

“A” Level Sociology

A Resource-Based Learning Approach

Module One:
Theory and Methods

Unit M4: Primary Research Methods (1)

Syllabus Area

“The range of methods, techniques and strategies involved in sociological research:

Surveys, experiments, ethnography, case-studies, content-analysis. Multiple methods. The use of secondary data. The role of values. Ethical issues”.

What?

The keywords in this unit are:

- **Questionnaires**
- **Content analysis**
- **Experiments**

Postal questionnaire
Structured interview
Closed and open questions
Reliability and validity
Standardisation / replication
Codification and Quantification
Response Rate
Self-selecting sample

Laboratory experiments
Natural experiments
(Field and Comparative)
Research considerations
Closed and open systems
Experimental Control,
Dependent Variable(s),
Independent Variable(s),
Causality and Correlation.

Mass media
Historical documents
Content analysis grid
Thematic analysis
Textual analysis
Underlying themes

Why?

You will be able to define:

- **Different methods of primary, quantitative, data collection.**
- **The difference between postal questionnaires and structured interviews.**
- **Closed and open systems.**
- **The difference dependent and independent variables**
- **The difference between causality and correlation.**

How?

You will be able to apply your knowledge to:

- **Examples of different sociological research involving questionnaires, structured interviews, content analysis and experimentation.**

Decision

You will be able to evaluate:

- **The uses and limitations of questionnaires, structured interviews, content analysis and experiments as methods of research.**

Primary Methods of Research

Sociologists use a wide variety of research methods (**primary and secondary, quantitative and qualitative**) to collect data and, to help us make sense of this variety, we are going to focus our attention in this first section on methods that can be roughly categorised in terms of their **primary, quantitative, nature**.

Note: You need to be aware that this type of **categorisation** is largely for academic convenience, in the sense that we are going to look at methods of research designed **mainly** to produce **quantitative data**. As we will see, some of these methods can be adapted to enable the researcher to produce qualitative data, but the main strength and purpose of these methods is the quantification of the social world.

What?

The key ideas in this section are:

- Questionnaires
- Closed and open questions
- Reliability and validity
- Standardisation / replication
- Codification and Quantification
- Response Rate
- Self-selecting sample

Postal questionnaire
Structured interview

Why?

We need to understand the basic principles involved in the collection of sociological data because if the objective of all sociological research is the collection of data that allows us to answer questions about the social world, it is evident we must be very careful about how we go about collecting that data. We must, for example, collect data as **accurately** and **systematically** as possible since, if our data is faulty or inaccurate, the conclusions we draw about something, based on that data, will not be realistic or accurate.

In this respect, we are starting to think about what is called the **reliability** and **validity** of data, ideas we will need to develop and **apply** throughout this section. In **Unit M3** (Sociology and Science) we defined these ideas and if they are not familiar to you, you should go back to this Unit. Alternatively, read **Sociology in Focus** p632 or **Themes and Perspectives** p829.

The first method we can look at, therefore, is the **questionnaire** survey, something that can be briefly defined as **a list of written questions** that can be completed in one of two basic ways:

- **Firstly**, respondents could be asked to complete the questionnaire personally, writing the answers themselves, with the researcher not present. This is usually termed a **postal questionnaire** and (loosely) refers to any questionnaire that a respondent completes without the aid of the researcher.

This is usually in the respondent's home, to which the questionnaire has been sent (hence the idea of a **postal questionnaire**), but it doesn't have to be. A researcher could hand their questionnaire to a respondent who then completes it and hands it back a few minutes later).

These people are known technically as **respondents** because they are asked to "respond" in some way to your research.

- **Secondly**, respondents could be asked to complete the questionnaire by **verbally** responding to questions in the presence of the researcher. This variation is called a **structured interview**.

Although the two variations of this method are very similar (as we will see, for example, a postal questionnaire and a structured interview could contain exactly the same questions), the difference between them is important. If, for example, we are concerned with protecting the respondent's anonymity then it might be more appropriate to use a postal questionnaire than a structured interview.

For the moment we will look at both variations in terms of their basic similarities.

We can develop the differences between them when we consider some of the basic **uses and limitations** of each variation.

This idea relates to something called **Practical Research Considerations**, a concept we will develop in greater depth in another Unit).

How?

Questionnaires, at their most basic, involve the researcher choosing to ask one of two broad types of question.

a. "**Closed-ended**" questions.

- A **closed-ended question** (or simply a "closed question" if you prefer) is a question for which a researcher provides a suitable list of responses. The following examples illustrate this idea more clearly.

Examples.

You might simply ask the respondent to state a "yes / no" **preference**.

"Do you drink Nescafe coffee?"

Yes?

No?

(Please tick one box only).

Alternatively, a closed question sometimes allows the respondent the (very limited) opportunity to fill-in an answer for themselves.

"Which soap powder do you use regularly?"

Bold
Persil
Tesco Automatic

Other (please specify).

A third variation on the closed theme is the attempt to measure a respondent's **attitude** towards something.

- All of the above are simply a variation on the "**closed question**" theme (there are others, but I'm sure you get the point) and their defining characteristic as a closed question is that they allow the respondent very little, if any, scope in which to develop an answer beyond the categories selected. The **primary purpose** of such questions, therefore, tends to be the collection of **quantitative data**.

"How strongly do you agree / disagree with the statement that "Nescafe is the best-tasting coffee on the market"?"

Agree very strongly
Agree strongly
Neither agree nor disagree
Disagree strongly
Disagree very strongly.

b. "Open-ended" questions,

- An **open-ended question** (or simply an "open question" if you prefer) is different in the sense that the researcher doesn't provide the respondent with a set answer from which to choose. Rather, the respondent is given the scope to answer a question "in their own words" (which tends to mean that the primary purpose of this type of question is the production of **qualitative** data).

For example, once you have established that your respondent drinks Nescafe, an open question that seeks to probe a little deeper might be something like:

"Please state in your own words why you drink Nescafe coffee".

As these examples demonstrate, questionnaires can quite happily contain a **mixture** of **open** and **closed** questions and each broad type of question allows the researcher to collect different kinds of information. For example:

- If you simply want to **limit** a respondent's answer to a **predefined** response ("Yes" or "No"), then a **closed question** will suffice.
- If, on the other hand, you want to try and discover the **reason** why a respondent does something, an **open question** might be more appropriate.

Decision

In general terms, each type of question has some distinct **uses** (**advantages or strengths**) and **limitations** (**disadvantages or weaknesses**) for the researcher. We can note a number of these in terms of the following categories:

1. Codification and Quantification.

The **coding** of a questionnaire involves devising some way of giving a **value** (usually **numeric**) to the responses given to the questions asked. This is done so that the researcher can **easily quantify** the various answers that are given.

- For example, in the "Do you drink Nescafe?" question above, the coding of the questionnaire would be relatively easy, since it involves just the two categories ("Yes" or "No"), the answers to which can be counted and expressed as a percentage. A **pre-coded question** would, therefore, look something like:

"Do you drink Nescafe coffee?"		
Yes?	<input type="checkbox"/>	Yes=1
No?	<input type="checkbox"/>	No=0
(Please tick one box only).		

