

PART ONE

Chapter 2

Formulating the Research Objectives and Research Design



Chapter Objectives

After reading this chapter, you should be able to:

- ➔ **Appreciate that good research starts with good thinking.**
- ➔ **Understand the link between the research approach and research objectives.**
- ➔ **Describe the nature and scope of research carried out to develop and approach to the problem.**
- ➔ **Understand the importance of clearly specifying the information needed and its relationship to the research objectives.**
- ➔ **Demonstrate how to specify measurable research objectives.**
- ➔ **Define research design and classify various research designs.**
- ➔ **Compare and contrast the basic research design: exploratory, descriptive and causal.**
- ➔ **Describe the major sources of errors in a research design.**
- ➔ **Describe the elements of a marketing research proposal.**



Developing an Approach to the Problem

Components

- ➔ Objective/theoretical foundations
- ➔ Conceptual and analytical models
- ➔ Broad and specific components
- ➔ Research questions
- ➔ Hypotheses
- ➔ Relevant characteristics
- ➔ Specifying the information required
- ➔ Research objectives



Objective/Theoretical Foundations

- ➔ Research should be based on objective evidence and supported by theory
[books, journals and monographs]
- ➔ Helps determine which variables should be investigated and how they should be measured

*Nothing is so practical as a good **theory!***



The role of theory in applied research cont.

Research Task:

Conceptualising and identifying key variables

Role of Theory:

Provides a conceptual foundation and understanding of the basic processes underlying the problem situation. These processes will suggest key dependent and independent variables.



The role of theory in applied research cont.

Research Task:

Operationalising key variables

Role of Theory:

Theoretical constructs (variables) can suggest independent and dependent variables naturally occurring in the real world.



The role of theory in applied research cont.

Research Task:

Selecting a research design

Role of Theory:

Causal or associative relationships suggested by the theory may indicate whether a causal or descriptive design should be adopted



The role of theory in applied research cont.

Research Task:

Selecting a sample

Role of Theory:

The theoretical framework may be useful in defining the population and suggesting variables for qualifying the population.



The role of theory in applied research cont.

Research Task:

Analysing and interpreting data

Role of Theory:

The theoretical framework guides the selection of the data analysis strategy and the interpretation of results.



The role of theory in applied research cont.

Research Task:

Integrating findings

Role of Theory:

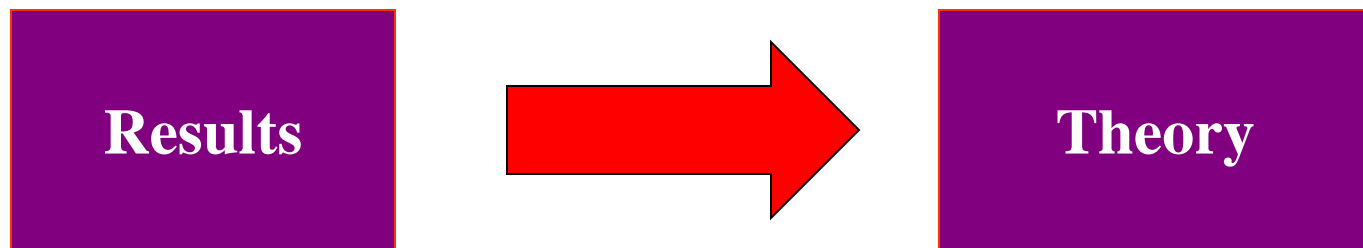
The findings obtained in the research project can be interpreted in the light of previous research and integrated with the existing body of knowledge



Conceptual and Analytical models

Inductive Research

- Phenomena are observed and a conclusion drawn on the basis of the information collected
- Commonly used in medicine or science, also used in marketing

