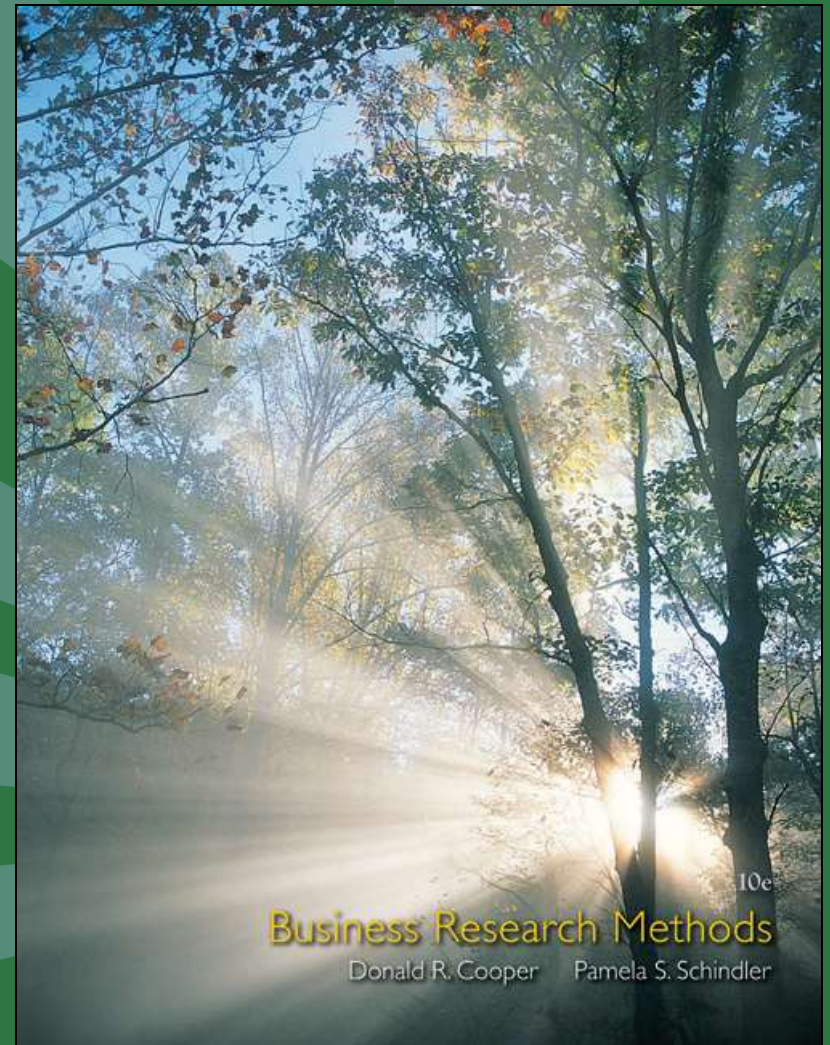



Do more than exist,
Live.
Do more than touch,
Feel.
Do more than look,
Observe.
Do more than read,
Absorb.
Do more than hear,
Listen.
Do more than listen,
Understand.

Research Design: An Overview





Learning Objectives

Understand . . .

- The basic stages of research design.
- The major descriptors of research design.
- The major types of research designs.
- The relationships that exist between variables in research design and the steps for evaluating those relationships.

Definition of Research design

- A blueprint to collect, measure and analyze data.
- Helps in the allocation of limited resources:
 - Choice between:
 - Experiment
 - Observation
 - Interview
 - Simulation
 - Data collection, whether it should be structured or unstructured
 - The sample size should be large or small
 - Quantitative or qualitative research

What Is Research Design?



