

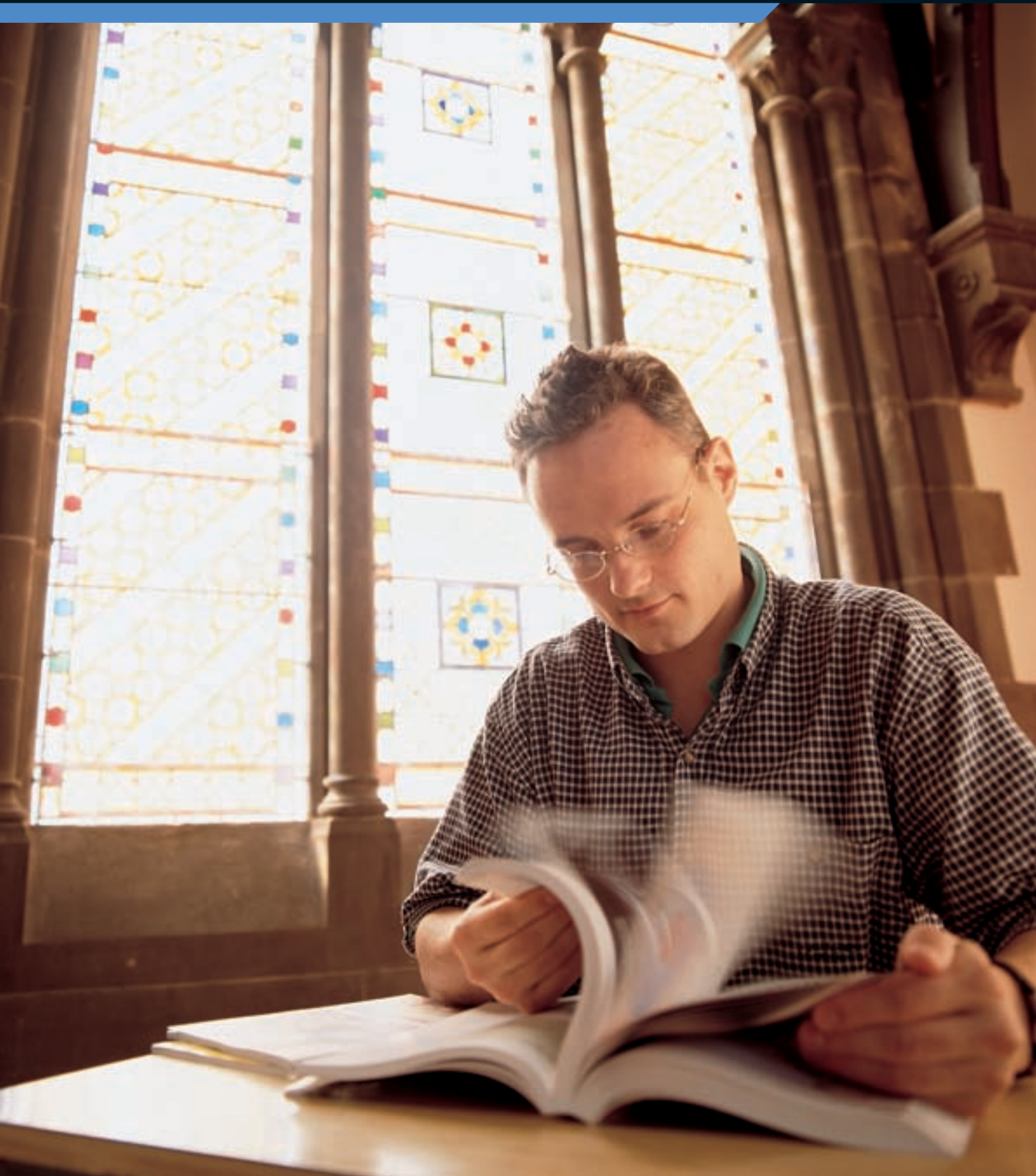


BRADFORD
UNIVERSITY
School of Management



Effective Learning Service

Introduction to Research and Research Methods



AN INTRODUCTION TO RESEARCH & RESEARCH METHODS

This workbook is a short introduction to research and research methods and will outline some, but not all, key areas of research and research methods:

- Definitions
- Research approaches
- Stages of the research process
- Background reading & information gathering
- Data collection
- Ethical issues in research

This workbook does not cover a number of important areas of the research process, particularly

- Data analysis
- Writing up the research

There are, however, books to assist you in these two important areas, and to take your general understanding of research and research methods beyond the introductory notes in this booklet; see page 44.

Students should also consult their own course guidelines on writing research up the results of their research projects.

YOUR RESEARCH

Research can be one of the most interesting features of any degree course as it offers you a measure of control and autonomy over what you learn. It gives you an opportunity to confirm, clarify, pursue – or even discover – new aspects of a subject or topic you are interested in.

RESEARCH IS...

... a process of enquiry and investigation; it is systematic, methodical and ethical; research can help solve practical problems and increase knowledge.

THE PURPOSE OF RESEARCH IS TO...

- Review or synthesize existing knowledge
- Investigate existing situations or problems
- Provide solutions to problems
- Explore and analyse more general issues
- Construct or create new procedures or systems
- Explain new phenomenon
- Generate new knowledge
- ...or a combination of any of the above!

(Collis & Hussey, 2003)

DIFFERENT TYPES OF RESEARCH:

Exploratory	Descriptive	Analytical	Predictive
<p>Exploratory research is undertaken when few or no previous studies exist. The aim is to look for patterns, hypotheses or ideas that can be tested and will form the basis for further research.</p> <p>Typical research techniques would include case studies, observation and reviews of previous related studies and data.</p>	<p>Descriptive research can be used to identify and classify the elements or characteristics of the subject, e.g. number of days lost because of industrial action.</p> <p>Quantitative techniques are most often used to collect, analyse and summarise data.</p>	<p>Analytical research often extends the Descriptive approach to suggest or explain why or how something is happening, e.g. underlying causes of industrial action.</p> <p>An important feature of this type of research is in locating and identifying the different factors (or variables) involved.</p>	<p>The aim of Predictive research is to speculate intelligently on future possibilities, based on close analysis of available evidence of cause and effect, e.g. predicting when and where future industrial action might take place</p>

RESEARCH APPROACHES:

Research can be approached in the following ways:

- Quantitative/Qualitative
- Applied/Basic
- Deductive/Inductive

Many research projects **combine** a number of approaches, e.g. may use both quantitative and qualitative approaches

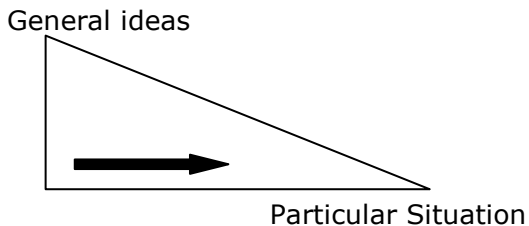
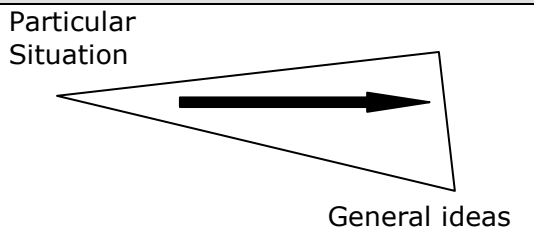
QUANTITATIVE/QUALITATIVE RESEARCH

