, involves all the time spent in the production, distribution and collection of the questionnaires. It is not just the time between sending out the questionnaires and receiving the completed returns; the planning should involve the whole period between the conception of the research and the receipt of data. The researcher needs to be aware of this and plan accordingly.
- **Permission:** Depending on the nature of the questionnaire and the people to whom it is being sent, there may be the need to gain permission from those in authority to conduct the survey. For example, if a questionnaire is being contemplated for use with young people and it is intended to distribute the questionnaires by hand at schools or youth clubs, staff and the local authorities are likely to want to give approval before allowing the survey to proceed using their facilities. The researcher needs to be cautious on this score. It is dangerous to short-circuit proper channels of authority. However, gaining permission from appropriate authorities can take time and this consideration needs to be built into the schedule.

V. ROUTINE ESSENTIALS FOR QUESTIONNAIRE DESIGN

- Designing a good questionnaire involves attention to certain routine matters, quite separate from the more creative and taxing aspects, such as constructing the questions themselves (see below). However, such routine matters are absolutely vital.

1- Background information about the questionnaire

- From both an ethical and a practical point of view, the researcher needs to provide sufficient background information about the research and the questionnaire. Each questionnaire should have some information about:
    1. **The sponsor.** Under whose auspices is the research being undertaken? Is it individual research or does the research emanate from an institution? Headed notepaper is an obvious way to indicate the nature of the institution from which the questionnaire comes.
    2. **The purpose.** What is the questionnaire for, and how will the information be used? It is important here to reveal sufficient information to explain the purpose of the research without going too far and 'leading' the respondent into a line of answering. A brief paragraph should suffice.
    3. **Return address and date.** It is vital that the questionnaire contains in it somewhere quite visibly the name and contact address (postal or email) of the person(s) to whom the completed questionnaire is to be returned and the date by which it is required.

4. **Confidentiality.** Assuming that the research is operating according to the normal code of ethics for social researchers, the information collected will not be made publicly available. Respondents should be reassured on this point.
5. **Voluntary responses.** In the vast majority of cases, researchers collect information from respondents who volunteer to co-operate with the research. Rewards are not generally used (though in market research there may be some enticements offered), and people are not usually obliged to respond. Again, this point should be acknowledged on the cover page and respondents reassured that the questionnaire is to be completed voluntarily.
6. **Thanks.** It follows from the fact that questionnaires are normally voluntarily completed that the researcher is beholden to those who co-operated. Courtesy suggests that some word of thanks from the researcher should appear either on the front cover or right at the end of the questionnaire.

Sample

The aim of the questionnaire aims to investigate the attitudes of University professors towards the reform of the bachelor's degree program. The questionnaire is administered within the framework of a research study conducted in the master program Applied Language Studies at Moulay Ismail University. Your participation in this study is voluntary, and your answers will form part of a statistical study and will not identify you as an individual. All the information provided will remain highly confidential and will be used for research purposes only. The questionnaire should, predictably, between 10 and 15 minutes to complete.

Thank you in advance for your time and collaboration

2- Instructions to the respondent

- It is very important that respondents are instructed on how to go about answering the questions. It is no good assuming that it is self-evident; experience will soon prove that wrong. Mistakes that occur can invalidate a whole questionnaire, so it is worth being meticulously careful in giving instructions on how to complete the answers.
    1. Example. It is useful to present an example at the start of the questionnaire. This can set the respondent's mind at rest and indicate exactly what is expected of him or her.
    2. Instructions. Specific instructions should be given for each question where the style of question varies throughout the questionnaire (e.g. put a tick in the appropriate box, circle the relevant number, delete as appropriate).

3- The allocation of serial numbers

- With web-based questionnaires, the serial numbers are added automatically. Other forms of questionnaire might need serial numbers to be added manually. In this case, each questionnaire should be numbered so that it can be distinguished from others and located if necessary. The serial number can be used to identify the date of distribution, the place and possibly the person. But note: if the questionnaires are anonymous, such serial numbers should only allow general factors such as the date and location to be identified – not the identity of any individual person.

Section 1:

Please put a **Tick V** in front of your answer (please tick one box only).

1. Are you?
2. Age
3. Teaching experience:

Section 2:

React to the following statements by ticking the appropriate answer (s)

1. Are you familiar with the following reforms?
2. Are you aware that higher education in Morocco is going to adopt a four-year bachelor's degree starting from the academic year (2019-2020)?

No ☐ Yes ☐

Please, indicate how accurate the following statements are when thinking about the bachelor's degree. Please, tick one option per row.

	strongly agree	agree	neutral	disagree	strongly disagree
The introduction of a four-year bachelor's degree will improve the quality of education.					
Open-access universities need more autonomy from public authorities					
Partnerships with businesses will reinforce universities (with open access)					
Open-access universities should open up to soft skills to enable graduates to better meet the requirements of the job market					
Study programs need to adapt more to labour market needs					
Open-access universities should be allowed to select and refuse students					
First cycle graduates will find suitable jobs on the labour market after the implementation of this reform					
Open-access universities are in need of better internal management					
Student fees are acceptable as a source of extra income for universities (with open access)					

VI. INTERNET QUESTIOANNIRES

- Using the Internet, questionnaires can be delivered in one of four main ways. With each of these the basic principles of planning and good design remain much the same as they do for questionnaires in general.

1. Send email surveys.

- As a direct means of communication between you and your audience, email is the first place that comes to most people's minds when they think about distributing an online survey.
- Email gives you the ability to decide on your target respondent. You create an email distribution list and send an email to that list all at once. Since you are sending the survey to your opt-in list, you have a greater probability of getting high-quality responses by

distributing to this group. Additionally, you can easily slice up your list with logic and filtering, to send to only a specific group of people, to make your surveys more targeted.

