RESEARCH HYPOTHESIS

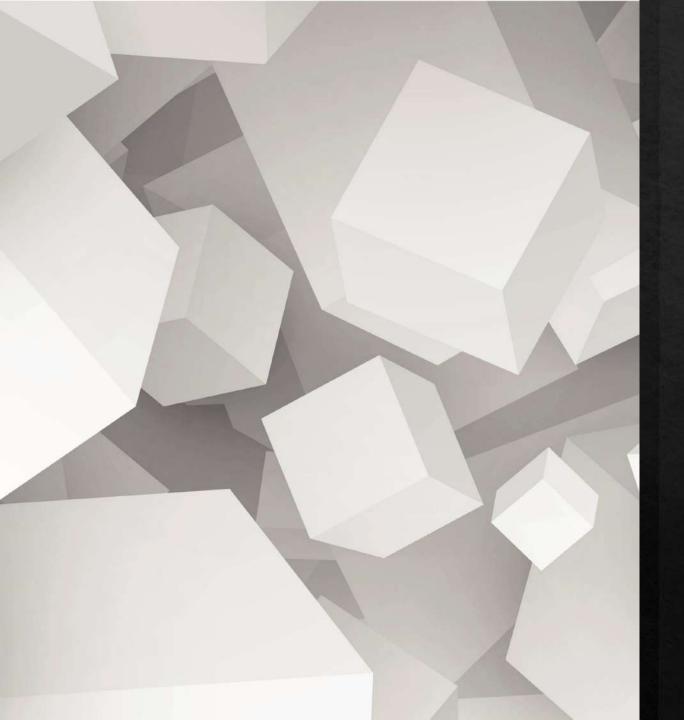
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TABLE OF CONTENTS

- ♦ What is Hypothesis?
- Contributions of Hypothesis
- ♦ Functions of Hypothesis
- ♦ Types of Hypothesis
- Simple Hypothesis
- Complex Hypothesis
- Empirical Hypothesis
- Question form of Hypothesis
- Null Hypothesis

- ♦ Alternative Hypothesis
- Statical Hypothesis
- Oirectional Hypothesis
- Non-Directional Hypothesis
- Causal Hypotheis
- ♦ Associative Hypothesis
- Characteristics of Hypothesis
- Reference



WHAT IS HYPOTHESIS?

- Hypothesis is usually considered as the principal instrument in research. Its main function is to suggest new experiments and observations.
- A mere assumption or some supposition to be proved or disproved. For a researcher hypothesis is a formal question that he intends to resolve.

- Quite often a research hypothesis is a predictive statement, capable of being tested by scientific methods, that relates an independent variable to some dependent methods.
- ♦ For example "students who receive counselling will show a greater increase in creativity than students not receiving counselling." Or "The automobile A is performing as well as automobile B."

These are hypothesis capable of being objectively verified tested. Thus, we may conclude that a hypothesis states that we are looking for and is a proposition which can be put to test to determine its validity.

CONTRIBUTIONS OF HYPOTHESIS

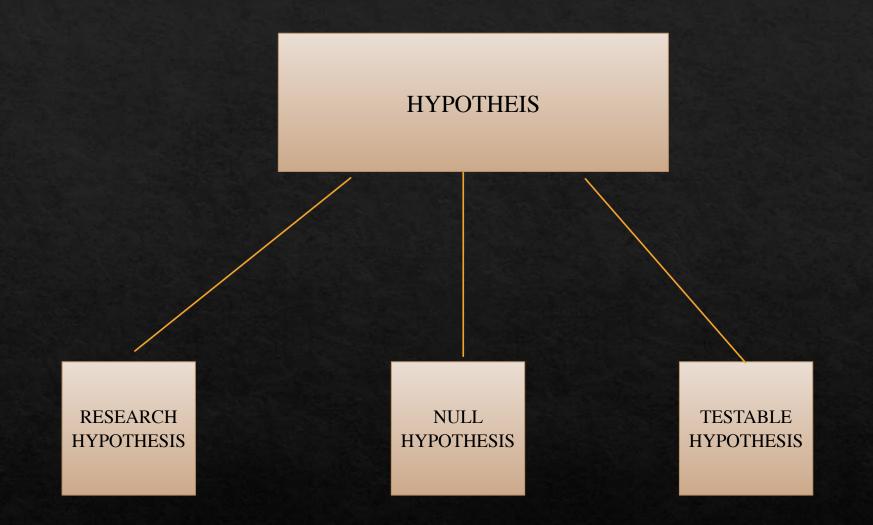
- ♦ It provides clarity to the research problem and research objectives.
- ♦ It describes, explains or predicts the expected results or outcome of the research.
- \diamond It indicates the types of research design.
- ♦ It directs the research study process.
- ✤ It identifies the population of the research study that is to be investigated or examined.
- ♦ It facilitates data collection, data analysis and data interpretation.

