

RESEARCH ARTICLE

EFFECTS ON METHODOLOGY OF RESEARCH PROCESS

Umasankar.K^{*}, Sivagurunathan.K and Balwin Nambikkairaj

P. G. and Research Department of Zoology, Voorhees College, Vellore, (TN), India.

Arignar Anna Government Arts and science college, Cheyyar, (TN), India.

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ABSTRACT

Research means search for knowledge, it aim at discovering truth on characteristics of good questionnaire tools and techniques of data collection different methods. Observation, Direct and personal interview method, Telephone interview, Questionnaire and schedule methods was execution of the project processing analysis and interpretation of data by statistical methods.

Keywords: *Observation, Direct and personal interview method, Telephone interview methods, questionnaire and schedule methods.*

INTRODUCTION

Research means search for knowledge on through objectives and systematic methods of finding solution to problems. It is identifying evaluation to extensive literature survey writing of primary synopsis identifying and labeling variable setting of hypothesis prepare research design clear statement of research problem on procedure and techniques to be used for gathering information and methods to be used processing and analyzing the data determining of the sample design and collection of data execution of the project processing analysis and interpretation of data by statistical methods on testing of hypothesis prepared of the report of thesis (Dawson and Catherine.,2002).

METHODOLOGY OF RESEARCH PROCESSES

Research Process: The various steps that are necessary to carry out a research effectively are known as Research process consists of

- (1) Identifying, evaluating and formulating the research problem
- (2) Extensive literature survey
- (3) Writing a primary synopsis
- (4) Identifying and labeling variables
- (5) Setting up of hypothesis
- (6) Preparing the research design: A research design contain
 - (a) Clear statement of research problem
 - (b) Procedure and techniques to be used for gathering information
 - (c) Population to be studied
 - (d) Methods to be used in processing and analyzing the data.
- (7) Determining the Sample Design
- (8) Collection of Data (some of the methods of collecting primary data are:
 - (a) Observation method
 - (b) Direct personal interview method
 - (c) Telephone interview method
 - (d) Questionnaire method
 - (e) Schedule method

Corresponding author: Umasankar.K^{*}

P. G. and Research Department of Zoology, Voorhees College, Vellore, (TN), India.

- (9) Execution of the project
- (10) Processing, analysis and interpretation of data by statistical method
- (11) Testing of Hypothesis
- (12) Preparation of the Report of Thesis (Denscombe., 2002).

TOOLS AND TECHNIQUES OF DATA COLLECTION

The most frequently used tools of research are

1. Observation (Types of observation: Systematic and Unsystematic Observation, Participant and Non-participant Observation, Controlled and Uncontrolled Observation, Direct and Indirect observation) (Kumar and Ranjit., 2002).
2. Questionnaire
3. Schedule
4. Rating scale (Types or Forms of Rating Scale: Numerical scales, Graphic scales, standard scales, Rating by cumulative points and Forced choice ratings)
5. Psychological tests (Projective technique)
6. Social scaling
7. Interview method (Types of Interviews: Clinical interview, selection interview, focused interview, structured and unstructured Interview, Non-directed interview, diagnostic interview, Depth interview, group interview, individual interview, repeated interview etc.)
8. Case study.

CHARACTERISTICS OF A GOOD QUESTIONNAIRE

A good questionnaire must have certain characteristics. A questionnaire must be:

1. Specific: The questionnaire should be concerned with specific topics
2. Short: The questionnaire should be short because very lengthy questionnaire often find their way into the wastebasket.
3. Simple and clear: The questionnaire should be clear. As far as possible simple words should be used.
4. Objective:
5. Presented in a good order
6. Attractive: A questionnaire must be attractive in appearance.
7. Arranged properly
8. As far as possible personal question should be avoided.
9. The questionnaire must be of convenient size and easy to handle.
10. The questions must be arranged in a logical order so that a natural and spontaneous reply follows.
11. Instructions in regard to the filling up of the form must be given in the questionnaire itself.
12. The number of questions should be kept to the minimum. The no. of questions should be limited to the object and scope of the investigation (Gill and Johnson., 1997).

