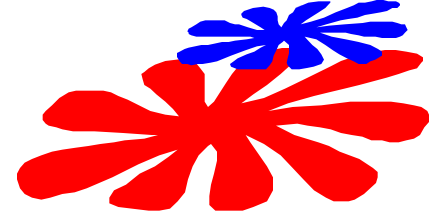




Chapter VII

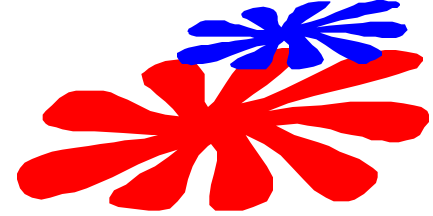
**Causal Research Design:
Experimentation**

Chapter Outline



- 1) Overview
- 2) Concept of Causality
- 3) Conditions for Causality
- 4) Definition of Concepts
- 5) Definition of Symbols
- 6) Validity in Experimentation
- 7) Extraneous Variables
- 8) Controlling Extraneous Variables





9) A Classification of Experimental Designs

10) Pre-experimental Designs

11) True Experimental Designs

12) Quasi Experimental Designs

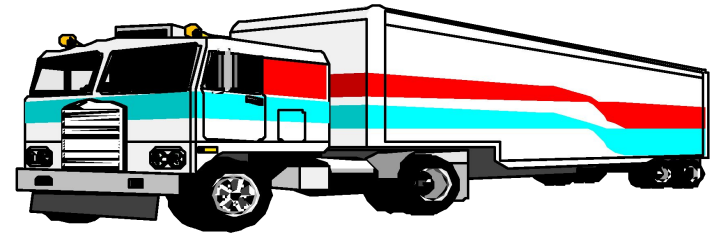
13) Statistical Designs

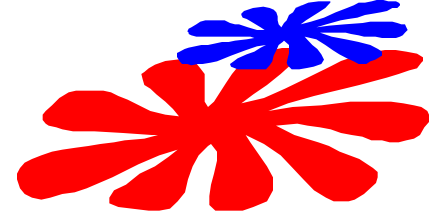
14) Laboratory vs. Field Experiments

15) Experimental vs. Non-experimental Designs

16) Limitations of Experimentation

17) Application: Test Marketing





18) Determining a Test Marketing Strategy

19) International Marketing Research

20) Ethics in Marketing Research

21) Internet and Computer Applications

22) Focus on Burke

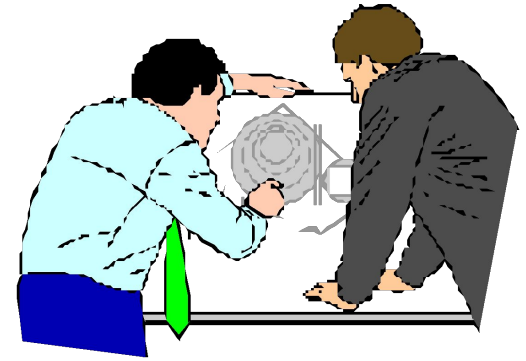
23) Summary

24) Key Terms and Concepts

25) Acronyms



Figure 7.1 A Classification of Experimental Designs



Experimental Designs

Pre-experimental

One-Shot Case Study

One Group Pretest-Posttest

Static Group

True Experimental

