

SHIVAJI UNIVERSITY, KOLHAPUR
REVISED COURSE WORK FOR M Phil / Ph D IN PSYCHOLOGY
FACULTY OF HUMANITIES
PAPER NO. I (COMPULSORY COURSE / PAPER)

Research Methods and Statistics in Psychology

Unit 1. General Issues in Psychological Research:

- 1.1 Thinking Like a Researcher
- 1.2 The Scientific Method
- 1.3 Ethical Issues and plagiarism in the Conduct of Psychological Research
- 1.4 Problem and Hypothesis
- 1.5 Variables
- 1.6 Reviewing the Literature

Unit 2. Quantitative Research Techniques or Methods:

- 2.1 Observation and Survey Research
- 2.2 Independent Groups Designs
- 2.3 Repeated Measures Designs
- 2.4 Complex Designs
- 2.5 Single-Case Designs and Small-n Research
- 2.6 Quasi-Experimental Designs

Unit 3. Measurement and Scaling Techniques:

- 3.1 Measurement in Research and Measurement Scales
- 3.2 Sources of Error in Measurement
- 3.3 Tests of Sound Measurement
- 3.4 Technique of Developing Measurement Tools Scaling
- 3.5 Meaning of Scaling and Scale Classification Bases
- 3.6 Important Scaling Techniques and Scale Construction Techniques

Unit 4. Statistical Analysis, Reporting Research and Computer Application:

- 4.1 Central Tendency, Variability and Application of Normal Probability

- 4.2 Significance of the Difference between Means and other Statistics
- 4.3 Correlation, Regression, ANOVA, MANOVA and Non-Parametric Statistics
- 4.5 Structure of a Research Report
- 4.6 Computer Application in Research: Excel, SPSS and R

Reference

1. Shaughnessy, J. J., Zechmeister, E. B., Zechmeister, J. S. (2012). *Research Methods in Psychology*. McGraw Hill International Edition. (Ninth Edition).
2. Cothari, C. R. (2004). *Research Methodology: Methods and Techniques*. New Age International (P) Ltd. New Delhi.
3. Banmali, M. & Misra, S. (2016). *Statistics for Behavioural and Social Sciences*. Sage Publications India Pvt. Ltd. New Delhi. (First Edition).
4. Mangal, S. K. (2006). *Statistics in Psychology and Education*. Prentice-Hall of India Private Ltd. Delhi. (Second Edition)
5. Bray, J. H. & Maxwell, S. E. (1985). *Multivariate analysis of variance*. Sage Publication Inc.
6. Best, J. W., Kahan, J. V. & Jha, A. K. (2017). *Research in Education*. Pearson India Education Services Private Lt. Noida. (Tenth Edition).
7. Ranjit, Kumar. (2014). *Research Methodology: A step-by-step guide for beginners*. 4th Edition. Sage Texts, Sage Publications India Pvt Ltd.
8. Andy, Field. (2019). *Discovering Statistics Using IBM Statistics*. Sage Texts. (4th Edition).
9. Jared, P. Lander. (2018). *R for Everyone Advanced Analytics and Graphics*. Pearson Education Inc. (2nd Edition).
10. Levine, Devid M. (2017). *Statistics for Managers, Using Microsoft Excel*. Pearson Education Inc. (8th Edition).