

The scientific method is a general model of inquiry in the physical and social sciences. It is a system for keeping track of the theoretical generalizations and data that are accumulated in the social sciences.. Because researchers make observations according to rules of scientific research, the scientific method decreases the probability of error (compared to common sense explanations which may be based on insufficient information. The Positivists believed that society can be studied logically, rationally and objectively. So the scientific method refers to the ways in which science employs procedures, tools and techniques in gaining empirical knowledge.

Characteristics of the scientific method:

- i) Objectivity- This exists when the researcher tries to ensure that bias is minimal by not allowing his/her values and emotions to influence conclusions of the research.
- ii) Reliability- Scientific studies should use reliable data collection tools so that two researchers studying the same behavior should arrive at identical findings.
- iii) Precision in measurement- All concepts must be defined and operationalized in a precise way and rules for measuring specified.
- iv) Systematic- A scientific study is conducted in a planned and logical manner.
- v) Verification- One must state all the procedures and methodological decisions made in the course of the research so that any other researcher can double check and verify the soundness of the research
- vi) Generalization- is the process of going from the particular to the whole or from specific instances to a principle or law. An important goal of science is to arrive at general laws that can explain a variety of behaviours.
- vii) Helpful in prediction- Conclusions drawn as a result of the scientific method are helpful in predicting behavior.
- viii) Have a critical perspective- Researchers should challenge the quality of knowledge they produce. e.g. They should ask are my data reliable and