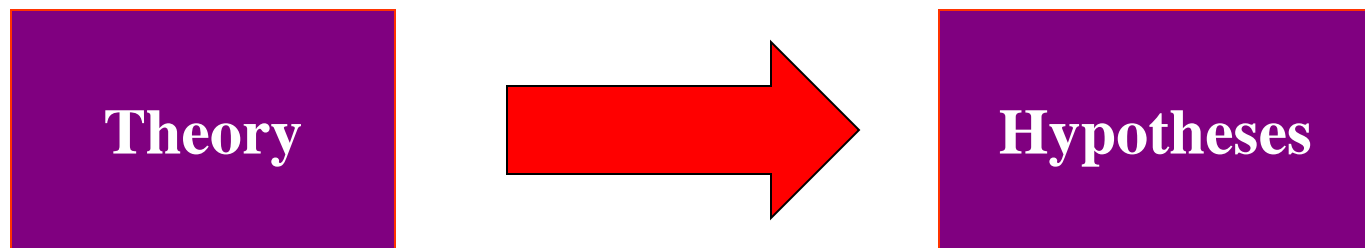




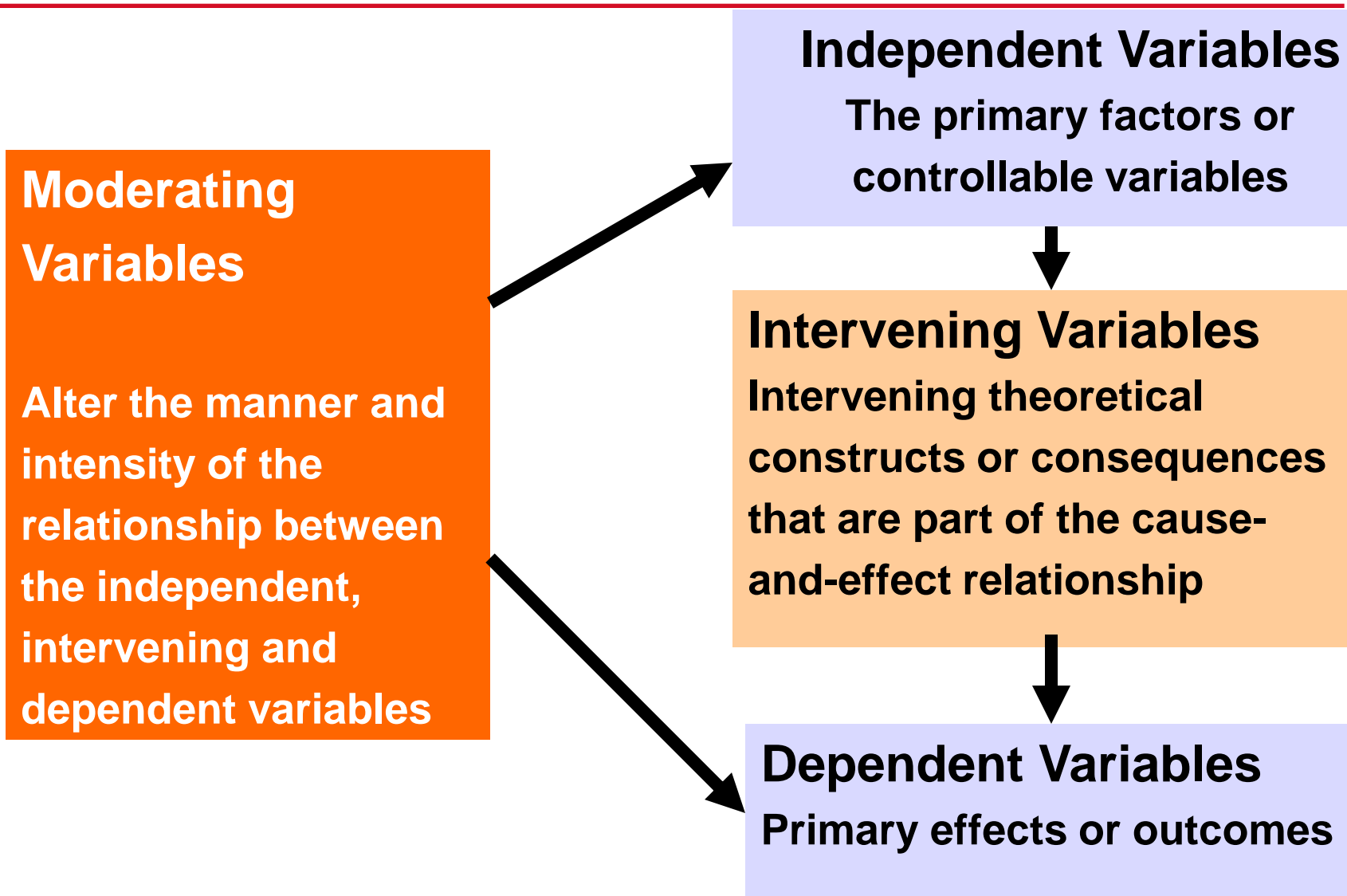
Conceptual and Analytical Models cont.

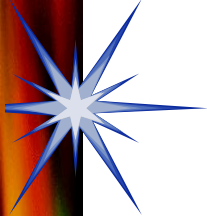
Deductive Research

- Derive a **hypothesis from theory** and gather data to test the hypothesis
- Commonly used in business and arts



The Hypothetico-deductive Model





Analytical Models

- ➔ **A set of variables and their interrelationships designed to represent, in whole or in part, some real system or process**
- ➔ **Verbal**
- ➔ **Mathematical**
- ➔ **Graphical**