2. **Add surveys to your website.** You can incorporate surveys into your web experience, and invite your website visitors to complete your survey. After all, your website traffic includes a highly relevant audience that you probably need to hear more from, since your Google Analytics data can only tell you so much.

3. **Embed surveys in blog posts.** A brief blog post that explains the details of why you're conducting a survey helps participants better understand the purpose of your data collection–and can motivate them to share their thoughts. This is one of the few places you have the ability to explain the bigger picture of your online survey, so take the time to explain what the data collected here means for your organization.

4. **Share surveys over social media:** Social media is all about being social–and collecting feedback from your following. There is one way to keep the conversation going. Promoting a survey in this space shows you value your audience's opinions and gives them the opportunity to share their thoughts.

VII. THE LENGTH OF THE QUESTIOANNIRE

- There is no hard and fast rule about the number of questions that can be included in a questionnaire. This will depend on factors like the topic under investigation, how complex the questions are, the nature of the respondents who have been targeted and the time it takes to complete the questionnaire. Decisions about the size of a questionnaire are ultimately a matter of judgement on the part of the researcher, who needs to gauge how many questions can be included before the respondent is likely to run out of patience and consign the questionnaire to the waste paper bin.
- When designing a questionnaire, then, the researcher has to walk a tightrope between ensuring coverage of all the vital issues and ensuring the questionnaire is brief enough to encourage people to bother answering it.
- To accomplish this balancing act there are certain rules to bear in mind.
    1. Only ask those questions which are absolutely vital for the research. The better the research is planned, the easier it will be to identify the absolutely crucial questions and discard the 'just in case I need this information later' questions.
    2. Be rigorous in weeding out any duplication of questions. For example, if a questionnaire contains as separate questions, 'What is your date of birth?' and 'How old are you?' we need to ask just how vital it is that both are included. A moment's reflection might lead the researcher to the conclusion that one or other will supply adequate information for the particular purposes of the investigation – or that one can be deduced from the other.
    3. Make the task of responding to the questionnaire as straightforward and speedy as possible.
    4. Pilot the questionnaire to see how long it takes to answer and then consider whether it is reasonable to expect the specific target group to spare this amount of time supplying the answers.

VIII. CONSTRUCTING THE QUESTIONS

- To construct questions in the questionnaire, the researcher should consider the following:

❖ **Suitable topics**

- The willingness of respondents to co-operate with research by filling in a questionnaire can easily be undermined by the nature of the topics in the questionnaire. To avoid this possibility, researchers need to ensure that the questions are on topics that respondents will:
    1. ***be willing to answer.*** When constructing the questions, the researcher needs to think about whether the respondent will want to answer the kind of questions that are being asked. This point applies, in particular, to questions touching on personal matters or sensitive areas linked with political and religious beliefs.
    2. ***have some information, knowledge, experience or opinions on***. It is no good constructing questions where the responses are likely to be a series of 'don't knows' or 'not applicable'.

❖ **Direct or indirect questions**

- Researchers need to consider whether the information being sought from the respondent is amenable to direct questions, or whether it will need to be measured by indirect means.
    1. Where the information being sought is of an overt, factual nature, there is not normally a problem on this point. The questions will take the form of 'How many times . . .? or 'When did you last . . .?
    2. However, questionnaires are frequently geared to less straightforward matters, where a direct question would be inappropriate. If, for example, the researcher wishes to know what social class the respondent comes from, it would not be wise to ask the straightforward question, 'What is your social class?' Apart from the fact that some people might find this offensive, the term social class has different meanings for different people, and the question will produce inconsistent answers. In this case, the researcher needs to pinpoint exactly what he or she defines as social class and then devise questions that will supply the type of information which will allow the respondent's social class to be deduced. For this purpose, indirect questions will be used about occupation, income, education, etc.

❖ **The wording of the questions**

- Questions should not be irritating or annoying for the respondents to answer. The success of the questionnaire, after all, depends on the willingness of the respondents to spend their time completing the answers and they should not be deterred from this task by any sense of frustration arising from the manner in which the questions are worded. There are some specific things that researchers can do to help avoid this possibility:
    1. *Make sure the wording is completely unambiguous.*
    2. *Avoid vague questions*. The more specific and concrete the question, the easier it is to give a precise answer. And, in all probability, the answer will prove to be of more value to the researcher.
    3. *Use only the minimum amount of technical jargon.* In terms of a questionnaire, the aim is not to see how clever people are.

4. *Use wording that is suited to the specific target group*. Questions geared to 14-year-olds will need to be different in terms of conceptual complexity and wording from ones aimed at, for example, members of a professional association.
5. *Keep the questions as short and straightforward as possible*. This will avoid unnecessary confusion and wasted time re-reading questions or trying to decipher the meaning of the question.
6. *Avoid asking the same question twice in a different fashion* (except as 'check' questions).
7. *Avoid the use of 'leading' questions.* These are questions which suggest an answer or which prompt the respondent to give a particular kind of answer (e.g. Would you agree that there should be controls on the emission of carbon dioxide from cars?).
8. *Be sure to include sufficient options in the answer*. If the list might prove too long, selecting the main possibilities and then tagging on the 'Other (please specify)' option is a good strategy.
9. *Pay attention to the way the questions are numbered.* Obviously they should be sequential, but there are clever ways of using sub-questions (e.g. 4a, 4b and so on) which can help the respondent to map his or her way through the series of questions.
10. *Avoid words or phrases which might cause offence.* If, for example, the questionnaire involves ethnic minority issues, it is prudent to use the 'politically correct' terms.