If the respondent answers "yes" to the question the researcher might circle "Yes=1". When the questionnaire is complete and ready to be **decoded**, the researcher then simply counts the number of "Yes=1's" on the questionnaire and arrives at a **quantified total** ("83% of the people questioned said they did not drink Nescafe", for example).

- This may strike you as being rather long-winded (why not simply count-up the number of times people answer "yes" or "no"?) but you need to be aware that in a

real questionnaire the number of possible answers and variations on answers might be very complex. This method of **coding** simply makes it easier for the researcher to correctly quantify answers.

In addition, although closed questions are relatively easy for the researcher to codify, this is not necessarily the case when open questions are used (such as "Please state in your own words why you drink Nescafe coffee").

- In this instance, the researcher may receive a variety of responses each of which has to be categorised, **coded** and quantified. Thus, answers that mention things like "taste" and "flavour" might be categorised and coded in one way, whereas answers that mention "cost", "value for money", etc. might be categorised and coded in another way. In this way, **similar types** of answer can be **coded** appropriately and quantified accordingly ("32% of respondents buy Nescafe because they like its flavour", for example).

Exercise 1

Briefly explain why "the ability to restrict the range of possible answers received may be useful to the researcher".

Clearly, therefore, the ability to **codify closed questions** easily makes them **easier to quantify** (as with the example of "43% of people asked saying that they drank Nescafe" or with the advertising slogan "9 out of 10 cat-owners who expressed a preference said that their cat preferred Whiskas to any other brand of cat food" - catchy or what?).

2. Depth and Scope

As should be apparent, trying to **quantify qualitative responses** is not only difficult but frequently **inappropriate** since one of the **main objectives** in the collection of **qualitative** data is to get at the **meanings** things have for people. If it is advantageous to collect qualitative data because of the greater **depth of meaning** it gives, it may not be particularly useful to reduce this depth of meaning to relatively simple quantitative categories.

- Similarly, one of the major **limitations of closed questions** that a respondent is limited in terms of the kind - and depth - of answers they can give.

For example, what those "9 out of 10" cat owners were not allowed to say was that, given the choice, their cat actually preferred sirloin steak rather than Whiskas...

In this respect, **closed questions** can have both uses and limitations. While the respondent has little or no opportunity to expand upon or qualify an answer, the ability to restrict the range of possible answers received may be useful to the researcher.

Open questions, on the other hand, allow some scope in the way the respondent can answer a question.

With an open question, for example, a respondent may qualify the opinion that "Nescafe is the best tasting coffee" by adding that they hardly ever buy it because it is too expensive.

Against this, of course, we have just seen that it is much more **difficult** for the researcher to **quantify** the data they collect (which tends to be one of the main reasons for choosing to conduct a questionnaire in the first place).

3. Ease of Completion and Response Rate

One of the main advantages of a **closed questionnaire** is that they are relatively **quick** and **easy to complete**. **Open-ended questionnaires** take more time to answer and there is the ever-present danger (from the researcher's point of view) that:

- People will simply write-down the first thing that comes into their head in order to complete the questionnaire quickly.
- They will not bother to complete the questionnaire at all, since it would take too much time and effort...

While the above relates specifically to the **uses and limitations** of different **types of question** (in basic terms, **open-ended** and / or **closed-ended**) it is clear that **postal questionnaires** as a **method of research** have both **uses and limitations**. We can identify and summarise these in the following way:

Exercise 2

Write one closed and one open question to test the hypothesis that "Smoking is related to stress".

Closed question:

Open question:

Theory and Methods

1. Uses

a. The researcher is able to contact large numbers of people quickly, easily and efficiently using a postal questionnaire (since all he / she has to do is identify the group that will be targeted and post them the list of questions).

b. Questionnaires are relatively quick and easy to create, code and interpret (especially if closed questions are used). In addition, the respondent - not the researcher - does the time-consuming part of completing the questionnaire.

c. A questionnaire is easy to **standardise**. The researcher, therefore, can be sure that everyone in the sample answers exactly the same questions.

d. Questionnaires can be used to explore potentially embarrassing areas (such as sexual and criminal matters) more easily than other methods. The questionnaire will usually be both anonymous and completed in privacy.

2. Limitations

a. The format of questionnaire design makes it difficult for the researcher to examine complex issues and opinions. Even where open-ended questions are used, the depth of answers that the respondent can provide tend to be more- limited than with almost any other method.

This is a useful attribute when, for example, you are trying to explore things like criminality in a population and you ask people to admit to crimes they have committed.

c. Two "sample related" problems are also in evidence:

1. The response rate (that is, the number of questionnaires that are actually returned to the researcher) tends to be very low for postal questionnaires. A 20 - 25% return of questionnaires is probably something that most researchers would happily settle for and this may mean that a carefully-designed sample becomes unrepresentative of a target population.

2. The problem of the self-selecting sample is particularly apparent in relation to questionnaires. When a response rate is very low the responses received by the researcher may only be the opinions of a very highly motivated section of the sample (that is, people with strong opinions who take the time and trouble to complete and return a questionnaire).

b. Although postal questionnaires can be useful because they can guarantee respondent anonymity, this also has potential disadvantages:

1. The researcher can never be certain that the person to whom the questionnaire has been sent actually fills it in. For example, if your research is concerned with finding-out the opinions of women on a range of issues, it would be less than useful if an unknown number of the questionnaires sent by the researcher were filled-in by men.

2. Where the researcher is not present, it's always difficult to know whether or not a respondent has understood a question properly. In addition, the researcher has to hope that the questions asked mean the same to all the respondents as they do to the researcher. This is a problem that can - to some extent - be avoided by conducting a Pilot Study prior to conducting the real survey.

What?

Structured Interviews.

Why?

A **structured interview** is basically a **postal questionnaire** administered by the researcher in the presence of the respondent. It can be seen as a variation or extension of the basic questionnaire method.

The basic difference between a **postal questionnaire** and a **structured interview**, therefore, is that the researcher personally asks the respondent questions and records their (**oral**) answers accordingly. This is not, however, to say that there are no differences between the two **techniques**. **Structured interviews** have slightly different **uses and limitations** which we can note in the following way.

Decision

a. As with postal questionnaires, all respondents **answer exactly the same questions** (which makes it easy to **standardise** the interview) and the responses are **easy to code and quantify**.

b. There is a **formal relationship** between the **researcher** and the **respondent** with the latter knowing exactly what is required from them in the interview.

If, for example, a respondent is unable or unwilling to answer a question the researcher, because they are present at the interview, is aware of the reasons for a failure to answer all questions.

