

PSY 06. Research Methods and Data Processing

Objective: To familiarize students with the paradigms and perspectives of research methodology and use of statistics as a tool for data analysis in quantitative and qualitative research.

Marks: 100 +50 (Practicum)

Contact hours: 48

1. Introduction: Paradigms: Positivist, interpretivist, critical; Research traditions: Qualitative and quantitative traditions and their steps; Basic issues in research ethics. Selecting the sample: methods of sampling: Probability, non-probability and mixed. (14 hours)

2. Analyzing relationship between variables: Descriptive and inferential statistics; levels of measurement; Parametric and non-parametric statistics; Correlation- Pearson and Spearman (nature, computation and factors affecting it) (12 hours)

3: Analyzing differences between groups: Normal Probability Curve, t-test and ANOVA (one-way), Chi Square. (12 hours)

4: Using Qualitative Methods: Case Study, Content analysis and Focus Group.(10 hours)

Practicum: Any 2 practicum pertaining to PSY 06 (Research Methods and Data Processing) out of the list suggested below:

1. Using SPSS to assess and interpret any two of the following:
 - t-test
 - One-way ANOVA
 - Chi-Square
 - Correlation
 - Parametric & Non-Parametric tests.
2. Collecting data and analyzing it using any two of the following qualitative methods;
 - Case study
 - Focus groups
 - Content Analysis

Readings:

1. Coolican, H. (2006). Introduction to Research Methodology in Psychology. London: Hodder Arnold. (pp.18-24, Chapters 15, 17)
2. Gravetter, F.J. (2009). Statistics for the Behavioral Sciences. Cengage Learning.(Chapters 1,6,7,8,9,10,11,13.)
3. Howell, D. (2009) Statistical methods for Psychology. (Chapters 3, 4, 5,6,7,9,12.)
4. King, B.M.& Minium, E.W, (2007). Statistical Reasoning in the behavioral Sciences USA: John Wiley & Sons.(Chapters 1,6, 7,14,18,19, 20.)
5. Mangal, S.K. (2012). Statistics in Psychology & Education. 2nd Edition. New Delhi: PHI learning Pvt. Ltd (Chapters 1,7 8,9 10,11,17).