Quantitative	Qualitative
<p>The emphasis of Quantitative research is on collecting and analysing numerical data; it concentrates on measuring the scale, range, frequency etc. of phenomena.</p> <p>This type of research, although harder to design initially, is usually highly detailed and structured and results can be easily collated and presented statistically.</p>	<p>Qualitative research is more subjective in nature than Quantitative research and involves examining and reflecting on the less tangible aspects of a research subject, e.g. values, attitudes, perceptions.</p> <p>Although this type of research can be easier to start, it can be often difficult to interpret and present the findings; the findings can also be challenged more easily.</p>

BASIC/APPLIED RESEARCH

The primary aim of **Basic Research** is to improve knowledge generally, without any particular applied purpose in mind at the outset. **Applied Research** is designed from the start to apply its findings to a particular situation. **Students at the school of Management are expected to engage with an applied research or problem solving research project.**

DEDUCTIVE/INDUCTIVE RESEARCH

Deductive	Inductive
 <p>Deductive research moves from general ideas/theories to specific particular & situations: the particular is deduced from the general, e.g. broad theories.</p>	 <p>Inductive research moves from particular situations to make or infer broad general ideas/theories.</p>

Examples of Deductive/Inductive Research in Action

Imagine you wanted to learn what the word 'professional' meant to a range of people.

Deductive Approach

It is clear that you would want to have a clear theoretical position prior to collection of data. You might therefore research the subject and discover a number of definitions of 'professional' from, for example, a number of professional associations. You could then test this definition on a range of people, using a questionnaire, structured interviews or group discussion. You could carefully select a sample of people on the basis of age, gender, occupation etc.

The data gathered could then be collated and the results analysed and presented.

This approach offers researchers a relatively easy and systematic way of testing established ideas on a range of people.

Inductive Approach

If you adopted this approach you might start by talking to a range of people asking for their ideas and definitions of 'professional'. From these discussions you could start to assemble the common elements and then start to compare these with definitions gained from professional associations.

The data gathered could then be collated and the results analysed and presented.

This approach might lead you to arrive at a new definition of the word – or it might not! This approach can be very time-consuming, but the reward might be in terms of arriving at a fresh way of looking at the subject.

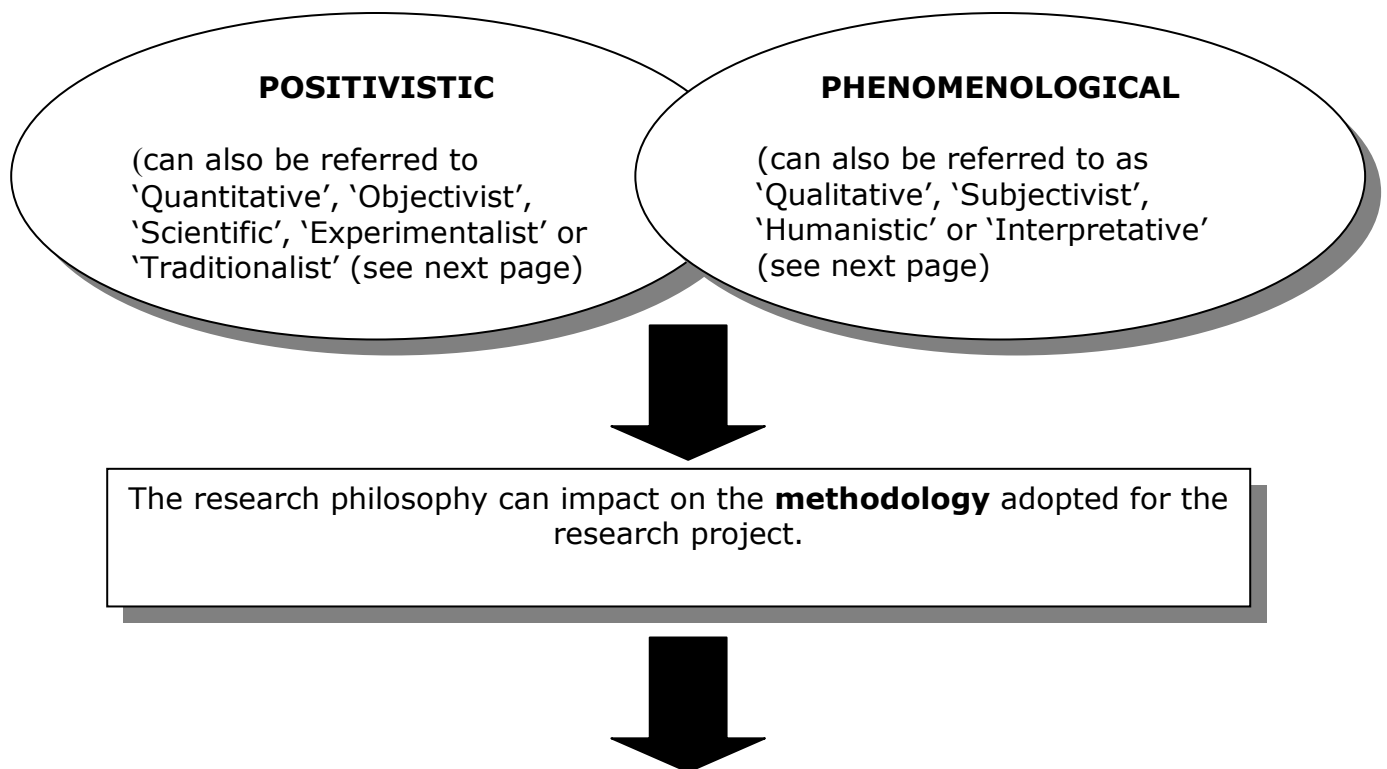
RESEARCH PHILOSOPHIES

Research is not 'neutral', but reflects a range of the researcher's personal interests, values, abilities, assumptions, aims and ambitions.

In the case of your own proposed research, your own mixtures of these elements will not only determine the subject of the research, but will influence your approach to it. It is important to consider in advance what approach you to take with your research – and why.



There are essential two main research philosophies (or positions) although there can be overlap between the two – and both positions may be identifiable in any research project.



The term **methodology** refers to the **overall approaches & perspectives** to the research process as a whole and is concerned with the following main issues:

- **Why** you collected certain data
- **What** data you collected
- **Where** you collected it
- **How** you collected it
- **How** you analysed it

(Collis & Hussey, 2003, p.55).

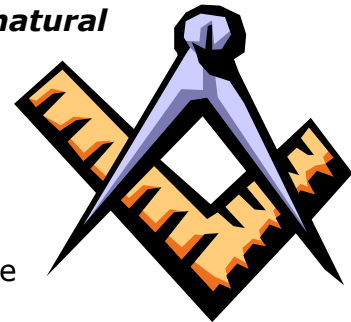
(A research **method** refers only to the various specific tools or ways data can be collected and analysed, e.g. a questionnaire; interview checklist; data analysis software etc.).

CHARACTERISTICS OF POSITIVISTIC & PHENOMENOLOGICAL APPROACHES & PERSPECTIVES TO RESEARCH

Positivistic

Positivistic approaches to research are based on research methodologies commonly used in science. They are characterised by a detached approach to research that seeks out the facts or causes of any social phenomena in a systematic way. **Positivistic approaches are founded on a belief that the study of human behaviour should be conducted in the same way as studies conducted in the natural sciences** (Collis & Hussey, 2003, p.52).

Positivistic approaches seek to identify, measure and evaluate any phenomena and to provide rational explanation for it. This explanation will attempt to establish causal links and relationships between the different elements (or variables) of the subject and relate them to a particular theory or practice. There is a belief that people do respond to stimulus or forces, rules (norms) external to themselves and that these can be discovered, identified and described using rational, systematic and deductive processes.



