

Research Methodology

I. Introducing the Basic Concepts and Terms in Experimental Design

1. Problem: defining the problem and questions
2. Variables: independent and dependent variables
3. Hypothesis: definition and examples + null and alternate hypotheses
4. Theory: definition and examples
5. Choice of the subject of research
 - feasibility
 - criticism and selection of research documents (literature on the question or problem investigated, first and secondary sources)
 - Precising the research problem or question(s)

II. Statistics in Experimental Design

1. Standard deviation
2. Correlation (Pearson Product Moment Coefficient of Correlation)
3. Inferential statistics (t-test, etc.)
4. Sampling techniques (population, sample)

III. Data Collection techniques and Data Analysis

1. Interview and questionnaire
2. Observation
3. Experiment designs

IV. (For master 2 students) Writing the research Proposal or Report

1. Steps in a research proposal
2. Enhancing students' ability to do research and to analyze papers.

General References

1. Robson, Colin. Real World research: A resource for users of Social Research Methods in Applied Linguistics. 3rd Edition, Willey, 2011
2. Miller, Steve. Experimental design and Statistics. 2nd Edition, Routledge, 1984; 1996
3. Wright, George, and Chris Fowler. Investigating Design and Statistics Penguin Books, 1986
4. Kerlinger, Fed, N. Foundations of Behavioral Research C.B.S international, 1988
5. Hatch, Evelyn, and Anne Lazaraton. The Research Maual: Design for Applied Linguistics Newbury Publishers, 1991