### Sociology



### Social Science Research Methods<sup>i</sup>

PURPOSE: TO AID WITH EXAM QUESTIONS FOR SECTION A – STUDYING HUMAN SOCIETY AND AS A STUDY AID FOR THE SOCIOLOGY INVESTIGATION.

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#### Introduction

This learning pack is divided into four parts:

#### Part One – Social Science methods: their basis in science

- a) What is knowledge, how do we know things and what is special about science as a type of knowledge?
- b) Natural Science and Social Science, an examination of the differences and similarities.
- c) Quality or quantity, why some researchers seek statistical data about large numbers of people whilst others prefer deep and detailed qualitative data about small numbers of people.

#### Part Two - A review of the main research methods

- a) Primary and secondary sources of information, a definition of each and an examination of their advantages and disadvantages with examples.
- b) The nature, principles and uses of each of the main research methods. This includes a consideration of their advantages, disadvantages, reasons for choosing them, their range and scope. Examples will be given. The methods will include:
  - postal questionnaires
  - structured interviews
  - asking questions: advice for your own practical research
  - pilot studies
  - survey methods and sampling: an introduction to sampling theory and practice with an explanation of all the basic concepts and terminology
  - participant observation
  - unstructured interviews
  - observation
  - official statistics
  - case studies
  - longitudinal studies.

#### Part Three – Application and relevance

In this part we will discuss some of the research methods that have been applied in previous research. We will focus upon the reasons for their use and their strengths and weaknesses.

a) Crime (link to Section C – Understanding Human Society 2. Topic 3 Sociology of Crime and Deviance We will focus on research methods in the areas of the study of the extent of crime and the causes of crime.

Part Four – The research process: Doing your own research

- a) A stage by stage guide to completing your *Practical Research* unit.
- b) Ethical issues in research a discussion of the ethical issues which should be considered when undertaking social science research.

#### PART ONE - SOCIAL SCIENCE METHODS: THEIR BASIS IN SCIENCE

# A: WHAT IS KNOWLEDGE, HOW DO WE KNOW THINGS AND WHAT IS SPECIAL ABOUT SCIENCE AS A TYPE OF KNOWLEDGE?

#### Why does the research process take the form that it does and why is this form important?

The nature of the research process has its basis in science. Science is a particular type of knowledge. Before we go any further we need to have a clear idea of what we mean by **knowledge** and **science**. Knowledge is the product of people's attempts to make sense of their experience of the world about them. Knowledge is made up of ideas about ourselves and the world and these ideas come in three forms. What we have been told (seen on television, read in a book, taken from the Internet) and simply accept, what we have been told and have checked against our own experience and what we work out for ourselves from our own experience.

When we are given an idea, a piece of knowledge we check it out by comparing it with our experience of the world. If it fits our experience we see it as making sense and we accept it. If we respect the source of the knowledge, if it has great power and authority, we may accept the knowledge without checking it, or we may even accept it if it contradicts our experience. To give some examples, we are told that Jesus Christ was born approximately 2000 years ago and is the son of God. A Christian, someone who accepts the authority of the Christian Church and the Bible would accept this knowledge without question and without proof, an act of faith.

We are told that when we get a cold it is caused by a thing called a virus that is transmitted from person to person when we cough or sneeze. As ordinary members of the public we have no way to check this idea. We accept it because we respect the authority of medical science, an act of faith. We are told that if we drive a car at 70 mph it uses more petrol per mile covered than if we drive at 50 mph. We may have tried this out in a car and found that it works, so we accept it. We probably all have found out by experience that if we sit in the sun for a long time, say more than an hour, our skin burns.

#### TASK

#### Describe your own examples of the three types of knowledge given above?

Knowledge that you are given and you simply accept, knowledge that you were given and that you checked by comparing it with your own experience and knowledge that you discovered for yourself through your own experience.

In the process of growing up in the world we absorb many different types of knowledge. For example, prejudice, superstition, religion, common sense, and science. All of these types of knowledge can be broken down into the forms of knowledge mentioned above. Let us look at prejudice, it means to pre judge, in our terms it means a set of ideas about a particular group of people or things that we have been given by our parents or our community. Often these people have so much influence over us that we accept these ideas without question and even distort or ignore our experience if it contradicts our prejudices. Prejudices are usually inaccurate. An example of a common prejudice is the idea that women make poor drivers. This prejudice persists despite the fact that car insurance is cheaper for women because they have fewer accidents than men.

#### TASK

Give some examples of knowledge that you or others hold that could be described as prejudice?

**Common sense** is a mixture of prejudice and knowledge based on our own practical experience but not necessarily supported by scientific research. In other words knowledge that we have simply accepted plus knowledge derived from our own experience. Examples of common sense knowledge would be:

- An apple a day keeps the doctor away proven by science
- A healthy diet includes milk, eggs, cheese, red meat now questioned by medical science.
- A woman's place is in the home now questioned by the feminist movement

#### TASK

Give some more examples of common sense knowledge?

We check common-sense knowledge against our own experience but this checking process can never be very thorough. What we see or experience is shaped or coloured by our own interests and prejudices. Most people's experience of the world is very limited and may give a distorted or limited view of reality.

For example you may know **five** healthy looking pensioners in their seventies who have smoked 40 cigarettes a day throughout their adult lives and conclude that smoking does not harm people's health or shorten their lives. Scientific research based on the detailed medical examination of **many thousands** of people has come to the opposite conclusion. We do not have the time, motivation or resources to thoroughly check our common-sense knowledge. **Science** as a type of knowledge **differs from other types of knowledge** most importantly in the significance that is attached to **thoroughly checking** out the basis of ideas and explanations. As we have seen **religious knowledge** is accepted on the basis of faith. No attempt is made by the faithful to test it and in many cases religious knowledge cannot be proved or disproved, for example it is not possible to disprove the existence of God. **Prejudice** is tested but people seek to prove what they believe to be true. **Common sense** is partly the product of our experience, a form of testing, but our experience is limited and partial.

#### The goals of science

Now we need to look more closely at what people are trying to achieve when they strive to produce knowledge that is scientific and how they go about it. Scientists strive to produce knowledge that is accurate, a description of or explanation of some aspect of the world that is as close to how it actually is as possible. They also try to make this knowledge as **objective** and **value free** as possible, that is it is not coloured or distorted by the scientists own values and interests. Scientists strive to be neutral and detached, keeping their own religious beliefs, political views, social ideals and personal feelings from influencing their work. For example, it may be hard to produce objective research into the impact of working mothers on their children's development if you feel that a woman's place is in the home. Many of the scientists who did the research to create the first atomic bombs found it impossible to continue this line of research after they had seen the pictures from Hiroshima.

#### TASK

#### List some areas of research in which a scientist's feelings or beliefs may cause a problem?

There is a big debate or argument still going on about accuracy and objectivity in scientific research with some writers suggesting that objectivity or value freedom is not a practical possibility for human beings. Others suggest that value freedom is not desirable as is indicated by the nuclear bomb or germ warfare examples.

If you want to find out more try reading:

Kuhn, T. The Structure Of Scientific Revolutions (1962)

- Polanyi, M. Personal Knowledge (1958)
- Gouldner, A. The Myth of a Value-Free Sociology (1975)
- Becker, H. Whose Side Are We On (1967)

In practice scientists do not worry too much about these debates. They focus on more practical issues like finding a cure for cancer, reducing violent crime, preventing global warming or how to detect and divert a meteorite that threatens to destroy the Earth. They just get on with the task of producing scientific knowledge.

#### Production of scientific knowledge

Having looked at the goals of science we now need to look at how they go about it, how scientists actually produce scientific knowledge. The production of scientific knowledge, doing science, involves two basic processes induction and deduction that can be done separately but which are usually combined to form a single process. Scientists look at some aspect of the real world, they gather lots of information about it, facts, data, statistics etc. They then use this information to establish patterns and relationships and eventually to form theories or explanations about how things work. This process is called **induction**. For example, if you watch a dog in its attempts to retrieve a stick that you have thrown for it, you can make the following observations.

- It runs off in the general direction in which the stick has been thrown.
- When it reaches the area in which the stick has landed, it often runs past the stick even though it is close enough to see it and you can see it clearly.
- It runs about in the area of the stick often in ever reducing circles or a reducing figure of eight pattern.
- It nearly always finds the stick even if it is very difficult or impossible to see.

# This is induction – you look at the real world (the dog's behaviour) and you produce an explanation for the patterns that you see.

