

Cross-sectional studies or longitudinal studies

Most research is cross-sectional. It is research sometimes referred to as a snapshot study. Doing a cross-sectional study gives researchers a snapshot of a single moment in time. It enables them to make comparisons of a range of variables at that point.

Longitudinal studies take place over a long time period, often several years.

Use page 1 of the digital resource **Longitudinal studies**

Ask the students to watch the *Seven Up!* programme produced by ITV.

The original intention of the researchers was to study a group of fourteen 7-year-olds who were representative of 7-year-olds in 1964.

The makers of the documentary said they wanted to see to what extent class background at birth determined the life chances of the children.

Ask them to consider why generalising from this small sample might be problematic.

The suggested response can be used for comparison with students' answers.

The sample size is very small. This means that these fourteen children could not be said to be necessarily typical of 7-year-olds in 1964. Although they do appear to be a good cross-section of children in terms of class, it would not be safe to generalise the whole population of 7-year-olds in that year.

Other longitudinal studies which are based on much larger, more systematically selected samples include the 1946 National Birth Cohort Study. The children in this study enabled JWB Douglas to do his work on children and schooling – *The Home and the School* (1964) and *All our Future* (1968).

Use page 2 of the digital resource **Longitudinal studies**

Ask the students to list more recent longitudinal studies you know which they would be able to refer to.

These suggestions are embedded in the resource for support.

1. *The Millennium Cohort Study* (2000 onwards)

The *Millennium Cohort Study* gave rise to the comparative study of literacy levels between Welsh and English pupils, published by the Wales Institute of Social and Economic Research, Data and Methods.

2. *The UK Household Longitudinal Study (2009 onwards)*
The study started in 2009 and follows 100,000 individuals in 40,000 households every year.
3. *Born in Bradford*
A longitudinal study particularly useful for those following the health and disability option on Unit 3 or Component 3. The study is based on 13,500 children born in Bradford Royal Infirmary between 2007 and 2010.
4. *The National Survey for Wales* (<http://gov.wales/statistics-and-research/national-survey/?lang=en>)
This is an annual survey of around 12,000 people which collects information about health, education and local services in Wales.

Use page 3 of the digital resource **Longitudinal studies**

Using the key concepts of validity, reliability, representativeness and generalisability, ask students to identify three weaknesses of longitudinal studies.

These suggestions are embedded in the resource for support.

Attrition may occur and therefore the sample will be reduced. This could lead to a skewed sample and therefore a reduction in the representativeness of the sample.

If sampling units drop out and the sample becomes less representative of the original sample then it may not be safe to make generalisations.

The more the sample get to know the researcher/s over the years, the more likely the Hawthorne effect will occur and therefore the validity of the research may be weakened.

An example of attrition and dropouts in the 1946 National Birth Cohort Study:

- In 1946 there were 5,418, in 1948 4,742 did the interviews, by 1950 there were 4,668.
- 4.3% had died in the first 5 years, 4.5% had emigrated. These figures rose to 4.9% and 6.7% by the time of Douglas' study on the home and the school.