❖ **The order of the questions**

- The ordering of the questions in a questionnaire is important for two reasons.
    1. First and foremost, it can entice or deter the respondent from continuing with the exercise of providing answers. If the respondent is immediately faced with the most complex of the questions at the start of the questionnaire, this might deter him or her from going any further. However, if the questionnaire starts with straightforward questions and then gradually moves towards such questions at a later stage, there is a greater likelihood that the respondent will persevere. This same point is true for those questions which might be perceived as more personal and on sensitive issues. There will be a greater chance of success if such questions appear later in the questionnaire than if they appear right at the start.
    2. The second way in which the ordering of questions can be important is that questions asked at an earlier point in the questionnaire can affect the answers supplied at a later stage.

IX. TYPES OF QUESTIONS

- There are a variety of ways in which questions can be put in a questionnaire, and these are outlined below. However, from the outset it is worth giving some thought to whether the overall questionnaire will benefit from using a variety of kinds of questions, or whether it is better to aim for a consistent style throughout.

Advantages of a variety of question	Advantages consistent style of question
- First, it stops the respondent becoming bored. - Second, it stops the respondent falling into a 'pattern' of answers where, for example, on a scale of 1 to 5 he or she begins to put 4	- It allows the respondent to get used to the kind of questions so that they can be answered quickly and with less likelihood of confusion or misunderstanding.

down as the answer to all questions.	

- NB: There is no hard and fast rule on this point: it is down to a judgement call on the part of the researcher.

❖ **'Open' and 'closed' questions**

- **Open questions** are those that leave the respondent to decide the wording of the answer, the length of the answer and the kind of matters to be raised in the answer. The questions tend to be short and the answers tend to be long.
- The advantage of 'open' questions is that the information gathered by way of the responses is more likely to reflect the full richness and complexity of the views held by the respondent. Respondents are allowed space to express themselves in their own words. Weighed against this, however, there are two disadvantages which are built into the use of open questions. First, they demand more effort on the part of the respondents (which might well reduce their willingness to take part in the research). Second, they leave the researcher with data which are quite 'raw' and require a lot of time-consuming analysis before they can be used.

- **Closed questions** structure the answers by allowing only answers which fit into categories that have been established in advance by the researcher. The researcher, in this case, instructs the respondent to answer by selecting from a range of two or more options supplied on the questionnaire. The options can be restricted to as few as two (e.g. 'Yes' or 'No'; 'Male' or 'Female') or can include quite complex lists of alternatives from which the respondent can choose.
- The advantages and disadvantages of the 'closed' question are more or less a mirror image of those connected with the open, unstructured approach. In a nutshell,
    1. the main advantage is that the structure imposed on the respondents' answers provides the researcher with information which is of uniform length and in a form that lends itself nicely to being quantified and compared.
    2. The answers, in fact, provide pre-coded data that can easily be analysed.
- Weighed against this, there are two **disadvantages.**
    1. First, there is less scope for respondents to supply answers which reflect the exact facts or true feelings on a topic if the facts or opinions happen to be complicated or do not exactly fit into the range of options supplied in the questionnaire. The closed question allows for less subtlety in the answers.
    2. Second, and largely as a result of the first disadvantage, the respondents might get frustrated by not being allowed to express their views fully in a way that accounts for any sophistication, intricacy or even inconsistencies in their views.
    3. Third, the questionnaire can be evaluated according to its likelihood of achieving a decent response rate. In order to get a representative picture, the questionnaire needs to avoid 'turning people off' by being poorly presented, taking too long to complete, asking insensitive questions, etc

X. ADVANTAGES OF QUESTIONNAIRES

1. **Questionnaires are economical**, in the sense that they can supply a considerable amount of research data for a relatively low cost in terms of materials, money and time.
2. **Relatively easy to arrange**. Questionnaires are easier to arrange than, for example, personal interviews. There is no need to 'arrange' it at all, in fact, since the questionnaire may be simply sent unannounced to the respondent. (Some researchers, though, have sought to improve the response rate by contacting respondents before they send a questionnaire to them. This contact can be by phone, email or letter.)
3. **Questionnaires supply standardized answers**, to the extent that all respondents are posed with exactly the same questions – with no scope for variation to slip in via face-to-face contact with the researcher. The data collected, then, are very unlikely to be contaminated through variations in the wording of the questions or the manner in which the question is asked. There is little scope for the data to be affected by 'interpersonal factors'.
4. **Pre-coded answers**. A further, and important, advantage of the questionnaire is that it encourages pre-coded answers. The value of the data is likely to be greatest where respondents provide answers that fit into a range of options offered by the researcher. These allow the speedy collation and analysis of data by the researcher. They also have an advantage for the respondents, who, instead of needing to think of how to express their ideas, are faced with the relatively easy task of only needing to pick one or more answers which are spelt out for them.
5. **Data accuracy**. Surveys using the Internet can be designed so that the data contained in the completed questionnaires can be fed straight into a data file, thus automating the process of data entry. This effectively eliminates the human error factor that inevitably arises when people need to read the responses to a paper questionnaire and then enter the data manually via the computer keyboard. More advanced design techniques can ensure that all sections of the Internet questionnaire get completed, an advantage even when compared with paper questionnaires that are designed to be read automatically via an optical mark reading (OMR) machine.

XI. DISADVANTAGES OF QUESTIOANNAIRES

- In many respects the potential disadvantages of questionnaires go hand in glove with the potential advantages. You can't have one without the other.