Given what we all already know about dogs this is an easy puzzle to solve, isn't it? One theory is that when searching for a stick the dog relies mostly on its sense of smell because this is much more powerful and reliable than its eyesight. Thus it ignores visual information whilst concentrating on scent information. Once the scientist has established a large amount of knowledge about a particular aspect of the world and formed a number of theories or explanations about how this aspect works it then becomes possible to make predictions. This is known as **deduction**. **Deduction is to make predictions about the nature of the real world based on theories or ideas that we hold in our heads.** For example by observing the behaviour of a dog, we came up with the theory that its primary means of locating objects was its sense of smell and that visual information was therefore of little importance to it. We did this by induction.

Having established the theory outlined above, we are then able to predict that a dog would be able to locate objects solely by sense of smell with no visual cues at all. In the language of science this prediction is called a **hypothesis**. In order to see if this theory is correct, we can test the prediction or hypothesis. To do this we can set up an experiment. Here is a student's description of such an experiment. 'There are no street lamps where I live. On a wet and very dark night, whilst the dog was being held indoors on his lead, I took the dog's favourite stick and threw it with all the power I could muster in the direction of the bushes at the end of the garden. Having been released the dog flew out of the kitchen door to search for his stick. Would the dog and my theory pass the test? After ten minutes I was becoming worried, after fifteen minutes I was convinced that I would be proved wrong but before twenty minutes had elapsed a very wet dog appeared at the door with his favourite stick in his mouth, theory proven!'

The philosopher, Karl Popper, in his book *The Logic of Scientific Discovery* (1959) produces what is perhaps the most widely accepted account of how scientific knowledge should be, and usually is, produced. He

emphasises the deductive stage in the process arguing that scientists produce theories or understandings about aspects of the real world that are usually biased of distorted in some way. What converts these distorted theories into objective scientific knowledge is the process of testing. Thus for Popper if a theory cannot be tested it cannot be regarded as scientific knowledge. For example, the argument that God exists cannot be part of scientific knowledge because there is no practical way to test it. The argument that there is life after death is not scientific because again, there is no practical way to test it.

#### TASK

Give examples of knowledge or beliefs that some people hold that cannot be accepted by science because they cannot be tested?

In practice science works in the following way. An individual scientist or group of scientists at a particular university or company does some research and comes up with a theory. The scientists then set up experiments to test the theory, as the student did with the dog theory. If the experiment confirms the theory, the scientists will then publish the theory. Bear in mind that these scientists invented the theory, so they will be biased towards proving it correct. However, when the theory is published throughout the world, all the scientists' competitors working in similar areas in other universities and companies will want to test the theory and possibly prove them wrong.

Scientific knowledge is different from and superior to other forms of knowledge such as superstition and common sense because of this process of thorough and ruthless testing. Popper calls this testing process falsification, to try and disprove a theory or prove that it is wrong or false. To enable falsification to take place the following conditions must be met:

- The theory must be falsifiable, it must be stated in a form that can be tested, it must be possible to
  prove it wrong. For example as we saw before, the belief in God cannot be tested therefore it is not
  possible to prove it wrong, it is not falsifiable.
- The theory must be **empirical**, it must be proven or tested by referring to evidence from the real world, no idea is accepted unless it is supported by adequate evidence. For example as we saw before, the argument that life goes on after death is not presently accepted by science because scientists have not managed to produce any evidence or practical proof that it does.
- The method of collecting evidence must be repeatable and reliable. It must be possible for other
  researchers to repeat the research or test with a very good chance of them being able to produce
  the same results.
- The method must produce **valid** information, that is a true and accurate picture of the thing being studied.
- The method must be **objective**, information must be gathered in a way that limits the possibility of the researcher influencing or distorting the information being gathered.
- The research method that meets these requirements most closely is the experimental method or laboratory experiment. For example think of an experiment in a physics lesson at school.

#### Topic displacement and density

- Hypothesis when an object floats in water the volume of water displaced by the object will have the same weight as the object.
- Experimental method (the test.) A wooden brick is placed in a beaker full of water. The water displaced by the brick spills over into a measuring cylinder thus the volume of water displaced by the brick is known.
- Results Weight of displaced water and brick are established and found to be equal.
- The hypothesis is proven.

You can see from this example that all the requirements for thorough testing are met.

- The idea is stated in a form that can be tested.
- The experiment can be repeated by any student and the same result will be achieved. It is reliable.
- In a laboratory experiment the researcher has total control over all aspects of the process as a result the information produced is accurate, it is valid.
- The method as described is clear cut there is little opportunity for the researcher to influence the outcome of the research reducing objectivity.

#### **B: NATURAL SCIENCE AND SOCIAL SCIENCE**

The natural sciences are those sciences that deal with the natural world, for example physics, chemistry and biology. The social sciences generally deal with the social world, more specifically people's behaviour, for example economics, politics and sociology. The favoured method of the natural sciences is the experimental method which, as we have seen, fits Karl Popper's ideal most closely. With laboratory experiments everything is strictly controlled and the results are usually clear cut.

The social sciences in most cases are unable to do experiments for practical and ethical reasons. For example it would be very expensive and very unfair to put 2000 children into children's homes to do an experiment on the effects of being brought up outside the biological family. Only Hitler or Stalin could do this kind of experiment. Fortunately for social science, human behaviour is so rich and varied that it is often possible to find 'natural' experiments, the situation that you want to set up, already occurring somewhere in the world or having occurred at some time in history. This is known as the **comparative method.** It involves comparing one place with another or one period of history with another. These natural experiments can never be as controlled or precise as laboratory experiments. Another problem is that the behaviour of human beings is much more complex than the behaviour of, say, rats or electrons. As a result human behaviour is more difficult to explain and predict reliably.

#### TASK

Make a list of all the factors that you think would influence the behaviour of a rat, then make a list of all the factors that you think might influence your behaviour. Compare the number of factors in each case.

As a result of these factors, social science knowledge is at times less reliable than natural science knowledge. Having said this, the natural sciences of astronomy, geology and meteorology suffer similar problems to the social sciences, experiments are difficult and the behaviour in the case of meteorology is very complex.

#### C: QUANTITY / QUALITY, OBJECTIVE / SUBJECTIVE, RATS AND MOTIVES

Within the social sciences there exist two distinct approaches to the study of human behaviour, the objective approach and the subjective approach. Each of these approaches employs very different research methods.

#### The objective approach

The natural sciences deal with living creatures and things such as electrons, which, as far as we know, do not behave in the same way as we do. They do not operate in terms of meanings/interpretations or motives and, even if they did, they have no language with which to communicate them. You cannot ask a rat why it behaves as it does so you have to use other methods. The usual method of understanding the behaviour of objects or living things is to observe their patterns of behaviour in relation to certain influences or stimuli. We cannot ask the dog how it found the stick. We can observe its behaviour in different situations and form a theory that it uses its sense of smell because this fits with the observed behaviour. Natural scientists explain the behaviour of objects and things in terms of their being pushed

around or influenced by forces. For example, the behaviour of electrons is influenced by electro-magnetic forces. The behaviour of rats is explained as an instinctive response to the presence of food or a threat.

#### STIMULUS - RESPONSE (BEHAVIOUR)

Thus through observation of the thing's behaviour under natural and experimental conditions it is possible to establish patterns, causes and laws of behaviour and this enables the prediction and control future behaviour. Because objects and creature's behaviour is based on the simple stimulus/response model, it is very predictable and thus it is easy to establish laws of behaviour (objective knowledge). As we know, the natural sciences such as physics and chemistry have been very successful in doing this. The objective approach in the social sciences is based on the belief that the social sciences should copy the methods of the natural sciences because these methods produce the most objective and reliable knowledge. In practice this means studying the behaviour of people as if they were objects or animals. The example described on the following page shows how this works.

#### Durkheim's study of suicide

E. Durkheim 'suicide' 1897 – in this research Durkheim set out to find the main cause of a particular form of human behaviour, suicide. He could not conduct an experiment but he could use the comparative method. Firstly he collected statistics on suicide from around the world. He found a pattern in the behaviour, over the years some countries had consistently high suicide rates whilst others had consistently low rates. He concluded that some social force or influence must exist to produce these patterns. He also collected statistics on other factors that he felt might be related to suicide. He found out whether people committing suicide were married or single, Protestant or Catholic, had children or not, were working or unemployed, lived in the town or the countryside.

When he analysed all these statistics a clear pattern and relationship emerged. Single, unemployed Protestants living in towns were the people most likely to commit suicide. Married, employed Catholics with children living in the countryside were the least likely to commit suicide. Durkheim invented the idea of social integration to explain the pattern of suicide. People who felt they belonged to something were less likely to commit suicide than people who were socially isolated, felt they belonged to nothing. In terms of the methods of the natural sciences, Durkheim wanted to find out what force caused people to behave in a particular way (suicide). By comparing the broad patterns of behaviour as reflected in the suicide statistics and comparing these with the statistics on social conditions, a relationship between social conditions and behaviour emerged. Durkheim explained this relationship with the idea of social integration.

