## VARIABLES <br> S. K.Kataria

## MEANING

A variable in social research is an attribute( object of study ) which is tested on various values and it may increase or decrease.

Variable is a non-constant object of a research / study.
A variable has the nature of 'vary'.
Variables are properties or characteristics of some event, object, person, place or thing that are measurable and can take on more than one value, or vary.

Variables decide the way of testing hypothesis and statistical techniques are used with variables.

## CHARACTERISTICS

Variables may show change in quality or quantity.
Dependent and independent variables are interconnected.
Variables explain cause- effect relationship.
Variables are related with hypothesis too.
These help in testing the magnitude or strength of some value.
Variables have observational feature and help in measuring something.
These are also known as 'data-item' e.g-age, sex, education, height, weight etc.

## TYPES OF VARIABLES

There are so many types of variables-
-A dependent variable is one that has been identified as the manifestation of some social phenomenon and that is caused by, or associated with, other independent variables. Explains the 'cause'.
-An Independent variables are those variables that, to some extent, explain a phenomenon. Explains the 'effect'.
-An extraneous variable is one that might also (i.e. as well as the explanatory variable) explain the phenomenon in question, and that must be ruled out as a possible explanation by the use of controls.

## CONTD.

A continuous variable is one that may assume any value between two an upper and lower limit. Examples of continuous variables include age and income.

A discontinuous variable has the nature of 'round figure' results, not in decimals. Also have two values like- agree/not agree or satisfied/not satisfied.

An intervening variable creates complexity between dependent and independent variables. (e.g-Social integration is such the variable between married life and suicide)

Some other types are experimental, moderating variable etc.

## RELATIONSHIP

| Dependent variable (X) | Independent variable ( Y ) |
| :--- | :--- |
| Presumed cause | Presumed effect |
| Stimulus | Response |
| Predicted from | Predicted to |
| Antecedent | Consequence |
| Manipulated | Measured outcomes |
| Predictor | Criterion |

## HYPOTHESIS AND VARIABLES : SOME EXAMPLES

| Hypothesis | Independent Variable | Dependent Variable |
| :--- | :--- | :--- |
| Nutritious Mid day meal and less <br> diseases | Mid day meal | Diseases |
| Extensive audit and less <br> embezzlement | Audit | Embezzlements |
| High temperature and sand storm <br> More police patrolling and less <br> thefts | Temperature | Sand storms |

