

Chapter 1

Perception of Research

Research has moved during this century from the periphery to the centre of our social and economic life. What is the nature of this force? Why it is getting momentum? Most of us recognize that the progress which has been made in our society has been largely the result of research, we do not have an exact definition of the term. Most of us have a vague idea of what is involved but our concept of research generally is too much oriented toward experimentation as conducted in the social sciences.

MEANING OF RESEARCH

Research simply seeks the answer of certain questions which have not been answered so far and the answers depend upon human efforts. It may be illustrated by taking an example of the moon. Some years ago man did not know what exactly the moon is? Was this problem which had no solution? Man could only make some assumptions about it but the man now this time by his efforts, he went to the moon brought the soil of the moon and studied it. The man is now able to give concrete answer of the problem what is the moon? But the question arises, “Is the answer of the question in examination also research”? The answer is ‘no’, because the answers of these questions are available. They are available in text-books, class-notes etc. Research answers only those questions of which the answers are not available in literature i.e., in human knowledge. Thus, we can say research seeks the answer only of those questions of which the answers can be given on the basis of available facilities.

Actually research is simply the process of arriving as dependable solution to a problem through the planned and systematic collection, analysis and interpretation of data. Research is the most important process for advancing knowledge for promoting progress and to enable man to relate more effectively to his environment to accomplish his purpose and to resolve his conflicts. Although it is not the only way, it is one of the more effective ways of solving scientific problems.

From the beginning of time man has noted certain irregularities among the phenomena and events of his experiences and has attempted to devise laws and principles which express these regularities. These laws and principles are of course not without expectation, any law is valid only under the conditions under which it was derived. Even though objects tend to fall, they have been known to rise when other forces are active, but this does not deny the general principle of gravity. Research is devoted to find the conditions under which a certain phenomenon occurs and the conditions under which it does not occur in what might appear to be similar circumstances.

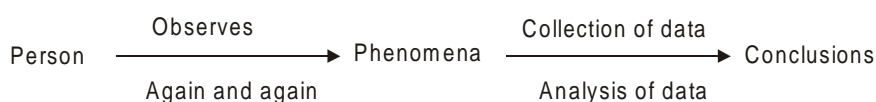
Our culture puts such a premium on science that the terms science and scientific are frequently misused. Research is also frequently in contexts where little research in the true sense of the world is actually done. A person no longer looks up a word in dictionary or a historical fact in the encyclopaedia he researches it. Many agencies claiming to do research are engaged in nothing more than fact-findings.

TERM RESEARCH

The term 'Research' consists of two words:

$$\text{Research} = \text{Re} + \text{Search}$$

'Re' means again and again and 'Search' means to find out something, the following is the process:



Therefore, research means to observe the phenomena again and again from different dimensions. For example there are many theories of learning due to the observation from different dimensions.

The research is a process of which a person observes the phenomena again and again and collects the data and on the basis of data he draws some conclusions.

Research is oriented towards the discovery of relationship that exists among phenomena of the world in which we live. The fundamental assumption is that invariant relationship exists between certain antecedents and certain consequents so that under a specific set of conditions a certain consequents can be expected to follow the introduction of a given antecedent.

DEFINITIONS OF RESEARCH

According to Rusk

"Research is a point of view, an attitude of inquiry or a frame of mind. It asks questions which have hitherto not been asked, and it seeks to answer them by following a fairly definite procedure. It is not a mere theorising, but rather an attempt to elicit facts and to face them once they have been assembled. Research is likewise not an attempt to bolster up pre-conceived opinions, and it implies a readiness to accept the conclusions to which an inquiry leads, no matter how unwelcome they may prove. When successful, research adds to the scientific knowledge of the subject.

According to George J. Mouly

He defines research as, "The systematic and scholarly application of the scientific method interpreted in its broader sense, to the solution of social studiesal problems; conversely, any systematic study designed to promote the development of social studies as a science can be considered research."

According to Francis G. Cornell

"To be sure the best research is that which is reliable verifiable and exhaustive, so that it provides information in which we have confidence. The main point here is that research is, literally speaking, a kind of human behaviour, an activity in which people engage. By this definition all intelligent human behaviour involves some research."