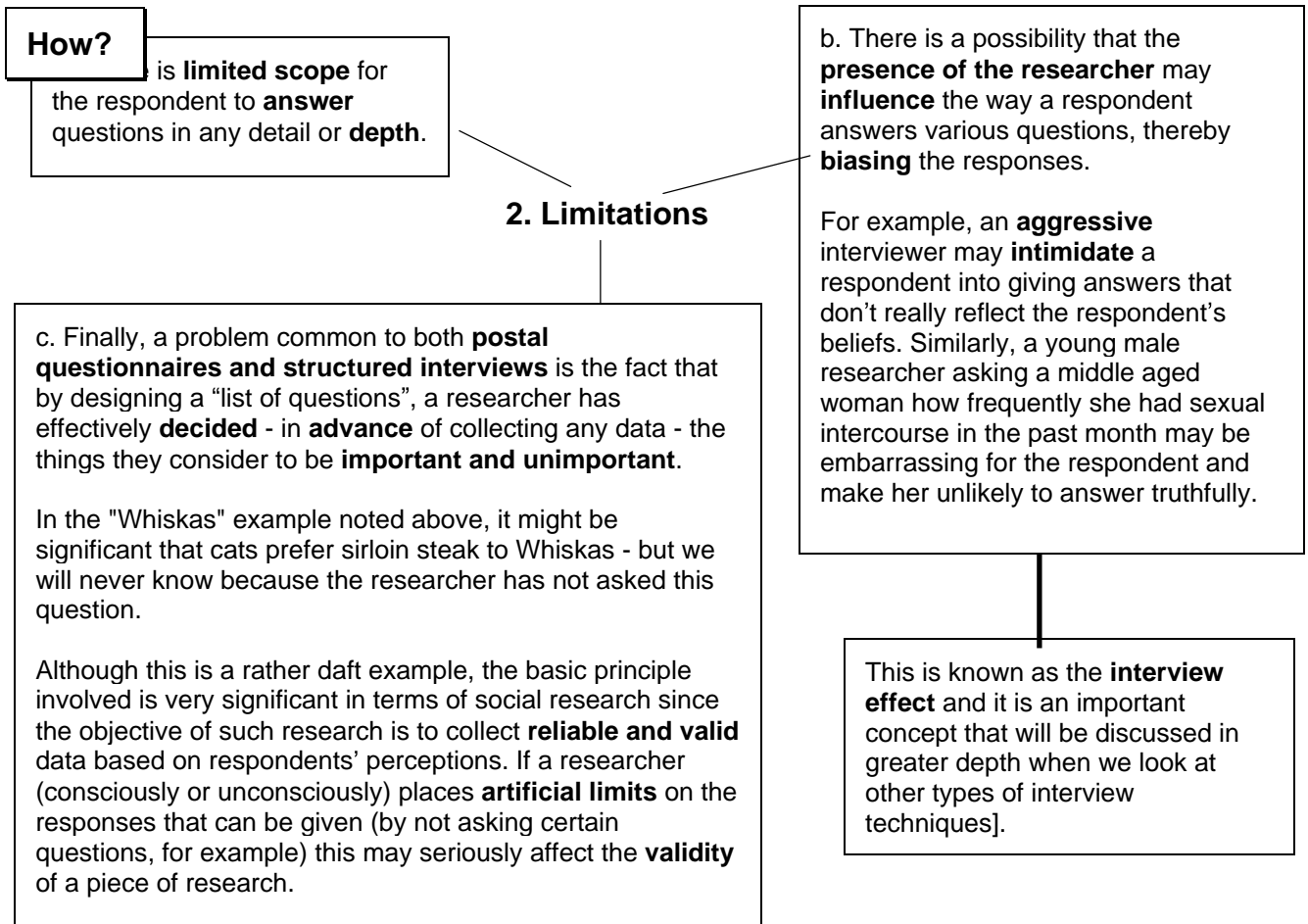
1. Uses.

c. The interviewer can explain both the **objectives** of the research and can resolve any **problems** that the respondent may have in understanding / answering questions.

d. The researcher does not have to worry about **response rates, biased (self-selected) samples, incomplete questionnaires** and the like.

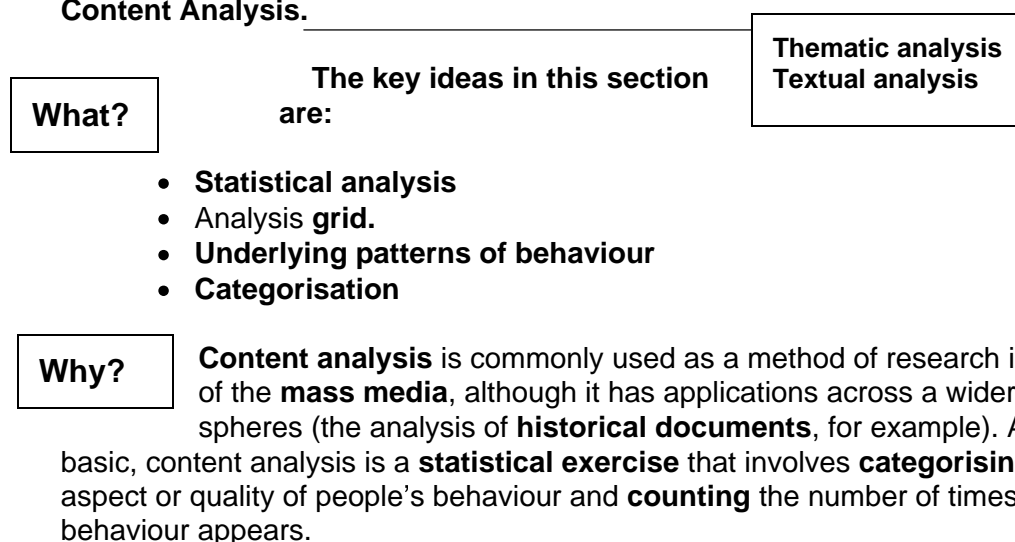
e. This type of research is fairly easy to **repeat** - other researchers should be able to apply the same questionnaire to a different sample of respondents (the technical term for this is "**replication**").

This means that, because a **questionnaire / structured interview** is **standardised**, the results gained by one researcher on one sample can be **compared** to the results gained by another researcher on a different sample. If both researchers get similar results it will increase the **validity** of the research. This form of comparison can also be used to test the reliability of the questionnaire / interview..



When we look at **primary qualitative methods** of research we will develop our ideas about a couple of **different types of interview method (semi-structured and unstructured interviews)**. These are sufficiently different from structured interviews to warrant a separate section. At this point, however, it might be useful to look at a related - but slightly different - method of primary quantitative data collection.

Content Analysis.



We can look at a couple of examples of content analyses in the following way:

- A **content analysis** of a **television programme** such as “Eastenders” might involve two basic **categories** (**men and women**).
 - A very **simple form of content analysis** might simply involve **counting** the number of minutes men and women appear on screen.
 - A **more-complex form** might involve the use of **categories** like:
 1. Where is each character most-often seen? (for example, in the pub as a customer or an employee; in their own home and so forth).
 2. What does each character mainly do? (for example, are they always pictured “at work” or “at home” and so forth).

In this way, content analysis helps us to build-up a picture of the **patterns of behaviour** that **underlie** (and are usually hidden from view) the social interaction portrayed in the programme.

- A **simple content analysis** of a **newspaper**, on the other hand, might **count** the number of **column inches** given to activities that focus on men as opposed to activities where the focus is on women.
- A **more-complex content analysis** might also look at the **prominence** given to different stories that feature men and women (for example, does the front page always feature a positive story about men or a negative story about women?).

