METODE PENELITIAN

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Disampaikan oleh:
Abdullah Aman Damai
Pada Kuliah: Metode Ilmiah (SDA620306)

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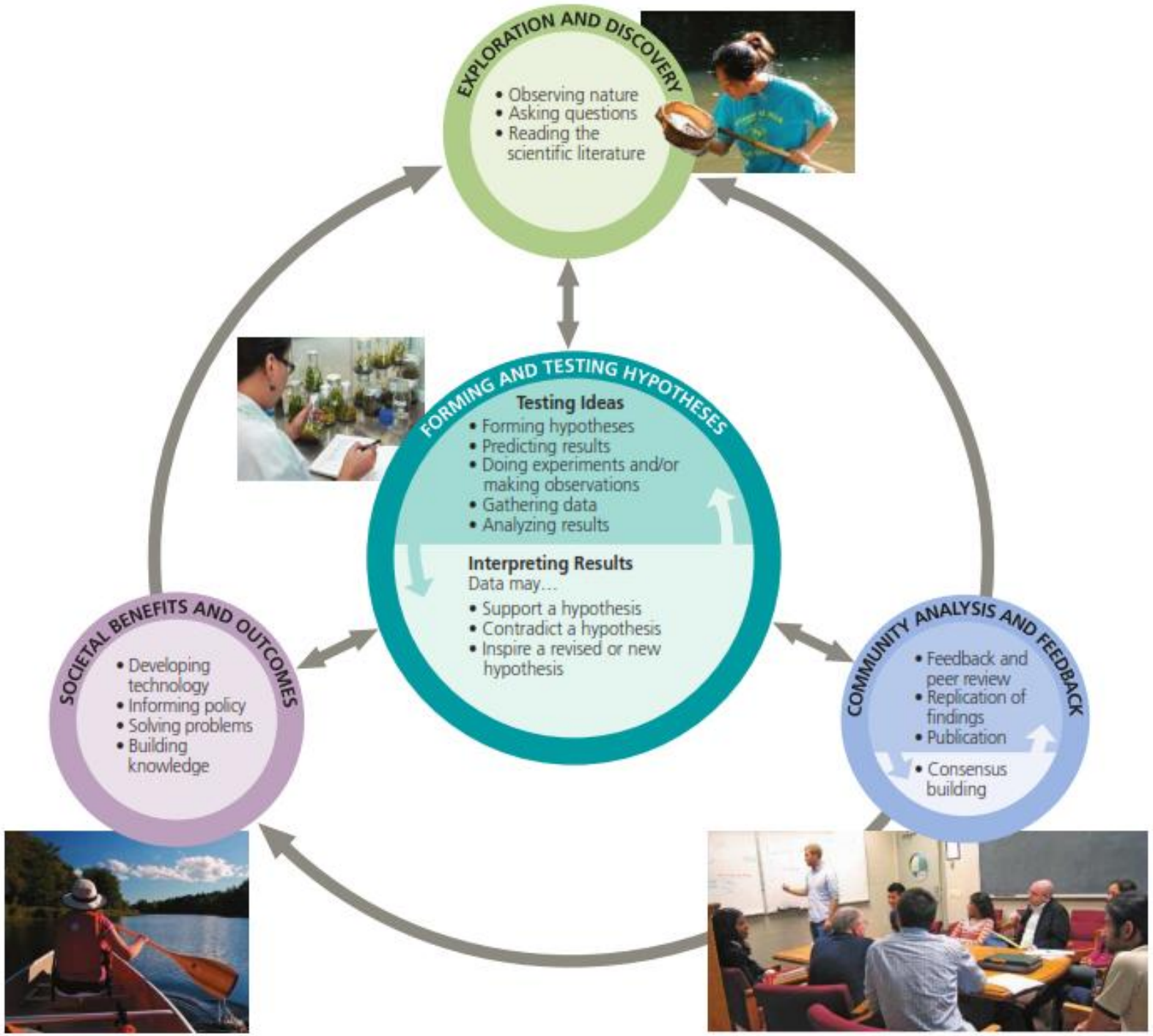
Meaning of Research:

Word ‘Research’ is comprises of two words = Re + Search.

It means to search again. So research means a systematic investigation or activity to gain new knowledge of the already existing facts.



The process of science:

a realistic model.

“Research is an endeavor / attempt to discover, develop and verify knowledge. It is an intellectual process that has developed over hundreds of years ever changing in purpose and form and always researching to truth.”

Purpose of Research:

- To gain familiarity with a phenomenon or to achieve new insights into it.
- To portray accurately the characteristics of a particular individual, situation or a group.
- To determine the frequency with which something occurs or with which it is associated with something else.
- To test a hypothesis of a causal relationship between variables.

Characteristics of research:

- Directed toward the solution of a problem.
- Requires expertise.
- Emphasizes the development of generalizations, principles, or theories.
- Based upon observable experience or empirical evidences.
- Demands accurate observation and description.
- Involves gathering primary or secondary data.
- Carefully designed procedures that apply rigorous analysis.
- Involves the quest for answers to un-solved problems.
- Strives to be objective and logical, applying every possible test to validate the procedures.
- Patient and unhurried activity.
- Carefully recorded and collected.
- Sometimes requires courage.

TYPES OF RESEARCH:

(A) On the basis of nature of information:

- Qualitative Research: When information is in the form of qualitative data.
- Quantitative Research: When information is in the form of quantitative data.