"In social studies, teachers, administrators, or others engage in 'Research' when they systematically and purposefully assemble information about schools, school children, the social matrix in which a school or school system is determined, the characteristic of the learner or the interaction between the school and pupil."

According to Clifford Woody of the University of Michigan

He writes that in an article in the *Journal of Social Studies Research* (1927), research is a carefully inquiry or examination in seeking facts or principles; a diligent investigation to ascertain something, according to Webster's New International Dictionary. This definition makes clear the fact that research is not merely a search for truth, but a prolonged, intensive, purposeful search. In the last analysis, research constitutes a method for the discovery of truth which is really a method of critical thinking. It comprises defining and redefining problems; formulating hypotheses or suggested solutions; collecting, organising and evaluating data; making deductions and reaching conclusions; and at last, carefully testing the conclusions to determine whether they fit the formulating hypotheses.

According to C.C. Crawford

He writes that "Research is simply a systematic and refined technique of thinking, employing specialised tools, instruments, and procedures in order to obtain a more adequate solution of a problem than would be possible under ordinary means. It starts with a problem, collects data or facts, analysis these critically and reaches decisions based on the actual evidence. It evolves original work instead of mere exercise of personal. It evolves from a genuine desire to know rather than a desire to prove something. It is quantitative, seeking to know not only what but how much, and measurement is therefore, a central feature of it."

John W. Best thinks, "Research is considered to be the more formal, systematic, intensive process of carrying on the scientific methods of analysis. It involves a more systematic structure of investigation, usually resulting in some sort of formal record of procedures and a report of results or conclusions."

"Research is but diligent search which enjoys the high flavour or primitive hunting."

– James Harvey Robinson

"Research is the manipulation of things concepts or symbols for the purpose of generalizing to extend, correct or verify knowledge, whether that knowledge aids in the practice of an art."

– *Encyclopaedia of Social Science*

"Research is a systematized effort to gain new knowledge."

– V. Redman and A.V.H. Mory

According to C. Francies Rummel

"Research is an endeavour 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 searching for truth."

P.M. Cook has given a very comprehensive and functional definition of the term research

"Research is an honest exhaustive, intelligent searching for facts and their meanings or implications with reference to a given problem. The product or findings of a given piece of research should be an authentic, verifiable and contribution to knowledge in the field studied."

He has emphasised the following characteristics of research in his definition:

1. It is an honest and exhaustive process.
2. The facts are studied with understanding.
3. The facts are discovered in the light of problem. Research is problem-centred.
4. The findings are valid and verifiable.
5. Research work should contribute new knowledge in that field.

According to W.S. Monroe

Monroe, University of Illinois states, "Research may be defined as a method of studying problems whose solutions are to be derived partly or wholly from facts. The facts dealt with in research may be statements of opinion, historical facts, those contained in records and reports, the results of tests, answers to questionnaires, experimental data of any sort, and so forth. The final purpose of research is to ascertain principles and develop procedures for use in the field of social studies; therefore, it should conclude by formulating principles or procedures. The mere collection and tabulation of facts is not research, though it may be preliminary to it on eve a part thereof."

According to R.M. Hutchins

R.M. Hutchins, Chancellor of the University of Chicago, in "The Higher Learning in America" says, "Research in the sense of the development, elaboration, and refinement of principles, together with the collection and use of empirical materials to aid in these processes, is one of the highest activities of a university and one in which all its professors should be engaged."

J.H. McGrath and D.E. Watson have defined the term 'Research' more comprehensively.

"Research is a process which has utility to the extent that class of inquiry employed as the research activity vehicle is capable of adding knowledge, of stimulating progress and helping society and man relate more efficiently and effectively to the problems that society and man perpetuate and create."

GENERAL CHARACTERISTICS OF RESEARCH

The following characteristics may be gathered from the definitions of 'Research'

1. It gathers new knowledge or data from primary or first-hand sources.
2. It places emphasis upon the discovery of general principles.
3. It is an exact systematic and accurate investigation.
4. It uses certain valid data gathering devices.
5. It is logical and objective.
6. The researcher resists the temptation to seek only the data that support his hypotheses.
7. The researcher eliminates personal feelings and preferences.
8. It endeavours to organise data in quantitative terms.
9. Research is patient and unhurried activity.
10. The researcher is willing to follow his procedures to the conclusions that may be unpopular and bring social disapproval.
11. Research is carefully recorded and reported.
12. Conclusions and generalisations are arrived at carefully and cautiously.

