# SW523- Research Methods (Part II: Quantitative)

L	Т	Р	Cr
2	0	0	2

## **Course Objectives:**

- Understand the nature, scope and significance quantitative research data in social work practice.
- Develop competence in conceptualizing, designing and implementing research using quantitative paradigms and techniques.
- Understand the nature and application of quantitative research paradigms in a practice profession like social work.

#### **Learning Outcomes:**

- Able to understand basic statistical procedure
- Able to analyzed and interpret quantitative research data
- Able to do graphical presentation of quantitative research data
- Able to use various statistical software for analyzing of research data

## **COURSE CONTENT**

#### **Unit-I: Basic statistical concepts**

- Variables, Data Processing (editing, coding, mastersheet, tabulation, etc.), population, sample and parameter/statistic, Confidence & significance level, precision, etc
- Sampling and non sampling error
- Hypothesis: Meaning and formulation of hypothesis, Steps in testing hypothesis, concept of degree of freedom, Type I and II errors in hypothesis testing.

# Unit II: Basic Statistics and Statistical Methods

- Descriptive statistics: Measures of central tendency (mean, median, mode), Measures of dispersion (range, mean deviation, standard deviation, coefficient of variation),
- Measures of correlation (Product Moment Correlation and regression analysis)
- Basic principles in test of Hypothesis and tests based on Chi-square, Student 't' and 'f' Statistics.
- Preparation of a table and interpretation- Graphical presentation of Data Bar Diagram, Histogram, Frequency Polygon etc.
- Introduction of statistical software

Note: Unit II will be supplemented with computer aided instruction

#### **Textbooks:**

Selltiz, C., Wrightsman, L.S. &Cook, S.W.1976, Research Methods in Social Relations. New York: Holt, Rinehart and Winston.

Laldas D.K. 2000, Practice of Social Research: Social Work Perspective. New Delhi: Rawat Publications

Bruce, B. L.1995, Qualitative Research Methods for the Social Sciences. Boston: Allyn and Bacon.

Podgett, D.1998, Qualitative Methods in Social Work Research. Challenges and Rewards.

New Delhi: Sage Publications.

Miles, M. & Huberman, A.1994, Qualitative Data Analysis: A Sourcebook of New Methods, 2nd Edition. Thousand Oaks: Sage Publications.

#### **Additional Readings:**

Black, J.A. &Champion, D.J.(1976). Methods and Issues in Social Research. New York: John Wiley. Bailey, K.D. (1982). Methods of Social Research. New York: The Free Press.

Burns, R.B.(2000). Introduction to Research Methods. New Delhi: Sage Publications.

Denzin, N. &Lincoln, Y. (Eds.). (1994). Handbook of Qualitative Research. Thousand Oaks: Sage Publications.

Dobbert, M.L.(1982). Ethnographic Research: Theory and Application for Modern Schools and Societies. New York: Praeger.

Goode, W.J. &Hatt, P.K. (1952).Methods in Social Research. New York: McGraw Hill Book Company, Inc.

Jane, R. &Jane, L. (2003). Qualitative Research Practice: A Guide for social science students and researchers. New Delhi, Sage Publication.

Krueger, R.A. (1988). Focus Groups: A Practical Guide for Applied Research. NewburyPark: Sage Publications.

Mandal KN. (2012). Social work research and statistics. Centrum Press. New Delhi.

Moore DS and McCabe George P (2006). Introduction to the practice of statistics, 5th edition, WH Freeman and Company, New York.

Nicola, B., Richard, K. & Rose Mary, S. (2003). SPSS for Psychologists: A Guide to Data Analysis Using SPSS for Windows. Palgrave Macmillan.

Reid, W.J. & Smith, A.D. (1981). Research in Social Work. New York: ColumbiaUniversity Press.

Rubin A and Babbie E (2011). Methodology for social work research. 2nd Edition, Cengage Learning India Private Limited.

Howell D C (2013) Statistical methods for Psychology. Wadswarth Cengage Learning India Private Limited.

Pagano, M and Gauvreau K (2001) Principles of Biostatistics. 2nd Edition, Cengage Learning India Private Limited.

Pelham BW (2013). Intermediate Statistics, 2nd edition, Sage Publications.

Venkadaswamy Reddy M (2015). Statistical Methods in Psychiatry Research and SPSS, Apple Academic Press.

Singh AK. (2002). Tests, measurements and research methods in behavioural sciences. Bharati Bhwan, New Delhi.

Taylor, G.R. (2000). Integrating Quantitative and Qualitative Methods in Research. Maryland: University Press of America.

Yin, R.K. (1984). Case Study Research: Design and Methods. Beverly Hills, Sage Publications.1984

#### **Supplementary Readings:**

Weinback, R.W. & Rubin, A. (eds.). (1987). Teaching Social Work Research: Alternative Programs and Strategies.New York: Council on Social Work Education

Jackson, W. (1988). Research Methods: Rules for Survey Design and Analysis. Ontario: Prentice Hall Canada Inc.

Crano, W.D., & Brewer, M.B. (2002). Principles and Methods of Social Research. New Jersey: Lawrence Erlbaum Associates.

Anastas, J.W. (1999). Research Design for Social Work and The Human Services (2<sup>nd</sup> ed.) New York: ColumbiaUniversity Press.

Franklin, R.D., Allison, D.B., & Gorman, B.S. (ed.) (1997). Design and Analysis of Single-Case Research. New Jersey: Lawrence Erlbaum Associates.

Ruane, J.M. (2005). Essentials of Research Methods: A guide to Social Science Research. Melbourne: Blackwell Publishing.

Rafael, J.E. & Russell, K.S. (2005). The practice of Research in Social Work.Sage Publication

Montcalm, D. & Royse, D. (2002). Data Analysis for Social Workers. London: Allyn and Bacon.

Duane, R.M., Thomas, S., & Cornell, R.D. (1986). Applied Social research – A tool for the human services. Holt, Rinehart and Winston Inc. Fortworth