1. ***Pre-coded questions can be frustrating for respondents and, thus, deter them from answering***. The advantage for the researcher of using pre-coded answers set out in the questionnaire carries with it a possible disadvantage. While the respondents might find it less demanding merely to tick appropriate boxes they might, equally, find this restricting and frustrating. So, on the one hand, the 'tick box' routine might encourage people to respond but, on the other hand, this same routine might be experienced as negative and put people off co-operating with the research
2. ***Pre-coded questions can bias the findings towards the researcher's, rather than the respondent's, way of seeing things.*** Questionnaires, by their very nature, can start to impose a structure on the answers and shape the nature of the responses in a way that reflects the researcher's thinking rather than the respondent's. Good research practice will minimize the prospect of this, but there is always the danger that the options open to the respondent when

answering the questions will channel responses away from the respondent's perception of matters to fit in with a line of thinking established by the researcher.

3. ***Questionnaires offer little opportunity for the researcher to check the truthfulness of the answers given by the respondents.*** Because the researcher does not meet the respondent and because the answers are given 'at a distance', the researcher cannot rely on a number of clues that an interviewer might have about whether the answers are genuine or not. The interviewer might see some incongruity between answers given by the same interviewee and be able to probe the matter. Or the interviewer might note a disparity between a given answer and some other factor (e.g. stated occupation and apparent level of income). In the case of the questionnaire, however, if a respondent states their occupation to be a 'dentist', it would seem at first glance that the researcher has little option but to accept this as true. Likewise, on matters of taste or opinion, if the respondent answers along a particular line, the questionnaire researcher would seem to have no solid grounds for challenging the answer. This is all the more true if the questionnaires are anonymous.

XII. CHECKLIST FOR THE PRODUCTION OF A QUESTIOANNAIRE

- When using a questionnaire for research you should feel confident about answering 'yes' to the following questions:
  1. Has time been allowed for the planning, design and production stages of producing a questionnaire?
  2. Does the research schedule allow time for respondents to complete and return the questionnaire (including follow-ups)?
  3. Have resources been allocated for all the costs involved in the production and distribution of the questionnaire?
  4. Has the questionnaire been piloted?
  5. Is the layout clear?
  6. Is there an explanation of the purpose of the questionnaire?
  7. Is there a contact address on the questionnaire?
  8. Have thanks been expressed to the respondents?
  9. Are there assurances about anonymity and the confidentiality of data?
  10. Have serial numbers been given to the questionnaires?
  11. Are there clear and explicit instructions on how the questions are to be completed?
  12. Have the questions been checked to avoid any duplication?
  13. Are the questions clear and unambiguous?
  14. Have all non-essential questions been excluded?
  15. Are the questions in the right order?
  16. Will closed questions produce the required kind of numerical data (nominal, ordinal, interval, ratio, discrete)?

S6: Research Seminar
Instructor: Mohammed Yachoulti

TECHNIQUES OF DATA COLLECTION: DOCUMENTS

I. SOURCES OF THE DOCUMLENTATRY DATA

- Documents can be treated as a source of data in their own right – in effect an alternative to questionnaires, interviews or observation. The documentary sources identified below are written sources. There are, though, alternative types of documents for research, which take the form of visual sources (pictures, artefacts) and even sounds (music). These also constitute some form of 'document' which has a value for research but, because they are used relatively rarely within the social sciences.

A. Government publications and official statistics

- At first glance government publications and official statistics would seem to be an attractive proposition for the social researcher. They would appear to provide a documentary source of information that is:
    - **Authoritative**. Since the data have been produced by the state, employing large resources and expert professionals, they tend to have credibility.
    - **Objective.** Since the data have been produced by officials, they might be regarded as impartial.
    - **Factual.** In the case of the statistics, they take the form of numbers that are amenable to computer storage/analysis, and constitute 'hard facts' over which there can be no ambiguity.
- It is not surprising, then, that in the Western world government publications and official statistics have come to provide a key source of documentary information for social scientists. However, the extent to which such documents can live up to the image of being authoritative, objective and factual depends very much on the data they contain (see below).

B. Newspapers and magazines

- The 'press' provides a potentially valuable source of information for research purposes. One reason for this is that newspapers and magazines can supply good, up-to-date information. In this case, the value of the newspaper or magazine for the research will stem from one or a combination of:
    - the expertise of the journalists;
    - the specialism of the publication;
    - the insider information which the correspondents can uncover.
- So, for example, in the UK, business researchers might use The Economist or the Financial Times for these reasons. Of course, the discerning researcher will also realize that there are plenty of newspapers and magazines whose contents should not be relied upon to reflect anything approaching an objective account of real events!

C. Records of meetings

- The bureaucratization of industrial society has created a wealth of documentation in relation to administration, policy, management, finance and commerce. These provide an abundant source of data for social researchers in whatever field they operate.
- The purpose of most such documentation is to enhance accountability. The records which are kept of meetings (minutes), the records kept of transactions the records kept of finances, etc. are kept in principle so that people and institutions can be held accountable for their actions. This means that the records need to have two qualities, both of which happen to be of particular value for research.
    - 1- They need to contain a fairly systematic picture of things that have happened. These might be decisions of a committee or transfers of money between accounts. Whatever the records, though, the principle behind them is that they provide a detailed and accurate picture of what took place. They have got to make events sufficiently transparent for the readers to comprehend what took place and why.
    - 2- They should be publicly available. The records only serve the function of accountability to the extent that they are made available to relevant people to scrutinize.

D. Letters and memos

- Private correspondence between people can be used for research purposes. This can take the form of memos sent between people at work or even personal letters exchanged between people. The more private the correspondence, of course, the more difficult it is for the researcher to gain access to the documents.
- These are really at the other end of the spectrum from the publicly available reports, and pose far more of a challenge for the researcher when it comes to getting hold of such documents and, especially, when it comes to getting permission to use them as research data.
- Letters and memos also differ from reports in terms of the extent to which there is any formal obligation on the writer to give a full and accurate portrayal of events. Because they are written to specific people, rather than for a broader public, their contents are likely to rely far more on assumptions about what the other person already knows or what that person feels. They are more likely to 'fill in the bits' rather than paint the whole picture. They can be expected to be from a personal point of view rather than be impartial. When contemplating the use of letters or memos as data for research, then, you need to recognize that they are not very reliable as accounts which depict objective reality, but they are extremely valuable as a source which reveals the writer's own perceptions and views of events.