Phenomenological

Phenomenological approaches however, approach research from the perspective that human behaviour is not as easily measured as phenomena in the natural sciences. Human motivation is shaped by factors that are not always observable, e.g. inner thought processes, so that it can become hard to generalise on, for example, motivation from observation of behaviour alone. Furthermore, people place their own meanings on events; meanings that do not always coincide with the way others have interpreted them.

This perspective assumes that people will often influence events and act in unpredictable ways that upset any constructed rules or identifiable norms – they are often 'actors' on a human stage and shape their 'performance' according to a wide range of variables.



Phenomenological approaches are **particularly concerned with understanding behaviour from the participants' own subjective frames of reference**. Research methods are chosen therefore, to try and describe, translate and explain and interpret events from the perspectives of the people who are the subject of the research.

RESEARCH METHODOLOGIES

The main research methodologies are summarised below and can be linked to positivistic and phenomenological research positions or approaches. However, as mentioned earlier, research often contains **both** positivistic and phenomenological approaches, e.g. a survey that also contains qualitative work from participant observation.

Positivistic	Phenomenological
<ul style="list-style-type: none"> • Surveys • Experimental Studies • Longitudinal Studies • Cross-sectional Studies 	<ul style="list-style-type: none"> • Case Studies • Action Research • Ethnography (participant observation) • Participative Enquiry • Feminist Perspectives • Grounded Theory

POSITIVISTIC METHODOLOGIES

SURVEYS

Surveys involve selecting a representative and unbiased sample of subjects drawn from the group you wish to study.

The main methods of asking questions are by face-to-face or telephone interviews, by using questionnaires or a mixture of the two.

There are two main types of survey: a **descriptive** survey: concerned with identifying & counting the frequency of a particular response among the survey group, or an **analytical** survey: to analyse the relationship between different elements (variables) in a sample group.

EXPERIMENTAL STUDIES

Experimental studies are done in carefully controlled and structured environments and enable the causal relationships of phenomena to be identified and analysed.

The variables can be manipulated or controlled to observe the effects on the subjects studied. For example, sound, light, heat, volume of work levels etc can be managed to observe the effects.

Studies done in laboratories tend to offer the best opportunities for controlling the variables in a rigorous way, although field studies can be done in a more 'real world' environment. However, with the former, the

artificiality of the situation can affect the responses of the people studied, and with the latter, the researcher has less control over the variables affecting the situation under observation.

LONGITUDINAL STUDIES

These are studies over an extended period to observe the effect that time has on the situation under observation and to collect primary data (data collected at first hand) of these changes.

Longitudinal studies are often conducted over several years, which make them unsuitable for most relatively short taught post-graduate courses.

However, it is possible to base short time scale research on primary data collected in longitudinal studies by, for example, government agencies, and focusing research on a close analysis of one or more aspect or elements of this data.

CROSS-SECTIONAL STUDIES

This is a study involving different organisations or groups of people to look at similarities or differences between them at any one particular time, e.g. a survey of the IT skills of managers in one or a number of organisations at any particular time.

Cross-sectional studies are done when time or resources for more extended research, e.g. longitudinal studies, are limited.

It involves a close analysis of a situation at one particular point in time to give a 'snap-shot' result.

PHENOMENOLOGICAL METHODOLOGIES

CASE STUDIES

A case study offers an opportunity to study a particular subject, e.g. one organisation, in depth, or a group of people, and usually involves gathering and analysing information; information that may be both qualitative and quantitative. Case studies can be used to formulate theories, or be:

Descriptive (e.g. where current practice is described in detail)

Illustrative (e.g. where the case studies illustrate new practices adopted by an organisation)

Experimental (e.g. where difficulties in adopting new practices or procedures are examined)

Explanatory (e.g. where theories are used as a basis for understanding and explaining practices or procedures). *(Scapens, 1990)*

Researchers are increasingly using **autobiography** as a means of collecting information from small groups of respondents to seek patterns, underlying issues and life concerns. This method could be used, for example, to trace the influences of variables, such as social class, gender and educational experiences on career development and career progression, or lack of it, within an organisation. It can be, however a time consuming process as it requires trust to be built between researcher and the people concerned.

ACTION RESEARCH

Action research involves an intervention by a researcher to influence change in any given situation and to monitor and evaluate the results.

The researcher, working with a client, identifies a particular objective, e.g. ways of improving telephone responses to 'difficult' clients, and explores ways this might be done.

The researcher enters into the situation, e.g. by introducing new techniques, and monitors the results.

This research requires active co-operation between researcher and client and a continual process of adjustment to the intervention in the light of new information and responses to it from respondents.

ETHNOGRAPHY (PARTICIPANT OBSERVATION)

This form of research evolved from anthropology and the close study of societies.

Ethnography is more usually described as **participant observation**, and this is where the researcher becomes a working member of the group or situation to be observed. The aim is to understand the situation from the inside: from the viewpoints of the people in the situation. The researcher shares the same experiences as the subjects, and this form of research can be particularly effective in the study of small groups/small firms.

Participant observation can be **overt** (everyone knows it is happening) or **covert** (when the subject(s) being observed for research purposes are unaware it is happening).

PARTICIPATIVE ENQUIRY

This is about research within one's own group or organisation and involves the active involvement and co-operation of people who you would normally work and associate with on a daily basis. The whole group may be involved in the research and the emphasis is on sharing, agreeing, co-operating and making the research process as open and equal as possible.

Clearly this type of research can work when the student is already an active and known member of any organisation and may therefore be a particularly suitable approach for part-time employed students in their own workplaces.

FEMINIST PERSPECTIVES

Research, from a feminist perspective, focuses on knowledge grounded in female experiences and is of benefit to everyone, but particularly women. In a business context, for example, research might centre on the role of women in an organisation and on their views, roles, influence and concerns.

Feminist research perspectives have a number of common starting points. First, that women and their contributions to social and cultural life have been marginalized and that this is reflected in past research practice. Second, that men and male perspectives or norms have dominated previous research. And third, that gender, as a significant factor in understanding the world, has been absent from understandings and interpretations of social phenomena, in favour of other categories, e.g. social class.

Feminist perspectives draw attention therefore, to how women or women's concerns may in previous research have been excluded, ignored or relegated to the periphery.

It also raises questions therefore about **why** some forms of knowledge become or are perceived as more valid than others.

GROUNDED THEORY

Grounded theory reverses approaches in research that collected data in order to test the validity of theoretical propositions, in favour of an approach that emphasises the generation of theory **from** data.

Theory is generated **from** observations made, rather than being decided before the study. This approach seeks to challenge research approaches that unwittingly or wittingly look for evidence in the data to confirm or deny established theories or practices; the feeling behind this is that you will often find out in research what you are looking for! But if an open mind is kept, new ways of perceiving a subject or new ways of categorising or applying data gathered may be discovered or advanced.

The aim of grounded theory is then, to approach research **with no pre-conceived ideas** about what might be discovered or learned.

Silverman (1993) summarises the main features and stages of grounded theory:

1. An attempt to develop categories which derive from the data;
2. Attempting then to give as many examples as possible in the categories developed in order to demonstrate their importance
3. Then developing these categories into more general and broader analytical frameworks (or theories) with relevance to other situations outside the research subject.