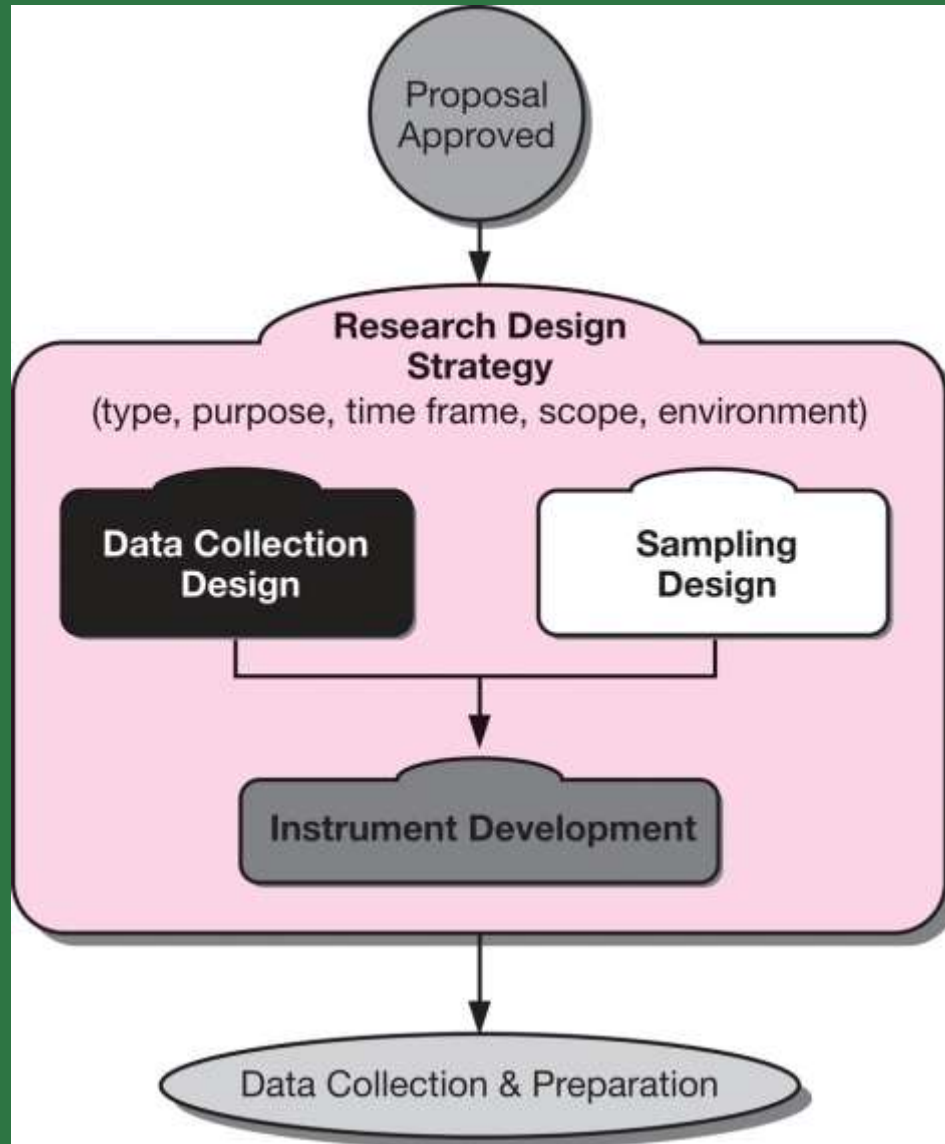
Blueprint

Plan – Research Questions

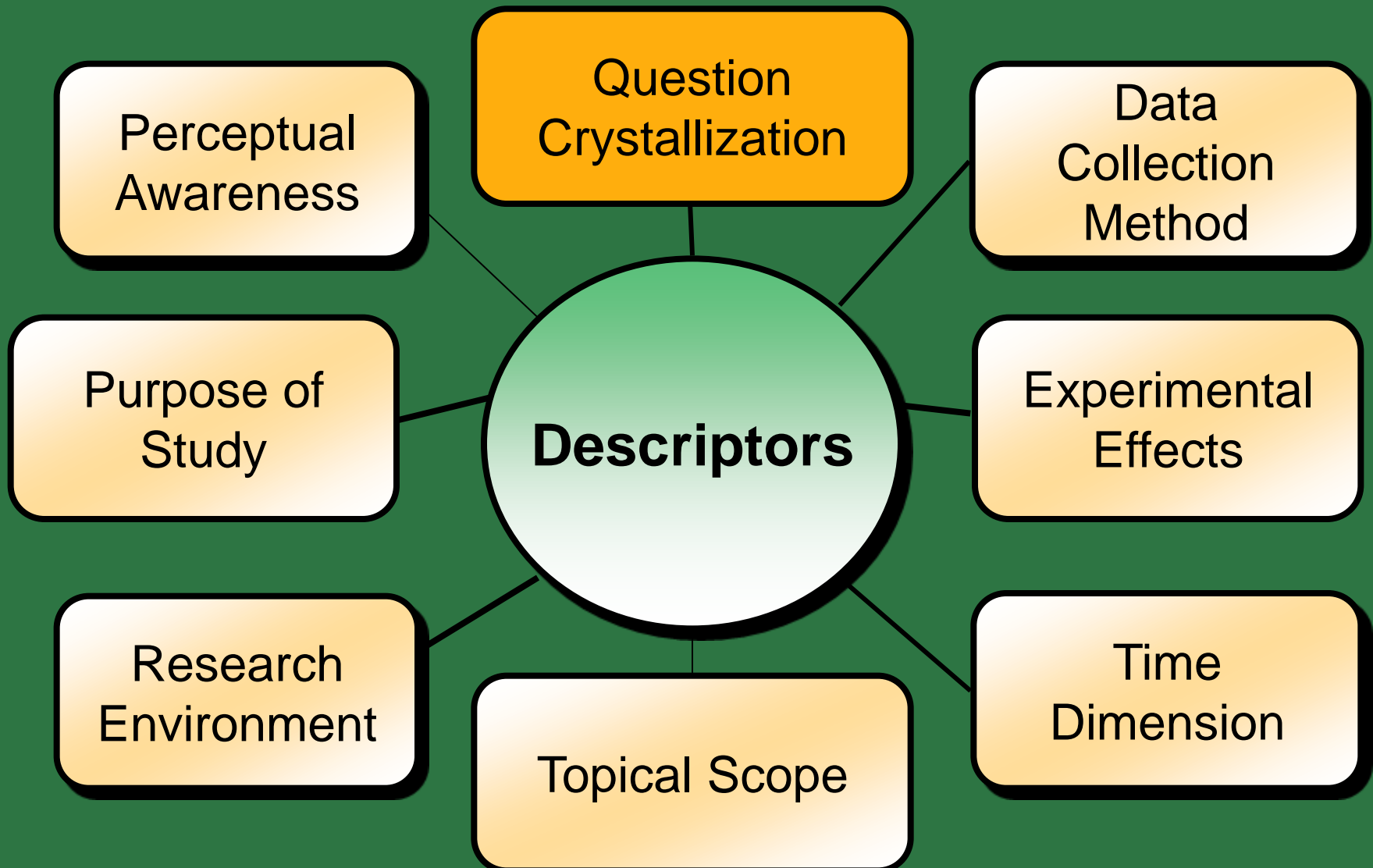
Guide – sources & types

