

PSY115:STATISTICAL METHODS FOR PSYCHOLOGICAL RESEARCH

L:3 T:1 P:0 Credits:4

Course Outcomes: Through this course students should be able to

- CO1 :: apply various statistical methods used in psychological research.
- CO2 :: analyze data from psychological research using advanced statistical techniques.
- CO3 :: evaluate measures of central tendency
- CO4 :: analyze measures of variability and correlational methods.
- CO5 :: hypothesize relevance of research and statistics in psychology.
- CO6 :: apply statistical methods to evaluate hypotheses and research findings.

Unit I

Introduction : what is psychological research, variables and constants, types of research, relevance of research and statistics in psychology, types of variables

Unit II

Graphical Representations and Frequency Distribution : importance of graphical representation of data, graphical representation of grouped and ungrouped data, frequency distributions, decile, quartile, percentile

Unit III

Measures of Central Tendency and variability : the median, the mode, the mean, range, interquartile and the semi-interquartile range, the average deviation, the standard deviation and variance

Unit IV

Correlation : types of correlation, Pearson's correlation coefficient correlation, multiple correlation, Spearman's rank-order correlation

Unit V

Sampling techniques : sampling, probability sampling and its types, non-probability sampling and its types, advantages and disadvantages of sampling techniques

Unit VI

The Normal Distribution : the nature of the normal curve, the normal curve as a model for sampling distributions, introduction to normal curve, skewness and types, kurtosis and types, characteristics of NPC

Text Books: 1. STATISTICS IN PSYCHOLOGY AND EDUCATION by HENRY E. GARRETT., PARAGON HOUSE

References: 1. STATISTICS IN PSYCHOLOGY AND EDUCATION by MANGAL, S. K., PHI Learning Pvt Ltd