STIMULUS - RESPONSE (Social isolation or lack of social integration) - (Suicide)

#### **TASK**

Suggest how you would use the comparative method to explain the increase in crime?

One problem with the comparative method is that the relationship between patterns of statistics may be coincidental and there may be other influences at work that the scientists had not considered. **The existence of a statistical relationship does not prove the existence of a causal relationship.** Thus we can say that the objective approach in social science tends to see people as being pushed around by social forces. It tends to be interested in broad patterns of social behaviour such as crime rates, voting patterns, divorce, and so its preferred research methods tend to involve surveys and questionnaires, statistics and government statistics. It employs methods that provide information on what most people do and think and do.

#### The subjective approach

Think about this question: All tennis balls when thrown into the air will fall to the ground. STIMULUS - RESPONSE (gravity) - (fall to the ground)

**Not all** individuals who experience social isolation will commit suicide.

STIMULUS - RESPONSE (Social isolation)?

#### Why is this?

The answer, of course, is that there are a couple of very important differences between tennis balls and human beings. Human beings have consciousness and free will. In practice it means that when we experience a stimulus we must first of all decide what it means to us then we choose what we think is an appropriate response to it. This is the reason why a few people do not behave like boring predictable robots when the rest of us do! It is why it is possible for human beings to be individuals.

#### STIMULUS - INTERPRETATION - RESPONSE

classical music - boring - leave the room classical music - exciting - sit down and listen

#### **TASK**

Give some examples of human behaviour that relies on people's ability to make their own sense of a situation and come up with a novel response.

How we interpret a particular stimulus will depend on our world view or outlook and that is a product of many factors including upbringing, culture, personality etc. The important point is that social scientists who adopt the subjective approach believe that people's world view, their perspective and motivation, is crucial to understanding their behaviour. They also argue that the methods of the natural sciences are not suitable for the study of people because they do not enable us to grasp subjective or internal world view. Instead of large-scale statistical research methods they prefer small-scale research which provides lots of depth and detail such as in-depth interviews or participant observation. Having said all of this about the subjective approach, for many of us for much of our lives, we do behave in very predictable ways. As a result the objective approach can be very useful and it must be said that for an adequate understanding of human behaviour both the objective and the subjective approaches are essential.

#### PART TWO – A REVIEW OF THE MAIN RESEARCH METHODS

#### A: PRIMARY AND SECONDARY SOURCES OF INFORMATION

#### **Primary sources of information**

New information, gathered by the researcher, is known as primary data. The information will have been gathered directly by the researcher or an interviewer employed by the researcher to do that job. Primary data is **new information** gathered **first hand** by the researcher.

#### **Advantages**

The researcher can control the way in which the information is gathered.



- The research process can be designed to provide the exact information that the researcher wants. For example, asking the right kinds of question of the groups of people in society that the researcher wants to find out about.
- The researcher can check and modify the primary research process to achieve the desired information (see pilot studies).
- The researcher should be more aware of any bias or limitations which affect the research.

#### **Disadvantages**

• It takes more time, and costs more money, to do primary research than it does to use secondary data.

#### Secondary sources of information

Secondary sources include **information that already exists** and has been **produced by people other than the researcher.** These sources have been produced usually for another purpose that may be very different from that of the researcher. Such sources include, for example, newspapers, journals, news magazines and documentary or current affairs TV and radio programmes. Researchers may also use other secondary sources of information such as diaries, parish registers, biographies, company records. For



example, research into political processes such as decision making may make use of the political diaries and biographies of politicians to gain an insight into processes that are normally kept confidential. In Sociology, government statistics are considered to be a secondary source since they have been gathered directly by researchers employed to do that job. The Internet is an excellent source of statistics, including the many government web sites. The screen shot below shows statistics on crime figures from the Home Office web site.

#### **Advantages**

- Can save time and money.
- Can provide information not available in other forms, for example, confidential processes.

#### Disadvantages

- Difficult to check the accuracy of information.
- The information may be biased.
- Information collected for different purposes may use criteria and definitions different from those that would be preferred by the researcher.

#### **CHOICE, RANGE AND SCOPE**

We will shortly be discussing research methods and we will be using the terms, choice, range and scope. In the context of research methods:

- the **choice** of method is determined by factors such as the amount of time and money available and the nature of the research topic;
- the **range** of a method means the different subjects or topics that can be researched using that particular method;
- the **scope** of a method is the depth of study made possible by that method.

#### **B: NATURE, PRINCIPLES AND USES OF THE MAIN RESEARCH METHODS**

#### **POSTAL QUESTIONNAIRE**

#### **Key features**

- It is a primary source of data.
- It will produce quantitative data.
- It usually involves a list of pre-set questions that is posted to the respondent, who then completes it and returns it to the researchers. Closed questions are normally used in questionnaires. This means that respondents choose from a range of possible answers given on the questionnaire; for example, 'yes', 'no' or 'sometimes'. The questions often involve giving numerical information; for example, how often do you go to the cinema? They may ask respondents to express an opinion or attitude; for example, what is your attitude to fox hunting - strongly in favour, in favour, neutral, against, strongly against? The questions below were part of a postal questionnaire used to research turnout in elections.



#### **EXAMPLES OF QUESTIONS:**

#### YES NO

Were you 18 or over in May 2011? In May 2010 did you vote in the election for the UK Parliament? In May 2011 did you vote in the election for the Scottish Parliament?

In the future, how likely are you to vote in the following elections?

**VERY** 

**LIKELY** 

QUITE

**LIKELY UNLIKELY** 

**VERY** 

#### UNLIKELY

- European Parliament
- **UK Parliament**
- Scottish Parliament
- Local Council

Would any of the following make you more or less likely to vote?

### **MORE LIKELY NO DIFFERENCE LESS LIKELY**

- Elections held at weekends
- Voting booths in public places
- Poor weather
- Longer voting hours
- Proportional representation
- Compulsory voting
- Postal voting

#### **Advantages**

- Cheap to conduct because it simply involves the cost of postage, the production of the questionnaire and the processing of the returned questionnaires.
- Possible to cover a large number of people for relatively small costs.
- Easy to cover a large and wide sample by selecting from the post code areas.
- Little time required from the researcher, only the time required to produce the questionnaire, post them and process the returns.
- If closed questions are used, as you can see from the examples, they are easy to quantify.
- Respondents may be more honest when completing a postal questionnaire than they would be in a face to face interview.
- Standardised questions mean there is little opportunity for interviewer to influence the respondent and thus impose their bias upon the research.
- Seen as reliable because it can be repeated by other researchers and checked.

#### **Disadvantages**

- There is no way to explore issues raised by the questions in greater depth.
- With postal questionnaires the questions need to be kept relatively short and simple otherwise people may be deterred from completing the questionnaire.
- Poor response rate, because respondents either forget or cannot be bothered to complete and return the questionnaire.
- Respondents are unable to clarify questions that they find unclear.
- The process does rely on the respondents' ability to read and write.
- The respondents may not understand the questions.

#### Examples of use

- Attitude surveys e.g. fear of crime; for or against European Union; attitude to fox hunting; attitudes to the Euro.
- Factual surveys, e.g. victim survey, car use survey.

#### TASK

Describe two advantages and two disadvantages of using postal questionnaires as a research method. Why might a researcher choose this method of research?

What kind of topics or issues can be examined using this method?

#### STRUCTURED INTERVIEWS

#### **Key features**

- Involves a face to face interview based on the respondent answering a pre-set list of questions, or questionnaire.
- Produces quantitative data.
- It is a primary source of data.
- Closed questions are usually used requiring a limited response.

#### **Advantages**

- Good for gaining factual information.
- If closed questions are used the results are easy to quantify.
- A good response rate is ensured because the questions have to be answered there and then.
- Respondents can take part in the study even if they are unable to read and write.
- If respondents find a question unclear they can ask for clarification.



- Standardised questions mean there is little opportunity for interviewer to influence the respondent and thus impose their bias upon the research.
- Seen as reliable because it can be repeated by other researchers and checked.

#### **Disadvantages**

- They involve the use of trained interviewers and that is expensive.
- The process of conducting the interviews can be time consuming.
- When pre-set questions are used, issues cannot be explored to greater depth if required.
- In a face to face interview people may not be honest. They be too embarrassed or they may try to
  impress or please the interviewer by giving the answer that they think the interviewer wants to
  hear.