E. Diaries

- As a source of documentary data, diaries are written by people whose thoughts and behaviour the researcher wishes to study. For research purposes such diaries are important in terms of recording things that have already happened. We are not talking about the kind of diaries which act as a planner, noting commitments in the future that need to be scheduled. For research purposes, the diary is normally a retrospective account of things that have

happened. There are three crucial elements to this kind of diary – three elements which, incidentally, are shared with the literary diary and the statesman's diary:

- factual data: a log of things that happened, decisions made and people involved;
- significant incidents: the identification of things seen as particularly important and a description of the diary-writer's priorities;
- personal interpretation: a personal reflection and interpretation of happenings, plus an account of the personal feelings and emotions surrounding the events described.

- Each of these three things has the potential to provide a rich source of data for the researcher. However, the accounts they provide should not be used by the researcher as a statement of objective fact. That would be very naïve. As a retrospective account, diaries must always be seen as a version of things as seen by the writer, filtered through the writer's past experiences, own identity, own aspirations and own personality. It is also worth noting that diaries, as a form of documentary data, lend themselves to being analysed in a variety of ways. As a method of data collection they do not prescribe such matters and, as Alaszewski (2006) argues, they can be analysed using approaches as widely different as content analysis, grounded theory and discourse analysis.

F. Website pages and the Internet

- Documents, as a form of data, include material obtained via the Internet. In a sense, the medium through which the document is obtained is not the issue. We can read newspapers in their original paper form, or we can read them on microfiche or via a CD-ROM. Equally, we can obtain documents through website pages or email, and this does not, of itself, have a bearing on the use of the output as a document for research. Websites, though, can be treated as documents in their own right. Home pages, etc. can be treated as a form of document, and their content analysed in terms of the text and images they contain. In effect, they can be treated like online documents.

II. ACCESS TO DOCULENTARY DATA

Access to documents for research

Type of document	Examples Access via	Examples Access via	Typical use
Public domain	Books, journals, official statistics, some company records	Libraries, Internet, Office for National Statistics	Academic research and consultancy
Restricted access	Medical records, police files, internal memos, personal papers/diaries, some tax accounts	Negotiations with gatekeepers, sponsors	Consultancy and academic research
Secret	Cabinet minutes, illegal trade, second set of books for VAT or Inland Revenue, corporate plans	Insider knowledge, participation, deception	Investigative journalism, fraud detection, undercover work

III. THE VALIDITY OF DOCUMENTARY DATA

- For the purposes of research, documentary sources should never be accepted at face value. Their validity is something that needs to be established rather than being taken for granted and, as Platt (1981) and Scott (1990) have argued, documents need to be evaluated in relation to four basic criteria

❖ **Authenticity**

- Is it the genuine article?
- Is it the real thing?
- Can we be satisfied that the document is what it purports to be – not a fake or a forgery?

❖ **Representativeness**

- Is the document typical of its type?
- Does it represent a typical instance of the thing it portrays?
- Is the document complete?
- Has it been edited?
- Is the extract treated 'in context'?

❖ **Meaning**

- Is the meaning of the words clear and unambiguous?
- Are there hidden meanings?
- Does the document contain argot and subtle codes?
- Are there meanings which involve 'what's left unsaid' or 'reading between the lines'?

❖ **Credibility**

- Is it accurate? Is it free from bias and errors?
- This will depend on factors like:
  - What purpose was the document written for?
  - Who produced the document? What was the status of the author and did he or she have a particular belief or persuasion that would colour the version of things?
  - If it reports on events, was it a first-hand report directly witnessed by the author? How long after the event was the document written?
  - When was the document produced?
  - In what social context and climate?

IV. THE EVALUATION OF INTERNET DOCUMENTS AND WEBPAGES

- The evaluation of the documents downloaded from the Internet centres around one issue more than others. Because there are few restrictions on what is placed on the Internet, any documents to be used for research need to be considered very carefully in terms of their authorship, their credibility and their authenticity. The documents need to be subjected to the researcher's own quality audit along the lines of those recommended in relation to books and journals – but with even more vigour and rigour.

- When it comes to the evaluation of the web pages, a similar point applies. For research purposes judgements need to be made about the credibility of the site where the pages are located. Judgements about this can be made on the basis of four criteria.
    - The authoritativeness of the site. A university or government site might add some credibility to the source, whereas a private web page might need to be viewed with caution
    - The trustworthiness of the site. Does the site convey a sense of serious and legitimate purpose? Does it contain suitable disclaimers and explicit statements about its purpose?
    - How up-to-date the site is. Attention should be given to how regularly the pages are updated. Is the date of last updating visible and, crucially, is it recent?
    - The popularity of the site. The extent of interest in a website and the size of its audience can suggest something about the site's recognition and popularity. These can be gauged by the number of times people have logged on to that site – the number of 'hits' on the site.