A hypothetical example

Verbal Model

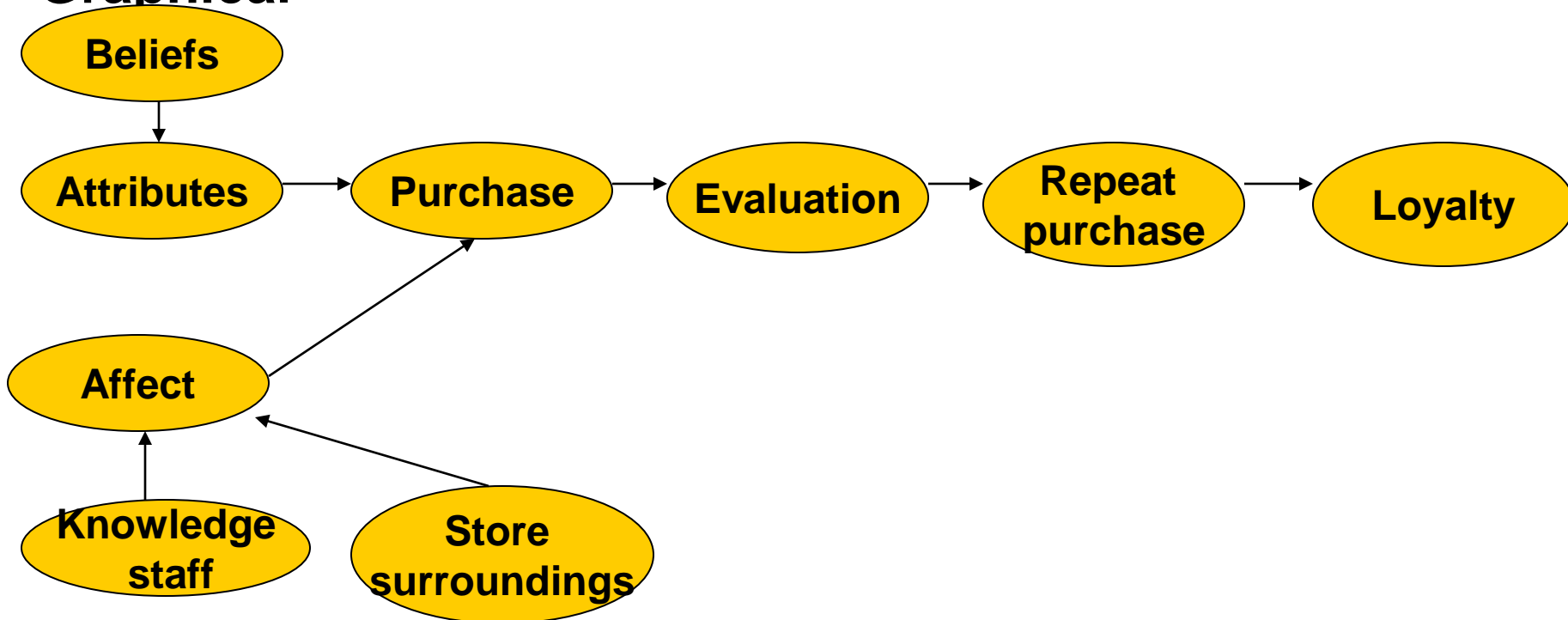
A customer will **purchase** from a store if they **believe** the store will provide them what they want and the store **surroundings** make them **feel** good. Customers are also influenced by knowledgeable and friendly store **personnel**. Customers will **evaluate** their experience with the store and decide whether they will return to the store. **Repeat purchase** will lead to store **loyalty**.

A hypothetical example cont.

Mathematical

$$\text{Loyalty} = b_0 + b_1\text{Beliefs} + b_2\text{Affect} + b_3\text{Purchase} + b_4\text{repeat purchase}$$

Graphical





Research Questions

- ➔ Ask what specific information is required to achieve the research purpose
- ➔ Should be guided by the problem definition, theoretical framework, and the analytical model

Problem definition

To understand peoples usage of comfort foods.

Research questions

What foods are considered comfort foods?

When do people eat comfort foods?

How do people become attracted to comfort foods?

Source: Wansink and Sangerman (2000) in Malhotra, N.K. 2004 *Marketing Research: An applied orientation*, 4th ed., Prentice-Hall: Upper Saddle River NJ, p50.



Hypotheses

- ⇒ Unproven statement or proposition about a factor or phenomenon of research interest
- ⇒ Possible answer to the research question
- ⇒ Hypotheses are **declarative**
- ⇒ Suggests variables to be included in the research design

Hypotheses

H₁ People eat comfort food when they are in a bad mood

H₂ People are interested in comfort foods that are consistent with their personalty

H₃ People are attracted to comfort foods because of past associations



Relevant Characteristics Influencing the Research Design

- ➔ **Bridge between the problem definition and research design**
- ➔ **Additional characteristics, factors, product attributes, or variables useful in constructing a questionnaire [see specifying information needed]**



Linking problem definition & research questions

Problem definition

What is the demographic and psychological profile of the customers of store X?

Research questions

Do they exhibit store loyalty? 

Are they heavy users of credit?

Are they more conscious of personal appearance than customers of compared stores?

Do they combine shopping with dining out?



Linking research questions and hypotheses

Research question

Do they exhibit store loyalty?