THE FUNCTIONS OF RESEARCH

The following are the main functions of research

The main function of research is to improve research procedures through the refinement and extension of knowledge.

The refinement of existing knowledge or the acquisition of new knowledge is essentially an intermediate step toward the improvement of the social studies process.

The social studies improvement is associated with various aspects of Social Studies:

- (a) The function of research is to aid to making a decision concerning the refinement or extension of knowledge in this particular area.
- (b) The function of research is to improve the students learning and classroom problem with which teacher is encountering with problems. The more effective techniques for teaching can be developed.
- (c) Another function of research is to aid social studies administrators to improve the Social Studies systems.

The Researches should contribute to the theory and practice of study studies simultaneously. It should have the image of a helpful mechanism which can be used by researcher/researchsholar in one way or the other, for the improvement of the process.

SPECIFIC CHARACTERISTICS OF RESEARCH

The following are the main characteristics of research:

1. A sound philosophy of social studies as the basis of research

Robert R. Rusk observes. "In the application of scientific procedure to social studies a sound philosophy as well as a sound commonsense must be invoked to save the scientific procedure from itself."

2. Research is based on insight and imagination

The same writer feels, "Social studies by its reliance on research must never fail to realize that in addition to its practical practitioner and skilled investigators, it stands in need of men and women of imaginative insight, who look beyond, he present and behold the vision splendid. If the vision should fade into the light of common day, not only will the people perish, but research itself will become a sterile futility."

3. Research requires an inter-disciplinary approach

Research is not the mere description of elementary and isolated facts of nature. It must be related to the study of complex relationships of various facts. It requires an inter- disciplinary approach.

4. Research usually employs deductive reasoning process

Eric Hylla writes in the 'Nature and Functions of Research', the science of mind commonly uses methods of description, explanation, interpretation, sympathetic or intuitive understanding methods which are mainly speculative and deductive in character and which rarely furnish results that can be subjected to measurement or mathematical procedures.

5. Research should come out of a desire to do things better

Stephen M. Corey writes. "Better social studies means better development or formulation of instructional aims, better motivation of pupils, better teaching methods, better evaluation and better supervision and administration, these are 'activities' or 'operations'.

6. Research is not as exact as research in physical science

No two human beings have ever been found to be alike. No scientific investigations of human behaviour even those of so-called “identical twins” have resulted in the findings of individuals completely similar in structure or behaviour. “In the whole world there are probably no two things exactly alike similarly no two human beings are alike, they differ physically in size, weight, height, colour of eyes and hair texture of skin and in a thousand other details as well as in thousands of details of mental, social and spiritual life,” writes H.C. McKown. This fact stands in the way of making research as an exact science.

7. Research is not the field of the specialist only

W.C. Redford writes, “In sum, I believe the teachers in every country have the opportunity and the capacity to undertake some research. Such research, carried out in the day-to-day work of the school, should be concerned directly with the problems of that school. It can properly concern itself with such matters as child development, class organisation, teacher-pupil relationships, interaction with the community, curriculum matters, teaching techniques and many others.”

Similarly, V.V. Kamat, in an article entitled “Can a teacher do research?” published in ‘Teaching’ making these remarks: “Any teacher with commonsense, intelligence and insight can undertake research in a problem. In the beginning such workers may require some guidance and training but this can be made easily available to them at the hands of experts.”

8. Research generally requires inexpensive material

In many social studies research studies we simply need subjects, i.e., children, their social studies tools of daily use, paper and pencil and a few tests.

9. Research is based on the subjectivity and intangibility of social phenomena

Lundberg has pointed out that the physical phenomena may be known directly through sense, whereas social phenomena are known only symbolically through words representing such phenomena as tradition, custom, attitude, values and the whole realm of so-called subjective worlds.

10. Research is perhaps incapable of being dealt through empirical method

According to Lundberg “Exact science tends to become increasingly quantitative in its units, measures, and terminology while most of the matter of social science is quantitative and does not admit of quantitative statement. We can talk of urbanisation, cultural assimilation etc. but we can’t measure quantitatively. We may talk of growing indiscipline, but unless we can measure it, unless we can ascertain the degree of indiscipline, we cannot find a perfect cure.”