•

#### Examples of use

• Surveys of political attitudes, attitudes to capital punishment.

#### Choice, range and scope of postal questionnaires / structured interviews

#### Choice

- A sociologist may choose this method because he/she wants to:
- conduct research over a wide geographical area
- conduct research on a large number of people
- find out quantitative or superficial information.

Using questionnaires, either postal or face to face, would be the quickest and cheapest way of gathering this type of information.

#### Range

It is easy to cover many aspects of social life and behaviour i.e.:

- health
- poverty
- attitudes
- lifestyle
- voting behaviour
- life chances
- class.

#### Scope

This method is **best suited for** gathering:

- quantitative information.
- superficial information.

This method is **not suited for** gathering:

- in-depth information
- information on processes or interactions.

#### TASK

Describe two advantages and two disadvantages of using structured interviews as a research method. Why might a researcher choose this method of research?

What kind of topics or issues can be examined using this method?

#### ASKING QUESTIONS: ADVICE FOR YOUR OWN PRACTICAL RESEARCH

Once you have selected your sample there are various ways of asking questions. Questionnaires can be sent, or administered by an interviewer. The form of the questions may vary and the way that the questions are framed can affect the replies that you get. People may not understand the question properly, or the phrasing of the question may encourage them to give one answer rather than another, a leading question.

The human element should be considered, the feelings of the interviewer and interviewee, their reaction to each other, the manner in which the questions are asked, even the fact that a survey is being conducted. All these factors can affect the responses that you get. As an interviewer it is important to ensure that the participants are not just being polite and giving the answers they think you want. Every survey depends on the questions that are asked. The quality of the results, what you get out of it, depends upon the quality of the questions that should be **clear, precise and unambiguous.** Otherwise the answers will be confused and meaningless.

- Express questions clearly, making sure that they are understood.
- Questions should be brief but specific, avoid using 'ifs' and 'buts'.
- If you ask people to tick categories, make sure that they do not overlap.

#### **Pilot studies**

It is a good idea to do a trial run, or **pilot study**, with your questionnaire to check that people do understand your questions and that they elicit the information that you are seeking. If there are any problems, it is easy to modify the questions at this stage before you do your full study. These guidelines apply to both written and oral questionnaires. The written form allows for greater privacy since it is usually anonymous but oral questionnaires have the advantage that the interviewer is present to give clarification if it is required.



## SURVEY METHODS AND SAMPLING Survey methods

The survey method is probably one of the most widely used of the social science methods. Market research, political opinion polls, attitude surveys, victim surveys and self-report studies are all examples of social surveys. The survey method is based on the principles of sampling. The principles of sampling are that it is possible to find out the characteristics (behaviour, qualities, attitudes) of a large number of people or objects without actually interviewing or examining all of them. This can be achieved by taking a cross section or sample from the group of people or objects that you are interested in and interviewing or examining them. Using this method it is possible to make valid and reliable generalisations about the whole group as long as the sample is representative, that is, it has the same characteristics as the total population.

It would not be possible to make valid generalisations if because of some **error in sampling** your sample did not have the same characteristics as the population. For example if you had done all of your interviewing in an expensive suburb of Edinburgh you would have too many middle class people in your sample and not enough working class people. This would be an example of **sampling bias**, an overrepresentation of one category of participant in your sample. As well as being used in the social sciences sampling forms the basis of quality control in manufacturing industry were a sample of products is tested to ensure that the whole production run is up to standard. The group that you are interested in as a researcher is known as **the population**. The population is the group of people that you want to study. This may mean all voters in Britain or all car drivers or all school age boys. It does **not necessarily** mean the total population of Britain. In order to select your sample from the population you will need a list of the names of all of the people that you are interested in. This is called a **sampling frame**.

Examples of sampling frames that might be used include:

- the Postcode Address File compiled by the Post Office listing all of the addresses to which mail is sent;
- the Electoral Register, a list of the names and addresses of all people registered to vote in the UK;
- GP patient lists;
- the telephone directory.

For the sampling frame to be effective it must list all of the people in the population that you are interested in. Very few sampling frames actually do this. For example the electoral register does not include every one that is eligible to vote in the UK because some people are not registered.

In the past the telephone directory was not seen as an adequate sampling frame because some people, particularly the poor, do not have telephones and others are exdirectory. Now 94% of the population have telephones and ex-directory numbers can be reached by random number calling, so telephone sampling is acceptable.

#### Methods of sampling

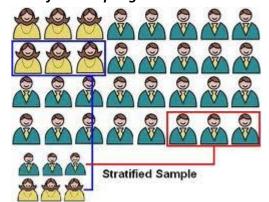
#### Random sampling

The basic method used in sampling is random sampling. This means a method of sampling in which everyone in the population has an equal chance of being selected. For example, get everyone in the class to write their names on a separate piece of paper, fold the papers, place them in a hat and shake them up. Then pick five names from the hat. The five names selected would form a random sample. Alternatively if you have a list of names printed on a page, close your eyes and stick a pin in the list to select a name. This too would be a way of random sampling. There are various ways in



which random sampling can be improved by doing things to increase the chance that your sample will reflect the characteristics of your total population, to improve accuracy.

#### Stratified sampling



To produce a stratified sample you would need to find out the general characteristics of the population that you are interested in. For example what proportion of that population are male, female, working class, middle class, under 18, over 65 and so on. You would then pick people at random from each of these groups until you had the same proportion of each group in your sample as exists in the total population. Thus if 60% of the total population are working class then 60% of your sample should be working class.

#### **Quota sampling**

Most market research companies use a form of stratified sampling called quota sampling. They use this method because it is both cheap and accurate. Each interviewer in the research team is instructed to select and interview an exact number of people from each of the groups in the wider population. The number of people in each group and thus the proportion of each group in the sample will be the same as their proportion in the population.

The problems with this quota form of sampling are that:

• Firstly, you need to already know a lot about the population that you are studying and this is often not the case.

• Secondly, the interviewers need to be well trained and experienced to be able to accurately select the type of people that they need to fill their quotas.

#### **TASK**

#### Explain the meaning of the following terms:

- representative sample
- sampling error
- sampling bias
- population
- sampling frame
- random sample
- stratified sample
- quota sample

#### PARTICIPANT OBSERVATION

#### **Key features**

• The researcher becomes a participant in the situation or group that they wish to observe.



- It is a primary source of data.
- It provides qualitative data.
- The observation may be **covert** (the group being studied will not know that the researcher is doing research).
- The observation may be **overt** (the group will know that they are being studied by the researcher).
- Perhaps only key people in the group will know the researcher's true identity and purpose.
- There are three stages to participant observation 'getting in', 'staying in' and 'getting out'.

#### **Advantages**

- Good for studying interactions and processes because the researcher is present over a lengthy period of time.
- Good for grasping feelings and meanings because the researcher can establish a degree of empathy through shared experience. The researcher can see what the group believes and does rather than what the group says or thinks that it does.
- Provides a realistic, in-depth picture of social behaviour.

#### **Disadvantages**

- Requires a large time commitment from the researcher. The researcher may need to spend several months working with the group.
- The costs are high because of the high level of involvement required from the researcher.
- Difficult to avoid bias because the researcher inevitably becomes involved with the group being studied.
- Must be seen as unreliable because it cannot be repeated and checked by other researchers.
- It is not possible to make generalisations about other similar groups. Findings can only be proven to apply to the group being studied.
- The presence of the researcher may change the behaviour of the group being studied (reactivity).
- Data is qualitative; it is difficult to quantify the results.
- If the researcher is participating in the group, particularly if the research is covert, it will be difficult for the researcher to record their findings.

#### **Examples of use**

Has been used to study:

- behaviour of drug users
- deviant or criminal gangs
- prison inmates
- decision making processes in organisations.

#### Choice, range and scope

#### Choice

Participant observation is chosen as a method if the researcher favours qualitative research and if they wish to obtain in-depth information about feelings and meanings, interactions and processes.

#### Range

This method can be used to study a wide range of topics in areas such as education, religion, deviance, crime and politics.

#### Scope

The scope of this method is limited to particular group sizes. The groups being studied must not be so small as to make the presence of the researcher obvious and intrusive, for example a family. And the group must not be so large a group as to make it impossible for the researcher to observe their behaviour.

#### TASK

- What do the researchers do when they use participant observation as a method?
- Give two advantages of this method.
- Give two disadvantages of this method.
- What is the range of participant observation as a method?
- Why is the scope of this method limited?

#### **UNSTRUCTURED INTERVIEWS**

#### **Key features**

- Provides qualitative data.
- Is a primary source of information.
- The interview is face to face.
- The questions are not pre-set.
- The researcher has a number of broad topic areas to cover.
- The questions are 'open', the person being interviewed can discuss points in depth or make new points.