Hypotheses

H1 Customers who are store loyal are less knowledgeable about the shopping environment

H2 Store loyal customers are more risk averse than non loyal customers



Specifying the Information Needed

Demographics
/socio-
economic
characteristics

Psychographics
and lifestyles

Personality

Motivation

Knowledge

Past
behaviour

Attitudes and
opinions

Behavioural
intentions

Other
information
related to the
problem



Demographic and Socio-economic Characteristics

- ➔ Gender
- ➔ Age
- ➔ Marital status
- ➔ Household size
- ➔ Education
- ➔ Occupation
- ➔ Income
- ➔ Dwelling
- ➔ Geography
- ➔ City size

Often used to cross-tab the other information obtained

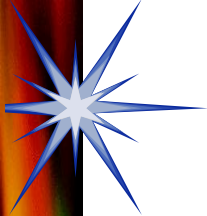


Psychographics and Lifestyle

➤ Personal activities

Activities	Interests	Opinions
Work	Family	Themselves
Hobbies	Home	Social issues
Social events	Job	Politics
Holidays	Community	Business
Entertainment	Recreation	Economics
Shopping	Fashion	Future
Sports	Food	Culture

- Buying activities **[DIY, convenience oriented, heavy user]**
- VALS, VALS-2, iVALS
- Roy Morgan Value Segments™
- Mind maps™



Roy Morgan Value Segments™

- **Visible achievement**
- **Something better**
- **Socially aware**
- **Young optimism**
- **A fairer deal**
- **Look at me**
- **Basic needs real conservatism**
- **Traditional family life**

Source: www.roymorgan.com



Personality

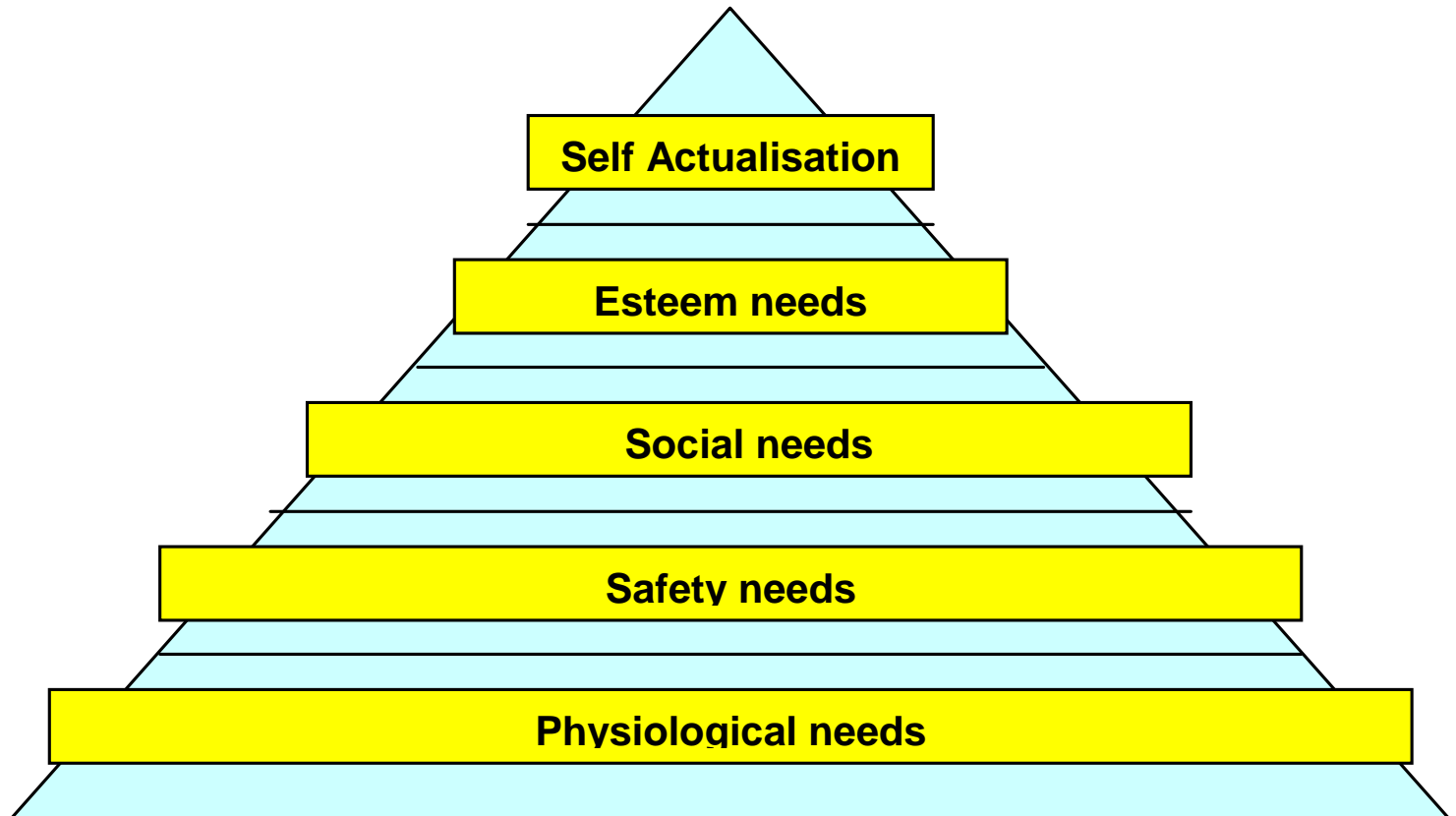
- ➔ Inner psychological both determine characteristics that and reflect how a person responds to his / her environment.
- ➔ More deeply rooted than lifestyle unstructured.



