



CROSS-SECTIONAL AND LONGITUDINAL STUDIES

Which study is better for looking at developmental trends?

Psychodynamic Approach

A **cross-sectional study** takes place at one specific moment in time, and compares different groups of people at that time. The participants are tested once, usually to find a simple relationship between one variable and another. This type of study is most common, as it can be done quickly and participants need only be tested once.

Cross-sectional studies are perfect if you want to test a group of participants on their memory, because you can run the experiment and use your findings to come to some sort of conclusion. However, if you want to study developmental trends, for example, to test how a group of participants' memories change with age, a cross-sectional study is not the only choice available.

In this example, of course a cross-sectional study could still be used. This would involve testing the memories of a group of 10-20 year olds, a group of 20-30 year olds, a group of 30-40 year olds, and so on. The findings of each condition could be compared to generate the conclusions. However, a **longitudinal study** may be used, whereby the study follows one group of people over a period of time. This can be as little as a month or so, but many longitudinal studies continue for years, if not decades. In this case, the memory test would be conducted at the beginning of the study period, and then again at regular intervals to see the changes found. The aim is to compare the data of each test to see how the passage of time affects whatever it is being tested for.

It may be difficult to identify a study as longitudinal, as sometimes the time period can be debatable. For example, the study of Reicher and Haslam (the BBC Prison Study) went on for six days. This wasn't a quick hour test of participants, their every move was watched over six days and developmental trends were looked for. But is six days long enough to be considered a longitudinal study? Most would consider the Prison Study to be a cross-sectional study, as it is generally accepted that a month or a couple of months is the minimum period for a longitudinal study, but this amount is variable. It depends upon what the study is looking at on what fits a 'longitudinal' study.

Strengths of cross-sectional studies	Weaknesses of cross-sectional studies
reasonably cheap, quick and practical, as participants need only be tested once and there is no follow-up study necessary participants are more easily obtained, because there is less pressure with cross-sectional studies than there is for them to stick with longitudinal studies less ethical considerations than for longitudinal studies	there is less rich detailed data collected than there is with longitudinal studies with regards to individual participant differences the data collected are from a snapshot in time, it is harder to identify and analyse developmental trends in cross-sectional studies

Strengths of longitudinal studies	Weaknesses of longitudinal studies
the same group of participants is followed throughout the entire study, so participant variables do not affect data collected these studies are the best way of spotting developmental trends as they repeat tests at regular intervals and compare the findings	certain participants from the group may move away or wish to no longer participate, which disrupts the study withdrawal of participants also means if remaining participants share a characteristic, findings are biased there are a number of practical difficulties with longitudinal studies: they can be expensive, they're very time-consuming and the data collection and analysis can vary in its strength if the researchers change over time