(B) On the basis of utility of content or nature of subject matter of research:

- Basic/ Fundamental /pure or Theoretical Research: Its utility is universal.
- Experimental or Applied Research: Its utility is limited.

(C) On the basis of approach of research:

- Longitudinal Research: Examples of this category are historical, Case study and Genetic research.
- Cross-Sectional Research: Examples of this category are Experimental and Survey Research.

(D) On the basis of method of research:

- Philosophical Research: It is purely qualitative in nature and we are focusing on the vision of others on the content of research.
- Historical Research: It is both qualitative as well as quantitative in nature and deals with past events.

(D) On the basis of method of research:

- Survey Research: It deals with present events and is quantitative in nature. It may further be sub-divided into; discretional, correlational and exploratory type of research.
- Experimental Research: This is purely quantitative in nature and deals with future events.

(D) On the basis of method of research:

- Case-Study Research: It deals with unusual events. It may be qualitative as well as quantitative in nature depending upon the content.

RESEARCH PROCESS

Consists of series of actions or steps necessary to effectively carry out research.

1. **Formulation of Research Problem:**

   At the very outset, the researcher must decide the general area of interest or aspect of a subject matter that he would like to inquire into and then research problem should be formulated.

2. Extensive Literature Survey:

Once the problem is formulated the researcher should undertake extensive literature survey connected with the problem. For this purpose, the abstracting and indexing journals and published or unpublished bibliographies are the first place to go to academic journals, conference proceedings, government reports, books etc. must be tapped depending on the nature of the problem.

3. Development of Working Hypothesis:

After extensive literature survey, researcher should state in clear terms the working hypothesis or hypotheses. Working hypothesis is tentative assumption made in order to draw out and test its logical or empirical consequences. It’s very important or it provides the focal point for research.

4. Preparing the Research Design:

After framing hypothesis we have to prepare a research design i.e. we have to state the conceptual structure within which research would be conducted. The preparation of such a design facilitates research to be as efficient as possible yielding maximal information. In other words, the function of research design is to provide for the collection of relevant evidence with optimum effort, time and expenditure. But how all these can be achieved depends mainly on the research purpose.

5. Determining Sample Design:

A sample design is a definite plan determined before any data is actually collected for obtaining a sample from a given population.in census inquiry we involve a great deal of time, money and energy so it it not possible in practice under many circumstances. Sample designs can be either probability or non-probability. With probability samples each element has a known probability of being included in the sample but the non-probability samples do not allow the researchers to determine this probability.

6. Collecting the Data:

There are several ways of collecting the appropriate data which differ considerably in context of cost, time and other resources at the disposal of the researcher. Primary data can be collected either through experiment or through survey. In case of survey, data can be collected by any one or more of the following ways;
By observation:

- Through personal interview,
- Through telephonic interviews,
- By mailing of questionnaires or
- Through schedules.

7. Execution of the Project:

Execution of project is a very important step in the research process. If the execution of the project proceeds on correct lines, the data to be collected would be adequate and dependable .A careful watch should be kept for unanticipated factors in order to keep the survey realistic as much as possible.

8. Analysis of Data:

The analysis of data requires a number of closely related operations such as establishment of categories, the application of these categories to raw data through coding, tabulation and then drawing statistical inference. Analysis work after tabulation is generally based on the computation of various percentages; coefficients etc., by applying various well defined statistical formulae. In the process of analysis, relationships of differences supporting or conflicting with original or new hypothesis should be subjected to tests of significance to determine with what validity data can be said to indicate any conclusions.

9. Hypothesis Testing:

After analyzing the data, the researcher is in a position to test the hypothesis, if any, he had formulated earlier. Do the facts support the hypothesis or they happen to be contrary? This is the usual question which is to be answered by applying various tests like ‘t’ test, ’F’ test etc. F test have been developed by statisticians for the purpose. Hypothesis testing will result in either accepting the hypothesis or in rejecting it. If the researcher had no hypothesis to start with, generalizations established on the basis of data may be stated.

10. Generalizations and Interpretation:

If a hypothesis is tested and upheld several times, it may be possible for the researcher to arrive at generalization i.e. to build a theory. As a matter of fact, the real value of research lies in its ability to arrive at certain generalizations. If the researcher had no hypothesis to start with, he might seek to explain his findings on the basis of some theory. It is known as interpretation.

11. Preparation of the Report or the Thesis:

Finally, the researcher has to prepare the report of what has been done by him. The layout of the report should be as follows; the preliminary pages, the main text and end matter. The preliminary pages carry title, acknowledgements and forward and then index. The main text of the report should have introduction, review of literature and methodology.

CRITERIA OF GOOD RESEARCH

1) The purpose of the research should be clearly defined and common concepts be used.

2) The research procedure used should be described in sufficient detail to permit another researcher to repeat the researcher for further advancement, keeping the continuity of what has already been attained.

3) The procedural design of the research should be carefully planned to yield results that are as objective as possible.

4) The researcher should report with complete frankness, flaws in procedural design and estimate their effects upon the findings.

CRITERIA OF GOOD RESEARCH

5) The analysis of data should be sufficiently adequate to reveal its significance and the methods of analysis used should be appropriate. The validity and reliability of the data should be checked carefully.

6) Conclusions should be confined to those justified by the data of the research and limited to those for which the data provide an adequate basis.

7) Greater confidence in research is warranted if the researcher is experienced, has a good reputation in research and is a person of integrity.

TERIMA KASIH