# NATURE & CHARACTERISTICS OF A GOOD HYPOTHESIS

**Degree Course (Three Years)**

**Psychology Honours**

**B. A. Part– III Honours Paper VI: Group A (Research Methodology)**

**Unit 2**

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## HYPOTHESIS

Hypothesis is usually considered as the principal instrument in research. Its main function is to suggest new experiments and observations. Ordinarily, when one talks about hypothesis, one simply means a mere assumption or some supposition to be proved or disproved. But for a researcher hypothesis is a formal question that he intends to resolve. Thus 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. For example, consider statements like the following ones.

The term hypothesis has been defined in several ways. Some important definitions have been given in the following paragraphs

- A tentative supposition or provisional guess "It is a tentative supposition or provisional guess which seems to explain the situation under observation." – James E. Greighton

- According to John W. Best, "It is a shrewd guess or inference that is formulated and provisionally adopted to explain observed facts or conditions and to guide in further investigation.

- George, J. Mouly defines that, "Hypothesis is an assumption or proposition whose testability is to be tested on the basis of the computability of its implications with empirical evidence with previous knowledge."

- "A hypothesis is a tentative statement of the relationship between two or more variables. Hypotheses are always in declarative sentence form and they relate, either generally or specifically variable and variables."

**NATURE OF HYPOTHESIS**

The following are the main features of a hypothesis:

1. It is conceptual in nature. Some kind of conceptual elements in the framework are involved in a hypothesis.

2. It is a verbal statement in a declarative form. It is a verbal expression of ideas and concepts, it is not merely idea but in the verbal form, the idea is ready enough for empirical verification. 3. It has the empirical referent. A hypothesis contains some empirical referent. It indicates the tentative relationship between two or more variables.

4. It has a forward or future reference. A hypothesis is future oriented. It relates to the future verification not the past facts and information's.

5. It is the pivot of a scientific research. All the research activities are designed for its verification.

The nature of hypothesis can be well understood by differentiating it with other terms like assumption and postulate.

**CHARACTERISTICS OF A GOOD HYPOTHESIS**

A good hypothesis must possess the following main characteristics:

1. Hypothesis should be capable of being tested. In a swamp of untestable hypotheses, many a time the research programmes have bogged down. Some prior study may be done by researcher in order to make hypothesis a testable one. A hypothesis "is testable if other deductions can be made from it which, in turn, can be confirmed or disproved by observation." A good hypothesis is in agreement with the observed facts.

2. A good hypothesis does not conflict with any law of nature which is known to be true.

3. Hypothesis should be clear and precise. If the hypothesis is not clear and precise, the inferences drawn on its basis cannot be taken as reliable A good hypothesis is stated in the simplest possible term.

4. A good hypothesis permits of the application of deductive reasoning.

5. A good hypothesis shows very clear verbalization. It is different from what is generally called hunch. Hypothesis should be stated as far as possible in most simple terms so that the same is easily understandable by all concerned. But one must remember that simplicity of hypothesis has nothing to do with its significance

6. A good hypothesis ensures that the methods of verification are under control of the investigator.

7. A good hypothesis guarantees that available tools and techniques will be effectively used for the purpose of verification.

8. Hypothesis should be limited in scope and must be specific. A researcher must remember that narrower hypotheses are generally more testable and he should develop such hypotheses. A good hypothesis takes into account the different types controls which are to be exercised for the purpose of verification.

9. A good hypothesis ensures that the sample is readily approachable. Hypothesis should state relationship between variables, if it happens to be a relational hypothesis.

10. A good hypothesis indicates clearly the role of different variables involved in the study.

11. A good hypothesis maintains a very apparent distinction with what is called theory law, facts, assumption and postulate

12. Hypothesis should be consistent with most known facts i.e., it must be consistent with a substantial body of established facts. In other words, it should be one which judges accept as being the most likely.

13. Hypothesis should be amenable to testing within a reasonable time. One should not use even an excellent hypothesis, if the same cannot be tested in reasonable time for one cannot spend a life-time collecting data to test it.

14. Hypothesis must explain the facts that gave rise to the need for explanation. This means that by using the hypothesis plus other known and accepted generalizations, one should be able to deduce the original problem condition. Thus hypothesis must actually explain what it claims to explain; it should have empirical reference.