

CONCEPTS OF RESEARCH

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Objectives

- Define Research
- What motivate research
- Characteristics of a good Research

Define Research

- Research is the search for knowledge through objective and systematic method of getting solutions to a problem.

OR

- Research is the organized, systematic, data based, critical and objective inquiry or investigation into a specific problem with the ultimate aim of finding suitable answers or solutions

AIM !!!

- the aim of RESEARCH: To Find a solution or answer to a problem
- For example, a large number of people presenting with severe vomiting in a certain hospital at the same time may raise concern leading to the initiation of a research to provide a solution. This should be done so as to prevent large scale eruption of the problem

RE- SEARCH

- **Re-Search** means looking for truth in a repeatable manner
- Searching is to examine closely, test, try or probe
- **RE-** refers to again, anew or afresh
- The two words (**Re-Search**) together imply patient study, or investigation to establish a fact or principle.
- Without research, decisions made are **commonly flawed** and can be regarded as **based on rumours**.
- By doing research on a specific problem, solutions can be designed that have greater chance of success using least amount of resources.

What motivate research

1. Get a research degree along with its consequential benefits;
 2. Face the challenge in solving the unsolved problems, i.e., concern over practical problems initiates research;
 3. Get intellectual joy of doing some creative work;
 4. Be of service to society;
 5. Get respectability.
- Other reasons include:
 - Directive of Government
 - Employment conditions
 - Curiosity about new things

Questions Researchers intend to answer

□ WHY,

- It interrogates a problem to determine its root cause with the ultimate aim of providing its solution.
- For example, “why are the people presenting with severe vomiting?”

□ WHERE,

- It interrogates the concentration or distribution of the problem in an area.
- That means ... “where are the persons presenting with severe vomiting coming from?”

❑ **WHEN,**

- It answers the question of occurrence of the problem in time.
- For instance, “when do people having the persons with the symptoms (of severe vomiting)?”

❑ **HOW**

- It considers the depth of understanding of the problem by mapping the sequence of events of their manifestation.
- For example, “how did the severe vomiting occur?”

CHARACTERISTICS OF A GOOD RESEARCH

- *Good research has to be:*
- **Controlled:**
 - In order to make valid conclusions, the researcher must minimize effects of other factors.
 - This is possible in controlled laboratory experiments but is rarely possible in field experiments.
 - In such situations, these factors which may influence the results obtained must be taken into consideration.
 - For instance, the density of water varies with temperature

Cont.....

- **Systematic:**

- It means that research is structured with specified steps to be taken in a specified sequence in accordance with the well defined set of rules but not in a haphazard manner.

- **Rigorous:**

- Procedures must be followed strictly in order to get answers that are relevant, appropriate and justified

Cont.....

- **Valid and verifiable:**
 - Conclusions made from the methodology are correct even when someone else does the study.
 - Common terms used in this aspect are unbiased and objective.
 - Unbiased implies the personal opinion of the researcher did not affect in any way the research outcome at any stage.

Cont....

- **Empirical:**
 - Conclusions drawn are based only on facts collected by direct experience or observation during the study described.
- **Critical:**
 - Methods used in data collection and analysis are full proof and can withstand critical scrutiny

Cont....

- **Approach/philosophy**
 - The study is undertaken within the framework of existing basis of knowledge, approaches and philosophies

Qualities of a good Researcher

- **R**esearch Oriented
- **E**fficient
- **S**cientific
- **E**ffective
- **A**ctive
- **R**esourceful
- **C**reative
- **H**onest
- **E**conomical
- **R**eligious

Cont..

- **Research Oriented**

- Research-oriented learning is a concept of learning that revolves around inquisitive, problem-oriented and critical thinking, autonomous and creative working and practical application in academic research. It is an individual competence that needs tutelage and fostering throughout the course of studies.”(<https://www.europa-uni.de/en/struktur/>)

- **Efficient**

- Efficiency signifies a peak level of performance that uses the least amount of inputs to achieve the highest amount of output. Efficiency requires reducing the number of unnecessary resources used to produce a given output including personal time and energy(<https://www.investopedia.com/terms/e/efficiency.asp>)

Cont....

- **Scientific**

- Any person involved in scientific research making the activity his vocation is labeled as a researcher. But it does not mean that a research could be only scientific in nature as many research on religion and are still called researchers. <https://search.yahoo.com/search>

- **Effective**

- Successful in producing a desired or intended result: "effective solutions to environmental problems"<https://search.yahoo.com/search?>

Cont...

