# HYPOTHESIS

POLS5001: Research Methodology

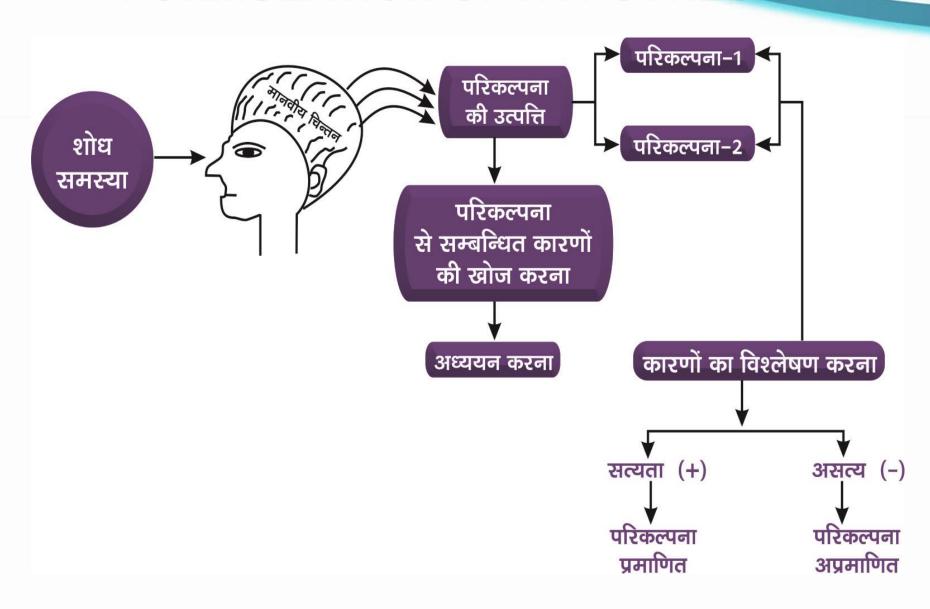
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#### **MEANING OF HYPOTHESIS**

- Hypothesis literally means an idea or theory that the researcher sets as the goal of the study and examines it and is replaced as a theory when the hypothesis is true in the study's conclusion.
- Hypothesis is a material thinking based on scientific process.
- Hypothesis is impossible to generate in the absence of human thought.
- Formulation of hypotheses in scientific study of social problems is an important and strong aspect of research, utility of their use etc.
- Hypothesis gives researcher a new direction in research study.
- In the absence of hypothesis, the researcher cannot move even a step further in his study because on the basis of this thinking he tries to know what is the reason behind this research.
- Hypothesis is the definitive and fully planned path of research study.
- Hypothesis is helpful and useful in giving a definite direction to any research study.
- Hypothesis has an important place in the study of social phenomena.
- Hypothesis controls and directs social research and scientific method.

#### FORMULATION OF HYPOTHESIS



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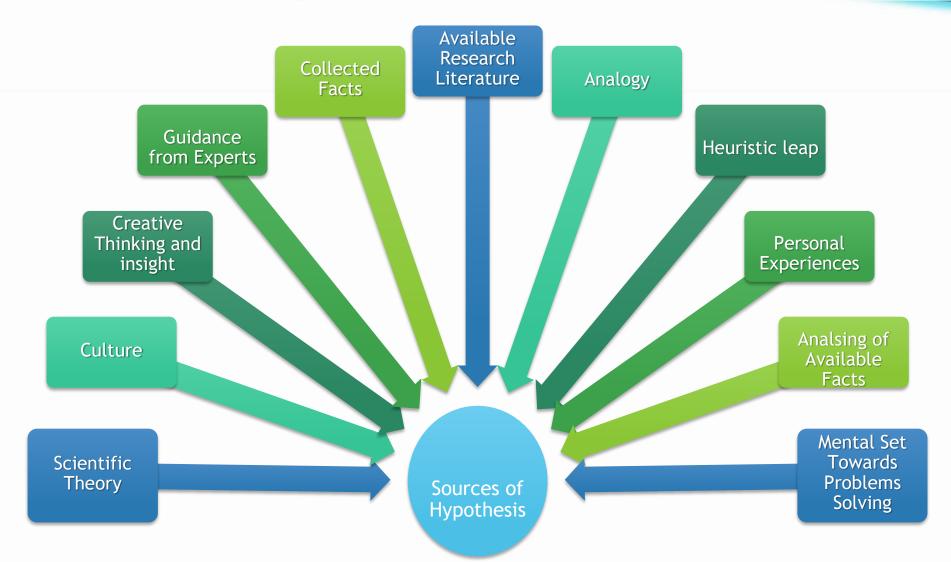
- Thus, hypothesis is a statement which should be a clear, specific, testable and predictable statement.
- Hypothesis must be guided by some available information or evidence.
- > The hypothesis may also has theoretical guidance.
- It can be formulated in various research designs.
- Hypothesis, therefore, requires a research question, first a research question then.
- Collection and study of available informations/ knowledge related to research question then.
- Formulate hypothesis then.
- ➤ Go for testing or verifying preconceived ideas, for it research tools will be decided according to research question.
- Research question can be answered by both qualitative and quantitative research methodologies but hypothesis is mostly used for quantitative research methods approach.
- Hypothesis demonstrate that researcher has prior knowledge about research study.
- Therefore, hypothesis provides direction for data collection and their interpretation.

