CONCEPT OF THEORY

DR NITA THAKARE

THEORY

 Theories are formulated to explain, predict, and understand phenomena and, in many cases, to challenge and extend existing knowledge,

STRATEGIES FOR DEVELOPING THE THEORETICAL FRAMEWORK

 A theoretical framework consists of concepts, together with their definitions, and existing theory/theories that are used for your particular study.

I. Developing the Framework

Here are some strategies to develop of an effective theoretical framework:

- **1.Examine your thesis title and research problem**. The research problem anchors your entire study and forms the basis from which you construct your theoretical framework.
- **2.Brainstorm on what you consider to be the key variables in your research**. Answer the question, what factors contribute to the presumed effect?
- 3. Review related literature to find answers to your research question.
- **4.List the constructs and variables** that might be relevant to your study. Group these variables into independent and dependent categories.
- **5.Review the key social science theories** that are introduced to you in your course readings and choose the theory or theories that can best explain the relationships between the key variables in your study
- **6.Discuss the assumptions or propositions** of this theory and point out their relevance to your research.

PUPOSE OF THEOROTICAL FRAMEWORK

- Means by which new research data can be interpreted and coded for future use,
- •identify to new problems that have no previously identified solutions strategy,
- Means for identifying and defining research problems,
- •Means for prescribing or evaluating solutions to research problems,
- •Way of telling us that certain facts among the accumulated knowledge are important and which facts are not,
- Means of giving old data new interpretations and new meaning,
- •Means by which to identify important new issues and prescribe the most critical research questions that need to be answered to maximize understanding of the issue,
- •Means of providing members of a professional discipline with a common language and a frame of reference for defining boundaries of their profession, and
- •Means to guide and inform research so that it can, in turn, guide research efforts and improve professional practice.

Meaning

Hypothesis

Structure

Size of Sample

Scrutiny

Time Factor

Theory

Approach

Difference Between Inductive and Deductive Approach to Research

Inductive theory is an approach to research that starts with the observation and the end result of the research is THEORY.

Deductive theory is an approach to research that starts with the proposition of hypothesis and the end result of the research is Confirmation/rejection.

Meaning

Hypothesis

Structure

Size of Sample

Scrutiny

Time Factor

Theory

Approach

Difference Between Inductive and Deductive Approach to Research

Inductive approach to research does not have any place for **hypothesis**. So, researcher is free to alter direction of the study.

Deductive approach to research starts with the **hypothesis** itself. Researcher is bound not to alter direction of the study.

Meaning

Hypothesis

Structure

Size of Sample

Scrutiny

Time Factor

Theory

Approach

Difference Between Inductive and Deductive Approach to Research

Inductive approach is **less structured** as there is no guiding factor.

Deductive approach is **highly structured** because there is some specific aim to be accomplished.

Meaning

Hypothesis

Structure

Size of Sample

Scrutiny

Time Factor

Theory

Approach

Difference Between Inductive and Deductive Approach to Research

Inductive approach is appropriate for small sample project because **small numbers of sample** are analyzed with greater gravity.

Deductive approach is appropriate for large sample project because **large numbers of samples** are analyzed with less depth.

Meaning

Hypothesis

Structure

Size of Sample

Scrutiny

Time Factor

Theory

Approach

Difference Between Inductive and Deductive Approach to Research

More scrutinized information about the subject matter.

Less scrutiny in getting information regarding subject matter.

Meaning

Hypothesis

Structure

Size of Sample

Scrutiny

Time Factor

Theory

Approach

Difference Between Inductive and Deductive Approach to Research

Inductive approach assumes that there is abundance of time; so depth analysis is possible.

Deductive approach assumes that there is **shortage of time**; so depth analysis of large number of sample is unattainable.

Meaning

Hypothesis

Structure

Size of Sample

Scrutiny

Time Factor

Theory

Approach

Difference Between Inductive and Deductive Approach to Research

Inductive approach is concerned with building a new theory.

Deductive approach is concerned with **testing** an existing theory.