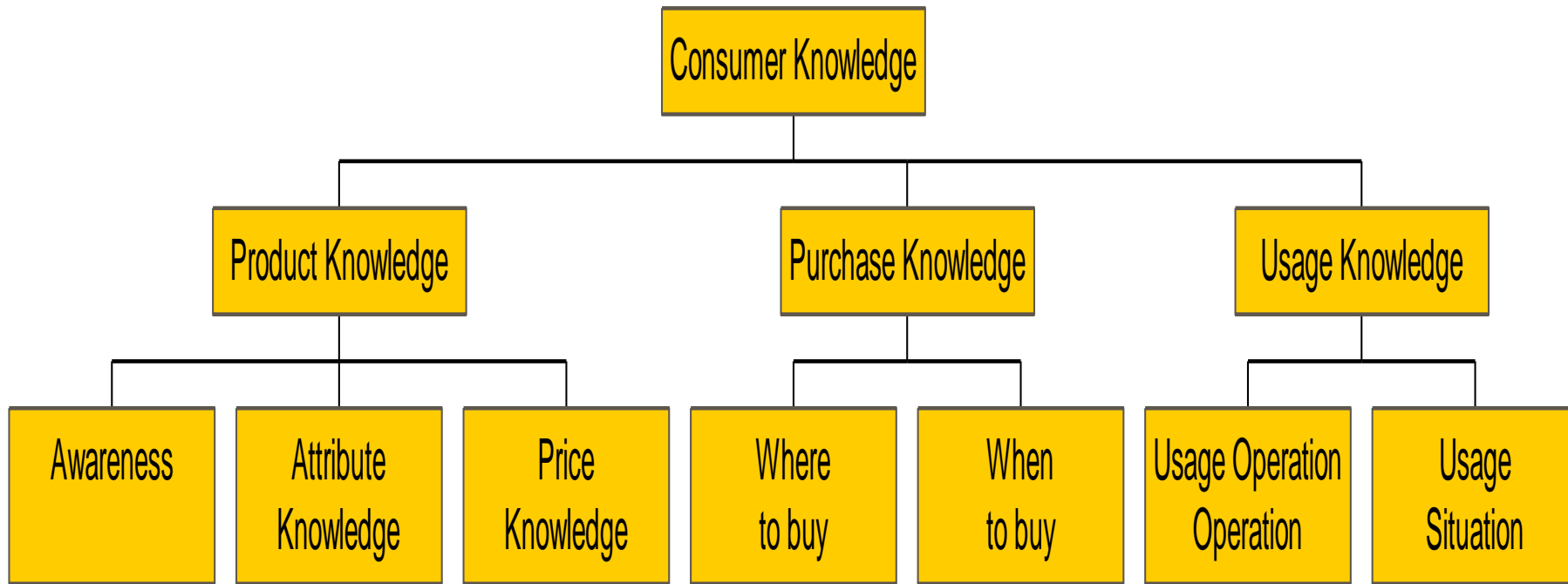
Motivation

- ➔ **Activated state within an individual that leads to goal directed behaviour**
- ➔ **Better in predicting future behaviour than past behaviour**
- ➔ **Motives include: possession, economy, curiosity, dominance and pleasure**

Maslow's hierarchy of human needs or motives



Knowledge





Past Behaviour

➔ **Assumed past behaviour is related to future behaviour**

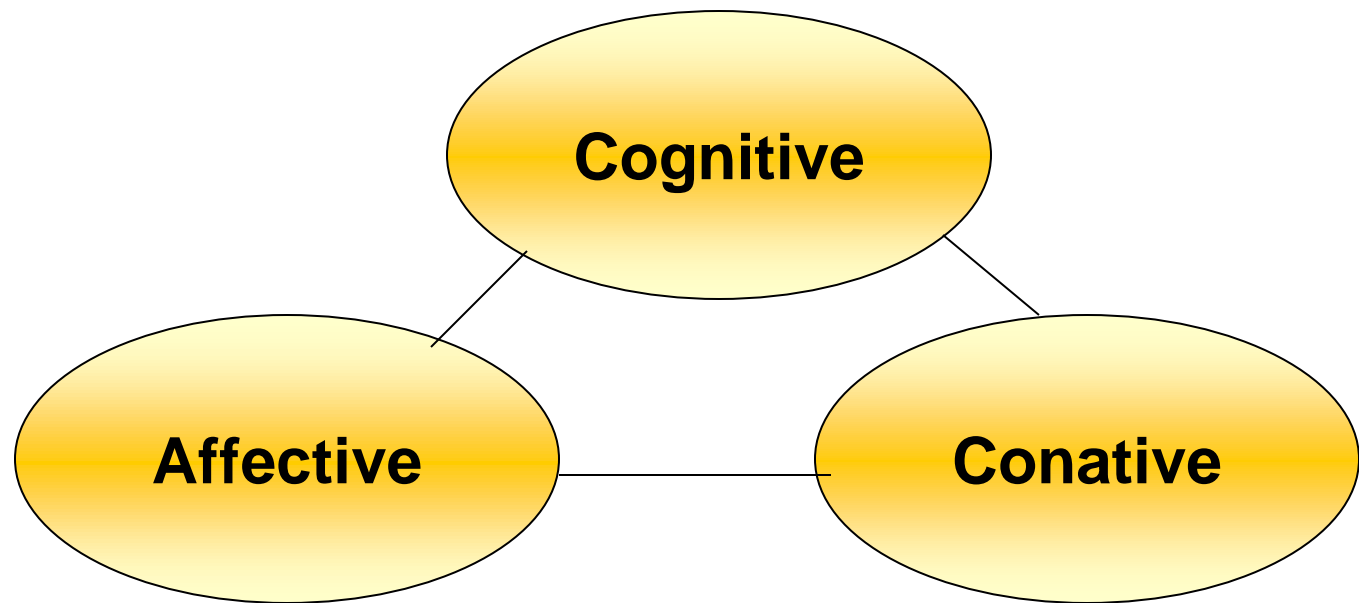
How much have you spent on internet shopping in the last 12 months?