#### **DEFINITIONS OF HYPOTHESIS**

- Lundberg- A Hypothesis is a tentative generalisation, the validity of which remains to be tested. In its most elementary stages, the hypothesis may be any hunch, guess imaginative idea or Intuition whatsoever which becomes the basis of action or Investigation.
- Bogardus- A Hypothesis is a proposition to be tested.
- ➤ Goode and Hatt- It is a proposition which can be put to test to determinants validity.
- ➤ P. V. Yaung- The idea of a temporary but central importance that becomes the basis of useful research is called a working hypothesis.
- F. N. Kerlinger- A hypothesis is a description of the relationship of two or more variables.
- > **Townsend-** Hypothesis is suggested answer to a problem in the research studies.

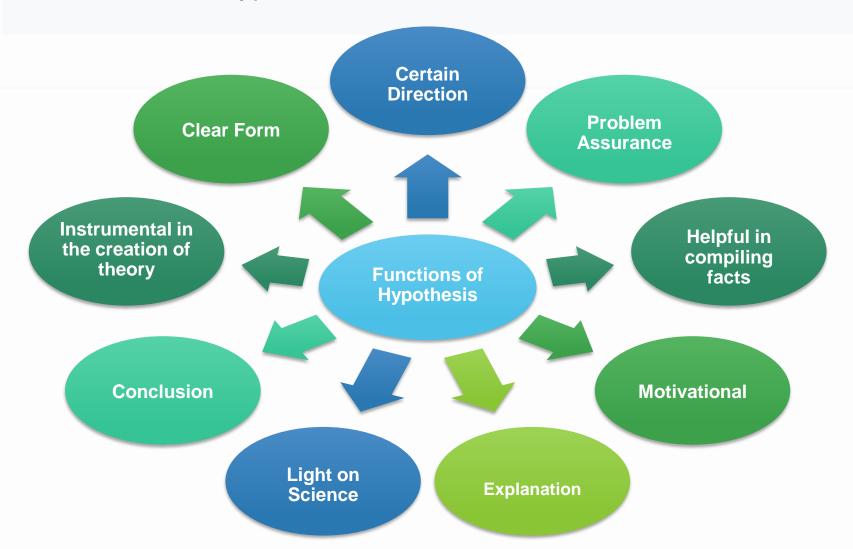
### **SOURCES OF HYPOTHESIS**

The major sources of Hypotheses are as follows:-

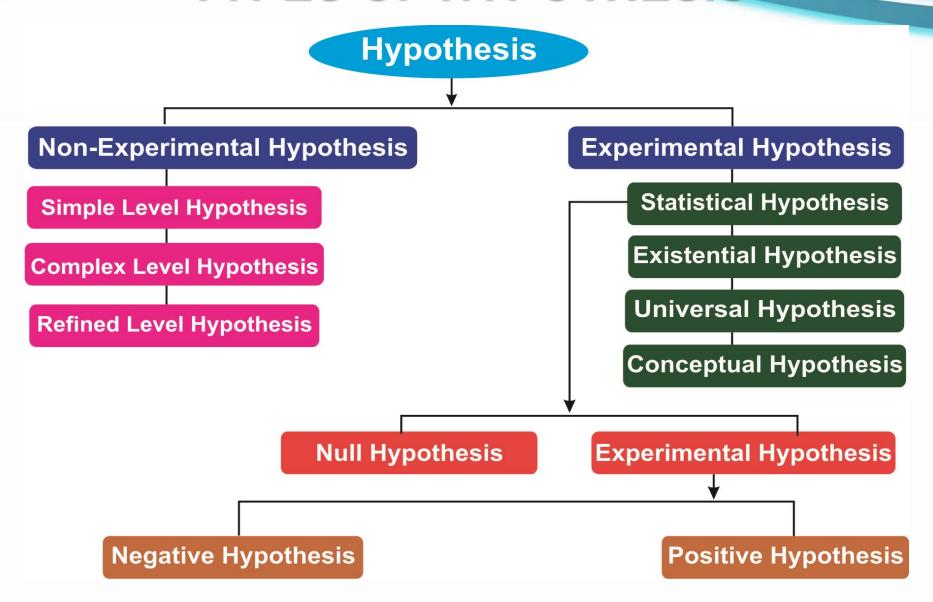


#### **FUNCTION OF HYPOTHESIS**

The Functions of Hypotheses are as follows:-



#### **TYPES OF HYPOTHESIS**



#### NON EXPERIMENTAL HYPOTHESIS

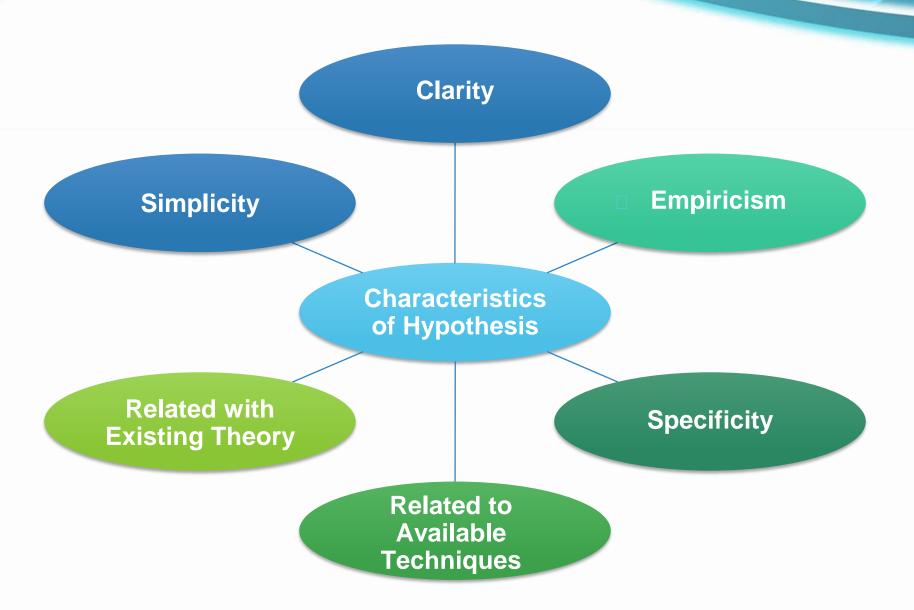
➤ Non Experimental Hypothesis: Non Experimental Research is research that lacks the manipulation of an independent variable, random assignment of participants to conditions or orders of conditions, or both:-

- √ Simple level Hypothesis
- √ Complex level Hypothesis
- √ Refined level Hypothesis

# **EXPERIMENTAL HYPOTHESIS**

- Experimental Hypothesis: The Experimental hypothesis usually precicts a difference between the behavior of groups. Since the groups are usually expuced to different levels of treatment, the Experimental hypothesis is the prediction the experimenter expects to support his data.
  - ✓ Statistical Hypothesis: A Statistical hypothesis is a statement about one or more parameters of population distribution as such. It refer to a situation that might be true. The Statistical hypothesis is two types: 1. Null Hypothesis 2. Experimental hypothesis. Thus the Experimental hypothesis is also two types: (a) Negative Hypothesis (b) Positive Hypothesis
  - ✓ **Existential Hypothesis**: Existential hypothesis is one which states the relationship which holds good for at least one place.
  - ✓ Conceptual Hypothesis: A Conceptual hypothesis is a brief general statement of the expected relationship between an independent variable and dependent variable. A conceptual hypothesis is derived from an experimental model, background research or relevant theories.