ADVANTAGES OF OBSERVATION METHOD

1. Observation method is one of the cheaper and more effective techniques of data collection.
2. Subjective bias is eliminated, if the observation is done accurately.
3. Mechanical devices can be used for recording data.
4. Directness is the most important advantage of observation method. It enables to study behaviour as it occurs.
5. It is more suitable for studying subjects who are unable to articulate meaningfully. (eg) studies of children, tribal, animals, birds etc.
6. This method does not seek the respondent's willingness to respond.

LIMITATIONS (OR) DISADVANTAGE

1. This is a slow and an expensive method.
2. The information obtained is very limited
3. This method is not suitable for studying opinions and attitudes.
4. It is not useful for studying past events.
5. Sometimes unforeseen factors may influence the observation.
6. Focuses only on external behaviour.
7. Observation poses difficulties in obtaining a representative sample.
8. Observer may affect the situation being observed in unknown ways.
9. Typically only a limited sample of activities are observed.
10. Finally, observation cannot be used as and when the researcher finds it convenient to use it. He has to wait for the event when it take place (Patton., 1990).

RESULTS AND DISCUSSION

Define Research? Explain Its Characteristics/ Features?

Research: Research means “Search for Knowledge”. It aims at discovering the truth. It is the search for knowledge through objective and systematic method of finding solution to problems. It is carried on both for discovering new facts and verification of old ones. Therefore, research is a process of systematic and in-depth study or search of any particular topic, subject or area of investigation backed by collection, computation, presentation and interpretation of relevant data (Silverman.,1993).

CHARACTERISTICS OF RESEARCH:

The following are important characteristics of Research:

1. Research is directed towards the solution of a problem.
2. Research is based upon observable experience
3. Research is a continuous process.
4. Research requires expertise.
5. Research is based on empirical evidence.
6. Research demands accurate observation and description.
7. Research is carefully recorded and reported.
8. Research involves the quest for answers to unsolved problems.
9. Research is recorded and reported
10. Research is the scientific and systematic search for pertinent information on a specific topic.
11. Research is a systematic and critical investigation into a phenomenon.
12. Research is not a mere compilation, but a purposive investigation.
13. Research is objective and logical.
14. Research adopts scientific method (Kothari., 1985).

CONCLUSION

- **Qualities of a good researcher**
 - ❖ Good at formulating the research
 - ❖ Good at literature survey
 - ❖ Good at developing working hypothesis
 - ❖ Good at preparing the research design
 - ❖ Good at determining the sample design
 - ❖ Good at collecting the data
 - ❖ Good at execution of the project
 - ❖ Good at analysis of data
 - ❖ Good at hypothesis testing
 - ❖ Good at research interpretation; and
 - ❖ Good at preparation of thesis and reports

REFERENCE

1. Dawson, Catherine, 2002, *Practical Research Methods*, New Delhi, UBS Publishers' Distributors
2. Kothari, C.R., 1985, *Research Methodology- Methods and Techniques*, New Delhi, Wiley Eastern Limited.
3. Kumar, Ranjit, 2005, *Research Methodology-A Step-by-Step Guide for Beginners*, (2 nd .ed.), Singapore, Pearson Education.
4. Patton, M. Q. (1990). *Qualitative Evaluation and Research Methods* (2nd Ed.). Newbury Park, CA: Sage Publications, Inc.
5. Denscombe, M. (2002) *Ground Rules for Good Research*, Maidenhead: Open University Press.
6. Gill, J. & Johnson, P. (1997) *Research Methods for Manager* (2 edition), London: Paul Chapman
7. Silverman, D. (1993) *Interpreting Qualitative Data: Methods for Analysing Talk, Text and Interaction*. London: Sage.

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