Pretest-Posttest Control Group

Posttest: Only Control Group

Solomon Four-Group

Quasi Experimental

Time Series

Multiple Time Series

Statistical

Randomized Blocks

Latin Square

Factorial Design

Figure 7.2 Selecting a Test-Marketing Strategy

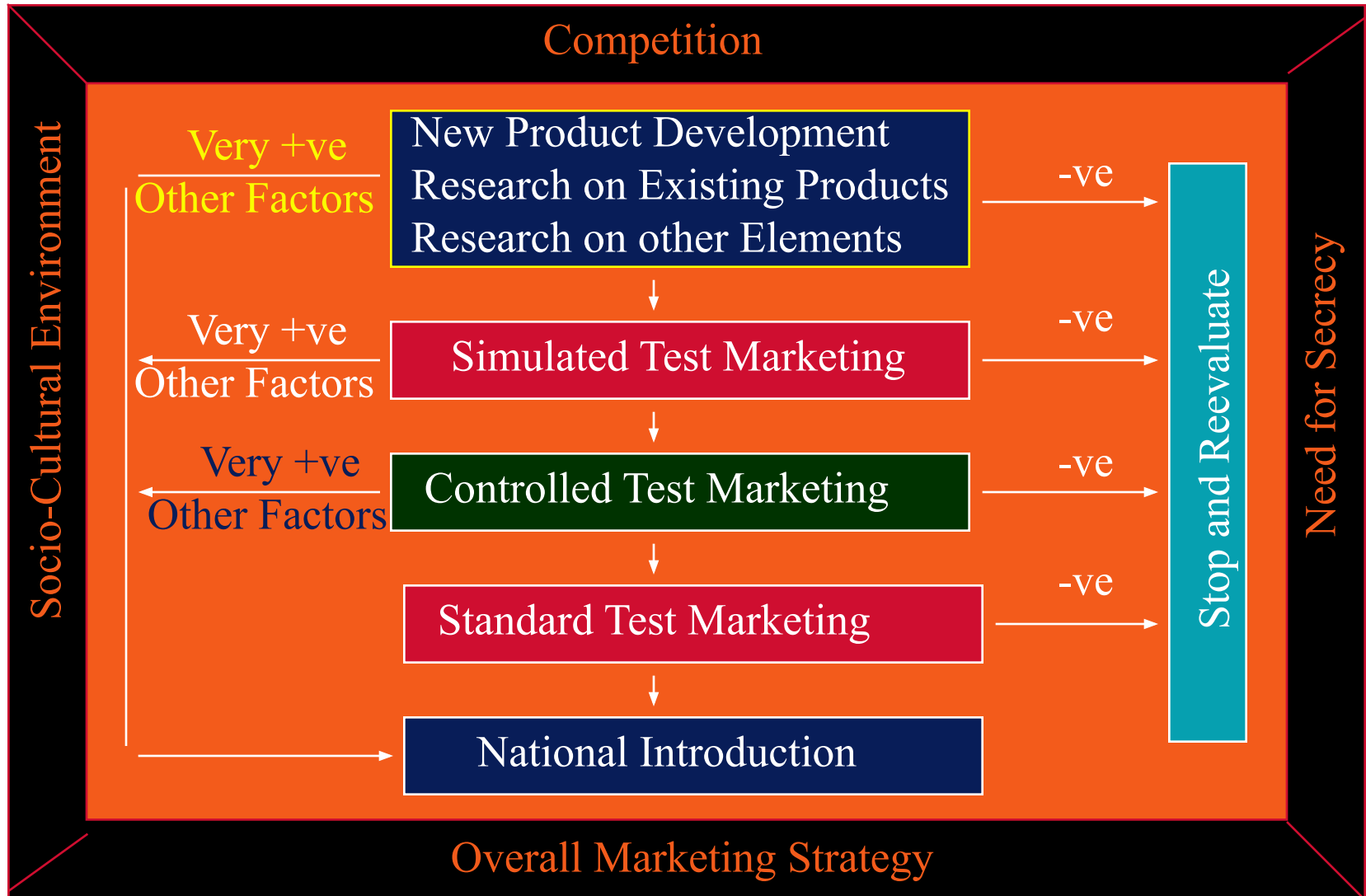


Table 7.1 Evidence of Concomitant Variation between Purchase of Fashion Clothing and Education

Purchase of Fashion Clothing, Y

		Purchase of Fashion Clothing, Y		
		High	Low	
Education, X	High	363 (73%)	137 (27%)	500 (100%)
	Low	322 (64%)	178 (36%)	500 (100%)



Table 7.1

Purchase of Fashion Clothing by Income and Education

Low Income Purchase



High Income Purchase

High Low

High Low

Education

High

122 (61%)

78 (39%)

200 (100%)

Education

High

241 (80%)

59 (20%)

300

Low

171 (61%)

129 (43%)

300 (100%)

Low

151 (76%)

49 (24%)

200

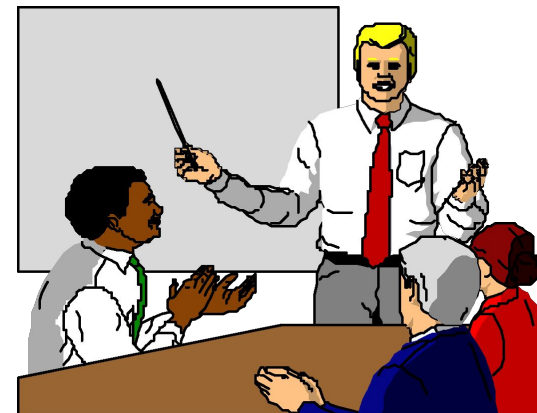


Table 7.4

An Example of a Randomized Block Design

Store Number	Treatment Groups			Block
	Commercial Patronage	Commercial A	Commercial B	
1	Heavy			
2	Medium			
3	Low			
4	None			

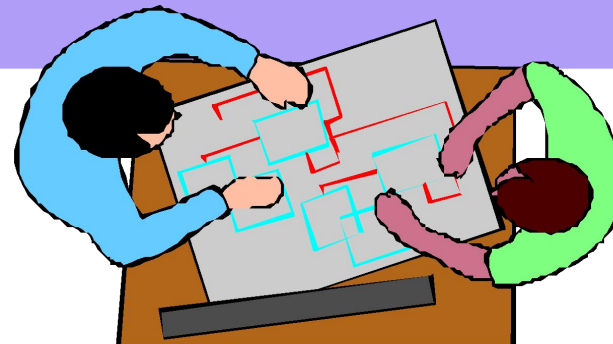


Table 7.5

An Example of Latin Square Design

Patronage	Interest in the Store			Store
	High	Medium	Low	
Heavy		B		A
Medium		C		B
Low and none	A		C	