  - ✓ Universal Hypothesis: Universal hypothesis asserts that the relationship in question holds for all variables that are specified for all time and at all places.

#### **CHARACTERISTICS OF HYPOTHESIS**



## **HYPOTHESIS DIMENSIONS**

- ➤ Even if hypothesis is confirmed in survey analysis, the possibility is that it may be false or fake.
- There is inherent link between the independent and dependent variables.
- ➤ The empirical support of an hypothesis in survey research represents weaker confirmation than hypothesis tested by means of experimentation.
- Theoretical based survey requires more elaboration.

#### FOUR STAGES OF HYPOTHESIS TESTING

- EXPERIMENTATION: Research study focuses its study which is manageable and approachable to it and where it can test its hypothesis. The study gradually becomes more focused on its variables and influences on variables so that hypothesis may be tested. In this process, hypothesis can be disproved.
- > REHEARSAL TESTING: The researcher should conduct a pre testing or rehearsal before going for field work or data collection.
- ➤ FIELD RESEARCH: To test and investigate hypothesis, field work with predetermined research methodology tools is conducted in which interviews, observations with stakeholders, questionnaires, surveys etc are used to follow. The documentation study may also happens at this stage.
- ➤ PRIMARY & SECONDARY DATA/INFORMATION ANALYSIS : The primary or secondary data and information's available prior to hypothesis testing may be used to ascertain validity of hypothesis itself.

### **EVALUATION OF HYPOTHESIS**

- It should be explain with the movement of study, anticipated relationship between variables.
- ➤ It must be testable and to be proven wrong. The study adopted techniques should be capable to test hypothesis whether it is truth or false.
- ➤ It should be connected to available informations, not being utopian.
- ➤ It should be clear, straight forward, focused or targeted and small in size, bigger statement bigger chances to be confusing.

# CONCLUSION

- Thus hypothesis is a preconceived idea that is formulated with the preparation of research design on the basis of available information's connected to the research question/study which is clear, testable and theoretically be established.
- Hypothesis provides clear guidance to the research study.
- > It also decides types of research design.
- It is called an educated guess.
- ➤ It gives empirical direction to the study and maintain focus of the study which helps in deciding research tools to achieve investigative objectives.

Thank You