

## Research Problem, Objectives, Hypothesis and Method in a Research

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### ABSTRACT

The article discusses the continuous emergence of new innovations and concepts across various fields, leading to a perpetual cycle of problem-solving. In the realm of education, research plays a vital role in addressing issues for national, social, and individual development. Research in education is depicted as a meticulous and gradual process that contributes to knowledge incrementally, akin to an ant adding grains of sand to its anthill. P.M. Cook's definition characterizes research as a thorough and intelligent quest for facts and their implications to solve problems systematically. The abstract emphasizes the significance of research in education for meaningful progress and problem resolution.

**Key Words:** research problem, objectives, hypothesis.

### INTRODUCTION

#### The Problem

Every year new innovations, new concepts and new ways of doing things in all areas of human endeavor emerge. The wider the horizon of our mental outlook, the more and more problems occur to us. The problem solving process continues like an unending spiral. Preliminary problems lead to more intrinsic problems. The field of education being no exception to this general rule of human knowledge also abounds in problems of diverse nature but every problem cannot be termed worthwhile. Since the goal of education has been recognized as national, social and individual development. So the need and importance of research has been realized increasingly in the field of education.

Those who are experienced know that research is often tedious, slow in nature and rarely spectacular. They realize that the research for truth and the solutions of the important problems take a lot of time and energy and the intensive application of logical thinking. Research makes its contribution to human welfare by countless small additions to knowledge. The researcher has some of the characteristics of ant, which is capable of bringing its single grain of sand to the anthill.

**According to P.M.Cook:** "Research is an honest, exhaustive, intelligent searching for facts and their meanings or implications with reference to a given problem. It is the process of arriving at dependable solutions to problems through the planned and systematic collections, analysis and interpretation of data. The best research is that which is reliable, verifiable and exhaustive so that it provides information in which we have confidence

#### Objectives Of Study

Without clear formulation of aims and objectives of research, the investigator is likely to wander aimlessly in the field and achieve nothing worthwhile.

#### Hypothesis

When attacking a problem, an educator, a chemist or detective gathers many facts. But he is not merely interested in 'Facts, facts and only facts'. The most authentic and widely prevalent method of conducting research on scientific line is to assume hypothesis, which may be accepted or rejected at the end of the enquiry.

Hypothesis is guidance in the research of evidence. It determines the particular line along with the experiment is built. Hypothesis is a guess, a supposition and proposition assumed for the sake of argument. It is a Speculation, an explanation for offering imaginary answers to a question, a temporary explanation for an event. It is a theory, a thesis, and a principle yet to be proved or disapproved by reference to facts or evidence.

**According to Best, John W.** - "Hypothesis is a shrewd guess or inference that is formulated and provisionally adopted to explain observed facts or conditions and to guide in further investigation"

**According to Bruce. W.** - "A hypothesis then could be designed as an explanation about event based generalization of the assumed relationship between variables"

**According to Mouley G.J.-** *“Hypothesis is an assumption or preposition whose testability is to be tested on the basis of the empirical evidence with previous knowledge”*

Thus, a hypothesis is defined as a statement for the tentative relationship of two or more variables. The relationship of the variables may either be normative or casual relationship. It should be based on some rational. It should be based on accepted facts, testable, tenable, possible, clear, expert and deductive reasoning.

### **Delimitation Of The Problem**

**In the words of Best John. W,** *“Delimitations are the boundaries of the study.”*

To trim an investigation to manageable size, a researcher may confine his attention to the events that occurred during the given segment of time or in a given place or to the relationship between two or more clearly identified variables.

### **Method**

By method we mean a systematic approach towards a particular phenomenon Methodology used in an investigation to determine its destiny. It is the nature of techniques and procedures adopted which determines the reliability, precision and validity.

In research there are various methods & procedures to be applied.

- (1) Historical method
- (2) Experimental method
- (3) Descriptive method.

It is the nature of the problem under investigation, which determines the adoption of a particular method and procedure. There is need to make judicious selection of the techniques, keeping in view the aims and objectives of the study, time factor, availability of the subjects and other resources at the disposal of investigator.

Various writers have classified descriptive studies into different categories. Some have been classified on the basis of purposes they achieve, some on the basis of techniques they employ. These classifications mostly range from the survey in which they describe to the status quo of the educational variables to the co relational study, which investigate the relationship between variables. For the sake of convenience descriptive studies may be classified into the following three categories: -

- (1) Survey studies
- (2) Interrelationship studies
- (3) Development studies

Also, there are many procedures, which can be developed to meet the needs of different purposes and conditions. Thus when one desires facts from people about themselves he may interview them, ask them to submit a text or examination or to produce something evidencing their skill or interest. In all, six different types of normative surveys are recognized when the basis is the technique employed. These are: -

- (1) Survey Testing
- (2) Questionnaire Inquiries
- (3) Case studies
- (4) Interview studies
- (5) Observation studies
- (6) Appraisal Procedures

### **ABOUT AUTHOR**

Author Dr Shaifali Rachna Puri has vast teaching and managerial experience. Her area of expertise is communication skills, English Hons, Elective English Functional English. She has worked as examiner and as question paper reviewer at Punjab Technical University, Jalandhar, Punjab, India. She has presented papers in various National and International Conferences.