#### Example

The questions below were prepared prior to an interview with a Council leader in order to ensure coverage of the main issue being researched, namely the representation of women in politics, and were supplemented by further questions during the interview.

#### **Question 1**

What measures in your opinion, should be taken to ensure women become involved in politics?

#### **Question 2**

Why do you think women remain so poorly represented in Parliament?

#### **Question 3**

Why are more women involved in politics at a local level?

#### **Question 4**

How did you first become involved in politics?

#### **Question 5**

How effective do you think the women's/feminist movement has been in improving the representation of women?

#### **Question 6**

Do you have connections with the '300 Group'? Do you feel it is effective?

#### **Question 7**

How do you think the position of women might improve under a Labour Government?

#### **Question 8**

Do you feel that women only shortlists would have been an effective way of achieving a more equal representation?

#### **Advantages**

- Good response rate.
- Can look at meaning, motivation, opinions and attitudes rather than just factual information
- · Researcher is not restricted to a set of pre-set questions
- Researcher can get in-depth information.
- Researcher can clarify points and explore particular points further if desired.
- The respondent has the opportunity to provide new information that the researcher had not considered.

#### **Disadvantages**

- Can be hard to maintain the focus of the interview.
- Very easy for the interviewer to influence the respondent's replies, thus very open to bias.
- Because the questions are not standardised, it is difficult to ensure objectivity
- Because the questions are not standardised, it would be difficult to repeat and check the research so the method is not reliable.
- Deep and varied information can be very difficult to quantify
- Can be time consuming.
- High researcher involvement results in high costs.
- Interviewer needs to be highly trained to maintain focus and objectivity.

#### **Examples of use**

In-depth studies of:

- the effects of industrial disputes on people's political attitudes
- the backgrounds and motives of criminals.

#### Choice, Range and Scope

#### Choice

This will be influenced by time and cost. The type of information required will also influence choice. If an in-depth view of social behaviour is required or perhaps information on past social behaviour, motives and meanings then the unstructured interview may be used.

#### Range

This method can cover a wide range of topics. For example: attitudes, motivation, beliefs, values, education, family, religion, political processes and attitudes, criminal motivation. The number of people involved in this type of study will be small because it takes a lot of time and money to interview people.

#### Scope

This method is most suited to research into:

- meaning
- process
- attitudes
- in-depth views.

#### TASK

What do the researchers do when they use unstructured interviews as a method? Give two advantages of this method.

Give two disadvantages of this method.

What is the range of unstructured interviews as a method?

#### **OBSERVATION**

#### **Key features**

- A primary source of information.
- The researcher covertly observes the behaviour of others without participating.
- The researcher has to take what is seen at face value and use their own resources to interpret the behaviour observed.
- Information may be both qualitative and quantitative. For example the research may involve videotaping the behaviour of shoplifters in a shop, counting particular types of body and eye movement.

#### **Advantages**

- If video data is collected the research/analysis can be repeated and checked by others, it is therefore a reliable method.
- There is no opportunity for the researcher to influence the behaviour of those being studied so the method is relatively objective.

#### **Disadvantages**

- Bias can intrude when the researcher analyses and interprets the meaning of the behaviour observed.
- Covert observations may raise ethical problems.
- Can be time consuming and expensive.
- May be difficult to establish the true meaning of the behaviour that is observed.

#### Examples of use

- Social behaviour in public places
- Studies of aggression in social relations.

#### Choice, Range and Scope

#### Choice

The method of observation may be chosen when the researcher needs to study behaviour that the subjects may be unaware of and therefore would not be reported on in a survey. Observation is quicker, cheaper and more objective than participant observation.

#### Range

The primary use of observation is in aspects of behaviour that have a significant visual component, e.g. body language, spatial organisation.

#### Scope

Observation provides information that can be deeper than questionnaires but not to the same depth as participant observation.

#### **TASK**

What do the researchers do when they use observation as a method? Give two advantages and two disadvantages of this method.

What is the range of observation as a method?

Why is the scope of this method limited?

#### **OFFICIAL STATISTICS**

#### **Key features**

- Official statistics are considered a primary source of information in Modern Studies.
- Official statistics are quantitative data.

Statistics used are gathered by government or state organisations such as the Registrar General's **National Census**, police records of crime, health statistics, unemployment statistics. These statistics are based on total populations rather than samples and provide information that would be too time consuming and expensive to collect in any other way. These statistics can be used to establish broad trends in social behaviour and are therefore very popular with researchers who favour the quantitative/scientific approach to the study of human behaviour.

#### **Advantages**

- Cheap and quick as the information has already been gathered by others.
- A good indicator of broad trends in social behaviour.
- Most official statistics are gathered from the total population.
- Ideal for quantitative comparisons over time and from place to place.

#### **Disadvantages**

- Officials may use different indicators and criteria to those preferred by the researchers. For example, the government may use a different definition of social class.
- Official statistics may be incomplete. For example, crime statistic only include those known to the police a fraction of the crime that actually takes place.
- There can be problems using official statistics for comparative studies because the indicators and criteria used may change over time and from place to place.

#### Examples of use

- Trends in crime.
- Comparative studies into crime, suicide, divorce, life chances.

#### Choice, Range and Scope

#### Choice

Official statistics tend to be used for quantitative research into broad trends in social behaviour requiring superficial information on large numbers of people. Since these statistics are already published by the government, they are cheap and quick to obtain.

#### Range

They can be used for any topic upon which the government provides statistics provided that the nature of the research is quantitative and superficial.

#### Scope

Official statistics can only provide superficial factual information in quantitative form.

#### TASK

What do the researchers do when they use official statistics? Give two advantages and two disadvantages of this method. What is the range of official statistics as a method? What is the scope of this method?

#### **CASE STUDIES**

#### **Key features**

- Primary sources of information.
- Provide both qualitative and quantitative data.
- Involve an in-depth and detailed study of a particular event, person, group or organisation.

#### **Advantages**

- Provide deep and detailed information.
- Enable an understanding to be gained of processes and interactions in a particular situation.
- It is possible to grasp the effect of a range of forces and influences.
- Can stimulate ideas and understandings about similar groups or individuals.

#### **Disadvantages**

- Can be time consuming and expensive.
- May be difficult to repeat and check thus may not be reliable.
- Findings are easily influenced by the bias of the researchers.
- Results apply only to the study. It is not possible to make scientific generalisations about similar groups or individuals.

#### Examples of use

- Study of media/television coverage of industrial and economic news to detect political bias.
- Study of the media's role in deviancy amplification.

#### Choice, Range and Scope

#### Choice

Case studies can be expensive and time consuming but they can provide a detailed and deep understanding of the phenomena being studied, which can provide clues for broader research.

#### Range

This method can be used to study a broad range of topics, at a wide range of levels; for example, education from a students' perspective to the operation of a college.

#### Scope

This method provides detailed and deep information about particular people, events or organisations. It is effective for grasping processes and meanings. It is not possible to make scientific generalisations to other people, events and organisations.

#### TASK

What do the researchers do when they use the case study method? Give two advantages and two disadvantages of this method.
What is the range of the case study method?

What is the scope of this method?

#### **LONGITUDINAL STUDIES**

#### **Key features**

- Can be either a qualitative or a quantitative method.
- They are a primary source of information.
- The researcher or a team of researchers studies a particular group of people over an extended period of time, at times many years.
- The people being researched will be studied at intervals.
- The research techniques used within a longitudinal study may involve interviews, either structured or unstructured, group discussions and various forms of tests such as IQ tests.

#### There are three types of longitudinal study:

#### **Panel studies**

A number of people are selected as being representative of a particular group in society. If people drop out they can be replaced with people of the same age and gender from a similar background. They are used to measure the changing views and attitudes of particular groups in society over time. For example, people's viewing habits or political attitudes.

#### Census studies

The census is a survey of the total population of the UK conducted by the government every ten years. It is based on a structured questionnaire and is used to establish absolute figures such as car ownership and family size on a particular date as well as long term trends that can be used to predict future needs for things such as road building, hospitals and housing.

#### **Cohort studies**

In this type of longitudinal study a group of people born at the same time will be studied over a number of years to see how their different social and economic circumstances affect their lives in such things as educational achievement, occupations, relationships, etc. This type of study is very good for demonstrating the influence of social forces on individual's lives. For example, J.W.B. Douglas's study *The Home and the School* used a cohort study method to look at the impact of home background on educational achievement.

#### **Advantages**

This method highlights social changes and the influence of social forces.

