

Core Paper- V PSYCHOLOGICAL STATISTICS

Introduction: The course is designed to equip students with knowledge in the fundamentals of statistics and research methods so that they understand the application of statistics to different research problems in psychology.

Learning Objectives:

- To help students develop knowledge and understanding of the application of Statistics within Psychology
- To help students develop critical thinking for application of appropriate statistical analysis in Psychological research

Expected outcomes: Students will be able to understand

- The nature of psychological variables and how to measure them using appropriate scale.
- The processes of describing and reporting statistical data.
- The methods of drawing inferences and conclusions for hypothesis testing by using appropriate statistical analysis.

UNIT-I: Fundamentals of statistics

- (i) Meaning and scope of statistics, Nature of variables- Categorical and Continuous, Levels of Measurement- Nominal, Ordinal, Interval, and Ratio
- (ii) Drawing frequency distribution; Graphical representation of grouped data-Polygon, Histogram, Ogive.

UNIT- II: Measures of Statistics

- (i) Measures of Central Tendency- Characteristics of mean, median and mode; Computation of mean, median, and mode
- (ii) Measures of Variability- Concept of variability, computation of semi-inter quartile range, Standard deviation and variance, Co-efficient of variation

UNIT- III: Sources and Applications

- (i) Concept of Probability; Characteristics of Normal Probability curve, Applications of NPC, Deviation from NPC- Skewness and Kurtosis
- (ii) Concept of correlation, Product-moment correlation (ungrouped data), Rank order correlation, Chi-square test (Contingency Table)

UNIT –IV: Hypothesis Testing

- (i) Level of significance; Type I and Type II error; Computation of 't' for independent and dependent samples
- (ii) Purpose and assumptions of ANOVA; One-way and two-way ANOVA

Practical:

(i) Reporting of Statistical Results: To collect data of 60 (30 boys and 30 girls) High School students about their Annual examination marks in four subjects and to report by descriptive statistical analyses.

(ii) Computer Awareness: To be familiar with software packages of statistics and their applications.

Text Books:

- Aron, A., Aron, E.N., & Coups, E.J. (2007). Statistics for Psychology. (4thEd.) India: Pearson Education, Prentice Hall.
- Ferguson, G.A. & Takane, Y. (1989). Statistical Analysis in Psychology & Education, Tata McGraw Hill Publishing Company, New Delhi
- Garrett, H. E. & Woodworth, R.S. (1985). Psychology in Statistics and Education, Vakils, Feffer & Simons Ltd. Mumbai
- Mohanty, N., Varadwaj, K. & Mishra, H.C. (2014). Explorations of Human Nature and Strength: Practicals in Psychology, DivyaPrakashani, Samantarapur, Bhubaneswar.

Reference Books:

- Mishra, G.C. (2018). Applications of Statistics in Psychology and Education, Kalyani Publisher, New Delhi
- Mohanty, B. and Misra, S. (2017). A text book of Basic Statistics. LaxmiPrakashans, Bhubaneswar, Odisha
- Siegal, S. (1994). Nonparametric Statistics. McGraw Hill, New Delhi

Core Paper XIII COUNSELING PSYCHOLOGY

Introduction: The course is designed to develop entry level counseling psychologists who will be capable of understanding and demonstrating behavior and attitudes in the basic areas of professional counseling.

Learning Objectives:

- To help students understand and integrate current scientific knowledge and theory into counseling practice.
- To make students learn the history and professional issues related to counseling psychology.
- To help students integrate and convey information in the core areas of counseling practice.
- To help students demonstrate professional behavior in their various roles as counseling psychologists.

Expected outcomes: Students will be able to

- Understand the purpose of counseling and practice of counseling ethically following different approaches.
- Understand the basics of counseling process and use them for counseling students, families, couples, distressed, and handicaps.

UNIT-I: Basics of Counseling

- (i) Meaning, scope and purpose of counseling with special reference to India; The counseling process, counseling relationship, counseling interview
- (ii) Characteristics of a good counselor, Ethics and values in counseling; Education and training of the counselor

UNIT –II: Theories and Techniques of Counseling

- (i) Psychodynamic approach-Freud and Neo Freudians; Humanistic approach-Existential and Client centered
- (ii) Cognitive approach- Rational-emotive and transaction analysis; Behavioral approach- Behavior modification; Indian contribution- yoga and meditation

UNIT- III: Counseling Programs

- (i) Working in a counseling relationship, transference and counter transference, termination of counseling relationship, Factors influencing counseling
- (ii) Student counseling, Emphases, roles and activities of the school, and college counselor.