Examples of Past Research Projects

Title	Approach	Methodology
<i>How do financial advice services market to the 'youth market'?</i>	Positivistic approach	Cross-sectional study
<i>Impact of developments in IT on financial services</i>	Positivistic approach	Cross –sectional study & in-depth survey of one company
<i>Disability awareness training within leisure organisations</i>	Phenomenological approach	Participant observation
<i>Age discrimination in the workplace</i>	Positivistic and phenomenological approaches/feminist perspectives	Survey & case study
<i>Personality Testing: is this a valid tool in the recruitment and selection process?</i>	Both positivistic and phenomenological approaches	Survey & Participant observation
<i>Impact of in-store marketing campaign</i>	Both positivistic and phenomenological approaches	Participant observation and survey
<i>Competitor strategies in the mortgage market</i>	Positivistic approach mainly, but some phenomenological elements included	Cross-sectional study & Focus group survey/discussion among consumers
<i>The use and application of purchasing within an organisation</i>	Phenomenological approach	Participative enquiry

What do you think are the main advantages & disadvantages of positivistic & phenomenological approaches in research? (Write in the spaces below)

POSITIVISTIC

Advantages (e.g. positive features)	Disadvantages (e.g. points of criticism)

PHENOMENOLOGICAL

Advantages/Positives	Disadvantages/Points of Criticism

STAGES OF THE RESEARCH PROCESS

The main stages of research can be summarised, as below. However, in reality the transition between one stage and another is not always so clear-cut. For example, during the research it may be necessary to return back and forth between stages to correct additional data, do additional reading or adjust a timetable. Nevertheless, **students need to carefully work out a timetable for deadline of completion of each stage.** A vital step for successful research is in working out a workable timetable that connects with the main stages of research.

1. Establish a general field of interest; discuss with supervisor/tutor

Your target date for this stage =

2. Undertake preliminary & background reading on the subject to be researched to discover with what is known already and to suggest the choice of an appropriate research methodology.

Your target date for this stage =

3. Narrow your ideas to a workable topic or research proposal and give it a title. Decide on the most appropriate methods for gathering data, e.g. questionnaire; observation; review of available information etc.

Your target date for this stage =

4. Preparation of information gathering 'tools', e.g. questionnaires, interview sheets etc (if relevant) & then information gathering stage. This can take a significant amount of time, so allow plenty of time for this.

Your target date for this stage =

5. Collation, analyse and interpretation of research data. There will undoubtedly be a need to continue reading on the topic to make connections with other current and related research. This can take a significant amount of time, so allow plenty of time for this.

Your target date for this stage =

6. Write first draft of research project report.

Your target date for this stage =

7. Revision and re-write dissertation; submit dissertation

Your target date for this stage =

YOUR RESEARCH - GETTING STARTED

1. Establish a general field of interest:

It is very important that the research subject will be of real interest to you. You will spend a lot of time on the research so a strong interest in the chosen topic is vital. A strong interest will carry you over the difficulties, delays and irritations that most researchers will experience. You will need to discuss your choice or research topic with your supervisor/tutor.

Before you decide however, on a choice of project you should be aware of the School of Management requirements for projects, e.g. for MBA Projects these state:

The project can be undertaken as a company-based or as a School of Management-based exercise.

- The project has to be a piece of **applied research and problem solving**. The literature element of the research is generally only supportive and not a project objective in itself.
- The project is concerned with problem solving, should have a strong policy-based thrust and must have a sound conceptual basis.
- The problem area must be of a sufficient depth so as to allow a detailed analysis. Micro-scale studies more easily lend themselves to in-depth analysis than do macro-scale projects.
- Preparing and writing the project necessitates ten weeks full-time work equivalent, that is a minimum of 400 hours. This includes discussing and defining the problem area, reading, data-collection, analysis and report writing, proof reading, copying and binding.

(from MBA Management Project Guidelines, 2003/4)

What research interests have you? Write your thoughts in the space below. At this stage, just keep your ideas broad and general.



Why are you interested in the above subject or topic? Write your thoughts in the space below:



Try now and think about your research title and possible research approach. Use the grid below to try and think this through. Your ideas are just provisional at this stage, so no one will commit you to them – you can change your mind!

Title (Think of a title that describes succinctly the nature of your proposed research)	Approach (i.e. positivistic/phenomenological)	Methodology e.g. case, study, survey, cross-sectional studies etc	The 'tools' or methods to collect primary data, e.g. questionnaire, autobiography, interviews etc

2. Background & Preparatory Reading

This is an essential stage of the research process, for the following reasons:

- It is essential to know what work has been done previously in the topic area. There is no point in you spending hours, weeks and months to produce a research outcome that someone else has already achieved!
- It will help you therefore identify research possibilities and to tailor or slant your particular research project to gain new insights or perspectives on the chosen topic
- This in turn will help you develop a research methodology appropriate to the chosen project
- It will help you to justify your choice of research topic at the project proposal stage to your supervisor/tutor.

One time-saving approach to background and preparatory reading is to select a just a few key books or articles initially on the chosen topic area and use these as a base for identifying other relevant texts as a starting point for your information search.

A checklist for analysing the literature and for helping to determine your own research approach has been suggested by Collis & Hussey (2003), as follows:

- What was the **purpose** of the previous study and how does it differ from other studies I have encountered and my own research ideas?
- How was the previous research **conducted** and how does it differ from other studies and my own proposed research?
- What were the **findings** and how do they differ from other studies, and what I expect to find?
- What were the **limitations and weaknesses** of these previous studies?

By engaging actively with previous studies in this way, you will strengthen your initial research proposal and enhance your final project report by offering clear justification for both the choice of research topic and methodology.

SOME USEFUL INTERNET SITES FOR BUSINESS STUDENTS

Bank of England (UK economic reports)
<http://www.bankofengland.co.uk>

BIZED (useful site for business studies students)
www.bized.ac.uk/

BIDS (academic publications)
<http://www.bids.ac.uk>

DTI Publications (UK government)
<http://www.dti.gov.uk/publications>

Economist (magazine)
www.economist.com

Emerald (academic publications)
<http://fiordiliji.emeraldinsight.com>

European Union
www.europa.eu.int

FAME (financial and other data from Companies House)
<http://fame.bvdep.com>

Financial Times (news and annual reports service)
www.ft.com

FreePint (range of useful Market Research resources, including featured articles, archive and student 'bar' for help on tricky research questions & issues)
www.freepint.com

HMSO Publications (UK government)
<http://www.hmso.gov.uk>

HRM (links & guides for HRM in UK, USA, Canada & Australia)
www.HRMGuide.net

HSBC (Business Profiles: economic & business information for over 40 countries)
www.hsbc.com.hk/hk/bps

ICAEW (accounting publications)
<http://www.icaew.co.uk/library>

Ingenta (academic publications)
<http://www.ingentaselect.co.uk>

Institute of Fiscal Studies (UK taxation and economics)

<http://www.ifs.org.uk>

ISI Web of Science (citation index)

<http://wos.mimas.ac.uk>

JISC (academic publications)

<http://www.jisc.ac.uk>

Listed Companies (annual reports for listed companies in Europe and USA)

www.carolworld.com

National Statistics Online (UK government)

<http://www.statistics.gov.uk>

Mintel (market analysis)

www.mintel.co.uk

NISS (news, publications & other information & good links to academic libraries)

<http://www.niss.ac.uk>

Research Index (list of UK market research & telemarketing companies)

www.researchindex.co.uk

Small Business Portal

<http://www.smallbusinessportal.co.uk/index.php>

Small Business Service (UK government)

<http://www.sbs.gov.uk>

Social Sciences Information Gateway (including business, economics & research methods)

www.SOSIG.ac.uk

UkOnline (UK government)

<http://www.ukonline.gov.uk>

United Nations (news & publications)

<http://www.un.org>

WWW Virtual Library (useful links to business related sites)

<http://www.vlib.org>

3. Gather Information & Data

Your research project should include empirical research (i.e. primary research) data. The ways that data can be gathered include:

- **One-to-one interviews** with key informants in an organisation (these might be face to face or by telephone)
- **Focus groups:** discussion & interviews
- **Participant observation** in a relevant social situation, e.g. supermarket
- **A questionnaire survey**, e.g. of relevant people in an organisation, or of consumers, customers etc. This can be done using printed or electronic questionnaires

However, other approaches can be used too, e.g. autobiography, diary methods, Internet etc.

