NOTES

ECD 113 M. No. 06

Module Name: Meaning, Importance and Sources of Hypothesis

Meaning of Hypothesis

- Hypothesis is a hunch, assumption, suspicion, assertion or an idea about a phenomenon, relationship or situation, the reality or truth of which you don't know.
- 'Hypo' means tentative or subject to the verification and 'thesis' means statement about solution of a problem.
- It is a declarative statement combining concepts. It is a tentative answer to research question.
- Goode and Hatt defined Hypothesis as "a proposition which can be put to a test to determine its validity".
- A tentative supposition or provisional guess which seems to explain the situation under observation.
- For example, consider a statement: "students who receive counseling will show a greater increase in creativity than students not receiving counseling." "Families with higher income spend more on recreation".
- The formulation of Hypothesis plays an important part in the growth of knowledge in every science.
- Hypothesis serves to explain already known facts in a given area of research and to guide the search for new truth on the basis of empirical evidence.

Importance of Hypothesis

• It brings direction and focus to research study. A hypothesis gives a definite point to the investigation, and it guides the direction on the study. Without a hypothesis, researches become unfocussed.

- It brings the clarity and specificity to the study. It tells you what specific aspects of a research problem to investigate.
- It specifies the sources of data -what data to collect and what not to collect, thereby also providing focus to the study. Hence it enhances the validity of the theory.
- It determines the data needs defines which facts are relevant and which are not; prevents a blind search and indiscriminate gathering of data.
- It determines the most appropriate technique of analysis.
- A hypothesis contributes to the development of theory. It links theory and investigation. It serves the function of linking together related facts and information and organizing them into one comprehensible whole.
- It serves as a framework for drawing conclusions. It makes possible the interpretation of data in the light of tentative proposition or provisional guess. Thus it provides the outline for setting conclusions in a meaningful way.
- A hypothesis may enable you to add to the formulation of theory. It enables you to conclude specifically what is true or what is false.

Sources of Hypothesis

i. Theory:

- It gives direction to research by stating what is known.
- For example, 'profit/wealth maximization is considered as the goal of private enterprises.' From this assumption, various hypotheses can be derived. For instance, "the rate of return on capital employed is an index of business success." "Higher the earning per share, more favorable is the financial leverage."
- ii. **Observation:** Hypothesis can be derived from observation. For instance, the observation of price behaviour in market. The relationship between the price and demand for a product is hypothesized.

- iii. **Intuition and personal experience:** Personal life and experiences of persons determine their perception and conception. Greater the researcher experience lead to higher degree of formation. For example story of Sir Isaac Newton and falling apple illustrate this individual accidental process.
- iv. **Findings of studies:** Hypothesis may be developed out of the findings of other studies in order to replicate and test.
- v. **State of Knowledge:** Where Formal theories exist, hypothesis can be deduced. Formal theories are scarce; hypotheses are generated from conceptual framework.
- vi. **Analogies:** Observation of a similarity between two phenomena may be a source of formation of a hypothesis aimed at testing similarity in any other respect. Julian Huxley has pointed out that "casual observation in nature or in the framework of another science may be a fertile source of hypothesis." The success of a system in one discipline can be used in other discipline also.
- vii. **Culture:** Culture is the accumulation of ways of behaving and adoption in a particular place and time. While formulating a hypothesis for a problem, culture should be studied. If we want to study trends towards female education in a particular area, for this purpose we will study, traditions, family system, Norms, Values, region and education system of that area.
- viii. **Continuity of Research:** Continuity of Research in a field itself constitutes an important source hypothesis. Rejection is some hypotheses leads to the formation of new ones capable of explaining dependent variables in subsequent researches on the same subject.