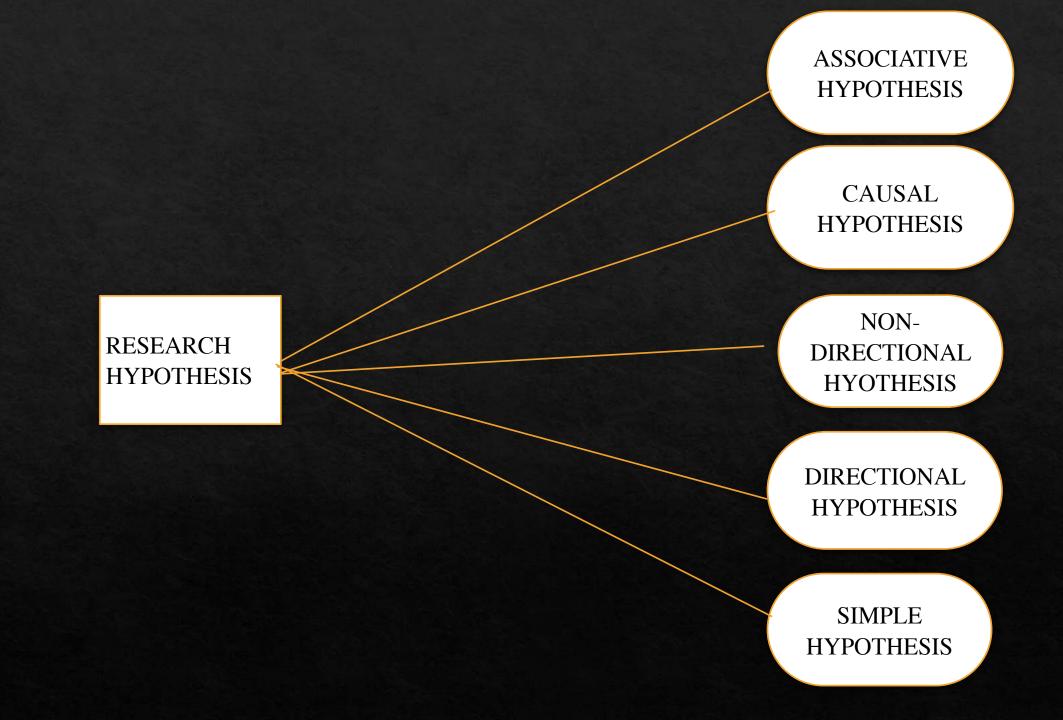
FUNCTIONS

It enables an investigator to start his research work.
It may lead to formulations of another hypothesis.
It leads to interpret results drawing conclusions related to original purpose.

TYPES OF HYPOTHESIS

- ♦ Simple
- ♦ Complex
- ♦ Empirical
- ♦ Null
- ♦ Alternative
- Sector Logical
- ♦ Statistical





SIMPLE HYPOTHESIS

- Simple hypothesis is that one in which there exists relationship between two variables one is called independent variable or cause and the other is dependent variable or effect.
- ♦ Ex. Smoking leads to cancer.
- ♦ The higher ratio of unemployment leads to crimes.

COMPLEX HYPOTHESIS

- Complex hypothesis is that one in which as relationship among variables exists.
- In this type dependent and independent variables are more than two.
 Ex. Smoking and other drugs leads to cancer, tension, chest infections etc.
- The higher ration of unemployment poverty illiteracy leads to crimes like dacoit etc.

EMPIRICAL HYPOTHESIS

Empirical which means it is based on evidence.
In scientific method the word "empirical" refers to the use of working hypothesis that can be tested using observation and experiment.

Empirical data is produced by experiment and observation.

QUESTION FORM OF HYPOTHESIS

♦ It is the simplest form of empirical hypothesis.

- ♦ In simple case of investigation and research are adequately implemented by resuming a question.
- ♦ Ex. How is the ability of 9th class students in learning moral values?

NULL HYPOTHESIS

Null the hypothesis that there is no significant difference between specified populations, any observed difference being due to sampling or experimental error.

♦ It is denoted by HO.

ALTERNATIVE HYPOTHESIS

The alternative hypothesis, denoted by H1 or Ha.
Is the hypothesis that sample observations are influenced by some non random cause.

STATISTICAL HYPOTHESIS

♦A hypothesis which can be verified statistically called statistical hypothesis.

♦ The statement would be logical or illogical but if statistics verifies it, it will be statistical hypothesis.

DIRECTIONAL HYPOTHESIS

Directional hypothesis predicts the direction of the relationship between the independent and dependent variable.

Example- high quality of nursing education will lead to high quality of nursing practice skills.

♦ Girls ability to learning moral science is better than boys.

NON DIRECTIONAL HYPOTHESIS

Non directional hypothesis predicts the relationship between the independent variable and the dependent variable but does not specific the directional of the relationship.

- Example- teacher student relationship influence student's learning.
- There is no significant difference between 9th class boys and girls abilities of learning moral values.

CAUSAL HYPOTHESIS

- ♦ Causal hypothesis predicts a cause and effects relationship or interaction between the independent variable and dependent variable.
- This hypothesis predicts the effect of the independent variable on the dependent variable.

ASSOCIATIVE HYPOTHESIS

Solution Associative hypothesis predicts an associative relationship between the independent variable and the dependent variable.

♦ When there is a change in any one of the variables, changes also occurs in the other variable.

CHARACTERISTICS

A hypothesis must be capable of verification.
A hypothesis is must be relation to the existing body of knowledge.

♦ A hypothesis needs to be precise, simple and specific.

REFERENCES

♦ Wikipedia

♦ Linkedin slideshare

Research Methodology : Methods and Techniques by C.R. Kothari

THANKYOU