Framework - Relations

Design in the Research Process



Descriptors of Research Design



Degree of Question Crystallization

Exploratory Study

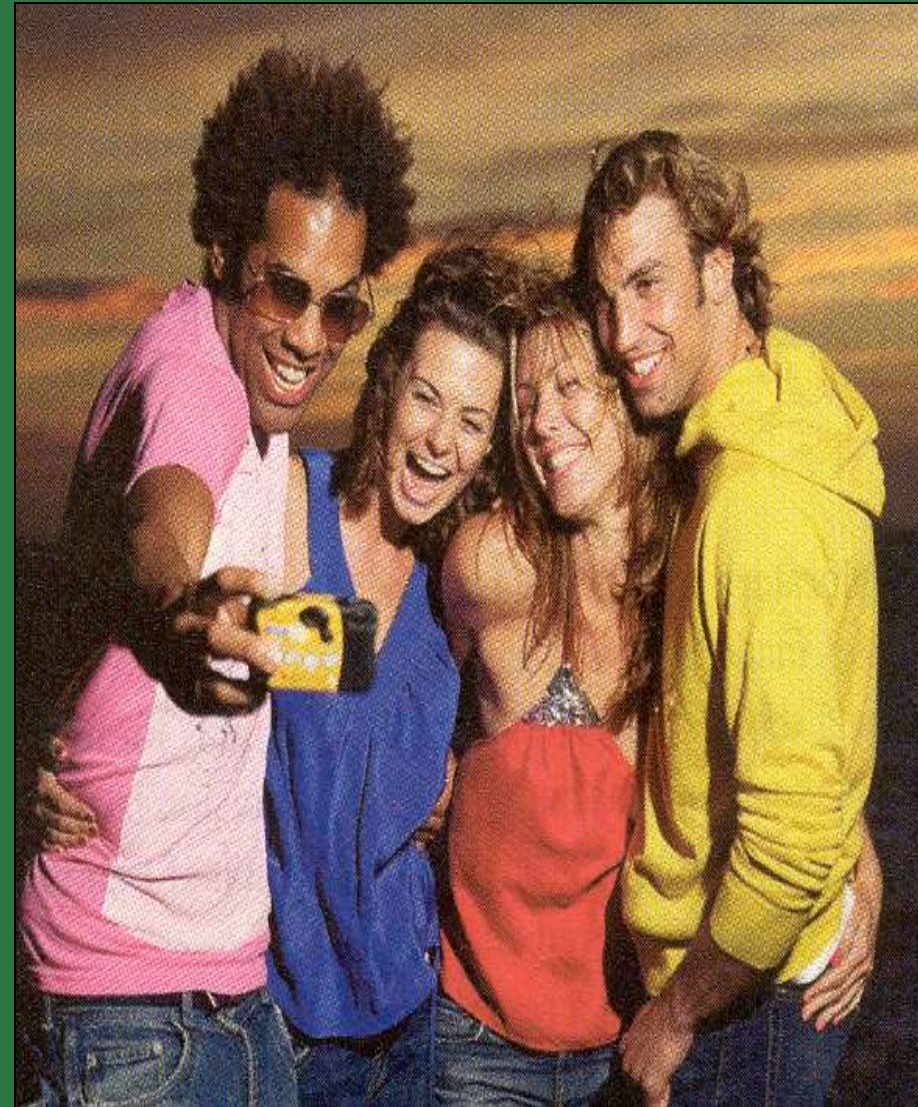
- Loose structure
- Expand understanding
- Provide insight
- Develop hypotheses