According to Mitchell, “Even in the work of the most statistically minded, qualitative analysis will have a place. Always our measurements, the pre-conceptions shape our ends, our first glimpses of new problems, our widest generalisations will remain qualitative in form.”

11. Research is based on inter dependence of causes and effect

In case of a social phenomena the cause and the effect are inter dependent and one stimulates the other. It becomes, therefore, very difficult to find as to what is the cause and what is the fore effect. MacIver rightly points out, “Social science has hitherto suffered greatly from the attempt to make it conform to

method derived from the order and more abstract sciences. It has led us to look for impossible results and to be disappointed at not getting them. We enquire, for example, after the manner of physical sciences which of the two related social phenomena is cause and which the effect. It usually turns out in the social sphere, that both are cause and both are effect.

12. Research cannot be a mechanical process

Symonds concludes that research is, ... “not something that can be ground out as by a machine. Research can never be made a mechanical process. There is no problem worthy of study that does not include unknown elements and does not require a fresh approach and attack. Too much of the research done by students in recent years has smacked of the mechanical or merely following the methods and procedures of some predecessors without clear insight, into the problem itself or the methods to be used in attacking it. Much of the research in social studies that is being published fails to receive recognition because it lacks that spark of originality that must accompany an attack on a new problem. Research methods and techniques can be taught, but after they are mastered there is still the problem of attacking a new problem and genuine contribution to social studies cannot be made without the willingness to pioneer into new fields or to work out new procedures. Genuine research must be an exploration. Any student who wishes to undertake research in social studies must be willing to take venture into the unknown and only by doing so he will bring back the fruit of genuine discovery.”

The criticism of research, Hugh B. Wood states: “Every year about a thousand young men and women go off justly neglected corners of knowledge and assemble tiny scraps of more or less useless information into a little pile of dust, which, adopted with comparative tables, correlative graphs, and other forms of academic is served up as a thesis. The reward is the little of Doctor of Philosophy, which enables its recipient to ascend the social studies as ladder and in time teach other young men and women to scrap together their own heaps of dust or doctoral dissertations.”

OBJECTIVES OF RESEARCH

The research has the following three objectives:

1. Theoretical objective
2. Factual objective and
3. Application objective.

1. Theoretical Objective

Those researches whose objectives are theoretical formulate the new theories, principles or laws. Such type of research is explanatory because it explains the relationships of certain variables. These researches contribute some basic knowledge to the human knowledge. The researches in different disciplines *i.e.*, Physics, Chemistry, Mathematics etc. have the theoretical objective.

2. Factual Objective

Those researches whose objective is factual find out new facts. This objective is by nature descriptive. These researches describe facts or events which happened previously. Such type of research is done in history.

3. Application Objective

The research having application objective does not contribute a new knowledge in the fund of human knowledge but suggests new applications. By application we mean improvement and modification in practice. For example if anyone gives a new application of electricity then such type of research has application objective.

CLASSIFICATION OF RESEARCH

In actual practice, research is conducted at different levels and for different immediate purposes. The level at which a person operates in the field depends on the objectives he intends to accomplish. Generally research has two levels:

1. Basic level and
2. Applied level.

1. Basic Level

Trevers has defined basic level as basic research. It is designed to add an organized body of scientific knowledge and does not necessarily produce results of immediate practical value.

2. Applied Level

Applied research is undertaken to solve an immediate practical problem and the goal of adding to scientific knowledge is secondary.

A common mistake is to assume that levels differ according to complexity and that basic research tends to be complex and applied research. Some applied research is quite complex and some basic research is rather simple.

KINDS OF RESEARCH

There are various bases to classify the research.

A. On the Basis of Objectives of Research

On the basis of objectives of research they are of two types:

1. Fundamental research and
2. Action research.

B. On the Basis of Approach of Research

On the basis of approach of Research they are of two types:

1. **Longitudinal research:** Historical research, case study, genetic comes under longitudinal approach of research.
2. **Cross sectional research:** Experimental research, survey are the examples of cross sectional research.

C. On the Basis of Precision in Research Findings

On the basis of precision (accuracy) the researches are:

1. Experimental research and