How often do you use the internet?

Attitude

- ➔ Predisposition to response in certain way
- ➔ Opinion: verbalisation of an attitude

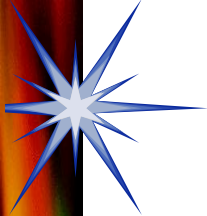
[Individual ideas, evaluations, convictions, liking]





Behavioural Intentions

- ➔ **Currently planned actions/behaviours**
- ➔ **Relationship between intentions and actual behaviour include:**
 - ➔ **Time interval between measurement and behaviour**
 - ➔ **Unforeseen environmental and situational events**
 - ➔ **New information**
 - ➔ **Lack of specificity in measurement**



Research Objectives

- ➔ **Should specify exactly what information is required for the research**
- ➔ **Should be clear and measurable**



Research Design

- ➔ A framework or blueprint for conducting the marketing research project. It specifies the details of the **procedures** necessary for obtaining the information needed to structure and/or solve marketing research problems.

Research Design – Exploratory vs Conclusive

	Exploratory	Conclusive
Objective	To provide insights and understanding.	To test specific hypotheses and examine relationships.
Characteristics	Information needed is defined only loosely. Research process is flexible and unstructured. Sample is small and non-representative. Analysis of primary data is qualitative.	Information needed is clearly defined. Research process is formal and structured. Sample is large and representative. Data analysis is quantitative.
Findings	Tentative.	Conclusive.
Outcome	Generally followed by further exploratory or conclusive research.	Findings used as input into decision making.

