## NATIOML LIBRARY AND DOCUMENTATION SERVICES BOARD

## WORKSHOP ON RESEARCH METHODOLOGY

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# WORKSHOP CONTENT

- Introduction to Research and Research Process
- Research Paradigms and Types of Research
- Methods of Data Collection –Quantitative and Qualitative
- Survey Methods and Sampling Surveys
- Critical Literature Review
- Formulation of Research Proposal
- Data Processing
- Data Analysis using SPSS and Qualitative Data Analysis
- Presentation of Research Findings
- Report Writing

# Lecture No. 1 Introduction to Research and Research Process

# Prof. K.A.P. Siddhisena

2<sup>nd</sup> August, 2017



# **1. WHAT IS RESEARCH?**

Research comes from a prefix and a root word

### **RE + SEARCH**

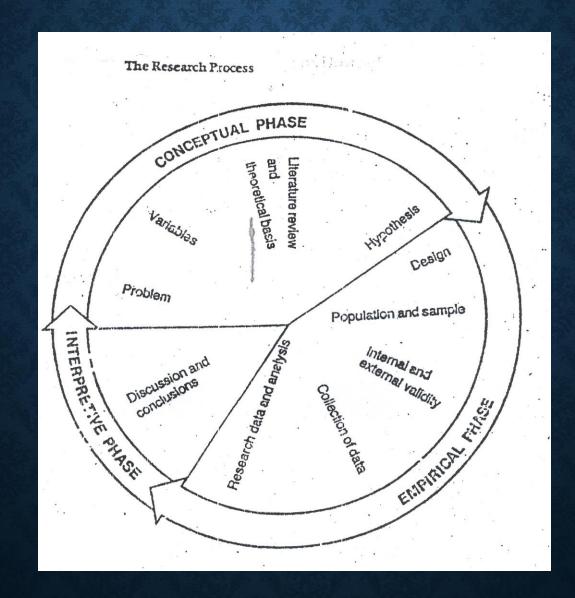
that means "To Seek Out Again"

In most research is indeed, a mater of seeking out ideas and materials already found or developed by others. Research is making discoveries – usually in order to put together in new ways, which is found.

 The concise Oxford Dictionary defines research as: "careful search or inquiry; endeavor to discover new or collate old facts etc. by scientific study of a subject; course or critical investigation".

 Hult Christine (1996) broadly defines research as: "Research is a systematic inquiry designed to further our knowledge and understanding of a subject"

(Hult Christine, A., 1996, Researching and Writing in the Social Sciences, London, Allyn and Bacon)



## RESEARCH FOR ENHANCING KNOWLEDGE.

There are four ways to further our knowledge through research:

- I. to confirm the existing knowledge
- 2. to refute the existing knowledge
- 3. to update the existing knowledge
- 4. to upgrade the existing knowledge

# Research is defined as "sets out to discover truth"

Is it possible? It is infinite to find out the truth from a research. It is impossible. What we are trying to find out is the approximate reality under given data, techniques and methods.

## Research is defined as

"the systematic, controlled, empirical and critical investigation of hypothetical propositions about the presumed relations among natural phenomena"

*Kerlinger, K.N., 2004, Foundation of Behavioural Research, Holt* Rinehart, and Winston, New York).

Scope of Research • According to Earl Babbie, there are three scope: a. Exploration **b.** Description c. Explanation (Babbie, E., 2005, The Practice of Social Research, New York, Wadsworth Co.) d. Prediction

## a. Explore a topic—*Exploratory Study*

- Simplify to satisfy the researcher's curiosity and desire for better understanding.
- To test the feasibility of undertaking a more careful study.
- To develop the methods to be employed in a more useful manner.

### **b. Description:**

to describe situation and events. (e.g. Gallup Poll).

 Two aspects of social scientific description are important:

i) quality of descriptionii) generalizability

### c. Explanation:-

explain things, findings or answering to the questions like why, what, how etc. in scientific way.

### • In brief:

- 1) Exploration is the attempt to develop an initial, rough understanding of some phenomena.
- 2) Description is the precise measurement and reporting of the characteristics of some population or phenomena under study.
- 3) Explanation is the discovery and reporting of relationships among different aspects of the phenomena under study.

### **Significance of Research:**

- Research needs to test the validity of hypothesis /ses or theory/ies.
- Research needs to bring conclusions, generalizations and policy implications for an issue or phenomena.
- Research needs to find out the gaps of knowledge in a subject area.
- Contribute to the advancement of knowledge or bridge knowledge gaps.

## SIGNIFICANCE OF RESEARCH (CONTD.)

- Helps in making policy decisions.
- Help solving problems that affects people as well as organizations.
- Provide a basis for prediction or forecasting of events and to take proactive decisions.

# **DISTINCTION BETWEEN RESEARCH** AND REPORT

• A Research is an evaluative, analytical and critically investigative inquiry.

 A Report is a compiled information without evaluating, analysing and interpreting it.
Most reports simply record a series of facts or incidences that have found or happened as they are.

# **RESEARCH METHODOLOGY VS TECHNIQUES**

- Some writers use the words of Methods and Methodology interchangeably.
- Methodology refers to the overall approach to the research process- from the theoretical underpinning to the collection and analysis of data.
- Methods refer only to the various means by which data can be collected and/or analysed.
- Techniques refer the analytical tools or measures which apply to analyse data.

# **IMPORTANCE OF RESEARCH METHODOLOGY**

- To explore and analyse more general issues
- To test hypothesis (ses) or theory (ies).
- To construct or create a new procedure or system.
- To generate new knowledge.
- To explain a new phenomenon.
- A combination of any of the above

## **CHARACTERISTICS OF GOOD RESEARCH**

- Clear problem focus
- Objective and unbiased presentation of research findings
- Addresses knowledge gaps
- Methodologically sound- appropriate methods are adopted in data collection and analysis
- Methodological limitations are identified and an attempt is made to overcome them
- Due acknowledgement is given to other's work
- Well organized and clear presentation of data as well as ideas
- Clarity and consistency are maintained through out the research
- Offer adequate explanation of phenomena or issues
- Validity and reliability of the findings are established
- Findings are treated as tentative

# THE RESEARCH TRIANGLE



Paradigm & Researcher's perspective

The Problem Methodology

Thank you