

**MOTHER TERESA WOMEN'S UNIVERSITY
KODAIKANAL**

COURSE WORK EXAMINATION: RESEARCH METHODOLOGY

Education , Guidance & Counseling & Psychology

Objectives:

- To orient students towards research in the field of education
- To develop computational skills in educational statistics
- To orient students in the application of statistical findings
- To inculcate skill of construction of tests and tools for data collection
- To enable the students interpret educational research findings
- To orient Feminist Methodology in Research

I Introduction

Scope and need for education problems faced in educational research differences between research in social sciences and Physical and Natural Sciences – Types of Research , Basic, Applied and Action Research, Strategies to approach them – Qualities of a research Worker

II Major Steps in Research

Web based Resources for Research – define a research problem. Sources for research problem – study of related literature – criteria for selecting a problem statement of the research problem – determining feasibility of the study – Hypothesis; meaning, types and formulation – Types of sampling procedure – criteria for a selection of sample – Research proposal: The need and format – collection of data; organizing and analyzing the data

III Research Methods

Historical – normative survey, Experimental – exploratory and descriptive – case study – generic method : Cross sectional and longitudinal – Analytic and comparative studies – Content Analysis- Narrative analysis – Research Methodology for Feminist studies – Inter Disciplinary Research

IV Selection of Tools

Criteria for selection of tools – Factors related to construction of a tool – Tools and Techniques – observation, interview. Questionnaire, check list, rating scale, attitude scale (Thurstone method and Likert method) – Achievement test – Diagnostic test and prognostic test- characteristics of research tools – validity

and prognostic test – characteristics of research tools – validity and objectivity
– standardization of tests and general procedure for them.

V Source Materials

Source materials – Primary sources, secondary sources, problem of credibility
of external criticism and of internal criticism

VI Research Reporting

Organization of data – synopsis – Graphical and Statistical representation –
Language and style of presentation – chapterisation – Indexing – Footnote –
Bibliography – Appendix – Format modification for short report – Book Review,
style manual, typing, heading, pagination, tables

VII Statistics Analysis of Data

The significance of statistical measures – concept of standard error and its uses –
Testing of difference between two means test for small large samples Elementary
ideas about F Test t – one way analysis of variance.

Two way analysis of variance interaction effect – non-parametric statistics –
multivariate analysis. Multiple regression analysis; Factor Analysis , path
analysis – (Basic principles and use and interpretation of results only, not the
computations as such) use of statistical package. Analysis of qualitative data,
grouping classification.

Reference Books

1. Van Dalen, D. Understanding Educational Research, New York, McGraw Hill Co., 1973
2. Travers, Robert M.W., Introduction to Educational Research, New York, Macmillan co., 1964
3. Guilford J.P. Fundamental Statistics Psychology and Education, New York, McGraw Hill; Booth Co., 1965
4. Garrett Henry V. Statistics in Psychology and Education , Vakis, Kelfer and Sons Pvt.Ltd., Bombay
5. Fred N.Kerlinger, Foundations of behavior research, Surjeet Publications, 1983
6. Kothari C.R., Research Methodology, Willy Eastern Limited, New Delhi.