Formal Study

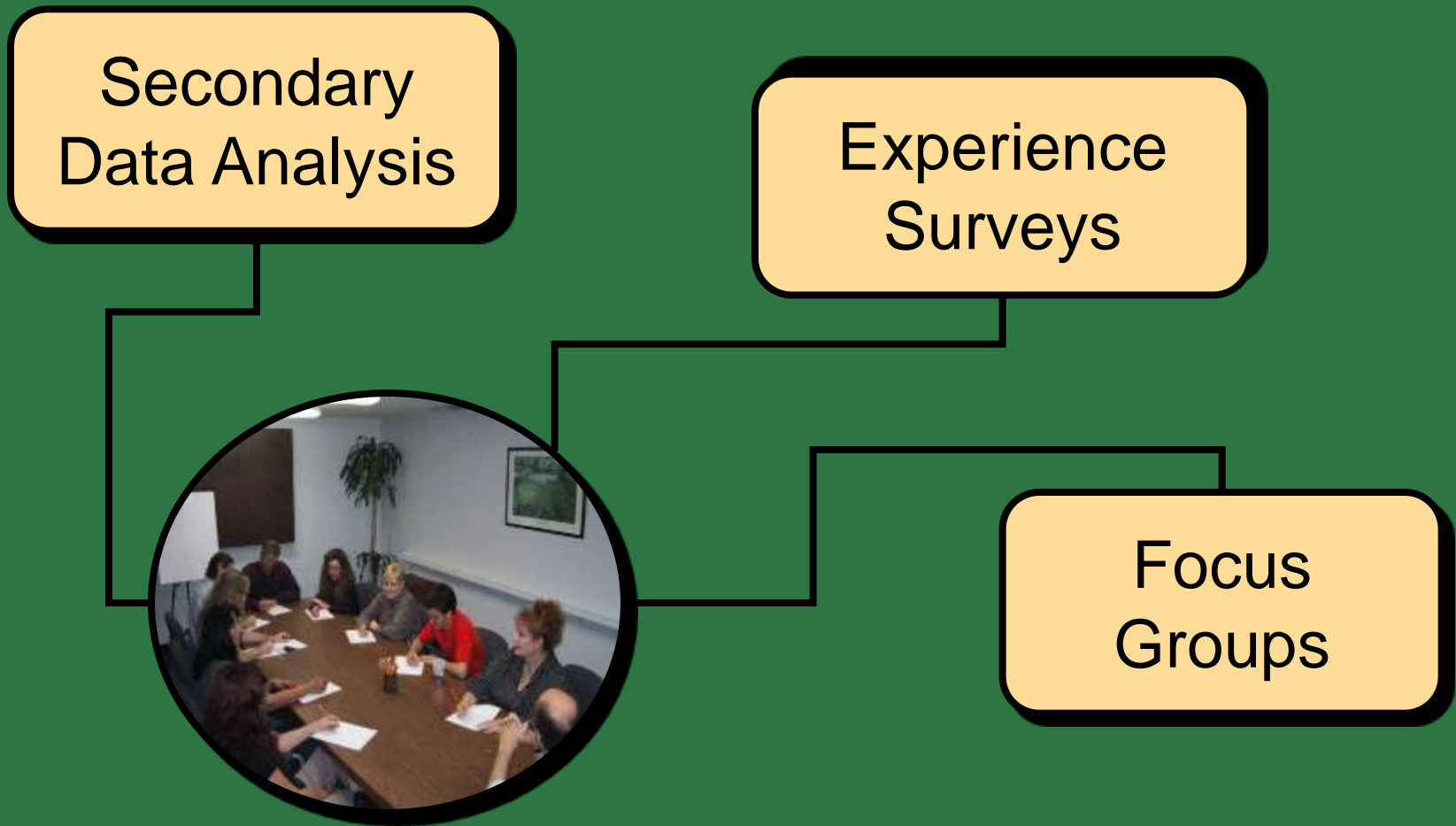
- Precise procedures
- Begins with hypotheses
- Answers research questions

Approaches for Exploratory Investigations

- Participant observation
- Film, photographs
- Projective techniques
- Psychological testing
- Case studies
- Ethnography
- Expert interviews
- Document analysis
- Proxemics and Kinesics



Commonly Used Exploratory Techniques





Face-to-face interaction—one of the best ways to learn from participants.

Creating Connections

In this high-tech world, it's easy to forget that face-to-face interaction is still one of the best ways to learn about people's experiences and impressions. Even though technology is playing an increasing role in data collection, we know it will never replace direct conversations with customers in a focus group setting.

At Delve, we help you find creative ways to connect with your customers. Whether it's a traditional group or one that requires a more adventurous approach, we are experts in recruiting the right respondents to ensure your feedback is reliable and insightful.

Delve creates and fosters environments for dynamic dialogues between marketers and customers. Whether they be face-to-face, voice-to-voice, or technology-based settings like the Web, we are committed to providing the best in the business.

Count on our experts to bring you and your customers closer together. Connect with your Delve sales representative today!

Focus Groups
Pre-recruits
Web Surveys
Telephone Interviews
Central Location Testing
Taste Tests
Interactive Voice Response


www.delve.com
800-325-3338



Appleton, WI
Atlanta
Chicago
Columbus

Dallas
Kansas City
Los Angeles
Minneapolis

Philadelphia
Phoenix
Seattle
St. Louis



Experience Surveys

- What is being done?
- What has been tried in the past with or without success?
- How have things changed?
- Who is involved in the decisions?
- What problem areas can be seen?
- Whom can we count on to assist or participate in the research?