It is also possible to engage in problem solving research by an analysis of secondary data relevant to the chosen topic, but you will need to discuss this acceptability of this approach with your tutor

INTERVIEWS

Interviews can be grouped into three main types:

1. **Structured**
2. **Semi-structured**
3. **Unstructured**



Structured Interviews

Structured interviews involve the use of questionnaires based on a predetermined and identical set of questions. The questions are usually read out by a researcher in a neutral tone of voice to avoid influencing or prompting a particular response from a participant. (see also the section on questionnaires)

Semi-Structured Interviews

The interviewer will have a list of themes and areas to be covered and there may be some standardised questions, but the interviewer may omit or add to some of these questions or areas, depending on the situation and the flow of the conversation.


Unstructured Interviews

These are informal discussions where the interviewer wants to explore in-depth a particular topic with another person in a spontaneous way. However, even in unstructured interviews it is likely that the researcher would have a pre-decided range of topics to cover in the discussion.

*What types of research project might favour a structured interview approach?
Write in the space below*



What types of research project might favour a semi-structured or unstructured interview approach? Write in the space below.



Interviews, whether they be structured or semi/unstructured, can sometimes be problematic. What factors might affect the outcome of any particular interview? (Write in the space below)

See comments on pages 37-43

FOCUS GROUPS

Focus groups are used to gather data, usually in the forms of opinions, from a selected group of people on a particular and pre-determined topic, e.g. consumer topic; political topic etc.



The researcher creates a relaxed atmosphere and records in some way what is being said (e.g. by use of a tape-recorder, video, note-taker etc).

The purpose of the discussion is introduced and discussion ground-rules agreed. The researcher encourages free discussion, but is ready to intervene if necessary to resolve group problems.

Focus groups can be a useful way of finding out what the main issues and concerns of any group are. This can help in questionnaire design or to develop a future interview strategy. They can be a useful way too, of bringing to the surface issues that might not otherwise have been discovered: the dynamics of a group can often make people bolder in advancing their opinions.

What might happen in a focus group to cause the researcher to intervene? Write in the space below.

See comments on pages
37-43

PARTICIPANT OBSERVATION

As discussed earlier, participant observation is when a researcher attempts to **observe** in some way in the group being researched and to share in the experiences being recorded and analysed.

It can be used in association with other research approaches or as the primary way of gathering data. It can be a good way of getting below the surface of any situation and to help reveal or unravel complex causal social processes.



The researcher can play an **overt** or **covert** role and the role the researcher can adopt in this situation has been summarised by Gill & Johnson (1977):

- Complete participant
- Complete observer
- Observer as participant
- Participant as observer

Complete Participant

- The identity and purpose of researcher is not revealed to other group members
- The researcher attempts to become a full covert member of the group

Example: study of leadership styles in action

Complete Observer

- The purpose of research activity not revealed to those being observed
- The researcher does not take part in the activities being observed

Example: a detached study of consumer behaviour in a supermarket

Observer as Participant

- The researcher's role is known to others in the group
- Researchers participate in activities, but their engagement with group activities may be fairly superficial or spasmodic, as their role is to observe the 'real' participants.

Example: Observing team-building exercises (taking part, but only in a superficial way, without real emotional involvement).

Participant as Observer

- The researcher's role is known to all others in the group
- The researcher would engage fully in all the activities and experience it totally themselves, plus observe and talk to other participants about their experiences

Example: Attending and fully participating in an assessment centre selection day and taking an active part in all the activities

Data Collection as a Participant Observer

This can be in the form of:

- **Primary Observations:** where the researcher notes what actually happened or what was actually said at the time
- **Secondary Observations:** interpretative statements by observers of what happened
- **Experiential Data:** a record of the researcher's feelings/values and how these changed, if applicable, over time

All three forms of data collection might be included in a research project report.

One example of participant observation would be the observation of consumer behaviour in supermarkets, and the reactions of both check-out cashiers and customers to queues. How much interaction is there between cashiers and customers in this situation? How do customers appear to choose a queue to join? (this could be followed-up with selected questioning of customers.

Participant observation can present a researcher with a range of advantages & disadvantages to consider beforehand or afterwards. What might these be? Write your comments in the space provided on the following page.

Advantages/Positives	Disadvantages/Negatives

See comments on pages 37-43

QUESTIONNAIRES

Main points to remember when designing and using questionnaires:
(adapted from Saunders, Lewis & Thornhill (2003), pp.315-6)

- a) Questionnaires facilitate the collection of data by asking all, or a sample of people, to respond to the same questions. They can be in both printed and electronic forms.
- b) There are five types of questionnaire approaches:
 - 1. On-line (electronic)
 - 2. Postal (printed)
 - 3. Delivery & collection (printed)
 - 4. Telephone (electronic/printed)
 - 5. Interview face to face/group (electronic or printed)
- c) **You need to absolutely clear before you design a questionnaire what it is you want to learn** and what data you need to obtain to enlighten you in this search. You also need to think ahead about how you are going to **collate** the information you gather. There is no point in designing a questionnaire that produces a range of information you find very difficult to collate in any meaningful quantitative or qualitative way.
- d) The **validity** (the extent to which the data accurately measures what they were intended to measure) and **reliability** (the extent to which the data collection method will yield consistent findings if replicated by others) of the data you collect depend on the design of the questionnaire and the words that you use.
- e) Questions can be open or closed:
 - Open questions:** a question is posed, but space is left for the respondent's own answer (the questions posed to you in this workbook have all been open questions)

e.g. Please tell me which brand you prefer, and why in the space that follows
 - Closed:** where a limited number of alternative responses to the set question are provided. These can be in list, category, ranking, scale/rating, grid or other quantitative form. They can be pre-coded on a questionnaire to facilitate analysis.

e.g. Please tick the box shown below with the brand you prefer
- f) The order and flow of questions should be logical to the respondent.
- g) There can be a low rate of return with questionnaires, so they need to be introduced carefully and courteously to potential respondents. This introduction can include the use of a covering

letter; offering a prize or other inducement can also improve the rate of return of questionnaires.

- h) All questionnaires should be piloted, if possible, with a small group before the main research to assess their value, validity and reliability.

What do you think are the respective research advantages and disadvantages of asking open questions and closed questions?

Open Questions	Closed Questions
Advantages:	Advantages
Disadvantages:	Disadvantages:

See comments on pages 37-43

EXAMPLES OF TYPES OF SURVEY QUESTIONS

1. Specific Information Request

In which year did you start the degree course? _____

2. Category

Have you ever been or are you a student representative? (Tick which)

Yes (currently) ☐ Yes (in the past) ☐ Never ☐

3. Multiple Choice

Do you view the money you have spent on your higher education as any of the following?
If so, tick which.

A luxury ☐ An investment ☐ A necessity ☐ A gamble ☐ A burden ☐
A right ☐ None of these ☐

4. Scale

How would you describe your parents attitude to higher education at the time you applied?
Please tick one of the options below.