V. THE CREDEBILITY OF OFFICIAL STATISTICS

- Certain types of official statistics will, to all intents and purposes, provide an objective picture of reality. Unfortunately, the same cannot be said for certain other types of official statistics. When politicians debate the accuracy of unemployment figures or the significance of particular national economic figures, there is clearly room for some doubt and controversy about the objectivity, the accuracy, the completeness and the relevance of some official statistics. This should alert us to the point that official statistics cannot always be taken as 'objective facts'.
- To say this is not to reject the use of all official statistics as a source of data for social research. But what it does mean is that before treating a set of official statistics as accurate and objective, the researcher should consider the following factors:
    - The extent to which the event or thing being measured is clear-cut and straightforward. Basically, the more clear-cut the event, the more confidence we can have in the data. The official statistics on things like births, deaths, marriages and divorce are likely to be virtually complete. Whether or not someone is born or dies, whether a marriage or divorce occurs, does not require much in the way of interpretation by the registrars involved. The events themselves happen or don't happen, with little scope for 'creative accounting' or biased interpretation. Alright, a very small number of births and deaths might go unrecorded and slip through the net of the tight official procedures for collecting such data. But the numbers will be sufficiently low not to present any serious challenge to the idea that these official statistics are a full and accurate record. Things like unemployment, homelessness and ill health, though, are far less clear-cut. There are a number of ways of defining these things, and this opens up the possibility of disputes about whether the statistics depict real levels of unemployment, etc., or whether they offer a picture biased by the nature of the definition that has been used.
    - Whether there are vested interests in the statistics that are produced. When those who produce the statistics stand to gain or lose on the basis of what the figures reveal, the astute researcher should treat them with some caution. Trade figures, hospital

waiting lists, sales figures: all have consequences for people who want or need the statistics to reveal a particular trend. And official statistics are not immune to the point. Governments can have a vested interest in a variety of statistics, from trade to inflation, from unemployment to health.

- The extent to which the statistics are the outcome of a series of decisions and judgements made by people. The more the statistics rely on decisions and choices by those who produce them, the more the eventual official statistics become open to being challenged. The more the statistics are the end product of a series of choices made by people – choices that involve judgement and discretion – the more the official statistics can be regarded as a 'social construction' rather than a detached, impartial picture of the real world.

- Crime statistics provide a good illustration of the construction of official statistics. Crime statistics are based on those crimes that people decide to report to the police. A large proportion of crime, however, never gets reported. Petty crimes may go unreported. Theft is frequently not reported, particularly when people see no chance of recovering their property and when the property is not insured. (If a claim is to be made through insurance, a 'crime number' is needed from the police, and this motivates people to report the crime.) Many crimes are not discovered and so obviously do not get reported (e.g. embezzlement). There are the 'crimes with no victims', where, unless someone is caught by the police, no record of the offence will ever appear (e.g. recreational drug use). In the case of some crimes, there may be an unwillingness of the victim to complain because of the accruing stigma (e.g. rape) or fear of retribution. Even when a crime is reported to the police, there is a level of discretion open to them about how they interpret things and whether to formalize the matter. A lot of 'crime' is sorted out informally, without ever entering the system as a recorded crime.
- Even when it is in the system, the nature of the offence is open to some degree of interpretation. From the police officer receiving the report onwards, there is some scope for leeway and interpretation about (1) whether to prosecute; (2) what kind of offence gets noted; (3) whether a caution is given; (4) whether the matter proceeds to court; and (5) whether the prosecution is successful or not. At each stage, people are taking decisions, using discretion and making judgements. Overall, these can have a marked impact on the end-product: the official statistics. It means that there will be a huge difference (in the case of crime) between the real level of crime in society and the figures that get published by the government as 'the crime rate'. It is estimated that recorded crime may be as little as one-fifth of 'actual' crime.

VI. THE CREDIBILITY OF RECORDS OF MEETINGS

- Records of meetings, whether publicly available or on restricted access, purport to depict things that have happened in a full and accurate manner. However, there is ample evidence that such records tend to be partial – in both senses of the word. They will tend to be selective in terms of what they report, emphasizing some things and ignoring others, and thus recording only part of the overall event. They will also tend to reflect a particular interpretation of what happened, recording events from a particular angle. We should remember that when such records are produced as part of public accountability, there will be a tendency to be cautious about what is recorded. Things might have been said 'off the

record' or following 'Don't minute this but . . .'. The records, in other words, may be subtly edited to exclude things which might render people vulnerable to criticism when the record is published. The researcher, therefore, needs to be cautious about accepting such records at face value. Publicly available records reflect upon matters in a way that is publicly acceptable at a given time and in a given social sphere. They tend to offer a version of reality massaged to meet public expectations.

VII. IMAGE BASED RESEARCH

- The documents referred to so far have been text-based. There are, however, alternative kinds of documentary data available to social researchers, ones that are based on visual images. Central to the idea of image-based research, visual images can be used as data in their own right – distinct from text, numbers or sounds as a potential source of research information. Just like other documents, visual images can prove to be valuable for the purposes of the research in terms of:
    - the factual information they contain;
    - how they represent things (the symbolism and hidden meanings communicated through the document or image).

❖ **Types of images**

- For practical reasons there has been a tendency to concentrate on twodimensional 'still' images, such as photographs, as the source of image-based data. Photographs are relatively inexpensive. They also lend themselves to analysis and reproduction alongside more conventional text-based research, e.g. in printed journals or academic dissertations. Potentially, though, there are a wide variety of visual images that could be used. There have been adventurous attempts on occasion to explore the possibilities of moving images and even three-dimensional objects .

