AS Sociology

Revision

Sociological Methods

The Research Process

© Chris. Livesey 2006: www.sociology.org.uk

Research Process

Hypothetico-Deductive

A common representation of "the research process" advanced by **Popper** ("The Logic of Scientific Discovery", 1959) Sometimes considered to be the model for positivist science / social science - but there are other models.

Ideas

All research starts with ideas about what to study - these are initially quite general and vague ("crime", "family life" and so forth).

Focus

The researcher starts to focus their initial interest on something more-specific within the general area they've chosen to study.

Hypothesis

Operationalisation: The researcher needs to think about the concepts in the hypothesis that require definition, testing or measurement.
Example: How to define and measure concepts like divorce, suicide or crime.

Indicators: Many social phenomena cannot be directly observed or measured so the researcher uses indicators for this purpose.
Example: "Marital breakdown" can't be directly observed, but we can try to measure it through things like counting the number of divorces in our society.

The research is further focused by the development of a testable hypothesis. This gives the research a clearly defined objective for data collection.

Observation

The researcher thinks about who they are going to research (their *sample*) and the research *method*(s) they will use. Data collection is an organised and systematic process that uses research instruments (such as interviews, observations or questionnaires) that are capable of producing quantifiable data.

Analysis

Technical

The technical analysis of collected data involves things like:
Ensuring sufficient data have been collected.
Checking the sample has remained representative.
Making decisions about whether to include or discard irrelevant data.

Interpretive

Interpretive analysis involves making decisions about the meaning of data collected.

Testing

On the basis of the data analysis the researcher decides if tested hypothesis has been confirmed or falsified

Falsified

If the hypothesis is false a decision has to be made about whether it it should be rejected or revised and re-tested.

Confirmed

A confirmed hypothesis becomes part of a theory.

Theory

A theory consists of tested and confirmed hypotheses that can be used to predict the behaviour originally observed.

Sampling

A sample is a small proportion of the people who belong to a target population. **For example**, by studying a representative sample of football fans it should be to say something about the characteristics or behaviour of all fans in the target population.

Sample

Target Population

A *target* or *general population* is everyone in the group we're going to research. **Examples** of target populations might be: UK football fans, all doctors and nurses in Dorset; the students in a school.

Concepts

Size

Size is not particularly important; what matters is whether or not a sample is representative

Frame

A way of identifying everyone in a target population so an accurate sample can be drawn. **Examples**: school and electoral registers, employment records.

Representativeness

This relates to the question of whether the characteristics of the sample accurately reflect the characteristics of the target population. If the sample group is representative then anything discovered about them can also be applied to the target population.

Access

Access to records may be denied for reasons of:

Legality
A school, for example, may not give a researcher access to their registers.

Secrecy
Religious groups, political parties and criminal gangs may not want to be studied.

Confidentiality
A business organisation may not give a researcher access to their payroll records.

Generalisation

If a sample is representative we can generalise the behaviour of this group to our target population - we can make statements about a group we *haven*'t studied (our target population) based on the behaviour of a group we *have* studied.

Time: Both are relatively quick and easy ways of selecting samples.

Random: They produce random or near-random samples, based on chance.

Expense: Both are reasonably inexpensive to create.

Information: Other than some way of identifying people in the target population (a name for example), the researcher doesn't require any other knowledge about this population.

Sampling Frame: These techniques *always* need a sampling frame - and one may not be available.

Unrepresentative: Sampling based on chance may not produce a representative sample.

Simple Random

Advantages

Based on the *probability* the random selection of names from a *sampling frame* will produce a sample representative of a target population. For it to be truly random, *everyone* in the target population must have an equal chance of being chosen. A simple random sample, therefore, is similar to a *lottery*.

Disadvantages

The general aim is to ensure that the characteristics of the people we study (our sample) are an exact match of the people in our target or general population. In this way, by studying a relatively small group we can generalise our findings to the the target population.

Example: Although there are around 35 million people eligible to vote in UK general elections (the target population) polling organisations (such as Gallup or MORI), can accurately predict the broad trends in UK voting behaviour on the basis of a carefully-constructed representative sample of around 1,000 people.

Systematic

Normally used when the target population is very large - names are systematically selected from a sampling frame.

Example: Choosing every tenth name from a sampling frame.