Very Positive ☐ Positive ☐ Mixed/Neutral ☐ Negative ☐ Very Negative ☐ Not Sure ☐

5. Ranking

What do you see as the main purpose(s) of your degree study? Please rank all those relevant in order from 1 (most important) downwards:

Personal Development ☐ Career Advancement ☐
Subject Interest ☐ Recreation ☐
Fulfil Ambition ☐ Intellectual Stimulation ☐
Other ☐ (give details).....

6. Grid or Table

How would you rank the benefits of your degree study for each of the following? Please rank each item:

for	Very Positive	Positive	Neutral	Negative	Very Negative	Not Sure
You						
Your Family						
Your Employer						
The Country						
Your Community						
Your Friends						

7. Open Questions

Please summarise the benefits of your degree study in the space below:

SOME GENERAL RULES FOR DESIGNING QUESTIONNAIRES

(source: Collis & Hussey, 2003)

1. Explain the purpose of the questionnaire to all participants
2. Keep your questions as simple as possible
3. Do not use jargon or specialist language (unless the recipients really prefer and understand it)
4. Phrase each question so that only one meaning is possible
5. Avoid vague, descriptive words, such as 'large' and 'small'
6. Avoid asking negative questions as these are easy to misinterpret
7. Only ask one question at a time
8. Include relevant questions only
9. Include, if possible, questions which serve as cross-checks on the answers to other questions
10. Avoid questions which require participants to perform calculations
11. Avoid leading or value-laden questions which imply what the required answer might be
12. Avoid offensive questions or insensitive questions which could cause embarrassment
13. Avoid asking 'difficult' questions, e.g. where the respondent may struggle to answer (people hate to look stupid by not knowing the 'answer').
14. Keep your questionnaire as short as possible, but include all the questions you need to cover your purposes

ASKING THE RIGHT QUESTIONS IN THE RIGHT WAY**Exercise**

Please comment on the wording of the following open questions taken from a range of questionnaires.

Comment	
1. How satisfactory was your stay at the Carlton Hotel?	
2. <i>What is your place of residence?</i>	

3. Some people say that the city is spending too much on building new schools. Do you agree or disagree?	
4. <i>How much time did you spend reading the newspaper yesterday?</i>	
5. <i>What is your religion?</i>	
6. <i>How old are you?</i>	
7. <i>Does your employer make adequate provision for maternity/paternity leave?</i>	

See comments on page 37-43

SIZE & SAMPLING

In a positivistic study, when seeking the views of a group of fifty or less, Henry (1990) argues against any form of sampling. He argues that you should distribute questionnaires and collect data to the entire population, if possible.

To elicit the views of larger groups, some form of sampling is usually necessary to attempt to gather opinions that are likely to be representative of the whole group.

Sampling strategies are divided into two main groups: **probability** and **non-probability sampling**.

Probability Sampling:

Where the researcher has a **significant measure of control over who is selected** and on the selection methods for choosing them.

Sampling methods allow for **representative** cross-sections, or particular groups to be identified or targeted.

Main Methods:

Simple Random Sampling:

(selection at random by the researchers from a choice of subjects)

Systematic Sampling:

(selecting by the researchers at numbered intervals, e.g. every one person in five in the target group)

Stratified Sampling:

(sampling within particular sections of the target groups, e.g. you target a specific number of people based on the percentage of the total group that share the same characteristics.

So, for example, in a study of an organisation that had 50 supervisors & 800 labourers, a 10% representative sample of this population would target 5 supervisors & 80 labourers to interview.

Cluster Sampling:

(surveying a particular cluster of the subject group)

Non-Probability Sampling:

Where the researcher has little initial control over the choice of who is presented for selection, or where controlled selection of participants is not a critical factor.

Main Methods:

Convenience Sampling:

(sampling those most convenient; those immediately available)

Voluntary Sampling:

(the sample is self-selecting; they come forward voluntarily in response to an appeal)

Purposive Sampling:

(enables you to use your judgement to choose people that are presented or are available that best meet your objectives or your target groups).

'Snowball' Sampling:

(building up a sample through informants. You start with one person – who then suggests another & so on)

Event Sampling

(using the opportunity presented by a particular event, e.g. a conference, to make contacts)

Time Sampling

(recognising that different times or days of the week or year may be significant and sampling at these times or days.

EXAMPLES OF PROBABILITY SAMPLING**Random**

00000
 00X0
 00000
 X00000
 00000X
 000000
 00XX00
 000000
 0000X0

Systematic

0000X
 00000X
 0000X
 0000X
 0000X
 0000X
 0000X
 0000X
 0000X

Cluster

00000
 00000
 00000
 XXXXX
 XXXXX
 XXXXX
 00000
 00000
 00000

Stratified

00X00
 0X000
 000X0

00000
 X0000
 XX000
 000X0

Source: Blaxter, L. Hughes, C. & Tight, M. (1998) How to Research. Buckingham: Open University Press.

In 1991 there was a study of the personal characteristics of 48 highly successful women. The 48 were contacted through the chairpersons of woman's business networks across England. The names of potential respondents were passed to the researchers, who wrote to the women concerned and invited them to participate in the survey, which included the completion of a questionnaire and interview with the researcher.

What sampling strategy do you think was used in this study?

(See comments on page 43)

RESPONSE RATES

As a general rule, a response rate of 30 per cent or greater for a postal/externally sent questionnaire is generally regarded as reasonable. However, a goal of 50 per cent or more responses should be attempted in any questionnaire that involved face-to-face interviews.

There are techniques that can help improve response rates to postal or electronic questionnaires:

- **Follow-up calls** (especially telephone reminders and special delivery letters)
 - **Pre-contact with respondents** (telling them about the questionnaire)
 - **Type of postage** (special delivery is superior to ordinary mail; there is also some evidence that hand-written white envelopes are more likely to be opened than brown/typed!)
 - **Rewards:** prizes, or better still, cash incentives.
 - **Personalizing the questionnaire:** writing to the person by name, e.g. 'Dear John' etc.
 - **Emphasising Confidentiality:** ensuring that all views to be published remain anonymous, if appropriate
 - **Appeals to the respondent:** based on the social, personal or other benefits that might flow from the participation of a respondent
-
- Postal questionnaires should **always** include a stamped return envelope and have a covering letter explaining the purpose of the questionnaire and the use intended for the findings in the future.
 - The researcher should include full contact details and the offer to discuss the questionnaire with any respondent who has doubts or queries about it.
 - The researcher should always offer to share the research findings with any participant, if requested, and this offer is best made in the covering letter.

ETHICAL CONSIDERATIONS IN RESEARCH

Ethical concerns may emerge at all stages of research.

Saunders, Lewis and Thornhill (2003, p. 131) summarise the main issues to consider, although the ethical issues surrounding these items are not always clear-cut:

- The rights of privacy of individuals
- Voluntary nature of participation – and the rights of individuals to withdraw partially or completely from the process
- Consent and possible deception of participants
- Maintenance of the confidentiality of data provided by individuals or identifiable participants and their anonymity
- Reactions of participants to the ways in which researchers seek to collect data
- Effects on participants of the way in which data is analysed and reported
- Behaviour and objectivity of the researcher

RESEARCH TENSIONS

1. Misleading People

Sometimes, if the real reasons behind the research were disclosed to those whose behaviour is being studied, they would refuse to co-operate, or alter their behaviour. *Example:* Roy Wallis, a sociologist, wanted to investigate a controversial religious organisation, but he knew the leaders of the movement were unlikely to agree. He covertly joined the movement and participated in an introductory course. As part of this introductory course he had to sign a pledge that he would not disclose to others details of it. He signed this – but went on to publish his view of this course.