UNIT –IV: Counseling application

- (i) Family and Marriage Counseling, Family life and family cycle, Models and methods of family counseling
- (ii) Alcohol and drug abuse counseling; Counseling the persons with Suicidal tendencies, and Victims of Harassment and Violence

Practical:

- (i) Marital Relationship- To assess the marital relationship of 2 couples using Lerner's Couple adjustment scale
- (ii) Case Reporting: To complete four case studies of high school students with problem behavior in the appropriate case record proforma

Text Books:

- Gladding, S.T. (2009). Counseling: A comprehensive profession (6th Ed.). New Delhi: Pearson India
- Mishra, H.C. & Varadwaj, K. (2009). Counseling Psychology: Theories, Issues and Applications, DivyaPrakashini, Samantarapur, Bhubaneswar, Odisha
- Burnard Philip. (1995). Counseling Skills Training – A sourcebook of Activities. New Delhi: Viva Books Private Limited.

- Gibson, R.L & Mitchell M.H. (2003). Introduction to counseling and Guidance. 6th edn. Delhi: Pearson Education

- Mohanty, N., Varadwaj, K. & Mishra, H.C. (2014). Explorations of Human Nature and Strength: Practicals in Psychology, DivyaPrakashani, Samantarapur, Bhubaneswar.

Reference Books:

- Feltham, C and Horton, I. (2000). Handbook of Counseling and Psychotherapy. London: Sage.

- Misra, G. (Ed) (2010). Psychology in India, Volume 3: Clinical and Health Psychology. New Delhi: Pearson India.

- Nelson-Jones. (1995). The theory and practice of counseling. 2nd Edn. London: Holt, Rinehart and Winston Ltd

- Mohanty, G. B. (2018). Counseling Psychology, Kalyani Publisher, New Delhi.

Discipline Specific Elective Paper-I

PSYCHOLOGICAL RESEARCH AND MEASUREMENT

Introduction: The research methods course is among the most frequently required in the psychology and with good reason. It helps the students know about the difference between an experiment and a correlational study, the function of independent and dependent variables, the importance of reliability and validity in psychological measurement, and the need for replication in psychological research. In other words, psychologists' research methods are at the very core of their discipline. The course is designed to train the students in psychological research and measurement.

Learning Objectives:

- To provide an overview of scientific approaches to psychological research in term of sampling techniques, scientific method, and experimental designs.

- To acquaint the students with respect to psychometric, projective techniques and non-testing approaches like interview

- .Expected outcomes: Students will be able to

- Understand the nature of psychological research and characteristics of scientific methods of research.

- Know the methods of test construction and standardization

- Know the different approaches to assessment of personality.

UNIT-I: Psychological Research

(i) Assumptions of science, Characteristics of scientific methods, Psychological research:

Correlational and experimental

- (ii) Sampling frame: probability and non-probability samples, sample size, sampling error

UNIT- II: Psychological Scaling and Construction of test

- (i) Purpose of scaling and types of psychological data, Psychological scaling methods:

Familiarity with Thurstone, Likert and Guttman scale

- (ii) Construction of test: Theory of measurement error; Operationalizing a concept, Generating items, Item analysis, Item response theory

UNIT –III:

- (i) Experimental Designs: Pretest- post-test design, Factorial designs, Randomized Block design

- (ii) Standardization of tests: Reliability and validity of tests, Development of norms and interpreting test scores

UNIT- IV:

- (i) Assessment of Personality: Psychometric and projective techniques, Familiarity with MMPI, Rorachs, WAT, and TAT

- (ii) Interviewing: Principles and procedures of interviewing, gaining cooperation, motivating respondents, training of interviewers, ethics of interviewing

Practical:

- (i) TAT: To administer the TAT on a subject and give summary report
- (ii) Word Association test: To administer the Jung / Kent-Rosanoff list of WAT on a subject and report on his areas of emotional difficulties

Text Books:

- Anastasi, A. (1988). Psychological Testing. New York: MacMillan
- Minium, E.W., King, B.M. & Bear, G. (1993). Statistical Reasoning in Psychology and Education. New York: John Willey

Reference Books:

- Kerlinger, F.N. (1983). Foundations of Behavioral Research. New York: Surjeet Publications
- Best, W.J. & Kahn, J.V. (2006)- Research in Education. Pearson