#### Disadvantage

- This method is expensive in terms of both time and money.
- Respondents may drop out or be lost from the research because of its long time scale.
- Takes a long time to produce results.
- It will occupy a team of researchers over a long period of time.

#### Choice, Range and Scope

#### Choice

Researchers use this method if they want to observe the long-term impact of social forces on people's lives. For example, they may wish to study long-term trends or to examine how people's attitudes and behaviour change as they move through different life stages.

#### Range

This is a good method to use on any topic that involves the development of people in a social context, or the examination of a process of change.

#### Scope

The scope of this method is broad. It can be used to examine broad structural influences and outcomes such as class and educational achievement. It can also be used to look at small-scale processes and subjective states such as the development of attitudes and meanings.

#### TASK

What do the researchers do when they use the longitudinal study method? Give two advantages and two disadvantages of this method.

What is the range of the longitudinal study method?

What is the scope of this method?

#### PART THREE - APPLICATION AND RELEVANCE

In this part we will discuss some of the research methods when applied in a particular area. We will focus upon the reasons for their use and their strengths and weaknesses.

We will focus on research methods used in the following areas:

- the causes of crime
- the extent of crime.

#### The causes of crime

As we saw in Part One, the approach to the study of human behaviour, including crime, is divided into two distinct forms — the quantitative or objectivist approach and the qualitative or subjectivist approach. Government organisations dealing with crime, who provide most of the money for research in these areas, tend to be concerned with broad patterns of criminal behaviour and its causes. As a result, they tend to favour the scientific or quantitative approach to the study of crime because statistical methods enable broad patterns to be observed and the 'scientific' approach involves the search for causes.

#### The quantitative approach

This approach seeks to copy the natural sciences and relies heavily upon statistical methods – for example experiments, surveys and comparative statistical studies using official statistics, e.g. Durkheim on Suicide or Pyle on the crime rate in D.J.Pyle *The Fight Against Crime* 1987. If it could be demonstrated that there is a clear relationship between periods with high crime rates and periods of high unemployment then this could be seen to indicate the possibility that unemployment causes crime but it does not explain the exact nature of the relationship. Official crime statistics indicate that the majority of criminals are young working class men. This has led the quantitative approach to seek the causes of crime by studying the living conditions of young working class men.

The work of two American social scientists S. Levitt and J. Donohue (1999) provides a good example of the quantitative approach to the study of crime. Levitt and Donohue conducted a comparative statistical study,

similar to Durkheim's, using official statistics. They compared the abortion rates in states and their crime rates. They found that during the period 1991 to 1997 there was a fall in the crime rate for property and violent crime. However, those states with high abortion rates had a 15% greater drop in crime than the states with low abortion rates.

Between 1985 and 1997 the 10 states with the lowest incidence of abortions experienced a 17% rise in their murder rates while the 10 states with the highest incidence of abortion experienced a 31.5% reduction in their murder rates. As we know there are several problems with comparative statistical analysis. Firstly, official statistics can be very unreliable and often tell us much more about the activities of the police than they do about the true extent of crime. Official statistics on abortion can also be unreliable if many abortions go unrecorded. However, violent crimes and most murders tend to come to the attention of the police thus official figures for murder rates are relatively accurate. Equally, abortion was legalised in America in 1973 and as a result most abortions appear in the official statistics. Secondly, just because there is a statistical relationship between abortion and crime rates does not in itself prove that having lots of abortions causes a reduction in crime. Having established a statistical relationship between abortion and crime rates, Levitt and Donohue then attempt to establish a causal relationship with the following argument.

The majority of crime is committed by young people, (25% by under 18 year olds and 40% by under 21 year olds in Britain, according to the official statistics). If we reduce the number of young people in society crime will drop. (This happened in Britain in the 1960s and 1970s following a fall in the birth rate.) If we reduce the number of poor and unwanted young people there will be an even bigger drop in crime. Abortion in America does just this because the majority of abortions in America are undertaken by poor people. Just as in the natural sciences, Levitt and Donohue have established a statistical relationship between two factors or variables; they then have to create a theory to explain that relationship. The next stage in a natural science would be to make a prediction or hypothesis, for example, if we encourage America's poor to have abortions there will be a further reduction in crime rates. To test this prediction by experiment would be unethical but further comparative statistics could be gathered to investigate whether the hypothesis could be confirmed. The problem with using this method in the social sciences is that the number of factors or variables involved in any piece of behaviour is huge and so we could never be sure that an increase in abortion causes a reduction in crime. It may in fact be due to other factors that we have not considered.

#### TASK

List some factors that you think cause crime.

Find statistics on these factors in 'Social Trends'.

Can you establish a relationship between these factors and crime rates using 'Social Trends'?

The alternative to the quantitative approach is the qualitative approach. This approach is less often used to investigate the causes of crime or to address broad patterns of crime. It is not popular with government organisations but it is often used by academics to criticise research based on statistical methods.

#### The qualitative approach

Again, as we saw in Part One, this approach rejects the use of scientific methods to understand human behaviour. It accepts that it is possible to establish a statistical relationship between rising crime and rising unemployment but statistics cannot explain why some unemployed people commit crime whilst others do not. In order to understand the behaviour that we call crime, the qualitative approach argues that we must try to grasp the values, beliefs and motivations, the **subjective view**, of people who commit crime. To grasp this subjective view they use methods such as participant observation, in-depth interviews and case studies. Unlike the objective approach, the qualitative approach also **questions the processes through** 

which some forms of behaviour come to be seen as criminal, the processes of law making, and some types of people come to be seen as criminal whilst others do not, the processes of arrest and conviction.

You can see from this that the qualitative approach questions the reality of the statistics that form the foundation of the objective approach. When you read the section on official statistics you will see how much work is done by many groups of people to create these apparently objective facts. A good example of the qualitative approach is given in the work of J. Patrick A Glasgow Gang Observed 1973. In this study Patrick uses the method of participant observation in order to gain an understanding of the beliefs, values and motivations that underlay the delinquent behaviour of a street gang in Glasgow. Patrick was introduced to the gang by its leader 'Tim' and spent some 120 hours with them. He discovered that most of the gang members came from very impoverished backgrounds and that the gang created an opportunity for excitement, status and notoriety that would not otherwise have been available to them. He found that far from being 'mindless thugs' or 'animals' the gang members had a very clear system of values which structured their behaviour. This system of values included loyalty to the gang and its members, pride in ruthless violence and a code of conduct that prohibited stealing from members of their community and inflicting violence against those weaker than themselves, such as women and children. The advantages of this method are that Patrick simply records and describes what he saw and heard whilst with the gang. Unlike the quantitative approach, he does not have to create any explanations, the gang members in effect 'speak for themselves'. He provides a deep insight into the motivation of the gang members, why they commit acts of vandalism and violence, which could not be obtained by quantitative research methods.

This disadvantage of this method is that it is open to **bias.** Patrick could have grown to like the gang members and made them look more moral than they actually were. This kind of research could not be repeated or checked by another researcher and is therefore **unreliable.** Because of these disadvantages, we cannot be sure of the truth or **validity** of the research. From a natural science point of view it only tells us about one Glasgow gang. We cannot make any assumptions about other gangs or groups of young people on the basis of this research as we could from a statistical survey.

#### **TASK**

Think of a group of people that you would like to study by using participant observation. What problems might you encounter in joining, staying in and leaving the group?

#### The extent of crime

The study of **the extent of crime** in the UK is based primarily on official statistics on crime, collected by the police and the courts and used as data by people doing research into crime in the UK. Many theories that seek to explain the causes of crime are based on official crime statistics. These theories treat the official statistics as facts, a true and accurate picture of the extent and nature of crime and criminals, as a reliable foundation upon which they can establish an explanation. In practice these official statistics are not a simple and accurate record of crime and criminals, they are a product of a series of complex social processes that, as a result, provide a partial and distorted view of crime and criminals. Official statistics on crime are collected by the police and the courts. This process is influenced by several factors.

#### The public do not always report crime

Less than 10% of all the crimes known to the police are detected by the police; the other 90% are reported by the public. This 90% is, however, but a fraction of the total amount of crime being committed for the following reasons:

 People may not be aware that a crime has been committed. Expert knowledge of the law may be needed to identify an act as criminal. This is often the case in white collar crime, for example fraud and deception.