As I've suggested above, **content analysis** is concerned with the **categorisation** of behaviour and, in this respect, its most basic “tool of the trade” is a content analysis **grid**. In simple terms, this is a **chart** the researcher uses to collect data **systematically** and easily when a content analysis is being carried-out.

- For example, a very simple content analysis grid designed to analyse the behaviour of characters in a soap opera might look something like this.

Character	Male / Female	Age	Place they appeared	How long on screen
Jo Banks	Female	37	Pub (employee)	15 seconds
Tom Ward	Male	56	Pub (customer)	43 seconds
Jo Banks	Female	37	Shop (customer)	84 seconds

An analysis of this type, recorded on a grid for future reference, might tell us something about the behaviour of a character (for example, that “Jo Banks” has two main roles - that of mother and part-time employee).

Although this is a very simple example, content analysis can be extremely complex and wide-ranging. **Meehan's** study of American daytime television ("**Ladies of the Evening**", 1983) provides us with a good example of a relatively complex content analysis.

This type of study is interesting both for its results and for what it shows about the power of content analysis to reveal **patterns of behaviour** that **underlie** our everyday observations. By using a **systematic approach** to the study of female relationships **Meehan** was able to demonstrate the way that assumptions about women (and indeed men) are often hidden from view.

In Britain, the work of **Greg. Philo** and the **Glasgow Media Group** ("**Bad News**", "**More Bad News**", "**Really Bad News**" and the like) is often cited as an example of the way content analysis can be used to illustrate the assumptions that lie behind the presentation of television news.

The two examples we've just looked at (**Meehan** and **Philo**) illustrate two further variations on content analysis which we can briefly outline:

Firstly, thematic

analysis focuses, as the word suggests, on the **themes** that underlie things like television programmes, news reports, magazine and newspaper articles and the like.

- In the **Meehan** example, one **theme** we could uncover in the programmes she analysed is the very restrictive range of female roles portrayed on American daytime television.

Meehan looked at the various ways women were portrayed on daytime television and, by studying the female characters and the (**stereotypical**) **roles** they played, she discovered that there appeared to be **ten basic roles** available to women, ranging from characters such as "**The Goodwife**" (her life revolves around her home and family, she is attractive, happy and contented) to "**The Matriarch**" (the woman - invariably elderly - who is a powerful figure within a particular family group. She may be abrasive and aggressive at times, but only in order to hold her family together. She is the dispenser of wisdom).

In "**Bad News**" for example, the analysis of the way **industrial disputes** were portrayed on both BBC and ITV **News programmes** illustrated subtle (and not so subtle) forms of bias on the part of the two organisations. A classic example, often cited, is the different ways employers and employees involved in the dispute were allowed to present their side of the argument.

- Employers were invariably pictured in a calm environment (an office, behind a desk and so forth) and the reporter would ask respectful questions that the employer was allowed to answer without interruption.
- The employees (often referred to as "striking workers") were most often pictured outside in an environment that was not particularly comfortable or hospitable. The questioning tended to be more aggressive with the emphasis on the employee to justify their actions ("why did you come out on strike?" for example).

In simple terms, women are either "**good**" or "**bad**" rather than being seen as complex personalities. In addition, to be classified as "**good**" the woman has to be **submissive** to men and, by and large, **content** to play a **supportive, domesticated role**. "**Bad**" women, on the other hand, invariably have characteristics of **independence, selfishness** and **destructive / petulant aggression**.

Exercise 3

Think about any popular series of films you are familiar with (for example, Bond films, Stallone's "Rocky" series, Willis or Schwarzenegger's action films and the like) and identify some "underlying themes" in the series.

- In the Philo example, one theme we could uncover in terms of industrial relations is that strikes are invariably the fault of those on strike and rarely, if ever, the fault of an employer.

Secondly, textual analysis looks at the way "texts" encourage the reader to see something in a particular way.

This can mean a variety of things - films, play, TV programmes and so forth as well as the more-obvious meaning of written words.

- For example, in the Glasgow Media Group's analysis they argue that the viewer is encouraged to see the employer as calm, reasonable and personable because of the setting in which they invariably appear.

Decision

We can complete this section by looking at a number of **uses and limitations of content analysis**.

Next time you watch one of these films, try looking-out for this **theme**. If you find yourself waiting enthusiastically for the point at which the hero kills the villain then there might just be something in this idea...

present an **objective, quantified**, account of events, themes, issues and so forth that may not be immediately apparent to a reader, viewer or general consumer.

1. Uses

b. **Complex forms of social interaction** can be **quantified** using a **standardised framework** (the content analysis **grid**) that can be applied across a wide range of media.

c. By and large, most forms of content analysis are relatively **simple, cheap** and **easy** to carry-out.

2. Limitations

a. The very fact that something may not be apparent to the media consumer without the aid of a content analysis to help them **decode** the “**underlying themes**” involved may mean one of two things:

- Either the consumer is unaware, on a conscious level, of these ideas and so they have little or no effect on their actual behaviour or
- The existence of these “hidden messages” may operate on an almost **subconscious ideological level**, such that a theme is being transmitted, received and acted upon without the consumer being aware of this fact.

For example, in many Hollywood “action” films, a constant, unstated, almost subliminal, theme is the revenge motive. The “good guy” has to take his revenge on the “bad guy” personally (invariably by killing them in a violent, painful and humiliating, way). Problems, in this respect, are solved through violence of an extreme and personal kind rather than the way people normally try to solve problems (through discussion, the police, etc.).

b. The **reliability** of content analysis may, in some instances, be questionable since it involves the researcher making **judgements** about the **categorisation** of behaviour. For example, a researcher judges things like:

- What categories will be used?
- Can everyone be put neatly into a particular category (or does someone who cuts across two categories merit a category of their own?)?

How important these judgements turn out to be is probably unknown, but we do have to consider **whether or not different researchers** studying the **same behaviour** would **categorise** it in the **same way**.

Similarly, judgements have to be made about the behaviour being observed (whether in a film, book, magazine or whatever). If you are looking for evidence of positive and negative images of homosexuality, how would you define “positive” and “negative” (and might another observer define them differently)?

You might like to note that the combination of two or more methods (such as **content analysis** to gather **quantitative** data and **semiology** to gather **qualitative** data) is a form of **triangulation** - an idea we will develop in another Unit.

c. Finally, as I’ve suggested in the above, one of the main criticisms and drawbacks of content analysis is that it tells us little or nothing about what something **means** (either in terms of its significance or how the audience interprets it).

This is why content analysis is usually accompanied by some form of **semiological analysis**. This concept is explained in more detail in the **Unit on primary, qualitative, methods**.

Project Idea



Content analysis can be a useful starting-point for a project because it can be applied to a range of topics. You could, for example, analyse:

Children’s books for sexist stereotypes (perhaps comparing books now with those published 25 years ago).

- **Soap Operas** in terms of male / female roles.
- **Film** - racist / sexist stereotypes.
- **Newspapers** - relate political ideology / standpoint of different newspapers to their reader’s perception / awareness of that ideology.
- **TV News / Current Affairs** - does it provide a balanced political coverage (as it is required to do by law)?
- **Classroom Interaction** - examination of the types of deviant behaviour found in school classrooms.