Figure 2.6 A Classification of Marketing Research Designs

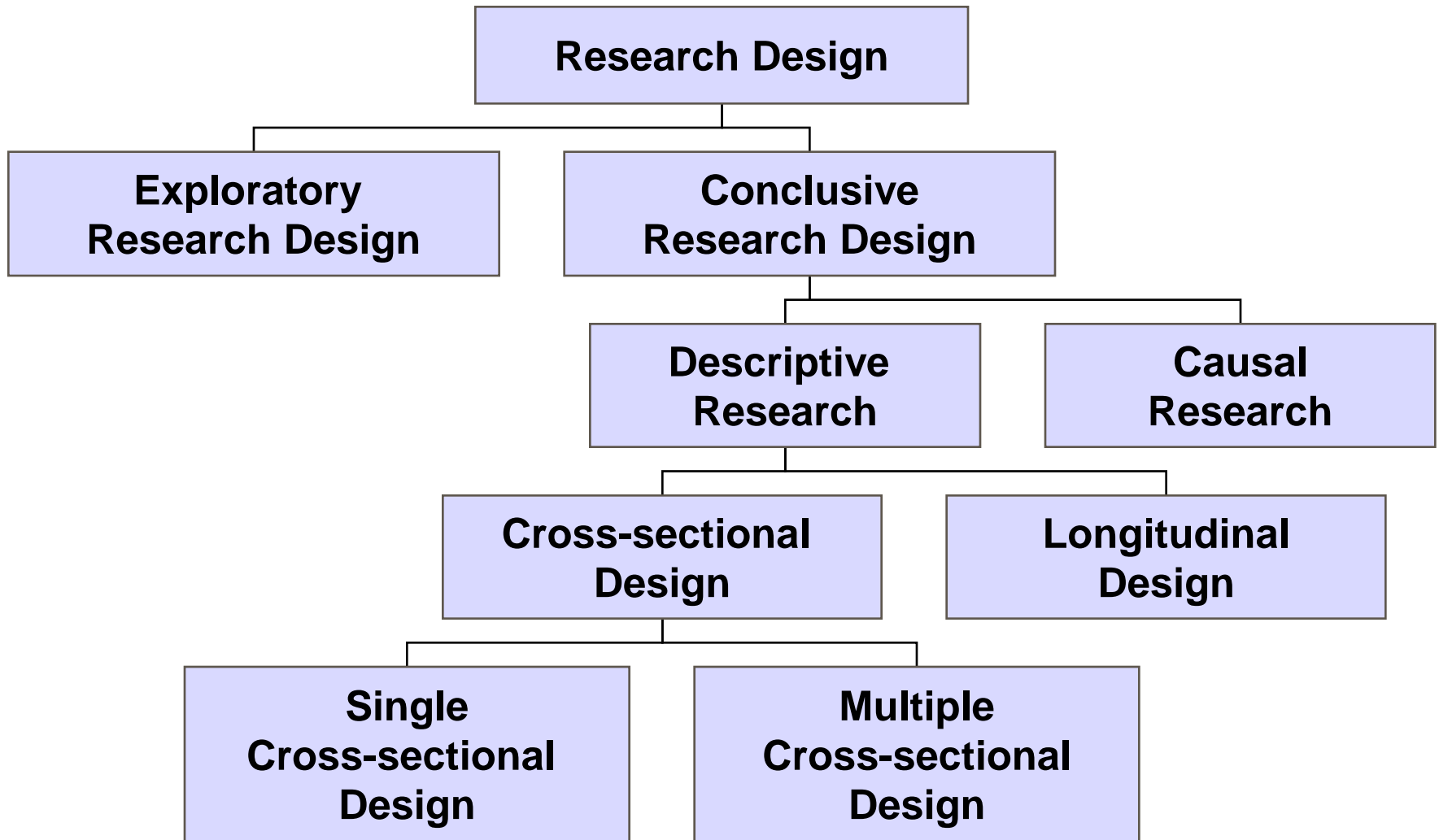




Table 2.5 A Comparison of Basic Research Design

	Exploratory	Descriptive	Causal
Objective	Discovery of ideas and insights.	Describe market characteristics or functions.	Determine cause and effect relationships.
Characteristics	Flexible, versatile. Often the front end of total research design.	Marked by the prior formulation of specific hypotheses. Preplanned and structured design.	Manipulation of one or more independent variables. Control of other mediating variables.
Methods	Expert surveys Pilot surveys Secondary data Qualitative research	Secondary data Surveys Panels Observational and other data	Experiments.



Exploratory Research

- ➔ **To explore or search through a problem or situation to provide insights and understanding.**



Exploratory Research cont.

Uses:

- ➔ Gain background information
- ➔ Define a problem more precisely
- ➔ Identify alternative sources of action
- ➔ Develop hypotheses
- ➔ Isolate key variables and relationships for further examination
- ➔ Gain insight for developing an approach to the problem
- ➔ Establish priorities for further research



Descriptive Research

- ➔ A type of conclusive research which has as its major objective the **description** of something - usually market characteristics or functions.
- ➔ Provides answers to questions such as **Who, What, Where, When, Why** and **How** are they related to the research problem
- ➔ Includes studies on the market, market share, sales analysis, image, product usage, distribution, pricing, advertising



Descriptive Research cont.

Cross-sectional design

- ➔ Collection of information from any given sample of the population elements only once
“snapshot”
- ➔ Often a large representative sample
- ➔ Can be single or multiple cross-sectional



Descriptive Research cont.

Cohort Analysis

- ➔ A series of surveys conducted at appropriate time intervals, where the cohort.
- ➔ The cohort refers to the group or respondents who experience the **same event** within the **same time** interval.

[A study on leisure time activities of Baby Boomers]



Case: Tweens

- Research company Millward Brown conducted over 2000 surveys spread across 11 countries on Tweens (8 to 14 year olds) to understand their relationship to brands.
- Some of the findings include:
 - Kids influence more than 67% of all brands their parents buy
 - Tweens spent \$US1 trillion across the globe last year
 - Australian children watch between 20,000 and 40, 000 television commercials a year.

Source: McCausland, V. (2003) "When Kids control the spending", Daily Telegraph (5 July), p. 29.



Descriptive Research cont.

Longitudinal design

- ➔ A type of research design involving a fixed sample of population elements (ie. Panel) which is **measured repeatedly over time.**
- ➔ Measures **changes** over time.
- ➔ Some potential problems include respondent refusal to co-operate, mortality, response bias and possible payment.



Table 2.6 Relative Advantages and Disadvantages of Longitudinal and Cross-sectional Design

Evaluation criteria	Cross-sectional design	Longitudinal design
Detecting change	-	+
Large amount of data collection	-	+
Accuracy	-	+
Representative sampling	+	-
Response bias	+	-

