

TESTING HYPOTHESIS

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Definition of an Hypothesis

- A hypothesis may be defined as a proposition or a set of proposition set forth as an explanation for the occurrence of some specified group of phenomena either asserted merely as a provisional conjecture to guide some investigation or accepted as highly probable in the light of established facts.
- Quite often a research hypothesis is a predictive statement, capable of being tested by scientific methods, that relates an independent variable to some dependent variable

Characteristics of Hypothesis

- Hypothesis should be clear and precise.
- Hypothesis should be capable of being tested.
- Hypothesis should state relationship between variables,
- Hypothesis should be limited in scope and must be specific.
- Hypothesis should be stated as far as possible in most simple terms so that the same is easily understandable by all concerned.
- Hypothesis should be consistent with most known facts
- Hypothesis should be amenable to testing within a reasonable time.

Procedure for Hypothesis Testing

- Make a **formal statement** on the null hypothesis and alternative hypothesis.
- Select a significance level.
- Decide on the distribution to use.
- Selecting a random sample and computing an appropriate value:
- Calculation of the probability:
- Comparing the probability:
- Making the decision

Note

Warning

In Research Methods the idea is to study how to formulate the research problem, conducting literature review and making conclusions on your research.