Experiments

The key ideas in this section are:

- **Laboratory experiments**
- **Natural experiments**
- **Research considerations**
- **Closed and open systems**
- **Experimental Control,**
- **Dependent Variable(s),**
- **Independent Variable(s),**
- **Causality and Correlation**

Ethical,
Practical and
Methodological

Why?

In this section we are going to look at experimentation as a method of data collection and, to begin with, we need to note a couple of important distinctions.

Firstly, we can categorise experiments in terms of two basic types:

- **Laboratory experiments**
- and
- **Natural experiments**

A **laboratory experiment** is a general name for an experiment carried-out under **controlled** conditions (for example, in a laboratory). That is, the researcher is able to control the **environment** in which the experiment takes place. The significance of this idea will become more apparent in a moment when we look at the **rationale** of experimentation.

Secondly, we need to note the distinction that can be made between:

- **Closed systems**
- and
- **Open systems.**

A **natural experiment** is a name given to a general type of experiment that is not carried-out under controlled conditions. This type of experimentation is sometimes referred-to as "opportunity experimentation" since the researcher takes advantage of a naturally-occurring chance to conduct some form of experiment (although it is possible, as we will see, for a researcher to deliberately construct a natural experiment). Again, the significance of this idea will become more apparent in a moment when we look at the **rationale** of experimentation.

An **open system**, on the other hand, is one in which the reverse is true. The environment **cannot** be closely controlled and the conditions under which an experiment takes place can only be loosely monitored. In this instance, the "future predictive value" of the experiment is decidedly uncertain (we cannot, with any degree of certainty, predict the future behaviour of something on the basis of its past behaviour).

A **closed system** is one where the **environment** can be closely **controlled** and the conditions under which an experiment takes place can be **tightly monitored**. In this instance it may be possible to conduct experiments that have "**predictive value**" (we can make predictions about something that is unknown on the basis of what we actually know. These predictions are not guesses but certainties).

- These ideas are important and we will return to them a little later when the principles of experimentation have been explained.

From the above we can draw a number of initial conclusions:

Decision

- Firstly, **laboratory experiments** are more likely to be used in **natural science** (such as Chemistry and Physics) than in social science. The reasons for this will become clear in a moment.
- Secondly, **natural experiments** are more likely to be used in **social science** for a number of reasons that will become clear in a moment.
- Thirdly, experimentation - even of the natural variety - is not a commonly-used method of research in sociology and to understand why this should be the case we can note **three main objections** to the use of this method in Sociology.

This is not always the case. Some natural sciences, such as **meteorology** (weather-forecasting), do not use laboratory experiments because their subject matter can only be observed in a natural setting (we cannot, for example, put a weather system into a laboratory - although it is possible to **model** weather systems and their behaviour in this type of setting). Meteorology is a good example of a natural science that works within an open system.

Why?

Psychology is probably a major exception here since psychologists do use both laboratory and natural / field experiments extensively in their work.

Ethical considerations

Do sociologists have the **right** to conduct experiments on people who may be "unwitting" (and unwilling) victims, simply because the sociologist claims to be doing so in the name of "science"?

Practical considerations

In simple terms, it is frequently the case that the kind of experiments it might be useful to conduct (such as separating identical twins at birth, placing them in different social environments and observing their social development) are simply **not practical** (and nor are they both **ethical** and likely to be met with the active co-operation of non-sociologists).

Sociological Considerations

Keeping the above firmly in mind, however, we can outline the basic **rationale** of

Methodological considerations

The experimental method, by definition, involves a complex process whereby the experimenter attempts to manipulate and / or **control** a number of different factors that may have a bearing upon, for example, a particular aspect of human behaviour.

For example, we may want to try and understand the relationship between the socialisation of a child and the presence or absence of a father within the family. In order to do this, we would have to decide such things as:

- What social factors would we have to control in order to carryout such an experiment?
- To what extent could we control various factors?
- How could we be certain that the factors in human development we have identified are the most significant?

experimentation (how, for example, it can be used to produce data and so forth)

Why?

since, as with any other potential method of research, it is important to understand how to go about collecting data **reliably and validly** through experimentation

To begin with, we can note **Giddens'** ("**Sociology**", 1989) definition of an experiment:

"An experiment can...be defined as an attempt, within artificial conditions established by an investigator, to test the influence of one or more variables upon others".

We can develop this definition by identifying and explaining a number of significant concepts relating to the **experimental method**:

A. Experimental Control.

One of the great strengths of experimentation (and one of the reasons why they are so widely used in the Natural Sciences such), is the fact that the researcher is able to control the environment in which the experiment takes place. In basic terms, this involves:

1. Being able to specify the conditions under which an experiment takes place.
2. The ability to control various factors ("**variables**") relating to the behaviour that we want to study.

In this respect, if we are able to tightly-control the conditions under which an experiment takes place, it follows that when we attempt to "manipulate" (that is, to change in some controlled way) certain behavioural factors we can do this systematically.

B. Dependent variables

The **dependent variable** in any experiment is **the thing or behaviour that we want to explain**. For example, in a **biological context**, if we want to know the best conditions under which a particular plant will grow, the dependent variable will be "plant growth" (since this is the thing we want to explain).

In a **sociological context** we might want to understand the effects violent television images have on children's behaviour patterns. The **dependent variable** in this context would, therefore, be possible **changes in children's behaviour** (after they are exposed to violent television images).

How?

C. Independent Variables

In an experiment, the objective is to see how various factors affect the behaviour of the dependent variable. In relation to plant growth, for example, various **independent variables** (such as lighting or heating) could be **manipulated** to allow us to come to some conclusion about which, out of all the **possible variables**, was the one that was most important in relation to plant growth.

An **independent variable**, therefore, is a factor that we think might have an **effect** on the **dependent variable**. By **changing** independent variables, therefore, we can **test** this possible relationship by seeing if **changes** in the **independent variable** produce changes in the **dependent variable**.

In this respect, what we are doing is testing a possible **hypothesis**. In simple terms, we might express this idea thus:

- By changing a known and measurable factor (the **independent variable**) and **observing** the effect on the **dependent variable**, we can come to some (tentative) conclusion about the **relationship** between the two. For example:

In biology:

By manipulating the factor of light (the **independent variable - the thing we change**) and observing the effect it has on plant growth (the **dependent variable - the thing we want to explain**), we can come to some conclusion about a possible relationship between the two.

In sociology:

By manipulating the factor of television images (the **independent variable - the thing we change**) - in this instance, exposing children to a series of violent programmes - and observing the effect it has on their subsequent behaviour (the **dependent variable - the thing we want to explain**), we can come to some conclusion about a possible relationship between the two.

D1. Causality

The concept of **causality** means, in basic terms, that two or more things are so closely related that when **one changes** the **other also changes** in some way; that is, one **causes** something to change in the other.

For example, in the plant growth example, our experiments might lead us to the conclusion that light causes plant growth.