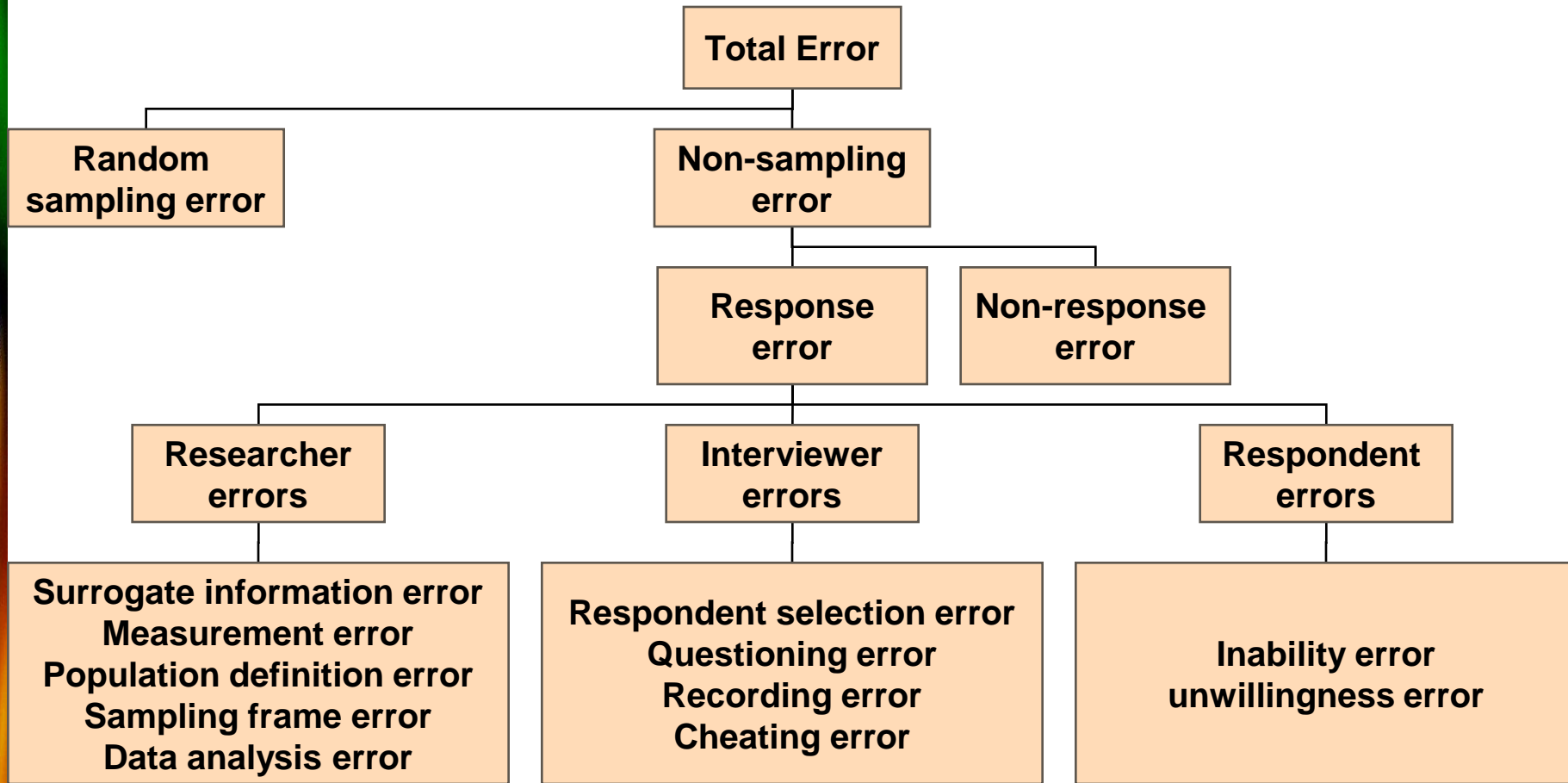
Note: + indicates a relative advantage; whereas - indicates a relative disadvantage



Causal Research

- ➔ A type of conclusive research where the major objective is to obtain evidence regarding **cause-and-effect** (causal) relationships.
- ➔ Independent variables are manipulated in a relatively controlled environment.

Figure 2.7 Potential Sources of Error in Research Design



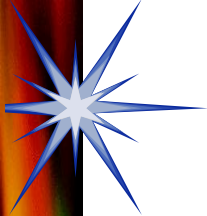


Budgeting and Scheduling the Project

- ➔ Ensures that the marketing research project is completed within the available resources – financial, time, human resources and other.

Methods

- ➔ CPM [critical path method]
- ➔ PERT [project evaluation and review technique]



Simple Gantt Chart

weeks

Activities	1	2	3	4	5	6	7	8	9	10
Discussion with decision-makers	■									
Secondary data searching		■	■							
Write up proposal			■	■						
Collect data					■	■				
Enter data							■			
Analyse data							■	■		
Write up report								■	■	
Present findings to client										■



Marketing Research Proposal

- ➔ **Covering letter or letter of transmittal**
- ➔ **Executive summary**
- ➔ **Introduction**
- ➔ **Background**
- ➔ **Purpose of the research study [management decision]**
- ➔ **Research objectives**
- ➔ **Management decision criteria**
- ➔ **Research design rationale**
- ➔ **Research design**



Marketing Research Proposal cont.

- ➔ **Field work/data collection**
- ➔ **Data analysis**
- ➔ **Reporting**
- ➔ **Materials required**
- ➔ **Cist**
- ➔ **Contractual requirements**
- ➔ **Timing**
- ➔ **Accreditation**
- ➔ **Project management**
- ➔ **Appendices**