

## Methods of Research

Psychologists use scientific research methods in order to understand people's feelings, actions and thoughts. There are various ways to conduct research. There are three main research methods, the descriptive, correlational and experimental. What sets them apart and what are their similarities?

Watching people behave is better known as observation, and in descriptive approach this is the major vehicle for gathering data. The methods used in the descriptive can be: case studies (detailed examination of a person), surveys (asking questions to a sample population) and naturalistic observation (behaviour studied in its natural setting). An example of a survey can be to go out and assemble a group of people that represents the population and ask them how well they sleep and then adapt the results to the main population. The meaning with the descriptive approach in psychology is to observe events where the variables cannot be controlled. The main advantages with descriptive research are that it provides detailed information and yields data that can be adapted to a general population. However, there is no cause-effect relation shown from the data acquired and the gathering of a population may not go well as it should and leads to an unrepresentative sample.

A vast amount of information collected in applied psychology is not gathered in the laboratory. Most data is correlational, this means that the variables are controlled and the strength of their relation is calculated. This can be best described with an example; a student with a high pre-exam confidence correlated with following exam success. This means that a person with a high value on one measure (confidence) also scored highly on the other measure (exam grade). Correlation is the degree of relation between pairs of scores. The benefit with the correlational research method is that it allows prediction and that it examines issues that have an ethical cause to them and that otherwise cannot be experimented on. The major difficulty with this approach is that there is a great chance for bi-directional problems: does x affect y or does y affect x?

Experiments are basically the controlling of a situation and manipulating its variables. In an experiment there is in its essence one control group and one experimental group. The way in which these equivalent groups of people are treated is the same except for one variable (independent variable). That variable is isolated and manipulated; the effect it has on another variables (dependant variable) is then measured. The different groups respond differently according to the changes made in the variable. Experiments can be performed on many things such as how noise affects learning and how stress-creates-errors effect. The advantage with this is the control of extraneous factors, this helps to rule out any alternative explanations. But on the other hand there are many disadvantages for instance confounding of variables, demand characteristics and the placebo effect.

My opinion on these research methods is the following: they are good for what they are designed to do, observing behaviour in a natural setting, collect quantitative data or have a controlled setting where no extraneous can influence the result. I consider the descriptive approach as the most suitable for investigating behaviour. It has a humane side to it that allows the display of an actual behaviour, not an acted version of it. But on the other hand it does not investigate the source of behaviour that is the key to understand the origins of behaviour. All three approaches are good in their ways, but it depends on what you want to find out from the assessment. There are many differences in these three major approaches in psychological research, but they all have the same purpose, to study behaviour. The way in how this is done is what sets them apart.