Example in an **Organization Study**

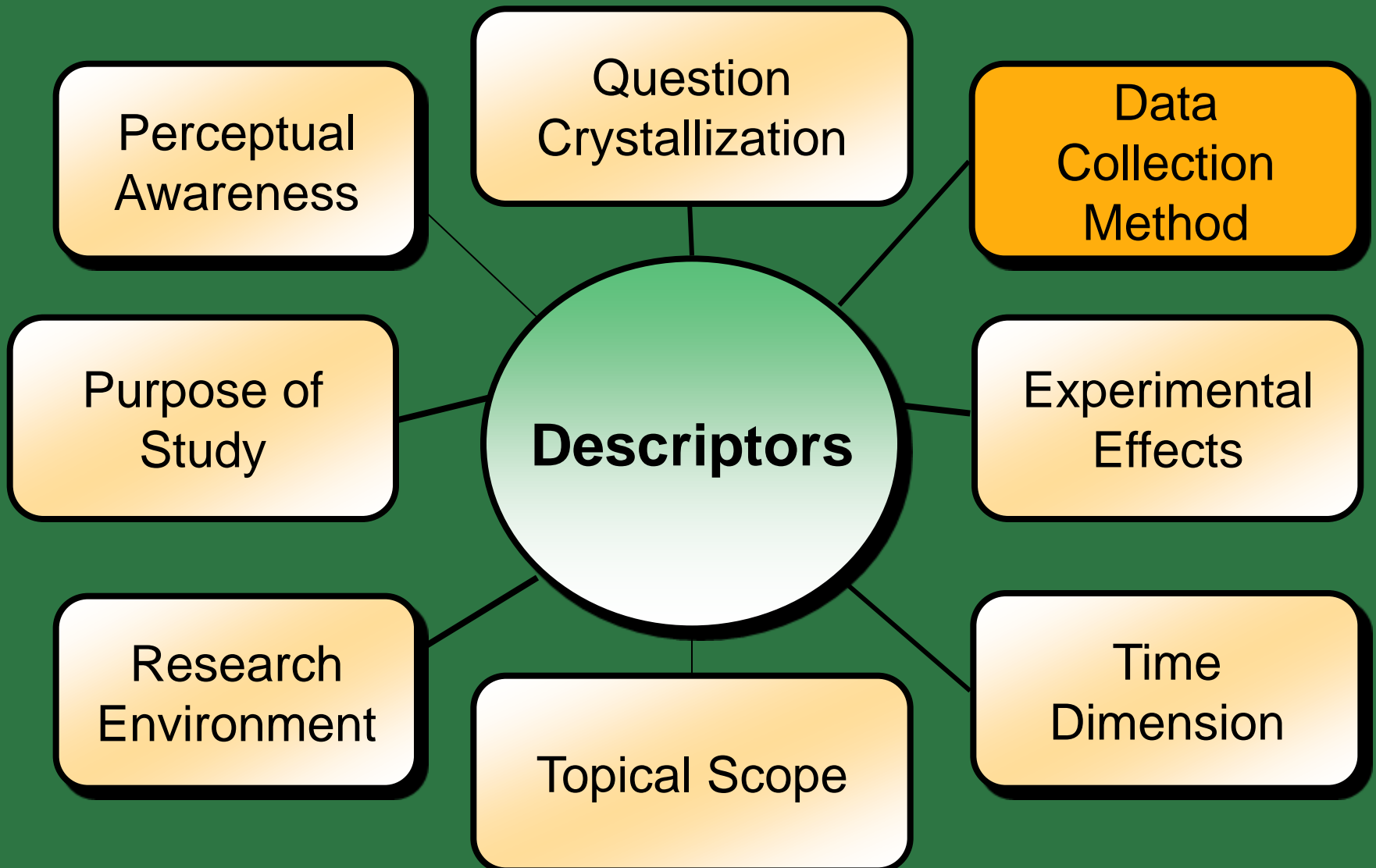
- Newcomers to the scene
- Marginal or peripheral individuals
- Individuals in transition
- Deviants and isolates
 - Unhappy, happy, most productive, loners
- Pure cases
 - Most unproductive, most antagonistic
- Those who fit well and those who do not
- Different positions in the system