As you might expect, this is a very **powerful** form of statement to be able to make, mainly because it allows us to make **predictions** about future behaviour. In this example, we might be able to predict that plants deprived of light will die.

In the **sociology example**, if we were able to show that exposure to violent television images causes a behaviour change in young children, this will have implications for the way in which we expose young children to such images.

D2. Correlation

A **correlation** is an observation that two or more things occur at the same time. In this respect, it is a much **weaker statement** to be able to make because:

- a. We don't know whether or not the two things occur at the same time because one has caused the other to occur.
- b. We don't know whether or not their appearance at the same time is simply **accidental** - a matter of **chance**.

The following illustrates the difference between **causality** and **correlation**.

- In 1989, the end of season first-class cricket averages for batting and bowling in England were as follows:

If the above represented a **causal relationship** each team in the County Cricket

The **top ten batsmen** all had **names** that were no longer than **one syllable** (Smith, Lamb, Jones etc.).

The **top ten bowlers**, on the other hand, all had **names** that were **two or more syllables** long (Ambrose, Dilley, Foster, etc.).

Championship would **know** not to employ any **batsman** with a **name** more than **one syllable** in length, nor to employ any **bowler** whose **name** was **less than two syllables** long. This is because they would be able to accurately **predict** that a batsman named "Livesey", for example, could never appear in the "Top ten batsman" averages (and, in this particular case, they'd be right...).

If, on the other hand, the above represented a simple **correlation** (a **chance** occurrence) then the names of batsmen and bowlers would have no significance whatsoever...

There are a couple of ways we could test whether or not the relationship between someone's name and their ability to play cricket is a causal one.

- **Logically**, for example, it is easy to see that the **relationship** described is simply an **accidental one**, since no-one could seriously argue that the ability to play cricket successfully is based on a person's name (would changing your name, for example, make you a better or worse batsman or bowler)?
- However, since it's not always easy or possible to test something logically, a better way would be to use some sort of **empirical test**.

Your answer, therefore, should have suggested that we can examine the **reliability and validity** of the **statistical relationship** between **ability** and **name** by looking at the **averages for previous or subsequent years**. If a **causal relationship** existed we would be able to **predict** with certainty that the same relationship would exist year after year.

The fact that this relationship was not repeated in the following year - the top ten batsmen, for example, were a mixture of one, two and three syllable names - tells us that the relationship was one of **correlation** (the **weakest** of all **correlation's**, a simple accident).

From the above, it follows that one of the great **strengths** of **laboratory experiments** is the ability to **repeat** the

Exercise 5

Suggest a way to test whether or not the above relationship is a causal one.

How?

To most of us, “theft” means taking something that doesn’t belong to us with the intention of keeping it. However, if we were investigating something like “theft amongst young children at school” we would have to be certain of two things:

- a. That the children accused of theft **understood** the concept in the same way that we, as researchers, **understand** it. This is by no means as certain as you might expect since young children routinely take things from each other without intending to keep them.
- b. That the adults charged with **defining theft** in a school **share similar definitions**. For example, where one teacher might define behaviour as “theft” another might see it as simply “borrowing”.

Consider, for example, the following accounts of a similar incident.

same experiment to see whether or not we get the same results. This is possible because of the ability to completely **control** both the **environment** and the **independent variables** involved in the experiment.

- Although, as I’ve noted, there’s no particular reason why, **in principle**, it is not possible for sociologists to conduct experiments, there are a couple of good reasons why, **in practice**, experimentation (at least of the **laboratory** variety) is not widely used. In the course of outlining these reasons the examples used will also illustrate the various **key ideas** noted earlier (**controls, variables, causality** and **correlation**).

Exercise 6**1. The Meaning of a Situation.**

Think about the above and suggest one possible reason why experimentation is not widely used in sociology.

One of the problems we face, as sociologists, is that our subject matter (people) exists in an environment that is rich in influence and **meaning**. In this respect, if we are to carry out experimentation successfully we have to ensure that the **meaning** we, as sociologists, give to particular categories (such as **theft**) is **shared** by the people we experiment on. Consider the following:

2. Experimental Control.

Account 1: Head Teacher A

"The theft of a bar of chocolate might seem like a rather trivial offence but we set high standards in this school and it is an indication of a lack of respect both for property and for school discipline which many of the children have. If you let such matters pass then it's like ignoring the early signs of wood-worm, sooner or later the whole structure will collapse, so you can see that my staff and I always treat such matters seriously.

What we usually do is make a note on the child's record card - quite openly, no secret about it, you know - we're not into that game - and to bring the child onto the stage at assembly and charge him with the offence in front of the whole school. In that way we use one child's misdeeds - and punishment - as a lesson to others."

It was noted earlier that one of the great **strengths of laboratory experiments** in the **natural sciences** is the fact that the conditions under which the research

Account 2: Head Teacher B

"In this school we are very careful how we treat, what shall we call it, 'missing property', because children don't necessarily share adult views about ownership - I mean rulers and pencils and to a certain extent sweets are fair game, not quite, but almost common property and we find that with a little help the children are able to sort things out for themselves.

Personally I would never charge a child with theft in those sort of circumstances - cases would have to involve quite a long history of taking property and taking maliciously before I would call it a 'theft'."

For example, imagine that we wanted to discover whether or not mice find food using their sense of smell or their sense of sight. Our initial **hypothesis** might be, for example, that:
"Mice find food using their sense of smell".

The **dependent variable** here is the behaviour of mice.

The **independent variables** might be things like:

1. Whether it is light or dark.
2. Whether or not the food is in plain view or hidden from sight.
3. The type of food.

E (There are, of course, many other possible variables we could identify and control for, but since this is just an example we don't need to consider them here).

Our (first) experiment, therefore, might be to hold the **independent variables 2 and 3 constant** and **change independent variable 1**. Thus, we could place some food out of sight and, leaving a bright light on, see if the mouse could find it. Next, we would do exactly the same thing except we would remove the light. If the mouse failed to find the food we have not confirmed our hypothesis, as such, (since there might be something about the absence of light that restricts a mouse's sense of smell), but our experiment has suggested that smell might be less important than sight...

takes place can be carefully and closely **controlled**. This is important because when a change is made in an **independent variable** in order to measure its effect on the **dependent variable** we need to be **certain** that any change in the latter is solely an effect of the former (and not the result of something else).

One of the major problems we would face, if we were conducting a **laboratory experiment** with **people**, rather than mice, is the difficulty we would have **identifying and controlling** all of the **possible influences** that potentially affect people's behaviour. Unlike mice, people bring to an experiment a vast range of **cultural meanings** that may or may not affect their behaviour in a certain situation and it is simply impossible for the researcher to know:

- a. **What** these **cultural meanings** may be on an individual level.
- b. **How significant** any or all of these **meanings** might be in terms of the particular circumstances under which an experiment takes place.
- c. **How** the **experience** of being involved in an experiment might change the behaviour of those involved.

A classic example to illustrate this idea is a piece of research carried out by **Bandura, Ross and Ross** ("The Imitation of Film-Mediated Aggressive Models", 1961).

