

Research Methods for Public Health

Lecture 1 (Part 1)

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Research Methodology

- **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.

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Research Methodology

- **Purpose of Research**

The purpose of research is **to discover answers to questions** through the application of scientific procedure. The main aim of research is **to find out the truth** which is hidden and which has not been discovered as yet

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- **General Objectives of Research**

1. To know a phenomenon or to achieve new insights into it. (Studies with this object in view are termed as exploratory or formative research studies).
2. To describe accurately the characteristics of a particular individual, situation or a group. (Studies with this object in view are known as descriptive research studies).

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- **General Objectives of Research**

3. To determine the frequency with which something occurs or with which it is associated with something else. (Studies with this object In view are known as diagnostic research studies).
4. To test a hypothesis of a causal relationship between variables. (Such studies are known as hypothesis-testing research studies)

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- **Characteristics of Research**

1. Research is directed toward the solution of a problem.
2. Research requires expertise.
3. Research is based upon observable experience or empirical evidences.
4. Research demands accurate observation and description.

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- **Characteristics of Research**

5. Research involves gathering new data from primary or secondary sources.
6. Research involves the quest for answers to un-solved problems.
7. Research is carefully recorded and collected.
9. Research sometimes requires courage.

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- **Types of Research**

(A) **On the basis of nature of information:** we can classify the research into two types.

1. **Qualitative Research:** When information is in the form of qualitative data.
2. **Quantitative Research:** When information is in the form of quantitative data.

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- **Types of Research**

(B) **On the basis of nature of subject of research:** we can classify the research into two categories.

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

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- **Types of Research**

(C) **On the basis of approach of research:** we can classify the research into two categories.

1. **Longitudinal Research:** E.g. historical, Case study and Genetic research.
2. **Cross-Sectional Research:** E.g. Experimental and Survey Research.

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- **Types of Research**

(D) **On the basis of method of research:** we can classify the research into five categories.

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

Research Methodology

- **Types of Research**

(D) On the basis of method of research:

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

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- **Types of Research**

(D) On the basis of method of research:

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

Reference

- Prabhat, P. and Pandey, M.M (2015) *RESEARCH METHODOLOGY: TOOLS AND TECHNIQUES*. 1st ed. Romania, European Union: BRIDGE CENTER.

Good Luck for All Students

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سبحان الله وبحمده سبحان الله العظيم

ذكر الله أعظم ما في الوجود ،، لعل الله يرحمنا بعلم تعلمناه في الحياة
الدنيا

أستغفر الله