Meaning

Hypothesis

Structure

Size of Sample

Scrutiny

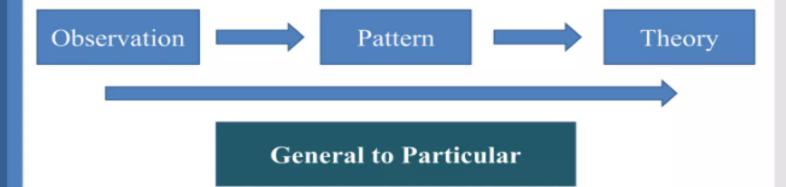
Time Factor

Theory

Approach

Difference Between Inductive and Deductive Approach to Research

Inductive approach to research is bottom-up approach



Meaning

Hypothesis

Structure

Size of Sample

Scrutiny

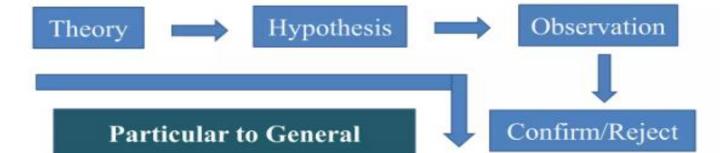
Time Factor

Theory

Approach

Difference Between Inductive and Deductive Approach to Research

Deductive approach to research is top-down approach.



Cycle of Deductive & Inductive Research

THEORY

New Theory Developed (Inductive process ends) Existing theory identified (Deductive process begins)

Patterns observed; Empirical generalizations/ tentative hypotheses created

EMPIRICAL OBSERVATIONS

Hypotheses tested with specific empirical observations: theory either supported or not supported (deductive process ends)

Inductive process begins;

(If/then predictions to test theory)

The main difference between inductive and deductive reasoning is that inductive reasoning aims at developing a theory while deductive reasoning aims at testing an existing theory.

Example: Inductive research approach

When there is little to no existing literature on a topic, it is common to perform inductive research, because there is no theory to test. The inductive approach consists of three stages:

1.Observation

- 1. A low-cost airline flight is delayed
- 2. Dogs A and B have fleas
- 3. Elephants depend on water to exist

2. Seeking patterns

- 1. Another 20 flights from low-cost airlines are delayed
- 2. All observed dogs have fleas
- 3. All observed animals depend on water to exist

3. Developing a theory or general (preliminary) conclusion

- 1. Low cost airlines always have delays
- 2. All dogs have fleas
- 3. All biological life depends on water to exist

Limitations of an inductive approach

A conclusion drawn on the basis of an inductive method can never be fully proven. However, it can be invalidated.

Example: Deductive research approach

When conducting <u>deductive research</u>, you always start with a theory. This is usually the result of inductive research. Reasoning deductively means testing these theories. Remember that if there is no theory yet, you cannot conduct deductive research. The deductive research approach consists of four stages:

1.Start with an existing theory and create a problem statement

- 1. Low cost airlines always have delays
- 2. All dogs have fleas
- 3. All biological life depends on water to exist

2. Formulate a falsifiable <u>hypothesis</u>, based on existing theory

- 1. If passengers fly with a low cost airline, then they will always experience delays
- 2. All pet dogs in my apartment building have fleas
- 3. All land mammals depend on water to exist

1. Collect data to test the hypothesis

- 1. Collect flight data of low-cost airlines
- 2. Test all dogs in the building for fleas
- 3. Study all land mammal species to see if they depend on water

2. Analyze and test the data

- 1. 5 out of 100 flights of low-cost airlines are not delayed
- 2. 10 out of 20 dogs didn't have fleas
- 3. All land mammal species depend on water

3. Decide whether you can reject the **null hypothesis**

- 1. 5 out of 100 flights of low-cost airlines are not delayed = reject hypothesis
- 2. 10 out of 20 dogs didn't have fleas = reject hypothesis
- 3. All land mammal species depend on water = support hypothesis

Limitations of a deductive approach

The conclusions of deductive reasoning can only be true if all the premises set in the inductive study are true and the terms are clear.

- •Example
- •All dogs have fleas (premise)
- •Benno is a dog (premise)
- •Benno has fleas (conclusion)

Based on the premises we have, the conclusion must be true. However, if the first premise turns out to be false, the conclusion that Benno has fleas cannot be relied upon.