In this respect, **experimentation** in the **social sciences** is far more **difficult** than experimentation in the natural sciences because:

- a. Human beings have **consciousness** (in basic terms, they are aware of what is happening both to them and in their immediate and wider environment). This "fact of consciousness" introduces an independent variable into any experiment that cannot be easily or adequately controlled - namely, the fact that if people are aware of an experiment their behaviour may change in some unknown and unquantifiable way.
- b. The **social environment** is far **richer**, in terms of possible influences on behaviour, than the environment in which inert (**non-conscious**) matter exists. In basic terms, this means it is far more difficult for sociologists to be certain they have controlled for the effects of all possible independent variables on the dependent variable.

- c. Considered in combination, the above means that it is far more difficult (if not impossible) for the social scientist to **control** for all of the possible **independent variables** that may affect human behaviour. This fact, in turn, means that it is difficult - if not impossible - for sociologists to predict people's behaviour with the same degree of certainty that natural scientists can predict the behaviour of non-conscious matter.

3. An Artificial Environment.

A controlled experiment is, by definition, an unusual situation for people and the question we have to ask here is the extent to which people do not behave as they normally would outside of the laboratory.

Apart from the question of whether or not the “behaviour changes” in children were simply **short term**, rather than **long term**, this experiment illustrates the problem of using **artificial conditions** under which to experiment on people.

Television viewing, in the real world, does **not** take place under the **conditions** created by Bandura and it is possible that various **mediating factors** intervene. For example, it is rare for children to watch television without adults being present in the room. An **adult presence** may be a mediating factor because they are able to explain to the child what is happening on the screen.

More importantly, perhaps, children do not watch television under “laboratory conditions”; on the contrary, television is often watched **inattentively** - as part of a general process of play that may involve interaction with others, with toys and games and so forth. In short, it may only be under certain conditions that exposure to film violence creates short-term aggression.

- **Bandura, Ross and Ross: “The Imitation of Film-Mediated Aggressive Models”, 1961.**

As I’ve suggested, the issues of **causality and correlation** are important ones in both the natural and social sciences since they sit at the very heart of the explanations it is possible to produce for behaviour (whether it be the behaviour of plants or people).

In the experiment, the dependent variable was the effect of violence on young children and Bandura used four groups of children, matched for things like age, gender and so forth, to test different independent variables:

Group 1 were shown film of real life attacks.

Group 2 were shown film of people attacking each other with mallets.

Group 3 were shown cartoons of characters attacking a bobo doll with mallets (a bobo doll is an inflated, self-righting, doll).

Group 4 were not shown any violent behaviour. This group was Bandura’s **control group**.

causality are fairly commonplace. One

After seeing the films, all four groups were placed in a room and told to play with various toys (including mallets and bobo dolls. The behaviour of groups 1, 2 and 3 was markedly more violent than the play of group 4 which lead to the conclusion that the viewing of violent (real, pretend or cartoon) made children more aggressive. This is sometimes taken to be proof that watching violent films on television makes people more aggressive.

Sociologists, for example, find it difficult (if not impossible) to produce **causal theories**, unlike their natural scientific counterparts where issues of

The importance of a **control group** can be seen here because this type of group, **exactly matched** with the other groups, is used to **check** that any **changes** in the **experimental groups** were not the result of chance, accident, or whatever.

For example, without a **control group** of children who were **not** shown violent behaviour **Bandura** could not be sure the behaviour exhibited by the groups who were shown violent films was not simply their **normal behaviour** (that is, would they have played aggressively regardless of the films they had been shown?).

reason we can suggest for this is the fact that they deal with **different subject matters**.

- In the Natural Sciences, the object of study (plants, electricity, the behaviour of atomic particles and so forth) does not have **consciousness** - in short, an atom is not aware of it's own existence and, therefore, can't chose to upset our carefully-prepared experiments by choosing not to behave in a particular way.
- In the Social Sciences, however, we have to take into account the fact that our **object of study (people)** does have **consciousness** - people are aware of the world around them and can act purposely towards that world (if only to act in purposely unpredictable ways simply to mess-up your experiment).

While this is not to say that sociology (or social science in general), can't be **scientific** in its approach to the study of human behaviour, it should alert you to the idea that it's much more difficult to study people in the same way (that is, using similar methods of research) that Natural scientists are able to study unconscious matter (rocks, plants and so forth).

We can use an example from a real piece of research (**Elton Mayo's** research at the **Hawthorne Electric Factory in Chicago** in the **1920's**) to illustrate many of the basic ideas that have been outlined in this section on experimentation.

- The following describes Mayo's research and, where appropriate, comments about concepts such as experimental **control**, **variables** and so forth are indicated by **bold text**.

In terms of **causality** and **correlation**, Mayo's observations suggest that there may be a possible **causal relationship** between productivity levels and the fact of being observed. However, whether or not this is the case in all instances may be open to doubt - more research would be needed to test this possible relationship.

However, it is clear that we can say there was a **positive correlation** between the presence of the observer and levels of productivity. That is, whenever an observer was present, worker productivity increased. However, even this correlation has to be tentative, since we don't know whether this effect would continue over time. For example, worker productivity may have increased because they felt the observer was "spying" on them on behalf of the owners of the company and that if they wanted to keep their jobs they needed to demonstrate they were working efficiently. Thus:

- If the workers discovered this wasn't the case, then it's possible that productivity levels would return to the norm.
- If, on the other hand, the workers discovered this was the case, then it is possible they might have devised various strategies for coping with the fact of being closely observed (especially if they found it impossible / undesirable to work at an increased level of productivity).

Mayo was asked to experiment on a group of workers (**the dependent variable**) to allow the owners of the company to create the environmental conditions in their workplace that would get the highest level of productivity out of their employees. Mayo controlled the conditions under which his experiments took place in a number of ways, but for our purposes here we need only note that he introduced changes in working conditions on the same groups of people. Thus, he was able to test whether or not the changes he introduced were the **cause** of changed behaviour by using a **controlled group** of people - if he had changed the groups, then any changes in behaviour might have been the result of changes within the group, rather than in the working conditions at the factory. Mayo manipulated the conditions under which people worked by adjusting such factors as:

- Levels of heating,
- Levels of lighting,
- Length of rest breaks and so forth.

Each time a particular environmental factor (**an independent variable**) was changed, Mayo measured any resulting changes in worker productivity (**the dependent variable**) over time. However, what Mayo discovered from this study was that, no-matter what the environmental conditions, worker productivity always seemed to increase. At least two possible explanations could be used to account for this (Mayo actually considered five possible explanations):

1. Environmental conditions make little difference to the way people work.
2. The presence of the observer (and the knowledge that they were being watched) somehow changed the behaviour of the workers.

(These explanations were **hypotheses** - possible relationships between two or more things that can be tested. After testing the **hypotheses**, Mayo concluded that his carefully-controlled study had over-looked a very significant **independent variable** - namely, the **affect** that the **observer** had on the behaviour of the people being studied).

The Observer Effect

Mayo's work is a good example of what has been called the "observer effect" in social research. In basic terms this relates to the idea that when people know they are being observed (as in the Mayo study) their behaviour is likely to change in ways that cannot be accurately predicted. We will need to look at and develop this idea in more detail when we look at **Participant Observation** as a method of research.

