

Hypothesis

What is Hypothesis?

A hypothesis is a tentative generalisation, the validity of which remains to be tested. In its elementary stage, a hypothesis may become the basis for action or investigation. According to Goode and Hatt, "a hypothesis is a proposition which can be put to test for determining the validity. Kerlinger states hypothesis as a conjectural statement of the relationship between two or more variables. A hypothesis is stated in declarative form and they always relate either generally or especially variable.

Different experts define hypothesis in different ways. Some of the definitions are as below.

The hypothesis is the conjectural (suggested) relationship between two variables.

The hypothesis is an elaborated theory. The validity of which remains to be tested. (William H. George)

When any hypothesis is provided that become theory So, a hypothesis is the immature theory.

The hypothesis is any hunch guess or imaginative idea which may be the basis of resonating.

From the above definition, we can conclude that hypothesis is the basis of resonating any fact which provides as a key where we have to move. Not only in case of research, a hypothesis is used in ever walking of life. In our daily life most of the time we are taking decision according to some hypothetic which may or may not true.

Types of Hypothesis

Below are some of the important types of hypothesis

1. Simple Hypothesis
2. Complex Hypothesis
3. Empirical Hypothesis
4. Null Hypothesis
5. Alternative Hypothesis
6. Logical Hypothesis
7. Statistical Hypothesis

Simple Hypothesis

Simple hypothesis is that one in which there exists relationship between two variables one is called independent variable or cause and other is dependent variable or effect. For example

1. Smoking leads to Cancer
2. The higher ratio of unemployment leads to crimes.

Complex Hypothesis

Complex hypothesis is that one in which as relationship among variables exists. I recommend you should read characteristics of a good research hypothesis. In this type dependent as well as independent variables are more than two. For example

1. Smoking and other drugs leads to cancer, tension chest infections etc.
2. The higher ration of unemployment poverty, illiteracy leads to crimes like dacoit, Robbery, Rape, prostitution & killing etc.

Empirical Hypothesis

Working hypothesis is that one which is applied to a field. During the formulation it is an assumption only but when it is put to a test become an empirical or working hypothesis.

Null Hypothesis

Null hypothesis is contrary to the positive statement of a working hypothesis. According to null hypothesis there is no relationship between dependent and independent variable. It is denoted by 'H₀'.

Alternative Hypothesis

Firstly many hypotheses are selected then among them select one which is more workable and most efficient. That hypothesis is introduced latter on due to changes in the old formulated hypothesis. It is denote by "H₁".

Logical Hypothesis

It is that type in which hypothesis is verified logically. J.S. Mill has given four canons of these hypothesis e.g. agreement, disagreement, difference and residue.

Statistical Hypothesis

A hypothesis which can be verified statistically called statistical hypothesis. The statement would be logical or illogical but if statistic verifies it, it will be statistical hypothesis.

Characteristics of Hypothesis

A hypothesis must possess the following characteristics:

- (i) 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.
- (ii) Hypothesis should be capable of being tested. In a swamp of un-testable hypotheses, many a time the research programs have bogged down. Researcher may do some prior study 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."
- (iii) Hypothesis should state relationship between variables, if it happens to be a relational hypothesis
- (iv) 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
- (v) Researchers should state hypothesis 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
- (vi) 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
- (vii) 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
- (viii) 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.

The importance of Hypothesis.

The importance of the hypothesis is as listed as below points.

1. It determines the method of verification as well as the procedure of enquiry.
2. It adequately explains all the facts connected with the research.
3. It helps in deciding the direction in which to proceed.
4. It suggests experiments and observation.
5. It leads to the discovery of lens.
6. It helps to draw the specific conclusion.

REFERENCES

1. www.google.com
2. www.wikipedia.org
3. www.studymafia.org