

### Research Methodology

(Lecture 2)

Dr. Mohamad Al-Dabbagh



### Previous Lecture

- Introduction to Subject
- What is Research
- What is Research Questions
- Research Steps



## Outline

- Applications of Research
- Research Process
- Research Tools
- Research Objectives
- Research Characteristics



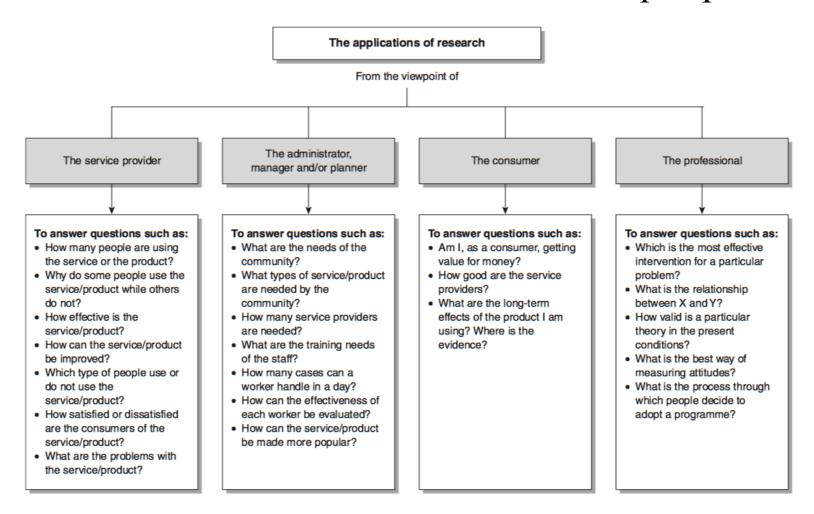
# Applications of research

- Very little research in the field is pure in nature.
- Most research is applied research, which has wide application in many disciplines.
- Within any profession, where you directly or indirectly provide a service, such as health (nursing, occupational therapy, physiotherapy, community health, health promotion and public health),



## Applications of research

Research can be viewed from four different perspectives:





- Research is a process for collecting, analysing and interpreting information to answer questions.
- To qualify as research, the process must have certain characteristics:
  - 1. Controlled: The concept of control implies that, in exploring causality in relation to two variables (factors).

You set up your study in a way that minimizes the effects of other factors affecting the relationship.

This can be achieved to a large extent in the physical sciences (Chemistry, Biology).



- To qualify as research, the process must have certain characteristics:
  - 1. Controlled: The concept of control implies that, in exploring causality in relation to two variables(factors)

However, in the social sciences (Hospitality and Tourism) it is extremely difficult as research is carried out on issues related to human beings living in society, where such controls are not possible



- To qualify as research, the process must have certain characteristics:
  - 2. Rigorous: you must be scrupulous (careful) in ensuring that the procedures followed to find answers to questions are relevant

Again, the degree of rigor varies markedly between the physical and social sciences and within the social sciences.



- To qualify as research, the process must have certain characteristics:
  - 3. Systematic: this implies that the procedure adopted to undertake an investigation follow a certain logical sequence.

The different steps cannot be taken in a haphazard way. Some procedures must follow others

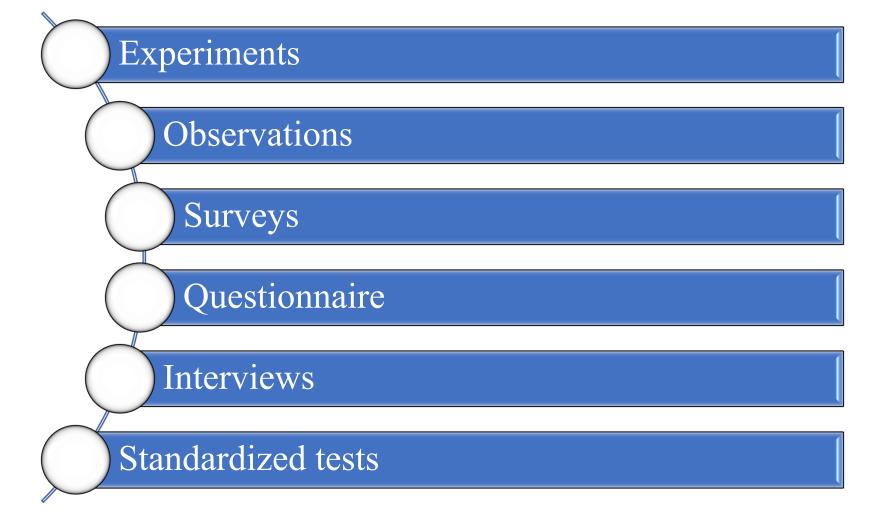


- To qualify as research, the process must have certain characteristics:
  - 4. Valid and verifiable: this concept implies that whatever you conclude on the basis of your findings is correct and can be verified by you and others..
  - **5. Empirical**: this means that any conclusions drawn are based upon hard evidence gathered from information collected from real life experiences or observations.
  - **6. Critical**: critical scrutiny of the procedures used and the methods employed is crucial to a research enquiry.



### Research Tools

Research Tools





# Research Objectives

- Research objectives are:
  - The purpose of research is to <u>discover answers</u> through the application of scientific procedures.

- The main aim of research is to <u>find out the truth</u> which is hidden and which has not been discovered as yet.



# Research Objectives

- Research objectives
  - The purpose of research is to discover answers through the application of scientific procedures:
    - Exploratory or Formulate Research studies: To gain familiarity with a phenomenon or to achieve new insights into it.
    - **Descriptive Research studies**: To describe accurately the characteristics of a particular individual, situation or a group



# Research Objectives

- Research objectives are:
  - The purpose of research is to discover answers through the application of scientific procedures:
    - **Diagnostic Research studies**: To determine the frequency with which something occurs or with which it is associated with something else.
    - **Hypothesis-Testing Research studies**: To test a hypothesis of a causal relationship between variables.



#### Research Characteristics

- Research objectives are:
  - Research is directed towards the solution of a problem.
  - Research is based upon observable experience or empirical evidence.
  - Research demands accurate observation and description.
  - Research involves gathering new data from primary sources or using existing data for a new purpose.



#### Research Characteristics

- Research objectives are:
  - Research involves the quest for answers to unsolved problems.
  - Research activities are characterized by carefully designed procedures.
  - Research requires expertise i.e., skill necessary to carryout investigation, search the related literature and to understand and analyze the data gathered.



### Qualities of Research

- Qualities of Good Research are:
  - Systematic
  - Logical
  - Empirical
  - Replicable
  - Creative
  - Use of multiple methods



### Questions & Answers