VIII. THE USE OF CREATED IMAGES

- The researcher can generate images specifically for the purposes of the investigation – so-called created images. The visual images, in this sense, provide primary source data. These images can be valuable as a means of recording things. Researchers can make records of events, people, cultures, and so on by photographing, filming or drawing them. Such visual records provide an alternative to tape recordings (sound), an alternative to the use of written documents such as field notes, diaries or minutes (text) and an alternative to the use of quantitative data such as figures from questionnaires or statistics based on systematic observation (numbers).
- When embarking on the use of created images the researcher ought to bear in mind certain practical issues. The first concerns equipment. Cameras for photographs and camcorders for videos come in a range of technical specifications and prices. They can produce output in film or digital format. The researcher needs to decide what equipment will best suit the purposes of the research and what equipment is actually available. This may well call for some sort of compromise decision that balances the quality and format of the output against the resources that exist. In arriving at the decision, the researcher will need to be aware that more sophisticated equipment might call for technical skills and expertise and that any additional technical wizardry attached to more expensive equipment might be wasted

without the necessary talent to make use of it. Weighed against this, cheap equipment that produces poor quality images might prove to be a poor saving of resources. Forethought needs to be given to the environments in which the images will be collected. Will the lighting be adequate to avoid flash photography that might be intrusive or distracting? Will better quality film and equipment overcome such a problem? Will a zoom lens be necessary to capture enough detail? Quite apart from the technical considerations involved with image-based research, when researchers set out to capture data by 'creating' the images first hand they are confronted as well by a range of social and cultural factors that can have a marked impact on their ability to record things 'as they are'. Even when things might seem quite straightforward, there can be problems lurking just beneath the surface. For example, filming objects such as buildings, transport facilities and artefacts would appear to be fairly unproblematic as a means of data collection. There are circumstances, however, where filming and photography are not allowed. Some countries might regard it as a security threat depending on the location. There are issues of privacy to be considered, and in galleries and museums there are often restrictions on photography and filming of the artefacts. Forethought needs to be given to the legal and cultural context within which data collection is to take place in order to minimize the risk that the filming or photography of specific objects will be regarded as an offence or as offensive.

- When the image-based research involves people, there is all the more need for sensitivity to the social and cultural context. As Prosser and Schwartz (1998: 119) point out, researchers need to appreciate that 'making pictures can be a threatening act (amply demonstrated by the metaphors photography invokes: we "load", "aim" and "shoot").' The act of being 'captured' on film can be perceived as threatening even if the researcher's intention is benign, and this likelihood has two important repercussions for the process of data collection:
    - It can limit access to research sites. If people feel threatened, if they feel that there is an invasion of privacy, they might well refuse to co-operate with the research.
    - It can cause people to become self-conscious and to act in a way that they would not do normally.
- There is, in effect, an element of reflexivity involved with the collection of 'created' images. Prosser (1998: 104–5) writes of this in terms of 'procedural reactivity' and 'personal reactivity'. Procedural reactivity refers to the way the act of taking the photographs makes the researcher more obviously visible when collecting data for the record, and the way that this can alter the natural state of affairs by inhibiting, embarrassing or in some other way altering the behaviour and activities of the person(s) being photographed. Personal reactivity refers to the way the photographer/researcher can have an effect on the situation simply on the basis of their own identity and personal characteristics, and their own judgements in terms of the nature of the photograph that is taken. An example might be a photographer's presence when recording images at the birth of a child and the way the sex and age of the photographer might have a bearing on the types of photograph that are taken and the reaction of the mother, the father and nursing staff to being photographed during this intimate moment.
- Bearing the issue of reflexivity in mind, researchers need to be conscious of the way their actions will be perceived. Consideration needs to be given to the impact of things like:

- The equipment. Flash photography will be more evident than daylight photography, and a discreet small digital camera will be less visible than bulky, professional camcorder equipment.
- The situation. Certain events involve film records more normally than others. Ceremonial events, for instance, might allow the use of created images by the researcher in a way that would not be the case in more personal, intimate circumstances.
- The people involved. People who live 'in the public eye', those with highprofile jobs and people like media celebrities, will probably be fairly comfortable in the knowledge that they are being filmed or photographed because it is a routine part of their working lives. They might, however, reserve the right to privacy on occasions when they are 'off duty', regarding this as their personal and private life.
- Personalities. Extroverts and publicity seekers will be likely to adore the attention of the camera in a way that more introverted and camera-shy people will not.

- The factors come into play, of course, only when people are aware that they are being filmed. This need not always be the case. The researcher might choose to undertake covert research, in which the process of filming is kept secret from those who are being studied. There are particular ethical issues that arise in this case and, to gain approval from any relevant authorizing body (e.g. an ethics committee), a strong case will need to be made for not seeking informed consent from those being studied. This pertains, of course, to a range of social research methods, but the fullness of the data captured on film can make people all the more defensive and reticent to co-operate – more than would be the case if the research relied on things like interviews or questionnaire data.

IX. THE USE OF FOUND IMAGES

- The social researcher can make use of images that already exist – so-called found images. These are images that have been produced by other people for reasons not directly connected with the researcher's investigation.
- The kind of images used depends largely on the subject discipline of the researcher. Media studies and marketing often use advertisements and newspaper photographs. Anthropologists, historians and sociologists will use images of groups and cultural events portrayed using film, photographs, paintings, graffiti or artefacts. Such items contain a visual record that can be used to provide factual information about groups or events, or the images can be interpreted to provide some better understanding of the ideas and lifestyles that generated the images.
- As a source of data, 'found' images sidestep a number of problems associated with the data gathering process for 'created' images. Technical issues about equipment and practical issues of access to locations, for instance, no longer arise, since the image already exists. Immediately, this suggests that the use of found images is an attractive proposition for the social researcher because it requires less skill to produce and may well prove less expensive if it saves fieldwork, travel and production costs. Equally attractively, it overcomes the ethical concerns of getting informed consent in those cases where the image involves living people. Added to this, the Internet has vastly increased the availability of images for social researchers. Images can be downloaded from across the globe to arrive almost instantaneously with the researcher. No fieldwork and no travel are required.