Was his behaviour ethical? He argued that it was in the interest of society that he published details of what went on inside secretive organisations. What do you think?

2. Publishing Results

The publication of research findings may prove damaging, embarrassing or offensive to the people involved – either because they are portrayed in an unattractive way, or because they would prefer to keep their attitudes or modes of behaviour private. In any organisation there are likely to be 'grey' areas of conduct or attitudes that the organisation would be reluctant to find in the public domain through research. A researcher once said '*a good study will make someone angry*'. But the researcher has to bear in mind the possible consequences of the publication of findings. The findings may, for example, be used to disadvantage groups of participants who had been cooperative and helpful in the research, and this can cause researchers some personal distress. Wherever possible, the researcher will want to discuss the issues emerging from the research directly with those touched by it before it is made public. To what extent should the

researcher be influenced by possible future negative responses to the research?

Another issue concerning publication regards researchers exaggerating or even falsifying research findings to get their work published. The career of an academic is advanced through publications, but unfortunately there have been a few past cases of researchers willing to falsify their findings to gain publicity. This is, of course, highly unethical and immoral – as is agreeing to omit or downplay results to avoid embarrassing a research sponsor. This last point is important, as it can easily happen that research findings are unexpectedly disagreeable to a sponsor of the project, and pressure can be bought to bear on the researcher to 'play down', omit, hide etc., these awkward findings.

3. Confidentiality

This is an important – perhaps **the** most important – issue to consider in research. Students need to be aware therefore, what the School of Management has to say about this, for example in the MBA Management Project Guidelines:

Frequently, the nature of a project necessitates the student having access to sensitive information about a company's business. The company may require the student to keep such information confidential, and occasionally may ask the student to sign a formal confidentiality agreement.

*If the project report contains confidential information the company may ask the University to keep the report confidential. Any such request should be sent **in writing** to the Projects Co-ordinator. After marking, confidential reports are kept under restricted access for 2 years instead of being placed in the library. If access needs to be restricted for a longer period application must be made again in writing at the end of this time.*

Similarly, if a student is employed by a company to do research, he/she does so on behalf of the company and this should be declared to other parties. It is not acceptable practice to use 'MBA student' as a cover to obtain competitor information.

(Section 12.6 'Confidentiality', from MBA Management Project Guidelines)

The last sentence of the above expresses a real fear that companies have, that a student researcher will disclose sensitive company information, divulge market plans, 'steal' information, etc. and students need to be alert and sensitive to these anxieties.

Checklist for Ethical Research

1. Will the research process harm participants or those whom information is gathered?
2. Are the findings likely to cause harm to others not involved in the research?

3. Are you violating accepted research practice in conducting the research and data analysis, and drawing conclusions?
4. Are you violating community or professional standards of conduct?

(Kervin, 1992, p. 38)

Is your proposed research likely to cause any ethical difficulties? If so, please make some notes in the space immediately below, and discuss these with your tutor as soon as possible.

Possible ethical issues:

DISCUSSION OF ISSUES RAISED IN THIS WORKBOOK

In this workbook a number of questions were raised and you were invited to think about your answers or responses to these. Our responses to these questions can be found on the following pages.

What do you think are the main research advantages & disadvantages of positivistic & phenomenological approaches?

Positivistic

Advantages	Disadvantages
Suitable for research projects that require a structured and qualitative approach	Highly structured research design imposes pre-arranged limits and boundaries to research
Good for research projects, for example, that are descriptive in nature, i.e. identifies and quantifies the element parts of any phenomena: the 'what' aspects of research	Not a particular good approach to take if you are trying to explain why things happen
Standardisation makes collation and codifying of gathered data easier	Assumes that researchers can be totally objective, but researchers may allow their own values, interests to influence the approach, for example, in the questions posed
Research methods easier to reproduce and for other researchers to test your conclusions	It is very difficult to capture the complex interplay of phenomena in a single measure
	You need to use a large sample to be able to make generalisations from results

Phenomenological

Advantages	Disadvantages
You can use a relatively small sample for your studies	The findings are subjective and it can be difficult to assert wider more generalised points from the research – or your findings would be more open to the charge that wider ideas that you assert flow from your studies cannot be substantiated
Enables you to gather data that is 'rich' in personal comment and personal insights	
Enables you to explore below the presenting surface of an issue	Your research would be very hard to reproduce if another researcher wanted to reproduce the survey and test your findings.

What types of research project might favour a structured interview approach?

Research projects that aim to be **descriptive** in nature, or where you are aiming for high reliability (the research findings can be easily tested by other research using same methodology). This approach to interview is suitable for gathering data that can then be analysed in a precise way.

What types of research project might favour a semi-structured or unstructured interview approach?

Research projects that are **exploratory** or **explanatory** in nature, that is, to discover the 'why' (reasons/motives) for things. It is suitable for research that tries to understand the relationships between variables, and where you need to probe, explore or seek for new insights into a subject.

Interviews, whether they be structured or semi/unstructured, can sometimes be problematic. What factors might affect the outcome of any particular interview?

There are a number of potential problem areas associated with interviews:

- Bias
- Demeanour of interviewer
- Suspicion of the interviewer
- Conduct of interview
- Confidentiality

BIAS

Bias is one of the most significant issues in interviewing, as it can affect the responses of the interviewee to the interviewer, and vice versa. Interviews are human encounters and a range of issues can influence and colour our perceptions of the people we encounter – including interviewers. We like or dislike someone, often without quite knowing why, and this can affect our responses to them. A range of factors can come into play: gender, race, age, speech, appearance and attitude.

Sexual bias is a particular significant factor. Rosenthal (1966) has suggested that there is the possibility of sexual bias in interviewers and that both male and female researchers behave more warmly towards female subjects than they do towards male subjects.

The way to reduce bias is to be actively alert to the following key issues in interviewing: demeanour, suspicion, confidentiality and the way you conduct the interview

DEMEANOUR OF INTERVIEWER

Generally speaking, we often like people who appear to like us! The interviewer should then, appear to be interested in the interviewee, but in a neutral and detached way: 'neutrally interested' is perhaps the best way of describing the best interviewer-interviewee relationship. The tone of voice of the interviewer is important, as it should project an impression of quiet confidence and quiet enthusiasm in the topic under discussion. Torrington (1991) suggests that an open posture is best, where the interviewer sits slightly forward toward the interviewee, keeps regular eye contact, and avoids folded arms. The interviewer must avoid appearing shocked, disbelieving or astonished by comments made by interviewees.

The interviewer wear clothes similar to those of the interviewees: too scruffy, or too over-dressed can affect the credibility of the interviewer.



SUSPICION OF THE INTERVIEWER

People are increasingly suspicious of interviewers and their motives. Most people have experience of being stopped in the street by an interviewer who appears to be asking questions in a neutral way but is really seeking to make a marketing contact for a commercial organisation. The true purpose of the interview should be carefully explained to the interviewee and how the data collected will be used. Wherever possible, the student researcher should have a letter from a University tutor explaining the research initiative, e.g. it is part of a legitimate first or post-graduate course. Wherever possible, the interviewer should send details of the interview process and agenda to interviewees in advance, for example explaining the estimated length of time it will take, the aim and purpose of the questions to be asked and the range of questions likely to be asked.

