



UNIT-II

Research Methods & Design

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Research Methods



Historical Research Method:

Historical method seeks to find explanation of questions of current interest by an intensive study of the past.

“Man uses history to understand the past, and try to understand the present in the light of past events and developments.”

-- By John W. Best

“Historical research is the application of the scientific method of inquiry to historical problems.”

-- By F. N. Kerlinger



Cont..



“Historical research deals with the past experience. Its aim is to apply the method of reflective thinking of social problems , still unsolved , by means of discovery of past trends of event, fact and attitude. It traces the lines of development in human thought and action in order to reach some basis for social activity.”

-- By Whitney

“Historical method may be defined as a system in which present day events are studied with reference to the events that took place in the past.”

-- By Redcliff Browne

What is Study Design?

- **A study design is a specific plan or protocol for conducting the study, which allows the investigator to translate the **conceptual** hypothesis into an **operational** one.**
- **A study design is a **scientific method** that a researcher follows to assess the association between an **exposure and an outcome**.**

Types of Study Design

2 Main Study Designs

(Based on exposure to intervention)

- 1. Observational:** Investigator only observes distribution of variables (risk factors, diseases, etc) 'in nature'
- 2. Experimental:** investigator assigns study conditions ~ usually testing an intervention.

Purpose of Historical Research

- It provide important information concerning the effects of certain past practices and may suggest plans for future actions.
- It also offers explanation of the how and why of many of the theories and practices that has developed.
- It contributes to an understanding of the significance of the phenomenon studied.
- It helps to gain an accurate account of the past.
- It helps to gain a clear perspective of the present.

Sources of Historical Research

(Autobiographies, Diaries, Confessions, Memories, Personal letters, Accessible documents, news-papers and literature, books and Magazines, Cultural and Analytical history material, Artistic materials, historical paintings, Portraits , charts etc.)

Primary sources of Historical Research

- Documents or Records
- Remains or Relics
- Oral Testimony

According to Kerlinger, "A primary source is the only repository of an historical datum, like an original record kept of an important occasion, an eye witness description of an event, a photograph, minutes of organization meeting and so on."

Secondary sources of Historical Research

- History books
- Encyclopedias

According to Kerlinger, "A secondary source is an account or record of an historical event or circumstance one or more steps removed from an original history."

Primary sources of Historical Research

Document or records

- These are maintained and written by actual participant of an event.
- e.g. autobiographies, letters, official minutes or records, permits, licenses, affidavits, certificates, books, transcriptions and research reports etc.

Remains or Relics

These are associated with a person.

e.g. Group, period, fossils, skeletons, tools, weapons, food utensils, clothing, buildings, furniture, coins, art objects, pictures and paintings are examples of relics.

Oral Testimony

These are spoken account of witness or participant in an event. It is obtained in a personal interview. It may be recorded or transcript as the witness relates his experiences.

Modern method of Research Design

- Survey of Literature
- Sampling Method
- Experimental Method
- Questionnaire
- Schedule
- Interview Method
- Group Discussion
- Observational Method
- Case Studies
- Content Analysis
- Statistical Method
- Brainstorming Techniques

➤ Survey of Literature:

The term survey is used for the techniques of investigation by a direct observation of a phenomenon or a systematic gathering of data from population by applying personal contact and interviews when adequate information about certain problem is not available in records, files and other sources.

“The survey is in briefly a method of analysis in scientific and orderly form for defined purpose of given social situation of problem and population.”

--By S. Herman

➤ Sampling Method:

Sampling is a **method** that allows **researchers** to infer information about a population based on results from a subset of the population, without having to investigate every individual.

➤ Experimental Method:

Definition: “It is a method of testing hypothesis.” --By Jhoda.

- ❖ It may be defined as the study of the relationships among variables- those manipulated and those measured.
- ❖ It simply enables the researcher to improve the conditions under which the researcher observes and thus to arrive at a more precise results.

➤ Questionnaire:

- ❖ It is a research instrument consisting of a series of questions (or other types of prompts) for the purpose of gathering information from respondents.
- ❖ The questionnaire was invented by the Statistical Society of London in 1838

“In general, the word questionnaire refers to a device for securing answers to questions by using a form which the respondent fills in himself.”

–By W. J. Goode & K. Hall

- The **questionnaire** is probably most used and most abused of the data gathering devices.
- It is easy to prepare and to administer.
- It is a systematic compilation of questions. It is an important instrument being used to gather information from widely scattered sources.
- Normally used where one cannot see personally all of the people from whom he desires responses or where there is no particular reason to see them personally.

Features of a Good Questionnaire

- Deals with an important or significant topic.
- Its significance is carefully stated on the questionnaire itself or on its covering letter.
- It seeks only that data which cannot be obtained from the resources like books, reports and records.
- Directions are clear and complete, important terms are clarified.
- The questions are objective, with no clues, hints or suggestions.
- Questions are presented in a order from simple to complex.
- Double negatives, adverbs and descriptive adjectives are avoided.
- The questions carry adequate number of alternatives.
- It is easy to tabulate, summarize and interpret.

➤ Interview

Definition:

“The interview may be regarded as a systematic method by which a person enters more or less imaginatively into the inner life of a comparative stranger.” --By P. V. Young

- In an interview a rapport is established between the interviewer and the interviewee. Both create their respective impression upon each other.
- The interview brings them both on the same level and an emotional attachment supervenes between them.
- In an interview all formalities are laid down and the gate is opened for delivering into the intellectuals, emotional and subconscious stirrings of the interviewee. Thus here the ‘depth’ of subject (man) is gone to the very bottom of his emotional pool and may check his truthfulness of responses.

➤ Schedule:

- When a researcher is using a set of questionnaires for interview purpose it is known as schedule.
- Thus schedule is a list of questions formulated and presented with the specific purpose of testing an assumption or hypothesis. In schedule method interview occupies a central and plays a vital role.

“Schedule is the name usually applied to set of questions, which are asked and filled by an interviewer in a face to face situation with another.”

--By W.J. Goode & P. K. Hatt

According to **Thomas Carson Macormie**, “The **schedule** is nothing more than a list of questions which, it seems necessary to test the hypothesis.”

➤ Case Study

- Detailed presentation of
 - a single case or handful of cases
- Generally report a new or unique finding
 - ✓ e.g. previous undescribed disease
 - ✓ e.g. unexpected link between diseases

➤ Case Series

- Detailed presentation of a **group of patients** with a similar diagnosis
- Cases may be identified from a single or multiple sources
- **Generally report on new/unique condition**
 - ✓ e.g. previous undescribed disease
 - ✓ e.g. unexpected link between diseases

➤ Observational:

- ❖ Another element of the experimental method is that the effect of the manipulation of independent variable on the dependent variable is studied or observed.
- ❖ The technique of observation is applied if measurement is not possible.

Steps of Experimental Research Methods

- Identifying, defining and delimiting the problem
- Reviewing the literature
- Formulating the hypothesis and deducing their consequences:
- Drawing up the experimental design
- Defining the population
- Administration of test / Carrying out the study
- Measuring the outcomes / Collection of Data
- Analyzing and interpreting the outcomes
- Drawing the conclusions
- Reporting the result

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