



# **PORTFOLIO PREPARATION & GRADUATION THESIS STUDY**

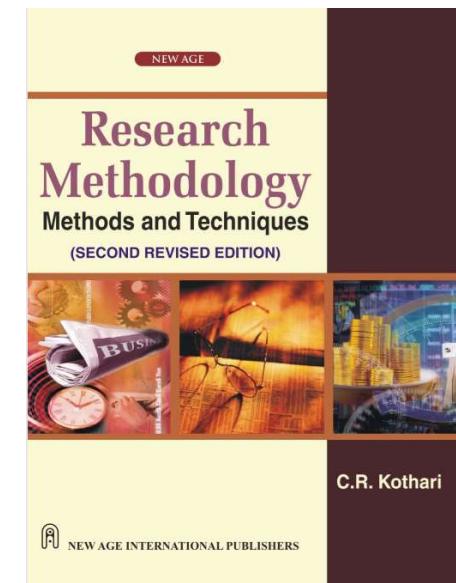
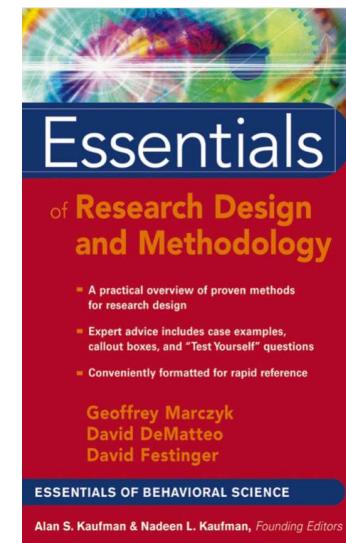


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## REFERENCES:

- (Essentials of behavioral science series) Geoffrey R. Marczyk, David DeMatteo, David Festinger-Essentials of Research Design and Methodology-John Wiley & Sons (2005)
- C.R. Kothari-Research Methodology\_ Methods and Techniques-New Age Publications (Academic) (1985)





## HYPOTHESES

■ The next step in the scientific method is coming up with a hypothesis, which is simply an educated—and testable—guess about the answer to your research question. A hypothesis is often described as an attempt by the researcher to explain the phenomenon of interest. Hypotheses can take various forms, depending on the question being asked and the type of study being conducted



## RELATIONSHIP BETWEEN HYPOTHESES AND RESEARCH DESIGN

- Hypotheses can take many different forms depending on the type of research design being used. Some hypotheses may simply describe how two things may be related. For example, in correlational research, a researcher might hypothesize that Smoking is related to poor decision making.

## FALSIFIABILITY OF HYPOTHESES

- According to the 20th-century philosopher Karl Popper, hypotheses must be falsifiable (Popper, 1963). In other words, the researcher must be able to demonstrate that the hypothesis is wrong. If a hypothesis is not falsifiable, then science cannot be used to test the hypothesis. For example, hypotheses based on religious beliefs are not falsifiable. Therefore, because we can never prove that faith-based hypotheses are wrong



## LITERATURE REVIEW

■ Scouring the existing literature to get ideas for future research is a technique used by most researchers. It is important to note, however, that being familiar with the literature in a particular topic area also serves another purpose. Specifically, it is crucial for researchers to know what types of studies have been conducted in particular areas so they can determine whether their specific research questions have already been answered.

## EXPERIMENTS

- After articulating the hypothesis, the next step involves actually conducting the experiment (or research study).



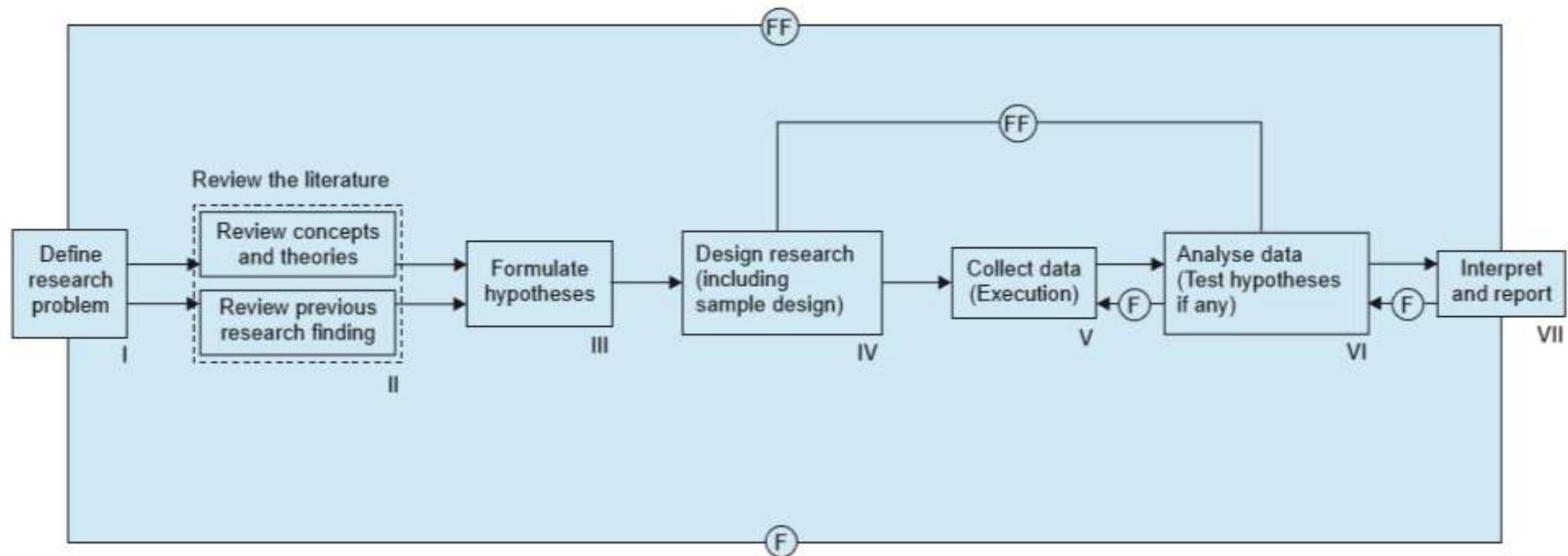


# ACCURACY VS. RELIABILITY

- When talking about measurement in the context of research, there is an important distinction between being accurate and being reliable. Accuracy refers to whether the measurement is correct, whereas reliability refers to whether the measurement is consistent

# RESEARCH DESIGN

RESEARCH PROCESS IN FLOW CHART



Where (F) = feed back (Helps in controlling the sub-system to which it is transmitted)

(FF) = feed forward (Serves the vital function of providing criteria for evaluation)

Fig. 1.1