CONFIDENTIALITY

Part of the suspicion shown toward interviewers concerns the issue of confidentiality, and interviewees may be worried about disclosing sensitive information in case it has negative repercussions in some way against them. Interviewees may also be concerned that their personal details would be passed on to commercial organisations and that they would be subsequently pestered to buy things.

Interviewees must be given a complete reassurance about confidentiality and told who will see the data obtained – and don't forget this is likely to include at least two university tutors and possibly one external examiner.

The interviewer should be assured that his or her views will be generalised in the final report or that any direct quotes used would remain anonymous unless the interviewee wishes otherwise. The interviewer needs subsequently to take pains to avoid revealing the identity of respondents by using false names and not giving any clues to the identity of any interviewee.

CONDUCT OF THE INTERVIEW

The opening stages of an interview are particularly important. Saunders, Lewis and Thornhill (2003) make the following suggestions on conducting a semi-structured interview:

- ❑ The interviewee is thanked for agreeing to the meeting
- ❑ The purpose of the research, its funding (if relevant) and progress to date are briefly outlined
- ❑ The interviewee is given an assurance regarding confidentiality (see next section)
- ❑ The interviewee's right not to answer questions is emphasised and the interview could be terminated at any time by the interviewee
- ❑ The interviewee is told about the use intended to be made of the data collected during and after the project
- ❑ The offer of any written documentation to the interviewee promised in advance of the meeting should be emphasised
- ❑ The interviewer describes the process of the interview, e.g. approximate number and range of questions to be asked and the time it was likely to take.

What might happen in a focus group to cause the researcher to intervene?

The researcher would want to intervene in the following situations:

- If one group member was dominating the discussion
- If the group strayed from discussing the topic in question
- To encourage quieter members of the group to contribute to the discussion
- To resolve any conflicts that arose between group members

Participant observation can present a researcher with a range of advantages & disadvantages to consider beforehand or afterwards. What might these be?

Advantages/Positives	Disadvantages/Negatives
<p>It allows the researcher to observe at first hand and get below the surface of a particular situation</p> <p>It heightens the awareness of a researcher to social processes that can influence behaviour</p> <p>It allows the researcher to observe the relationship of different variables</p> <p>It can enable a researcher to gain insights into a situation that otherwise would not have been recognised or observed</p> <p>It can allow, in the case of overt participation, the researcher to gain the trust of the people being observed</p>	<p>Access to an organisation for overt participation may be very difficult</p> <p>There may be role-conflict. Researchers may lose their objectivity if they become too close emotionally to the people they are observing.</p> <p>The researcher may encounter suspicion and even hostility from people, who suspect the motives for the research and may be worried about their livelihoods.</p> <p>The presence of a researcher (overt participation) can have an impact on the behaviour of the people being observed: the 'observer effect'. They may change the way they behave if they are aware they are being observed.</p> <p>It is very time-consuming and can generate a large amount of data/commentary that will need to be collated (also see below)</p> <p>Recording and collating data from observations can be difficult and the researcher may need to adopt structured observation, where tasks/responses etc are identified and broken down into elements and the frequency of actions or responses noted and later collated. Taking notes in any covert situation presents real problems, as the researcher may not be in a position to openly record observations. In this situation, the researcher must record his or her observations as soon as possible afterwards.</p>

What do you think are the respective research advantages and disadvantages of asking open questions and closed questions?

Open Questions	Closed Questions
<p>Advantages:</p> <p>Enable you to get below the surface, explore and probe</p> <p>Encourages respondents to think and offer considered answers</p> <p>Encourages respondents to give honest opinions</p>	<p>Advantages:</p> <p>Often easier for respondents (particularly those who are busy) to answer</p> <p>Easier to collate than open questions</p> <p>The questionnaire can be easily reproduced by other researchers who wanted to test your findings</p>
Open Questions	Closed Questions
<p>Disadvantages:</p> <p>The responses can be hard to collate</p> <p>The research may be difficult for others to reproduce, so your findings may be open to doubt or question</p>	<p>Disadvantages:</p> <p>They limit the choices (of answers) to respondents and gives them less control over their responses</p> <p>It is harder to get below the surface of an issue</p>

ASKING THE RIGHT QUESTIONS IN THE RIGHT WAY

Comment

1. How satisfactory was your stay at the Carlton Hotel?	A vague question, and it would be better to offer a range of questions relating to specific aspects of the person's stay in the hotel.
2. <i>What is your place of residence?</i>	This question is capable of misinterpretation, as 'place of residence' might be seen as the road, town, county, country etc.

3. Some people say that the city is spending too much on building new schools. Do you agree or disagree?	This question presents just one perspective on the topic. It would be better to include both perspectives, e.g. <i>"Some people say that the city is spending too much on building new schools, whilst others argue not enough is being spent? What is your view?"</i>
4. <i>How much time did you spend reading the newspaper yesterday?</i>	There is an assumption being made here that the person did or should have read a newspaper. Respondents faced with such a question may be tempted to make something up to save face.
5. <i>What is your religion?</i>	Again, this assumes the respondent has an affiliation to a particular religion. In this case it is better to offer respondents a choice of religious groups, plus options for atheists, agnostics and others.
6. <i>How old are you?</i>	This is a stark and abrupt way of asking this sensitive question and some respondents might take offence at it. It is better to either offer respondents a choice of boxes to tick with age cohorts, e.g. 30-39, or ask for a year of birth.
7. <i>Does your employer make adequate provision for maternity/paternity leave?</i>	The word adequate is vague and imprecise and may be based on a particular model of maternity/paternity leave arrangement known to the researcher, but not to the participant. It would be better to simply ask what provision the respondent's employer makes for maternity/paternity leave.

SAMPLING STRATEGIES

In 1991 there was a study of the personal characteristics of 48 highly successful women. The 48 were contacted through the chairpersons of woman's business networks across England. The names of potential respondents were passed to the researchers, who wrote to the women concerned and invited them to participate in the survey, which included the completion of a questionnaire and interview with the researcher.

Question: what sampling strategy do you think was used in this study?

This was an example of purposive sampling (non-probability).

Bibliography & Suggested Reading

- Blaxter, L. Hughes, C. & Tight, M. (1998) *How to Research*. Buckingham: Open University Press.
- Collis, J. & Hussey, R. (2003) *Business Research: a practical guide for undergraduate and postgraduate students, second edition*. Basingstoke: Palgrave Macmillan.
- Denscombe, M. (2002) *Ground Rules for Good Research*, Maidenhead: Open University Press.
- Gill, J. & Johnson, P. (1997) *Research Methods for Manager* (2nd edition), London: Paul Chapman.
- Henry, G.T. (1990) *Practical Sampling*, Newbury Park, CA, Sage.
- Kervin, J.B. (1992) *Methods for Business Research*. NY: Harper Collins
- Rosenthal, R. (1966) *Experimenter Effects in Behavioural Research*. N.Y. Appleton-Century-Crofts.
- Saunders, M, Lewis, P. & Thornhill, A. (2007) *Research Methods for Business Students* (4th edition) Harlow: Prentice Hall.
- Silverman, D. (1993) *Interpreting Qualitative Data: Methods for Analysing Talk, Text and Interaction*. London: Sage.
- Torrington, D. (1991) *management Face to Face*. London: Prentice Hall

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If you have any queries please contact Martin Sedgley, Effective Learning Advisor, University of Bradford School of Management.

Telephone: 01274 234320

Email: M.T.Sedgley@Bradford.ac.uk.

Contact details:

Effective Learning Service

Tel: 01274 234414 | Email: M.T.Sedgley@bradford.ac.uk | Web: www.bradford.ac.uk/management/els