

RESEARCH METHODOLOGY IN LIS**Vikas Govardhan Jagtap*****Asst. Librarian**

Government College
Engineering & Research,
Awassari (Khurd),
Pune, Maharashtra,
India.

QR Code

ABSTRACT: - *Research Methodology is the science of methods which refers to the process of conducting the research and explains the logic behind research. It means a careful investigation or enquiry especially through search for new facts in any branch of knowledge. The study explains of the meaning of research, the objective, types and significances of research and discusses the research process. Research methods in Library and Information Science.*

KEYWORDS: Research Methodology, LIS

Research:

1. Answer to question and solutions to problem.
2. It is a art of scientific investigation.
3. Addition of new knowledge
4. Careful critical enquiry
5. Discovery in the truth
6. Seeking/ exiting facts/ Principle
7. Movement from know to unknown
8. Scientific research for knowledge and origin
9. Scientific enquiry to the growth of knowledge.

Purpose:

1. To reach now conclusion
2. To established the facts
3. To verify to knowledge
4. To study a subject scientifically
5. To update the knowledge to regarding subject
6. To attack a problems coming up in different fields of life and try find out the solutions

Characteristics of Research:

1. Research originates which a question or problems.
2. Research requires a clear articulation of aim.
3. Research follows a specific plan of decision.
4. To qualify as research, the process must have certain characteristics. It must be controlled i.e. there should be minimum effect of extraneous variables on the relationship of variables under study. The well planned method of research should be followed to ensure control.
5. Research requires the collection and interpretation of data in attempting to solve the problem that initiated that research.
6. Research is scientific approach based on certain rationale and logics.
7. Accuracy of results remains the focus of a researcher.

The Significance of Research:

Research has the following significances:

- It is directed towards the solution of a problem. It may attempt to answer a question or determine the relationship between two or more variables.
- It emphasizes the development of generalization, the principle of theories, that

will be will be helpful in predicting future occurrence.

- It based upon observable experience or empirical evidence.
- It is an aid to decision making ehe management information systems.
- It involves the gathering of new data from primary or fist hand sources, or using existing data for a new purpose.
- It requires expertise. The researcher knows what is already known about the problem and how others have investigated it.
- It strives to be objective and logical, applying every possible test to validate the procedure employed, the data collected and the conclusions reached.
- It is characterized by patient and unhurried activity.

Process of Research:

There are Seven steps involved in research processing:

1. Identification of the problem:

It flows in situation or a need when unsolved difficulty emerges.

2. Formulation of Objective/hypothesis:

It is the generalization in the form of positive derived on the basis of introduction on a subject verification they are called hypothesis in the field of natural science and normative principles in the field of social sciences. In this step use get theory/principles in tentative form.

3. Review of related literature:**4. Data collection/Classification:**

This step involves the researcher deciding and selecting the techniques that shall be used to collect relevant information. Which can be used to solve the research problem? There are many data collection techniques that may be used.

5. Data Analysis::

The actual analysis will obviously begin after the data has been classified and tabulated. Analysis of data will include simple techniques such as measures of central tendency mean, median and mode, measures of dispersion – range, mean deviation and standard deviation and measures of correlation between variables. Higher level techniques of data analysis will include techniques of testing hypothesis for both parametric and non-parametric data, multiple regression analysis, etc.

6. Verification of hypothesis:

This is a supposition or proposed explanation made on the basis of limited evidence as a starting point for further investigation.

7. Conclusion of finding:

Dr. S R Ranganathan have explained the process of research in the following four steps-

1. Empirical

2. Deductive

3. Hypothesizing

4. Verification

Research methods in library and information science:**Historical Method:**

Historical methods of research are the process of systematically examining an account of what has happened in the past. History of library and information science is the continuous methodical recounting of the past events pertaining to the establishment, maintenance and utilization of systematically arranged collection of recorded information. Hence historical method is adopted in the research of the discipline it will be foundation for improvement on the basis of the past study. It can also help to find out various shortcoming in this field on the basis of the past.

Survey Method:

Survey research is commonly used in LIS. However it is used differently in different context. Some well known e.g. of survey research from LIS are:

1. **Community Survey:** To know the character of population being served by the library or to served by a purpose library.

2. **Library Survey:** To ascertain the resources of library or a group of library and their growth in a particular period.

