

description of methods

There are three main types of descriptive methods: observational methods, case-study methods and survey methods. This article will briefly describe each of these methods, their advantages, and their drawbacks. This may help you better understand research findings, whether reported in the mainstream media, or when reading a research study on your own.

Observational Method

With the observational method (sometimes referred to as field observation) animal and human behavior is closely observed. There are two main categories of the observational method – naturalistic observation and laboratory observation.

The biggest advantage of the naturalistic method of research is that researchers view participants in their natural environments. This leads to greater ecological validity than laboratory observation, proponents say.

Ecological validity refers to the extent to which research can be used in real-life situations.

Proponents of laboratory observation often suggest that due to more control in the laboratory, the results found when using laboratory observation are more meaningful than those obtained with naturalistic observation.

Laboratory observations are usually less time-consuming and cheaper than naturalistic observations. Of course, both naturalistic and laboratory observation are important in regard to the advancement of scientific knowledge.

Case Study Method

Case study research involves an in-depth study of an individual or group of individuals. Case

studies often lead to testable hypotheses and allow us to study rare phenomena. Case studies should not be used to determine cause and effect, and they have limited use for making accurate predictions.

There are two serious problems with case studies – expectancy effects and atypical individuals. Expectancy effects include the experimenter’s underlying biases that might affect the actions taken while conducting research. These biases can lead to misrepresenting participants’ descriptions. Describing atypical individuals may lead to poor generalizations and detract from external validity.

Survey Method

In survey method research, participants answer questions administered through interviews or questionnaires. After participants answer the questions, researchers describe the responses given. In order for the survey to be both reliable and valid it is important that the questions are constructed properly. Questions should be written so they are clear and easy to comprehend.

Another consideration when designing questions is whether to include open-ended, closed-ended, partially open-ended, or rating-scale questions (for a detailed discussion refer to Jackson, 2009). Advantages and disadvantages can be found with each type