- People are more likely to report serious crimes such as murder, violent assault and large property crimes.
- People may regard a crime as too trivial to report or they may assume that the police will not take it seriously.
- People may regard the crime as a legitimate perk, for example the theft of goods or services from an employer. For example, the MPs expenses scandal.
- People may see the crime as a private matter to be dealt with by the family or immediate community. They may see the police as untrustworthy or ineffective outsiders.
- People may be involved in 'consensual' crimes where all those involved gain from the transaction, for example prostitution, drug dealing or bribery and corruption.
- People victimised in sexual crimes such as rape may be too embarrassed to report the crime to the police. They may wish to avoid any further distress and humiliation.
- If people know the offender(s) they may want to avoid harming them, for example theft or violence within the family.
- People may not be motivated to report a crime they have witnessed if they cannot obtain any gain
  or advantage by doing so. For example, if they have been robbed but see the police as ineffective
  they may not bother to report the crime. Alternatively, if they must report it to claim the insurance
  they will do so.

#### **Police discretion**

Individual police officers, and police forces as organisations, make interpretations and choices that have a significant impact on the crime statistics:

Since police forces have limited resources they may choose to **focus** their work **on particular areas**, for example, inner cities where most crime is seen to take place or rich suburbs where the victims are most influential. The type of area focused upon will affect the type of crime detected and the type of criminal arrested. If the police focus on inner cities then more crime will be found in these areas.

Different police forces focus on different types of crime. The more manpower they devote to a particular type of crime the more of it they will detect. For example in 1964 the new Chief Constable of Manchester decided to 'crack down' on male soliciting. By 1968, according to the official statistics, the incidence of male soliciting had increased by 1000%. Individual police officers use their **own discretion in deciding which crimes to investigate and which suspects to target and charge**. If certain types of offence or categories of offence are treated leniently by the local courts the police may choose to ignore them as a waste of their time. If suspects are 'co-operative' they are less likely to be charged than if they are 'uncooperative'.

Police officers and police forces have to decide **how to categorise the crimes** that come to their attention in order to record them in the official statistics. This process involves interpretation and choice and has a significant impact on the official statistics. For example, in 1977 the Home Office changed the guidelines on crime categorisation. Before 1977 criminal damage worth less than £20 was not recorded, after 1977 it was. This produced a 7% rise in crime. If you steal four bottles of milk it counts as four crimes of theft. If you cash several cheques from a single stolen cheque book it counts as one act of theft. Each of the factors listed above can produce a significant change in the recorded levels and types of crime without there having been any actual change in the levels or types of crime.

At times the police may encourage defendants to admit to other similar crimes that they may not have committed, to have them 'taken into consideration', so that those crimes can be 'written off' improving the forces clear up rate and making it look more effective. This creates a false impression of who or what type of person is committing crime.

#### **Political influences**

Some writers, particularly Marxists, suggest that in Britain as in most countries law making, police activity or law enforcement, the courts and the media are heavily influenced if not directly controlled by the interests of the rich and powerful. This results in a tendency for these institutions to focus on working class crime and to down-play or ignore middle class or corporate crime. As a result the official statistics give the impression that most crimes are committed by young lower working class men. They do not reflect the true significance of middle class and corporate crime. In terms of official records middle class or white collar crime is invisible.

#### The judiciary

As indicated above, judges in Britain tend to drawn from the upper levels of the class system and they tend to see criminals as being typically working class. As a result working class defendants have a greater chance of being found guilty than middle class defendants. The prejudice of the judges is also reinforced by the fact that, as a result of the political factors mentioned above, most defendants appearing in court are working class.

Given the factors outlined above both social scientists and the government are aware of the distorted and partial nature of official crime statistics. Researchers in Britain and America have sought ways to establish the true levels of crime, to uncover the 'dark figure' of unreported and undetected offences.

#### Attempts to establish the true levels of crime in Britain

#### **Victimisation studies**

Since 1982 the Home Office Research and Planning Unit has conducted biennial victim surveys. The surveys are known as the **British Crime Survey** (BCS) they involve a survey of a representative sample of 14,500 people aged 16 and over. The respondents are asked if they have been the victim of a crime in the previous year. Fraud, drug use and crimes against business are not included; the focus is on personal and household offences.

The BCS has established that **only one third of crimes are reported to the police**. Half of the people choosing not to report a crime did so because they thought the crime too trivial. The 1996 BCS established that 19 million crimes had occurred in 1995. The police statistics give only a quarter of this number. BCS figures indicate a less dramatic rise in crime over the years than do the police figures. This suggests that **some of the increase recorded by the police is a product of their increased efforts and improved methods of detecting crime.** 

#### Problems with the BCS

There are several problems with the BCS:

- The exclusion of corporate or business crime, fraud and drug related crime is a significant failing. The effect is to bias the survey towards working class crime away from middle class crime.
- Crimes involving sexual violence such as rape and sexual assault are still underreported to the BCS.
- Many people refuse to co-operate with the survey and this makes it difficult to obtain a representative sample.
- The BCS presents its results in terms of statistical averages this tends to hide the fact that some
  areas of Britain have much higher levels of crime. Some groups of people are far more likely to be
  victims of crime. Local crime surveys have established that people living in inner city areas are far
  more likely to be victims of crime than average.

#### **Self-report studies**

These are surveys where a sample of the population is asked to complete a questionnaire stating whether they have committed any of the offences listed. It is claimed that such studies **provide a more accurate picture of the real number of crimes and the nature of the people committing them.** The official statistics give the impression that young working class men commit the most crime. The self-report studies indicate that young middle class men and women commit far higher levels of crime than the official statistics indicate.

#### Criticisms of self-report studies

There are however some significant flaws in the methodology of the self-report studies. Most studies have been conducted using adolescent samples and it is possible that this age group may boast and exaggerate their criminal activities or be fearful of authority and under-report it.

Thus the **validity** or truthfulness of the studies is called into question. A study by M. Gold *Undetected Delinquency Behaviour* 1966, using questionnaires and intensive interviews, concludes that about 80% of respondents tell the truth. The self-report studies having focused largely on adolescents do not provide a picture of adult criminal activity that includes white collar crime. They are therefore **not representative** of the total population. A further flaw in the studies is that they include many **'trivial crimes'** on the questionnaires. Thus their conclusion that crime is widely distributed across the age and class groups of society may not be true if they focused on serious crime. Despite their limitations Victim Surveys and the Self-Report Studies provide a much fuller picture of crime and criminals than do the official crime statistics.

#### TASK

- List the main limitations of official crime statistics.
- What is the British Crime Survey and what does it tell us? List the limitations of the BCS.
- How do self-report studies work and what do they tell us? What are the limitations of self-report studies?

#### PART FOUR – THE RESEARCH PROCESS: CONDUCTING YOUR OWN RESEARCH

The research process normally follows a number of distinct stages. If you adopt this structure for your own research work you should find the process relatively straightforward.

#### The research topic or question

Research generally starts from a perceived lack or gap in our knowledge or understanding. There is a 'problem', perhaps we do not have enough information about something, for example the true extent of female crime, or we do not properly understand something, e.g. why the female crime rate appears to be increasing. The best research involves providing understandings, solving puzzles, explaining why something is happening. Contrary to popular myth new explanations or understandings are not usually the product of an individual creative genius. They are instead part of a long and continuous process of research and reflection undertaken by a great number of researchers working in a particular area, each contributing small pieces to the overall jigsaw puzzle.

A particular researcher will have done a degree and post-graduate work in a particular area of study. They will have a thorough knowledge of all the research that has been done in their particular field. They will attempt through their research to solve one of the unsolved puzzles that exist in their field of study. For example, to explain the dramatic changes in voting behaviour that began to appear in the mid 1970s, researchers focused on the attitudes and living conditions of the working class. They discovered that more affluent living conditions tended to produce a change in political attitudes that resulted in 'partisan de-

alignment' or the affluent working class voting Conservative. **Don't panic**; your teachers and lecturers do not expect you to produce an original piece of research or to solve any puzzles. Some students do conduct original research but most repeat existing research on a small scale in their own local community. They effectively check to see if the professional researcher's findings are true for their area or community.

#### Choosing a question to research

Hopefully in the process of working on your Advanced Higher in Modern Studies issues will emerge that you find particularly interesting and you will establish some background knowledge of these issues.

#### **Reviewing the literature**

Once the researcher has chosen a particular problem or question to examine they will read all of the existing literature/research in the area of that question. They will focus upon how other researchers have attempted to understand the problem, which avenues have been explored, which research methods have been used and what questions have been left unanswered.

**You** will be expected to be familiar with the established arguments/research in the area of your chosen question.

#### Narrowing down the problem or question

The next stage, having completed the literature review, is to produce a clear definition of the research problem. Ideally the researcher will attempt to produce a definite hypothesis, a precise statement about what they think is going on, which can be proved or disproved by the research that they then conduct. Remember the arguments of Karl Popper? For example, in the case of the changes in voting behaviour the researchers' hypothesis would have been that 'increasing affluence amongst the working class results in a decline in loyalty to the Labour party'. This hypothesis could then be tested using survey methods to establish levels of affluence and voting intentions.