Representative

Types

Stratified

This technique divides (or *stratifies*) a target population into groups who's characteristics are *known* to the researcher (such as males and females) and treat *each* group as a random sample in its own right.

Advantages

Known differences in the target population are accurately reflected in the sample and it will be broadly representative.

Focus: The sample is focused on relevant distinctions in the target population (age, gender, class, ethnicity, etc).

Size: Stratified samples can be relatively small, since it's possible to make certain we have accurately reflected our target population.

Resources: *Quota* samples are usually relatively cheap and quick to construct accurately.

Random

Quota

The main difference is that the selection of the sample is not truly random. In other words, each in the sample (for example men as one and women as the other) is chosen in a non-random way - everyone in the target population *does not* have an equal chance of being selected for the sample.

Disadvantages

Accurate information about the target population isn't always available.

Out-Dated: Information about the target population may be outdated by the time the research is actually done

Unrepresentative: *Stratified quota sample* selection is *not* truly random; it may be unrepresentative of a target population.

Case Studies

The objective is to study, in great detail, the characteristics of a particular group (or "*case*"). Although technically an example of a *research method*, case studies offer a useful illustration of a non-representative sample because the researcher isn't concerned about whether the people or groups being studied are representative of all other, similar, groups. The "sample" in this respect *is* the target population - an acceptable form of research as long as the researcher doesn't try to generalise their findings.

For some types of research the sociologist might *not* want to make generalisations about a very large group based only on a sample of that group. They might, for example, simply be interested in the behaviour of the group itself, rather than what they may or may not represent.

Non-Representative

Opportunity

Best Opportunity

This involves deliberately choosing a sample to provide the *best possible opportunity* to show the hypothesis you're testing is *true*. If your research shows the hypothesis is *false* for this group, there's a *high probability* it will be false for any other related groups.
Example: Goldthorpe, Lockwood et al "The Affluent Worker In The Class Structure" (1965).

Snowball

So-called because, just as a snowball rolling downhill gets bigger as it picks-up more snow, a *snowball sample* picks up more and more people to be in the sample over time. This type of sampling may be used in situations where a researcher can't get hold of a *sampling frame* for a target population or they know nothing about the characteristics of their target population (which rules out stratified sampling).
Example: **Charlton and Panting** ("Mobile Phone Usage and Abusage", 2001) used an *opportunity sample* of schoolchildren in the absence of any available sampling frame.

Advantages

Availability
It allows a researcher to construct a sample in situations that would be impossible using any other sampling technique.

Resources
It can be a relatively cheap and quick method of sampling.

Disadvantages

Unrepresentative
The sample is unlikely to be truly representative.

Reliability
There is no way of checking whether your sample is representative.

Self-Selection
Because the members of the sample effectively "choose themselves" representativeness is invariably very low. There is also the related problem of one-sidedness - the people attracted to your research are those with very strong (positive or negative) feelings about whatever it is you are researching.

Exam Questions

Item A
"As with most case study research based on participant observation, the outcomes of this study do not lend themselves to conclusions in terms of one or two carefully tested hypotheses, but rather to a set of inter-related propositions. Indeed, I did not enter into my fieldwork with specific hypotheses to test. But I did have general issues in mind and a theoretical framework that directed my attention to certain events. It quickly became apparent which issues would be theoretically important, but I would certainly not claim to have exhausted all possible aspects of the research. Once propositions began to emerge from the analysis of data, I made efforts to search for negative features, as well as supporting ones. However, the organisation of the research over a long period of time did not always make this easy or as extensive as I would have wished".
Source: adapted from S. Ball, Beachside Comprehensive (Cambridge University Press) 1981

2 marks

Explain what is meant by a "sampling frame"

2 marks

With reference to Item A, briefly explain what is meant by 'case study research'

4 marks

Identify two types of "sampling procedure" used in sociological research.

4 marks

Briefly explain one reason why some researchers use representative samples in their studies and one reason why others use samples that are non-representative.

4 marks

Briefly explain why a sample might need to be representative

4 marks

Suggest two reasons why researchers might find it difficult to create a sample representative of all victims of domestic violence.

6 marks

Suggest three reasons why sociological research is often carried out using "only a small sample of research subjects"

© Chris. Livesey 2006