

# Chapter 4

## Literature Reviews

### LEARNING OUTCOMES

**After studying this chapter, you should be able to**

1. Define the meaning of theory
2. Understand the goals of theory
3. Understand the terms concepts, propositions, variables, and hypotheses
4. Discuss how theories are developed
5. Understand the scientific method

### **Define the meaning of theory**

Theory is a formal, testable explanation of some events that includes explanations of how things relate to one another.

Theories are simply models designed to help us better understand reality and to understand the logic behind things we observe.

A theory is a formal, logical explanation of some events that includes predictions of how things relate to one another.

### **Goals of Theory**

There are two primary goals of theory.

1. To understand the relationships among various phenomena. A theory provides a picture of the linkages among different concepts, allowing us to better comprehend how they affect one another.
2. To predict what will happen if we change one factor. For example, if we understand the relationship between advertising expenditures and retail sales, we can then predict the impact of decreasing or increasing our advertising expenditures.

### **Concepts, Propositions, Variables, and Hypotheses**

A concept or construct is a generalized idea about a class of objects, attributes, occurrences, or processes that has been given a name.

A proposition explains the logical linkage among certain concepts by asserting a universal connection between concepts. 2

A hypothesis is a formal statement explaining some outcome regarding variables of interest.

Variables are the empirical reflection of a concept and a hypothesis is a proposition stated in a testable format.

So, concepts and propositions are at the abstract level, while variables and hypotheses are at the empirical level.

### **How theories are developed**

A theory can be built through a process of reviewing previous findings of similar studies or knowledge of applicable theoretical areas.

Theory generation may occur at either level.

1. Deductive reasoning is the logical process of deriving a conclusion about a specific instance based on a known general premise or something known to be true. A theory may be developed with deductive reasoning by going from a general statement to a specific assertion.
2. Inductive reasoning is the logical process of establishing a general proposition on the basis of observation of particular facts. At the empirical level, a theory may be developed with inductive reasoning.

### **Understand the scientific method**

The scientific method is a set of prescribed procedures for establishing and connecting theoretical statements about events, for analyzing empirical evidence, and for predicting events yet unknown.

It is useful to look at the analytic process of scientific theory building as a series of stages.

We mentioned that seven operations may be viewed as the steps involved in the application of the scientific method.

### **Steps of the Scientific Method**

1. Assessment of relevant existing knowledge of a phenomenon
2. Formulation of concepts and propositions
3. Statement of hypotheses
4. Design of research to test the hypotheses
5. Acquisition of meaningful empirical data 3

6. Analysis and evaluation of data

7. Proposal of an explanation of the phenomenon and statement of new problems raised by the research.

In sum, the scientific method guides us from the abstract nature of concepts and propositions, to the empirical variables and hypotheses, and to the testing and verification of theory.

### **Practical Value of Theories**

Theories allow us to generalize beyond individual facts or isolated situations. Theories provide a framework that can guide managerial strategy by providing insights into general rules of behavior. When different incidents may be theoretically comparable in some way, the scientific knowledge gained from theory development may have practical value.

A good theory allows us to generalize beyond individual facts so that general patterns may be understood and predicted. It is often said there is nothing so practical as a good theory.

### **Questions For Review and Critical Thinking**

1. Find another definition of theory. How is the definition you found similar to this presentation's definition? How is it different?
2. What are different in the terms of concepts, propositions, variables, and hypotheses ?
3. Compare and contrast deductive logic with inductive logic. Give an example of both.
4. What does the statement, "There is nothing so practical as a good theory" mean? Do you agree with this statement?
5. What is the scientific method and What are the steps involved in the application of the scientific method?