You will probably start by saying, 'I would like to look at a particular issue'. For example 'I would like to do research into the role of the mass media in politics'. You would then need to narrow this down to a particular aspect of the media's role in politics, such as gender bias in television news coverage of politicians. You would then need to produce a hypothesis that you could test, such as – 'My hypothesis is that television news programmes focus on the appearance and the family responsibilities of female politicians whilst to a large extent ignoring these aspects with male politicians.'

#### **Choosing a research method**

Having established the area of study and the basic hypothesis, the researcher must then **decide how to gather data to test the hypothesis**. There are several factors that affect the choice of method:

- The time and money available.
- The perspective of the researcher, do they prefer quantitative or qualitative research?
- The nature of the topic being researched, for example, research into levels of female crime would require a statistical approach whilst work on the motivations of female criminals may require unstructured interviews or a case study approach. (See the notes on the research methods.)
- You will need to decide which research method is most suitable to test your hypothesis. You must be able to explain why you have chosen a particular method. You will then need to produce a step by step action plan of exactly how you are going to conduct your research.

#### **Conducting the research**

At times in research things do not work out exactly as planned. Some of the people in your survey sample may not return your questionnaire. People may respond in a completely unexpected way to your

questions. An organisation may refuse to allow you access to do your observational study. To avoid this type of problem professional researchers usually conduct a **pilot study** before doing their main study.

A pilot study is a small-scale test run to see what kind of response you get. For example if you draw up a questionnaire to assess peoples fear of crime, try it out on a few friends first to make sure that people can understand the questions and that you get the kind of information that you want. If it works, you can then use it on your main sample group. If it does not, modify the questions and pilot them again until they do work.

#### Selecting the subjects of the study

As you saw in the section on statistical methods and sampling it is important that the sample selected, the people you choose to interview or study, should be representative of the population that is being studied. In other words the people that the researcher studies must have the same characteristics as the broader group of people that the researcher is trying to understand. For example if you were doing a study of the political attitudes of women between 16 and 18 years old, you may be tempted to interview the women you know at college or in the sixth year. These women would not be a representative sample of all women between 16 and 18 years old. Can you say why? When doing research projects at school or college it is very tempting to interview people you know or people at college or to do participant studies of your part-time job or hobby You must keep in mind the primary goals of the research and ask yourself does the convenient sample or group of people that you know or have access to have the same characteristics as the whole group of people that you are trying to understand?

Finally, it is not the end of the world if your practical research does not work out perfectly, it very rarely does. Your teachers and lecturers do not expect it to be perfect. You can use problems and mistakes to your advantage if you can explain why things went wrong, what the implications of the problem are and how you would avoid this kind of problem in a future study.

#### Interpreting the results/analysing the data

If the work were quantitative/statistical, for example a structured questionnaire, the researcher would need to quantify the results and then see if any patterns emerge. In your attempts to analyse statistical data you may wish to summarise the data that you have obtained. You will want to establish an average or middle score from the data that you have collected. For example, a researcher has conducted an attitude survey to see if particular social groupings tend to hold particular sets of values and attitudes. The researcher has tested several groups of people, middle class, working class, male and female in age groups 18 to 29, 30 to 44, 45 to 59, 60+. The researcher used a questionnaire designed to test for levels of nationalism, sexism and racism.

The results of a postal questionnaire can be quantified in order that the researcher can analyse the data collected. In order to analyse the results the researcher needs to find the 'average' score for each group. He could use the mean score for each group. The mean score in a set of numbers or scores is the sum of all the scores divided by the number of scores in the group. The mean would be satisfactory as long as none of the people in the group had achieved a score that was extreme in relation to the others in the group. If they had, then a very high or a very low score could distort the average or mean. If there are extreme scores it would be more accurate to use the median score. The median score is the score that has the same number of scores above and below it when all the scores have been put in rank order. The median is not distorted by extreme scores. Another way of summarising data would be to establish the mode or most frequently occurring type or category. The mode is the most frequently occurring type or category. For example if a researcher was to summarise official crime statistics in terms of which type of person appears most often in the convicted offender statistics, this would be the mode. As you know the answer would be young working class males.

The next stage is to see if the patterns confirm the hypothesis. (Very often patterns in statistics become apparent when they are presented in graphical form.) For example, let's say your hypothesis was that the lower down the class structure young people are the more petty crime they commit, and you used a confidential self-report study based on a structured questionnaire.

- Firstly, you would need to establish the social class position of each respondent, based on a question about their parents' occupation.
- Secondly, you would need to total the number of petty crimes for each respondent.
- Finally, you would need to see if a pattern emerged.

If the research was qualitative, perhaps a participant study, the researcher would need to read through all the notes from the study noting any themes, patterns and broad observations regarding the group being studied. For example, the analysis of the notes on a group study might take the form of a list of observations under the following headings:

- structure of the group
- style of leadership
- values of the group
- group activities
- membership of the group.

#### Presenting the data

- If you have done quantitative research the data will be presented in graphical form, for example, line graphs, bar charts or pie charts.
- If the research is qualitative the data will be presented in written summary form under headings as shown above in the example of the group study.

#### The discussion

Having analysed the results, the researcher is then in a position to say:

- Whether any clear patterns have emerged, (not all research is conclusive).
- Whether these patterns prove the hypothesis.
- Whether these patterns confirm previous research by other researchers.

#### **Conclusions**

In this final part of your research project you will do two things:

- 1. Summarise the main argument and findings of your research in relation to your hypothesis. (Yes, there is a degree of repetition here.)
- 2. Criticise your methodology, say where it went wrong and how you would improve it if you were to do it again. In the real world of professional research the results of the research would be published in a book or a journal (a magazine for academics in which people publish research papers). In this way other researchers have the opportunity to criticise and test the research. If

it passes this test it becomes part of the established knowledge on this issue for the time being. (Remember Karl Popper?)

#### TASK

- What is the first step in the research process?
- Why is reviewing the literature important?
- What is a Hypothesis?
- What factors are involved in choosing a research method?
- Why is a pilot study useful?
- Why is doing the easy thing not always the best thing when selecting the subjects for your study?
- What are your main goals when analysing your data?
- What issues will you talk about in your discussion?
- What two things will you do in your conclusion?

#### **ETHICAL ISSUES IN RESEARCH**

In the process of choosing a research method and designing a research programme, ethical considerations must be taken into account. In all circumstances, researchers must consider the ethical implications and consequences for the participants in their research. The essential principle is that the possible impact of the research must be considered from the standpoint of all participants. Any foreseeable threats to their well-being, values and dignity should be eliminated.

#### Confidentiality

Anonymity of the participants in research must be guaranteed at all times unless otherwise agreed in advance. A researcher can guarantee anonymity or request permission to identify individuals if the need arises. For example, if questionnaires are being used anonymity can be ensured simply by not asking for the respondent's name or address. In detailed in-depth studies such as case studies or participant observation it may be necessary to leave out or change identifying detail, such as names and locations, to protect the subjects of the study, particularly if they are engaged in criminal or deviant activity. For example J. Patrick's study of a delinquent Glasgow gang had to deal with this problem.

#### Consent

Whenever possible the researcher should inform all participants of the objectives of the research prior to obtaining their consent to participate.

#### **Deception**

From an ethical standpoint deception should be avoided. There are, however, occasions in research when it is necessary not to fully inform the respondents of the specific goals of the research in order to encourage a more truthful or natural response from them. For example, in covert participant observation the researcher does not tell the people in the group that he is a researcher for fear of influencing their behaviour.

#### **Impact**

Due consideration must be given to the possible impact upon the respondents of both conducting the research and the publication of the research findings. As was stated earlier, in social sciences it is regarded as unethical to conduct experiments that alter or damage people's lives for research purposes. With the exception of psychologists, social scientists rarely conduct experiments. The publication of research, if it is detailed and in-depth, can have an impact on the lives of respondents and given the amount of detail given in some types of study it may be difficult to preserve anonymity.

For example several night shift workers from a particular factory lost their jobs after the publication of the findings of a participant study of night working at the factory stated that many workers slept through the majority of the night shift.

#### **TASK**

Discuss the ethical issues that are raised by your choice of practical research topic.

#### **Modern Studies Support Materials:**

#### http://www.ipsos-mori.com/researchtechniques.aspx

<sup>i</sup> Modern Studies Support Materials: Social Science Research Methods (AH) ACKNOWLEDGEMENTS

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