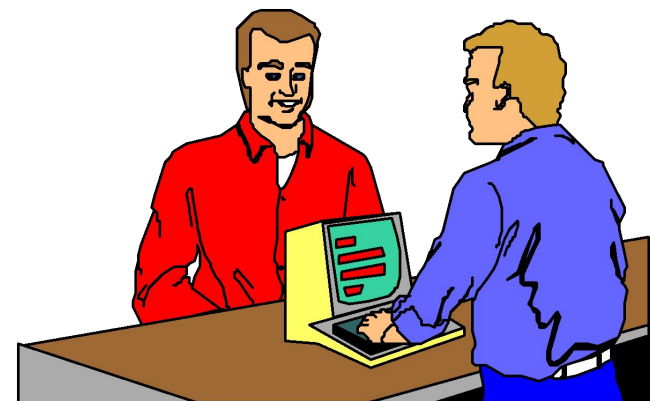
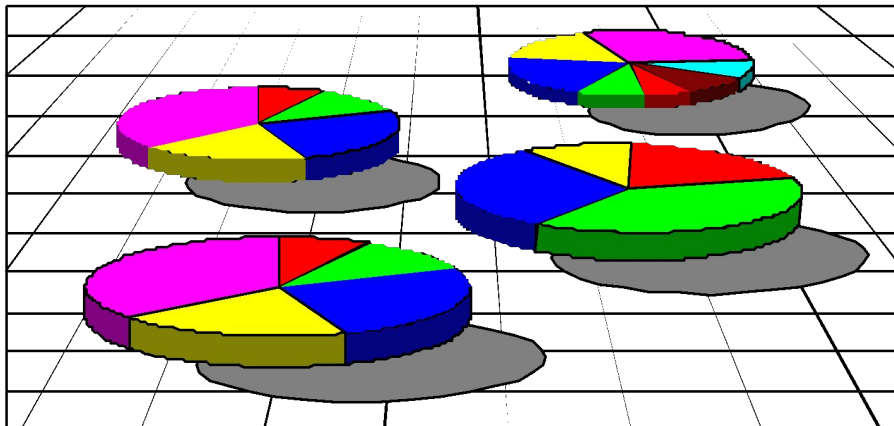


Table 7.6

An Example of a Factorial Design



Amount of Humor

**Amount of Store
Information**

**No
Humor**

**Medium
Humor**

**High
Humor**

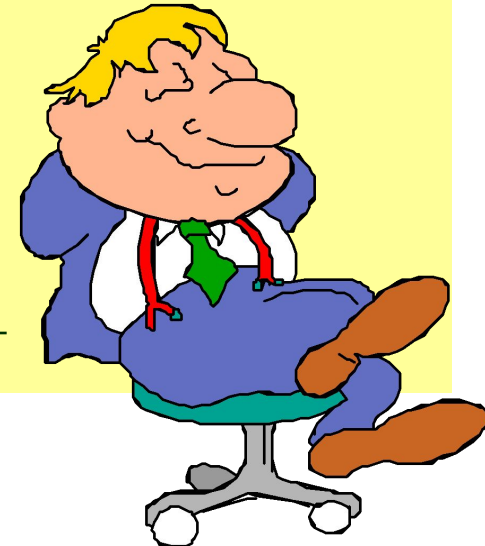
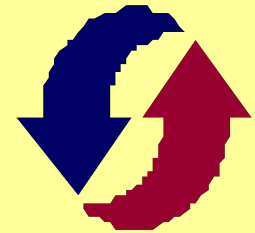
Low

Medium

High

Table 7.7 Laboratory versus Field Experiments

Factor	Laboratory	Field
Environment	Artificial	Realistic
Control	High	Low
Reactive Error	High	Low
Demand Artifacts	High	Low
Internal Validity	High	Low
External Validity	Low	High
Time	Short	Long
Number of Units	Small	Large
Ease of implementation	High	Low
Cost	Low	High



Criteria for the Selection of Test Markets

Test Markets should have the following qualities:

- 1) Be large enough to produce meaningful projections. They should contain at least 2% of the potential actual population.
- 2) Be representative demographically.
- 3) Be representative with respect to product consumption behavior.
- 4) Be representative with respect to media usage.
- 5) Be representative with respect to competition.
- 6) Be relatively isolated in terms of media and physical distribution.
- 7) Have normal historical development in the product class
- 8) Have marketing research and auditing services available
- 9) Not be over-tested

Dancer Fitzgerald's Sample List of Recommended Test Markets

Albany-Schenectady-Troy, N
Boise, ID
Little Rock, AR
Louisville, KY
Cincinnati, Oh
Omaha, NE
Orlando-Daytona Beach, FL
Phoenix, AZ

Knoxville, TN
Lexington, KY
Cedar Rapids-Waterloo, IA
Charlotte, NC
Nashville, TN
Columbus, OH
Des Moines, IA
Erie, PA

Buffalo, NY
Minneapolis, MN
Cleveland, OH
Colorado Springs-Pueblo, CO
Pittsburgh, PA

