The Cognitive Approach (CA) methodology consists of case studies and lab experiments. Scientific methods are used to gather data in order to establish cause and effect and give reasons for people’s behaviour. One such experiment is the digit span test, which tests memory. It is believed that the human brain can remember 7 things +/- 2, and experiments such as this can gather that information. They are conducted in a controlled environment to make sure any extraneous variables do not affect the results (e.g. distracting noise, lights etc.) and any data is reliable (consistent). Scientific methods are one of the ways in which the CA does its research.

A strength of the scientific method of the CA is cause and effect can be established between the independent and dependent variables. The results are replicable as an environment used in the experiment can be set up again so it can be proven to work as a reliable method of research. Some disadvantages to the method are it isn’t ecologically valid – not true to life - this has been said of Milgram’s (1963) obedience study wherein participants were in a lab shocking people for not remembering pairs of words, which is a preposterous situation which does not accurately reflect real life and therefore arguably cannot be generalised to it.

Case studies are in-depth idiographic studies – producing large combinations of both quantitative and qualitative data. One strength of case studies is that they are written in a natural environment such as Clive Wearing, who had Herpesviral encephalitis that damaged his brain so his memory was severely impaired. The fact that experiments aren’t ecologically valid means that the results might not be applied to everyday life as the digit span test puts people under a lot of pressure they might not normally experience in the real world.

The case study of Clive Wearing as reported by Blakemore (1988) is an example of a study into the distinction between short-term and long-term memory stores. Clive demonstrated an extreme case of anterograde amnesia, caused by damage to the hippocampus, making him unable to transfer information from his short-term memory to his long-term memory, suggesting further evidence that there could be two stores and damage to the brain has a direct effect on memory structure. A strength of the case study method is it gathers rich, qualitative data. In the case of Clive Wearing, a lot of information was gathered about his past (his wife) and personality. A weakness of the case study however was it can be difficult to generalise from a single case. Clive had an extreme case of anterograde amnesia and not everyone with brain damage has this, so findings cannot be applied to them.