- **Active**

- Higher Education Institutions generally define a “Research Active” individual as someone who conducts research on an ongoing basis and ensures it is a significant focus of their academic activity.

(<https://www.dkit.ie/system/files/Research%20Active%20Definition%20DKIT.pdf>)

- **Resourceful**

- Resourcefulness is defined as the “ability to act effectively or imaginatively, especially in difficult situations.” It is associated with creativity, imagination, and self-sufficiency.

(<https://thehelpbyastrids.com/resourcefulness-and-research-skills/>)

Cont...

- **Creative**

- production that come up with new knowledge through an interrogation/disruption of form and refines existing knowledge through an adaptation of convention

<https://tisch.nyu.edu/tisch-research-news-events>

- **Honest**

- free from fraud or deception : LEGITIMATE, TRUTHFUL

<https://www.merriam-webster.com/dictionary/legitimate>

Cont....

- **Economical**

- giving good value or service in relation to the amount of money, time, or effort spent: "a small, economical car"

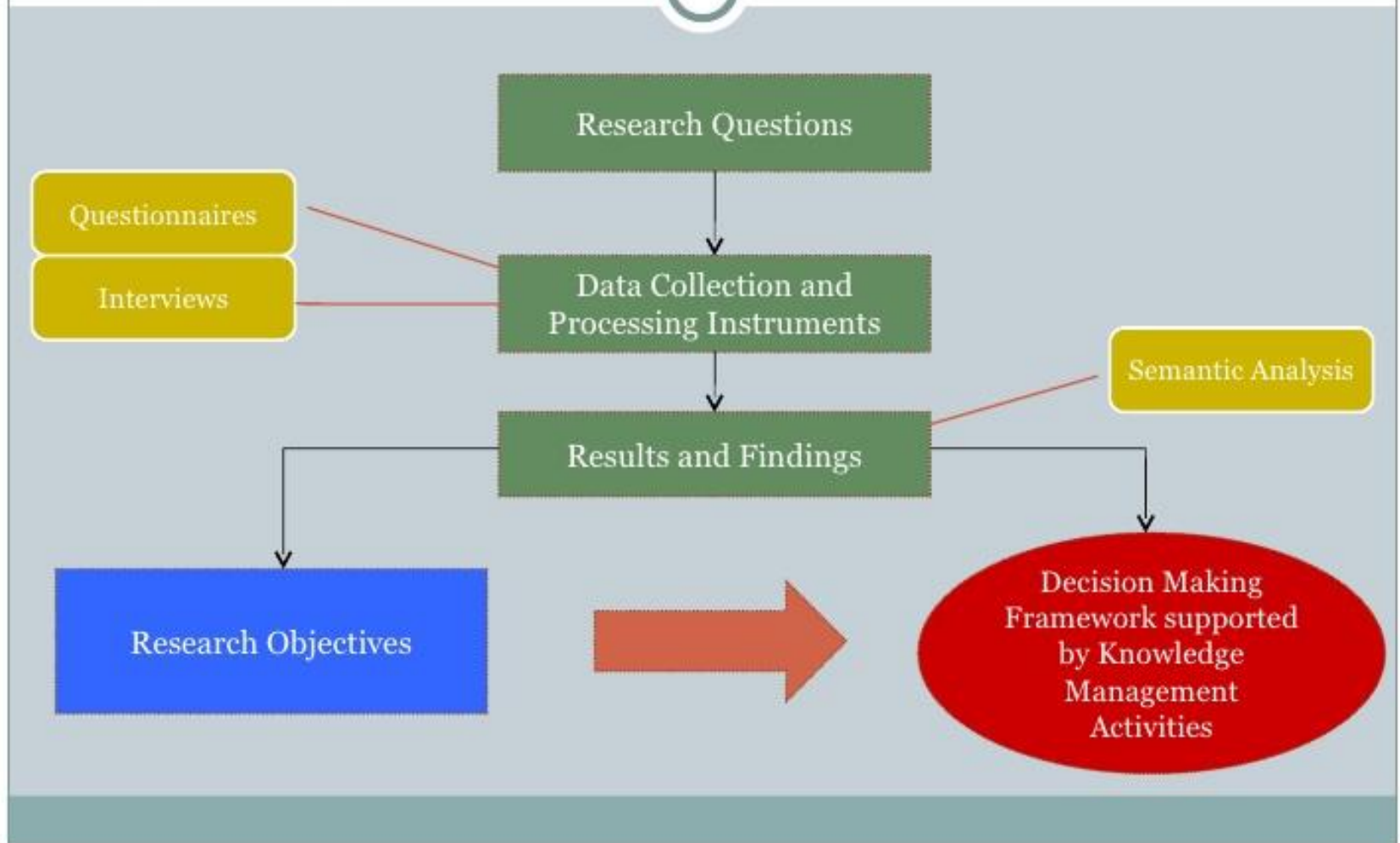
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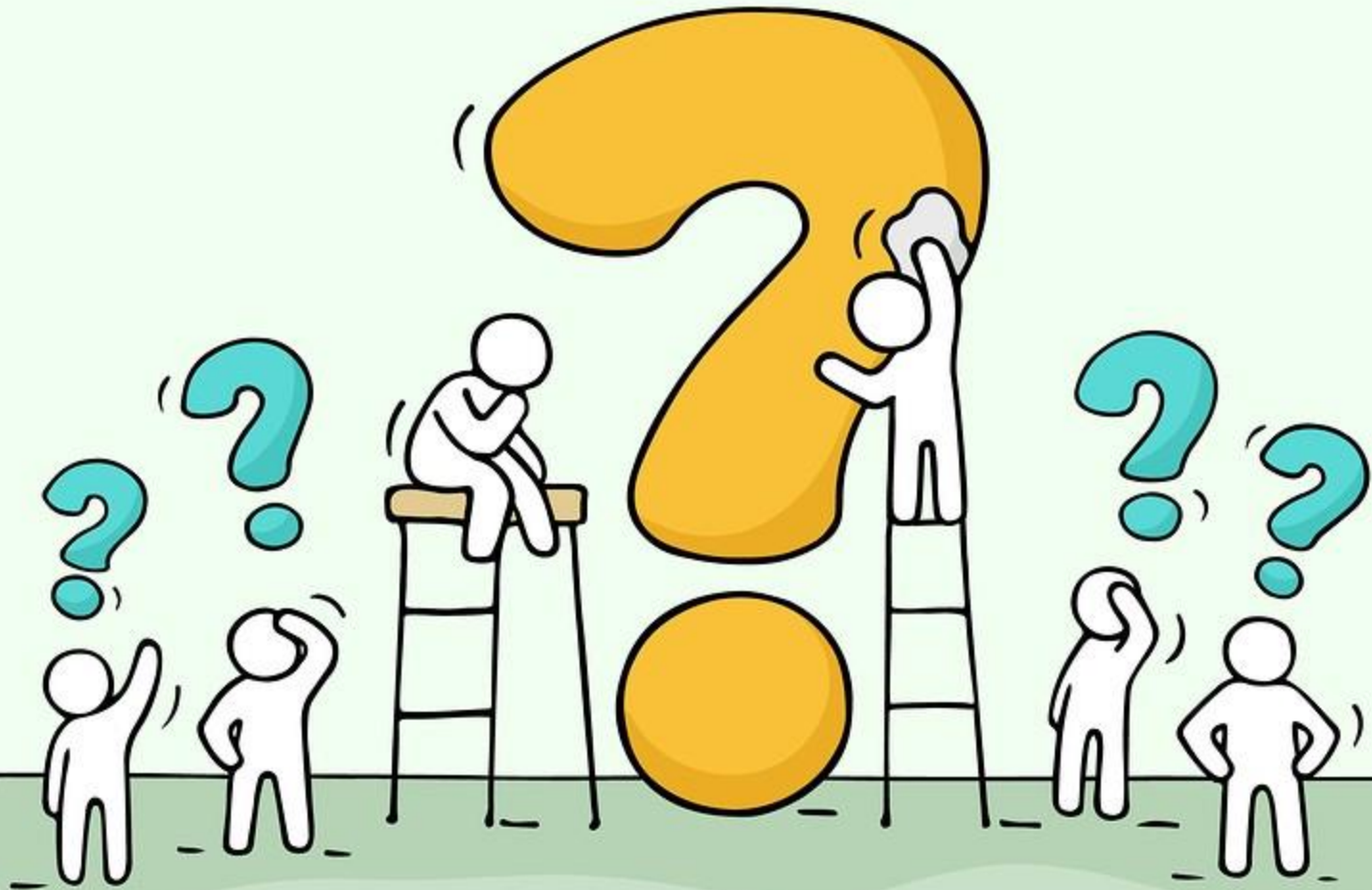
- **Religious**

- relating to or believing in a religion: "both men were deeply religious, intelligent, and moralistic"

<https://search.yahoo.com/search>

Research Design





END

Read on types of Research