Unit I: Introduction to Scientific Methods - Research philosophy and approaches- ideology, paradigm, post-modernism, positivism, interpretivism, realism, rationalism- scientific methods - objectivity, verification, replication, sense perceptions- deduction and induction. cycles, verifiability, falsifiability, theory, facts and hypotheses, qualities of sound theory and hypotheses.

Unit II: Research Design - Broad types - Exploratory, Descriptive and Explanatory - design for evaluating programmes and practice - Experimental, Quasi- experimental, Single- case evaluation design, programme evaluation

Unit III: Survey Research: The process of survey research - problem identification and formulation, conceptualization, objectives, concepts, variables, operational definition, developing hypothesis, reliability and validity - mail surveys, online surveys, interview surveys, telephone surveys, comparison of the different survey method - Strengths and weaknesses of survey research, use of surveys in need assessment - Sampling methods - Probability and non-probability sampling.

Primary and Secondary methods of data collection-interview schedule and Self administered Questionnaires, checklist - Errors in personal human enquiry - Professionalism and research in Social Work- Critical thinking, reflexivity and research- Social Work research as a Social Practice-Ethical issues in research

Unit IV: Case Study Design - Brief introduction-Difference between case study and survey (sample or census)

(i) Conceptualizing a case study: Identifying the focus of the study, the areas of study and lines of inquiry; Review of literature; conceptual framework. Case studies and Theories-Explanations: Theory building theory testing

(ii) Types of cases(individuals, movements, incidents, legislative processes, decision making, institutions, riots etc)

(iii) Designing a case study: developing a research strategy, principle of saturation, specifying the role of the researched and the researcher, and insider/outsider perspectives;

(iv) Methods of data collection: participant observation, life histories, in-depth/unstructured interviews, group interviews and focus group discussions, and community-based participatory methods and techniques; Aggregates and available data, Principles of triangulation

(v) Role of quantitative data analysis in case study design

(vi) Data processing and analyses; preparing narrative data texts, developing coding categories, use of matrices, memoing, and findings to develop field-based conceptualizations;

(vii) Writing up of qualitative analysis – insider/outsider perspectives, interactive process between the researcher and the researched, self-reflectivity, and working towards the development of field-based theory

Unit V: Statistics - Data Processing- Coding, Data entry in SPSS software, tabular and graphic presentation of database.

Analysis of Data: Levels of Measurement (Nominal, ordinal, interval and ratio)
Descriptive Statistics: A brief idea on measures of Central tendencies- mean, median and mode; measures of dispersion- range, mean deviation, Standard deviation

Hypothesis testing: Chi square test/ t-test/ ANOVA

Research Reporting: Explanations and Writing Social work Research reports

Survey Method

References

Suggested Reading

Case Study Design

References

Suggested Readings