

Facts/concept/definition /variable/Theory

The science of research and scientific methodology

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Introduction

- **Every Science has its own vocabulary, terminology**
- **Evolution of any subject as a Science: Many facts, concepts, definitions, variables, and theories come into existence.**
- **These are the basis of science**
- **The Utility of science depends on these things**
- **All these are interrelated and interlinked**
- **Well defined concepts, verified facts, valid theories can solve sociological problems and become more universal and useful for the society.**

Facts

- **Facts are propositions which are supported by evidences**
- **It is limited to one particular thing or anybody, group of things or events explaining particular aspects**
- **Its object is to specialise the term**
- **Facts are specialised and particular in nature**
- **Something that has actual existence**
- **Eg. Sun is a celestial body**
- **Leaves are green**
- **India is multi religious country**

Concepts

- Facts arranged in a systematic way
- Concept is a generalized term for a class of objects and facts
- Purpose of concept is to simplify thinking on a particular Subject by summarizing number of facts related with one event or act.
- It relates to a group of facts , Hence it is wider than facts and includes various facts on particular Subjects.
- **McClelland:** Concepts are the way of representing reality in shorthand
- **Kerlinger:** Concept is a expression formed by generalisation of particular thing (Facts)
- Income, Child , Age of majority
- Property, Movable , Immovable

Concepts

- **Concepts are necessary to formulate a problem for research and solve it systematically**
- **Concept are specific aspect of subject**
- **It has meaning in particular framework of subject**
- **It lose its meaning if separated from the subject**
- **It represent certain characteristics and elements which are found in the group of facts**
- **The nature of Concept is interlinking between fact and theory**
- **Eg. Theft , rape, negligence , murder are concepts which deals with particular typical situations or group of facts**

Kinds of Concept

1. **Empirical Concepts:** These concepts are evolved on the basis of the experiences of researcher who have evolved that concept. These concepts can be experienced by anyone.
2. **Relational Concepts:** These are abstract concepts indicating relations between two or more phenomenon/facts/concepts.
3. **Valuation Concepts:** ought to be. These concepts are related with the subjects with the value loaded relation. It never explains the concept as it is but explains it as it ought to be. These are normative and not subject to experience. Eg. Law should be for just and reasonable.
4. **Ideal Concepts:** These are neither experiential or normative. These are made an instrument of analysis.
5. **Exploratory Concepts:** They are explaining concepts. Semi empirical and semi valuation concepts. Some facts are subject to experience and some facts are normative in character and set norms.

Conceptualisation

- It is a process of making and forming of concepts
- **Prof Dodd** - Conceptualisation is a process of organizing and systematically arranging various facts and giving label to it.
- **Prof. Blummon-** Conceptualisation means to process the available raw data to formulate a concrete Concept. This process starts with symbolising the facts and ends with conceptualization of facts.
- Conceptualisation is abstraction of concept from the class of facts.
- Researcher collects the related fact, arrange them systematically, analyse them to form a concrete concept.
- Researcher needs training for this to get concepts to built a theory.

Definition

- Symbolic representation of concept
- Few word Substitution for concepts
- The Function of definition is to explain the conditions under which and operations under which concept can symbolically represented.
- Shortest Representation of concept
- Instead of writing concepts we can write definition to avoid repetition.

Two Types

Formal Definition:It gives general meaning of concept which explains general nature of the phenomenon.

Operational definition:It provides criteria and conditions under which the concept operates. Exact meaning. It limits the exact boundaries of concept for clear and proper understanding

Variables

- Explain cause effect relationship by way of proposition
- Variables interlinks two or more concepts in such a way that some new propositions comes into existence
- The propositions are formulated by conceptualization of various facts.
- While creating concepts some facts are to be used In the process variables becomes an interlinking factors on the basis of which relation between concept changes.
- Poverty is a Cause of Crime
- Poverty /Illiteracy/ Psychology (Dependent variable)is cause of crime(Concept & Independent variable)
- Illiteracy is a cause of exploitation

Theory

Arnold Rose: Theory is an integrated body of definitions , assumption, and general propositions with reference to given subject matter from which a general conclusions & testable hypothesis can be deducted.

According to H W Smith: Theory is a set of interrelated hypotheses or propositions.

Prof. Young: A theory consist of set of hypothesis which are arranged in such a way that from some of the hypothesis all the hypothesis flow logically.