


FAQ's About Research

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1. WHAT IS RESEARCH?

- **Research is a careful study of a given subject, field, or problem in a scholarly and often scientific manner.**
 - **A researcher, like an architect, finds that planning is the essence of his/her art. Structure, conceptualization, practical methodology, and up-front planning are basic requirements to secure an excellent outcome in both fields.**
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1. WHAT IS RESEARCH?

- **According to Kerlinger (1986,11):
scientific research is a systematic, controlled,
empirical, and critical investigation of
hypothetical propositions about the presumed
relations among natural phenomena."**





WHAT ACTIONS ARE ASSOCIATED WITH RESEARCH?

- Investigating
 - Analyzing
 - Scrutinizing
 - Observing
 - Exploring
 - Examining
 - Probing
 - Testing
 - Collecting (Data)
 - Thinking
 - Inquiring
 - Sweating 😊
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Applied research - pragmatic and usually involves

- ❑ **Formulating a problem – based on theoretical frameworks and lit review.**
- ❑ **Developing a hypothesis and/or research questions.**
- ❑ **Constructing a model (method) to solve the problem.**
- ❑ **Collecting data using the *epistemological method chosen.**

*The nature, sources and limits of knowledge



Applied research – pragmatic,
and usually involves:

- **Analyzing and synthesizing the data.**
 - **Coming to a conclusion based on the data.**
 - **Making recommendations for application.**
 - **Setting the stage for future research.**
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WHAT IS A RESEARCH DESIGN?

- **According to L.DeBakey (1978) -- the strategy, plan, and the structure of conducting a research plan.**
 - **According to Verhonic (1978) -- the overall framework for collecting data once the problem has concretely been formulated in order to provide a format for the detailed steps in the study.**
 - **The type of design depends upon the statement of the problem, the research questions and the hypotheses (if any).**
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Major Paradigms of Research

- A paradigm is a broad framework of perception, understanding, belief within which theories and practices operate.
 - A Quantitative purist (Positivist) contends that the observer is separate from the entities that are observed.
 - A Qualitative purist (constructivist) contends there are multiple interpretations of reality.
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WHAT TOOLS DOES ONE NEED TO DO RESEARCH?

- Access to data bases
 - Measurement techniques (including instruments to obtain data)
 - Ethical behavior
 - The computer and its software.
 - Facility with language.
 - An open and flexible mind.
 - Statistics (for quantitative studies).
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HOW IS STATISTICS RELATED TO RESEARCH?

- **Statistics is often interwoven in many stages of research after the problem is formulated.**
 - **Qualitative – descriptive stats**
 - **Quantitative- descriptive+ inferential stats**
 - **Statistics involves data: collection, organization , analysis, interpretation , and prediction (COAIP)**
 - **[Data – like toys – is plural so “data are us 😊]**
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