3. User Survey:: To determine the mobilization of library resources satisfaction of a clientele and their needs. Survey research is characters by a selection of a sample for the enquiry design of presentation of report. Three are various through which data are collected in survey research that is questioner, observation, Interview etc.

Some other example is enquiry into the general reading habits, T.V watching habit. Newspaper reading habit, use a periodical use of online resources and consumer behaviors might fall into the category of survey research author kind of survey research can be study of psychological phenomena or a group of individuals such as attitude, behaviors, motivation etc.

4. Case Study Method: Case study is a comprehensive examination of a single object which may be group and institutions or a locality taken to be representative of the class. Case study is a popular procedure of research in medicine psychology or sociology. In this method, emphasis is on principles and processes rather than the transfer of factual information. It represents real solutions drawn from practice and provides an opportunity to enquire skills in analyzing problems, making decisions and solving them. This method can be used in library

management system analysis cost benefit analysis, Cost effectiveness, Library effectiveness and computer application in libraries.

5. Delphi Research Method: Delphi method is commonly used to forecast the future trend and required. The Delphi process has been used in various fields of study such as program planning, needs assessment, policy determination, and resource utilization to develop a full range of alternatives, explore or expose underlying assumptions, as well as correlate judgments on a topic spanning a wide range of disciplines. The basic theory behind this technique is that consensus opinion among majority of opinions will have greater credibility and authority than then the surmise of only the most articulate/spokes persons is a group of participating respondents. In the formulation of library legislation,, policies making for libraries, curriculum design, methods of teaching and evaluation, processes of decision making and in manpower planning this method can be used.

6. Statistical Method: Statistical methods are being used for aggregative analysis and intensive study of individual unit is outside its scope. This method is based

upon quantitative analysis. By using this method that researches can study the problems related to libraries such as budget estimates, library planning, assessment of library services, evaluation of library services and library forecasting studies.

Tools/Techniques of Data Collection:

- 1. Questionnaire:** Questionnaire is list of questions. All scientists use tools to measure to phenomena of interest to this disciplines and social scientists are no exception. The questionnaire serves many social scientist as a primary measurement tools.

Questionnaire is one among the data collection techniques. It is a most common and widely used device for data collection. It is a primary data collection method asking question to elicit answers from the units of study known as respondent. The important steps of questionnaire method to take care in the design of the questions. The question should be specific and relevant the formulated hypothesis and direct to the purpose of research.

- 2. Schedule Technique:**

Good & Hard: Schedule is the named usually applied to set of questions which are asked and filled in by an investigator

in a face to face situation with another person/

- 3. Observation Technique:** Observation is well established techniques for collection of data. The observation method is normally employed in measuring, testing and characterizing human behavior. Observation method go into the past, events and study the since present hence it has historical orientation science begins with observation and must ultimately written to observe for its final validation.

Observation is most prominent method in a social science research. It enable to study the behavior of individuals as its accurate data collected by observation may described the observed phenomena as they occur in their national setting. This also applicable to library science research, study of the users behavior in the library functioning of the library system.

- 4. Interview Technique:** In the social science a major method of data collection is interviewing individuals. Interview may be formally conducted is social surveys face to face or over the telephone.

Interview is the most challenging and rewarding forms fo measurement. They required personnel sensibility and adoptability as well as the ability to stay with the bounds of the designs interview.

The Interview method is more direct and has greater flexibility. The Interview is conducted in orders to exchange ideas/data/experience.

5. Measurement/Scaling Technique:

Tangible characteristics like weight, height, age etc, can be easily measured directly with some standard unit of measurement but the intangible properties like, interest, intelligence, motivation etc. cannot be measured without judgmental error easily. Thus physical properties or quantizes can be measured accurately keeping in mind the research requirements.

6. Sampling: There are Three main methods of sampling

1. Random Sampling

2. Representative Sampling

3. Mixed Sampling

1. Random Sampling:

a. Systematic Sampling

b. Lottery Sampling

c. Table of Random Number

2. Representative Sampling

a. Purposive/Judgment

3. Mixed Sampling

a. Stratified Sampling

b. Multistage Sampling

7. Analysis of Library records: Library generally maintained statistical records on the different services in provide such as lending, including inter library loan,

Reference service, complication of bibliographies, supply of facts etc.

References:

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- Research Methodology by Dr. Pawan Kumar Oberoi