Despite the criticisms we've just considered, experimentation is used in sociological research at various times (although, as I've suggested, **laboratory-type experiments** are very rarely used for the reasons just noted). To complete this Unit, therefore, we can look at some examples of sociological experiments which I've previously classified as **natural experiments**.

For convenience, we can sub-divide this general category into two general types.

- **Field experiments**
- **Comparative experiments.**

Field experiments, as the term suggests, can be defined as designed experiments that are conducted **outside** the confines of a closed, tightly-controlled, environment such as a laboratory. They take-place, therefore, "in the field" where the respondent is situated in some form of natural environment.

Comparative experiments, on the other hand, are probably quite unlike anything

I've already described as being "an experiment".

This type of experimentation takes the form of **comparing** two or more **naturally-occurring situations** to examine their similarities and differences.

There are numerous examples of sociological field experiments we could note in this context by way of illustrating the idea of field experiments.

A field experiment conducted by **Rosenthal and Jacobson** (“**Pygmalion In The**

Rosenthal and Jacobson administered their test and identified to the class teacher those pupils who, on the basis of objective IQ testing would subsequently develop greater academic achievements than their peers.

After to gap of a few months, Rosenthal and Jacobson returned and tested the children and found that those who had been identified to teachers as possessing “academic potential” had improved their IQ scores significantly whereas the “non-achievers” in the class had not. The one significant thing **Rosenthal and Jacobson** did not tell the teacher was that they had selected the names of “potential achievers” at **random**, not on the basis of a new and highly sophisticated test.

Rosenthal and Jacobson decided to test the proposition that some kind of **self-fulfilling prophecy** was involved and this idea, in effect, became the hypothesis they tested. Having chosen to test this idea, the independent variable in their research became the behaviour of the children’s teachers.

Classroom”) provides us with a further example of the way in which the concept of a **self-fulfilling prophecy** can be **tested**.

The **independent variables**, as in most (all?) instances of human behaviour, were potentially many and varied. **Rosenthal and Jacobson** could have looked at such ideas as:

- Mexican children being innately more or less intelligent than their peers.
- Physical environmental factors (lighting, heating, possible overcrowding. etc.) having some unknown effect upon behaviour.
- Whether or not the teaching staff were competent, well-motivated, etc.
- The home background of the children somehow affecting their behaviour, in short, any number of independent variables might have existed to cause the observed behaviour.

Rosenthal and Jacobson were interested in studying low educational achievement by Mexican children (an idea that we can link in with the concept of educational achievement generally).

In order to **test** their **hypothesis** they had to manipulate the independent variable and in this instance, they manipulated the variable (the behaviour of teachers in terms of their expectations about the children’s intellectual ability) by posing as psychologists who could, on the basis of a sophisticated IQ test, identify children who would in the future display “dramatic intellectual growth”.

The **dependent variable**, in this respect, was the intellectual behaviour of these children. That is, they wanted to try and isolate the causes of under-achievement by these children.

A classic example of the **comparative method** in sociology can be seen in the work of **Max Weber** (“**The Protestant Ethic and the Spirit of Capitalism**”).

Another example of the use of the **comparative method** is **Durkheim’s** classic study of suicide (“**Suicide: A Study in Sociology**”, 1897).

To summarise this section on experimentation we can note the following observations.

1. Experiments are a common, very powerful, method of research in the Natural sciences, but **ethical**, **practical** and **methodological** problems make experiments like those conducted in the Natural sciences less common in sociological research.

2. Experiments in the Natural sciences are a major method of research because scientists can have **complete control** over both the **conditions** under which an experiment takes place and all of the possible **variables** that are being tested. In sociology, this is not possible for:

- **Ethical** reasons (we cannot force people to participate in an experiment, for example).
- **Methodological** reasons (will people behave “normally” under laboratory conditions, for example?).

By introducing a relatively controlled element into the classroom interaction between teachers and pupils, Rosenthal and Jacobson were able to test their hypothesis and demonstrate that the expectations held by teachers about their pupils was a significant factor in the intellectual development (or lack of same) of those pupils.

3. One of the main problems with sociological experiments is the fact that people have **consciousness**. This means they can participate actively in an experiment in a way that non-conscious matter cannot.

4. The large number of possible **variables** involved in any form of sociological experiment means that:

- It is difficult to establish exact **causal relationships**.
- It is difficult to accurately **repeat (replicate)** an experiment for the purpose of

To **test** the **hypothesis** that **suicide** had **social causes**, **Durkheim** collected **statistical** data on suicide from a variety of **different societies** and linked different rates of suicide to different personal and social events. The **statistical patterns** established (such as the idea that Protestants were more likely than Catholics to commit suicide) were then explained using a variety of theoretical concepts (for example, the concept of **social integration**).

integration) were more likely to kill themselves if they were suddenly rejected by the group on which they placed so much faith.

Weber attempted to **test** the idea that the first Capitalist economies anywhere in the world developed in England because of the influence of the Protestant religion (in this instance, a variation called Calvinism). Weber’s basic **hypothesis** was that the Protestant religion was more-conducive than Catholicism to the development of Capitalism. In order to **test** his **hypothesis**, Weber **compared** a large number of different societies and concluded that, in every case, the first societies to embrace Capitalism were those in which Calvinist religious ideas existed.



verifying data.

A variety of relatively simple experiments can be constructed and used in student projects, although you should be aware of the ethical considerations that always apply when conducting research of this type.

5. All experiments involve the manipulation of **independent variables** in order to

1. In our society “personal space” is considered to be an area around our bodies that we each own. It usually extend for 1 -2 feet and we find it uncomfortable if people “invade” our personal space without our permission. Using a relatively closed environment such as your school or college library:

- Measure the responses of fellow students whose personal space you deliberately and accidentally infringe (for example, by standing close to someone who is searching for a book on the library shelves). You could check to see how people of the same and opposite sex react to your invasion of their space.
- You could observe examples of the ways people try to protect their personal space in this environment. For example, do they surround themselves with things like books and bags that seek to stop uninvited people sitting next to them?
- Place a bag on an empty chair at a desk in the library and observe how people respond (this is best done when the library is relatively crowded).

measure the **effect** on a **dependent variable**. This is much easier to achieve under

2. If you have access to a children’s play group, it is possible to conduct a variety of harmless experiments around the theme of gender differences. For example, you could set-up a “kitchen area” and encourage the boys in the group to play there and observe how they use this “gendered space”.

tightly-controlled laboratory conditions - but the main problem sociologists identify here is that people do not live and work “under laboratory conditions”.

6. A **causal statement** is a much stronger (more **valid**) form of statement than a **correlation** (which may be the result of **chance**).

7. A major problem with sociological experiments is that of the difficulty involved in the **standardisation** of the conditions / **environment** under which an experiment takes place.

8. It is possible to conduct “**natural experiments**” using a **comparative methodology**. For example, to study family life in different societies and to compare the similarities and differences.

You have now completed this Unit.

The next Unit looks at primary, qualitative, methods of research.