

Name of Method	Statistics
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Brief Outline of Method

Statistics are a form of numerical data where the objective is to quantify some aspect(s) of an individual, group or society. Statistics provide a wide variety of data that would normally be inaccessible to the sociologist (due to the cost of collection, for example). We can note two main sources of statistical data:

1. **Official** statistics refers to numerical data collected and published by Governments (for example, crime or marriage statistics).
2. **Non-official** statistics refers to numerical data collected and published by a variety of public and private organisations (the Rowntree Foundation, for example, publishes statistics on poverty).

This method has the following Strengths / Uses:	This method has the following Weaknesses / Limitations:
<p>1. Availability:</p> <p>It may be the case that official statistics are the only available source in a particular sociological area of interest. Emil Durkheim, for example, in his study of suicide ("Suicide: A Study In Sociology", 1897) used official statistics drawn from coroners' reports from different societies to establish that suicide rates varied within and between societies. By so doing, he was able to argue that social factors, such as religious belief, were significant variables in the explanation of why people committed suicide.</p> <p>For some topics, therefore, secondary research is the only way to find data. You cannot go back in time to collect data so you have to use what has already been collected.</p> <p>2. Cost:</p> <p>This kind of research is cheap and easily accessible. Also, as not much time is spent on primary research, analysis will be fairly quick so the results are fairly up to date. The ready availability of official statistics mean the researcher does not have to spend time and money collecting his / her own information.</p>	<p>1. Definitions.</p> <p>In relation to the way statistical categories are defined, we have to be careful in two ways:</p> <p>a. The definitions used by the collector of statistics may not be the same as those used by the sociologist. For example, we need to ensure that the official definition of such concepts as "crime", "unemployment" and "class" is the same as our own.</p> <p>b. The basis for the collection of statistics by may change over time.</p> <p>This is significant if your research is concerned with, for example, comparisons of employment / unemployment levels between the present and the past. Between 1980 and 1990, for example, the British government changed the way it defined unemployment (and hence the way it which it collects official data about the unemployed) approximately 25 times...</p>

3. Examination of trends / changes over time:

Using statistical data drawn from a number of different years it's possible to see how something has **changed** over a long period. For example, statistics of educational achievement can show us changes in relative levels of academic achievement between boys and girls.

4. Comparisons:

Statistics can be used for Inter-group comparisons (for example, the examination of differences in middle-class and working-class family size), as well as **cross-cultural comparisons** (for example, a comparative study of crime rates in different countries) - using official statistics, you can easily determine any patterns that occur.

This kind of information may well be too expensive and time-consuming for the sociologist to collect personally.

5. "Before" and "after" studies:

For example, we could use statistical data to examine the effect that changes in the law have on patterns of divorce by noting the number of divorces before the legal change and doing the same for divorces after the change.

2. The Purpose of Official Statistics

Although official statistics are collected by governments to provide information about what's happening in society, it would be **naive** to pretend that the collection of such data is **unaffected** by **political and economic considerations**.

As in the example above, the British government has changed the way in which it defines unemployment a large number of times over the past few years. It may be a happy coincidence that all but one of these changes (the first) has resulted in a fall in the number of people defined as being "unemployed", but, there again, it might not...

3. A partial picture of reality?

Quantitative data gives no indication of people's meanings (for example, why do X number of people go to church?). When using statistics, therefore, we need to be aware of two points:

Firstly, any statistical account will represent a **"snapshot"** of social interaction as it was at the moment the statistics were compiled. Just as a photograph captures a single frame of social activity, so too do statistics capture a fragment of any interaction process.

Secondly, and perhaps more importantly, the statistical data we use may only represent a **partial picture of reality**. An **example** may help to clarify this point:

Data collected by the police is only represents a proportion of the true level of criminal behaviour - not all crimes (for whatever reason) are notified to the police (which casts some doubt upon the validity of official crime statistics).

How **reliable** is this method? [Circle one option]

1

2

3

4

5

6

7

8

9

10

Highly
Reliable

Neither Reliable
nor Unreliable

Highly
Unreliable

Briefly explain why you think the method is reliable / unreliable

The statistics (e.g. crime, unemployment, marriages, births, divorces, etc.) are collected by law every year. They are usually collected in the same way from the same sources which adds to their overall reliability.

By definition, statistical data is quantitative data which increases its reliability.

Although definitions may change (e.g. the definition of "unemployment" has changed approximately 30 times in the past 25 years), most statistical definitions (e.g. what counts as a birth or a murder) rarely change. This makes year-on-year comparisons possible.

It is easy for the Government to repeat the data collection process.

How **valid** is this method? [Circle one option]

1

2

3

4

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10

Highly
Valid

Neither Valid
nor Invalid

Very Low
Validity

Briefly explain why you think the method is valid / invalid

Statistics, by definition, do not tell us anything about **why** someone does something (such as committing a crime, getting married or divorced, etc.). In other words, we do not get any real depth of information about people's behaviour from statistical sources.

A further problem, in terms of validity, is that statistics don't always measure what they claim to measure: e.g. "Crime statistics" do not actually measure the real level of crime in this country - they actually only measure "crimes known to the police". "Unemployment statistics" only count those people "who are available for work" on a particular day.

However, in some instances statistics may measure what they claim to measure - all births, deaths, marriages and divorces, for example, have to be recorded by law.