- The ease with which found images can be obtained should not seduce the researcher into opting for their use without recognizing that there are also some specific issues that arise in relation to the use of found images that need to be weighed against the ease and cost factors.

❖ **Authenticity**

- As with other documentary data, the social researcher who uses visual images will want to feel certain about the authenticity of the image. This is particularly the case with 'found' images that are to be used as a source of factual information. The researcher needs to be wary about whether the image has been tampered with, changed or edited from the original. Computer software, of course, makes this increasingly simple to do. Photographic images, in particular, are relatively easy to alter and the researcher should not take it as a matter of trust that the image is genuine. As Loizos (2000: 95) warns,

> One fallacy is implied by the phrase 'the camera cannot lie'. Humans, the agents who wield cameras, can and do lie: . . . they can distort the evidential recording capacity of visual data just as readily as they can distort written words.

❖ **Copyright**

- Ownership of an image is an important issue, particularly if the image is to be reproduced and made publicly available through the process of research. Where the image has been created by the researcher, there is generally not too much of a problem. The image is usually owned by the researcher. However, this may not always be the case. In some cases ownership of the image might be claimed on behalf of the person or event portrayed. However, as Banks (2001: 168) notes, this issue is 'relevant largely to representations of celebrities, those deemed likely to have a financial interest in the use of their representations'.
- If the image already exists, the chances are that it 'belongs' to some person, company or institution, in which case it is necessary to obtain permission to use the image. At one extreme this might be a fairly informal thing. If, for example, the image to be used is a personal photograph from a family album, the necessary permission could involve little more than getting approval (preferably in writing) from the owner for the use of the image for research purposes. At the other extreme, images based on advertisements or works of art, and drawn from news media, entertainment magazines or the Internet, are the kind of thing that will probably require a very formal request to the copyright holder for permission to reproduce the image. If the copyright holder agrees to this, it might be conditional on the payment of a fee. The fee can be prohibitively large and it is important to make it clear when requesting permission that the image is to be used for the purposes of small-scale, private research from which there will be no monetary gain. Fees might be waived or reduced under these circumstances, though this will depend on the nature of the image and the policies of the particular copyright holder. If the image to be used has an obscure origin and the copyright holder cannot be traced, there is a standard solution to the problem, which consists of making a clear statement at the start of any report or dissertation along the lines that 'Efforts have been made to obtain permission from copyright holders of the

(photographic images) used. Where the copyright owners have not been traced the author invites further information from anyone concerned and will seek to remedy the situation.' This does presume, of course, that rigorous efforts have indeed been made and the statement should not be used as a way to avoid the work of tracing copyright holders.

Caution: using image-based data
Despite claims that contemporary society has more of a 'visual culture' than in the past, and despite some signs of a growing interest in 'visual research' (Flick 2002), the use of image-based data remains relatively uncommon in the social sciences. Part of the reason for this is that film, video and three-dimensional images do not readily fit the medium within which research data and analyses are normally presented. They may not fit in dissertations, journals or computer documents that favour a two-dimensional, text-based format. Partly, this might be because of the cost of using full-colour glossy photographic data, or the space that photographic data might consume when there are tight editorial restrictions on the number of pages available. What is clear, however, is that image-based research remains somewhat marginalized and, as yet, struggles to achieve a parity of status in the social sciences with research whose data take the form of numbers or words. The project researcher undertaking small-scale research might do well to bear this in mind.

X. ADVANTAGES OF DOCULENTARY RESEARCH

- Access to data. Vast amounts of information are held in documents. Depending on the nature of the documents, most researchers will find access to the sources relatively easy and inexpensive.
- Cost-effective. Documentary research provides a cost-effective method of getting data, particularly large-scale data such as those provided by official statistics.
- Permanence of data. Documents generally provide a source of data which is permanent and available in a form that can be checked by others. The data are open to public scrutiny

XI. DISADVANTAGES OF DOCUMENTARY RESRARCH

- Credibility of the source. The researcher needs to be discerning about the information they use. Researchers need to evaluate the authority of the source and the procedures used to produce the original data in order to gauge the credibility of the documents. This is not always easy. Internet documents, in particular, need special scrutiny. Information found on the Internet can be up-to-date and good quality stuff. However, just as easily, it can be out-of-date, poor quality material because there is little control over what is placed on the Internet. From the academic researcher's perspective, the worry is that 'the Internet is characterized by uncontrolled and unmonitored publishing with little peer review' (Cline and Haynes 2001: 679).

- Secondary data. When researchers use documents as a source of data, they generally rely on something which has been produced for other purposes and not for the specific aims of the investigation.
- Social constructions. Documents can owe more to the interpretations of those who produce them than to an objective picture of reality.

Checklist for the use of documents (text and visual images)

When undertaking documentary research you should feel confident about answering 'yes' to the following questions: ☑

1 Am I satisfied that the documents/images are genuine in terms of what they purport to be (not drafts, forgeries, misleading second versions, etc.)? ☐

2 Have I considered the credibility of the documents or images in terms of:

- their source (published book, journal article, official statistics)? ☐
- their author or creator (status, role, in a position to know)? ☐
- their sponsorship (organization, funding, pressure group)? ☐
- the accessibility of the information they use (public domain, restricted, secret)? ☐

3 Have website sources been evaluated in terms of their accuracy and how recently they have been updated (where applicable)? ☐

4 Am I satisfied that I have taken account of possible bias in the document or image arising from:

- its purpose (description, theory, persuasion)? ☐
- how representative it is (typical, extreme)? ☐
- the editing and selection of extracts used in it? ☐
- its interpretation of facts or theories? ☐
- sensitivity to the information or image it contains? ☐

5 Have I provided full details of the sources of the texts or images used? ☐

6 Has the research avoided contravening copyright laws? ☐