Focus Groups

- Group discussion
- 6-10 participants
- Moderator-led
- 90 minutes-2 hours



Descriptors of Research Design



Data Collection Method

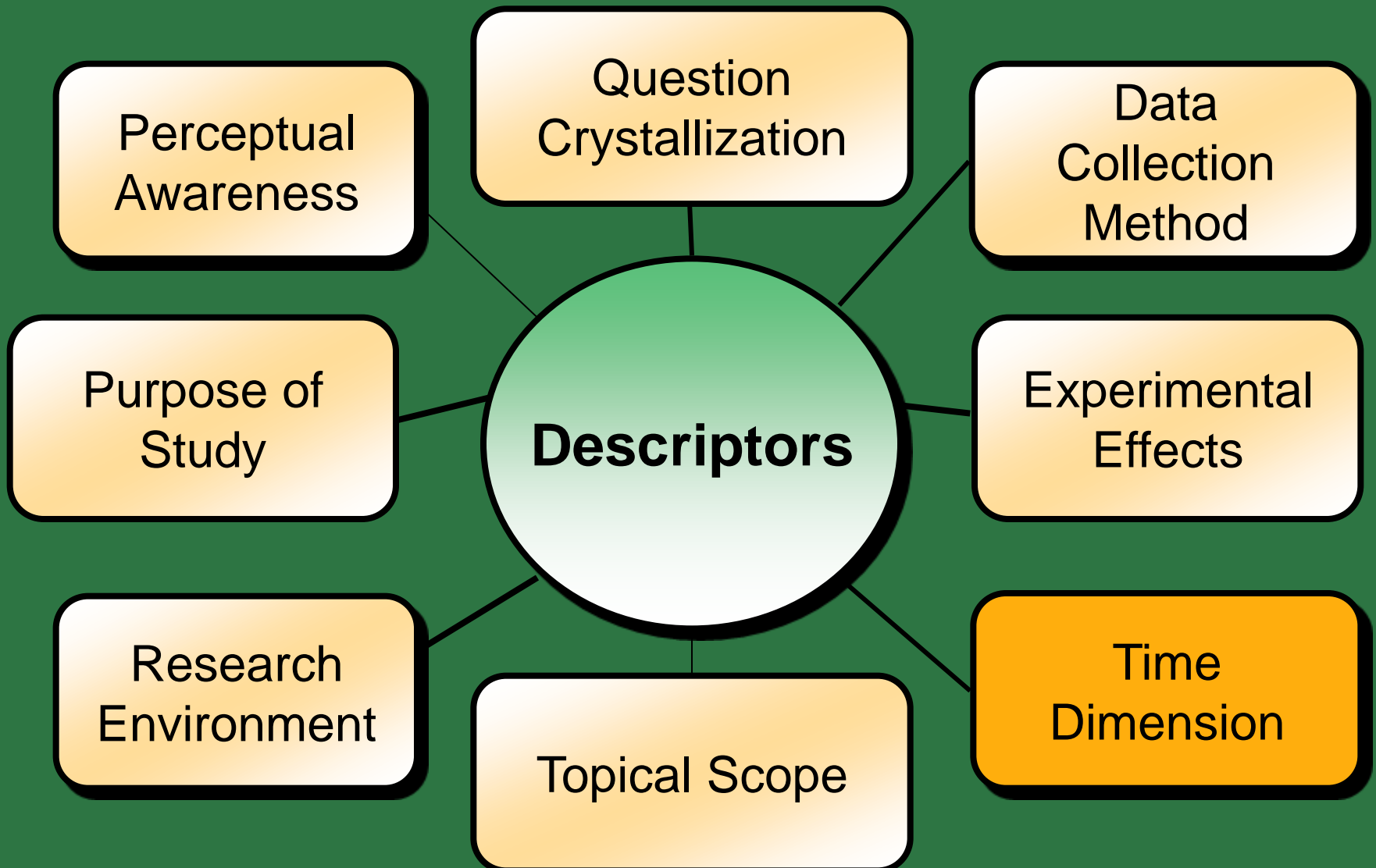
Monitoring



Communication



Descriptors of Research Design

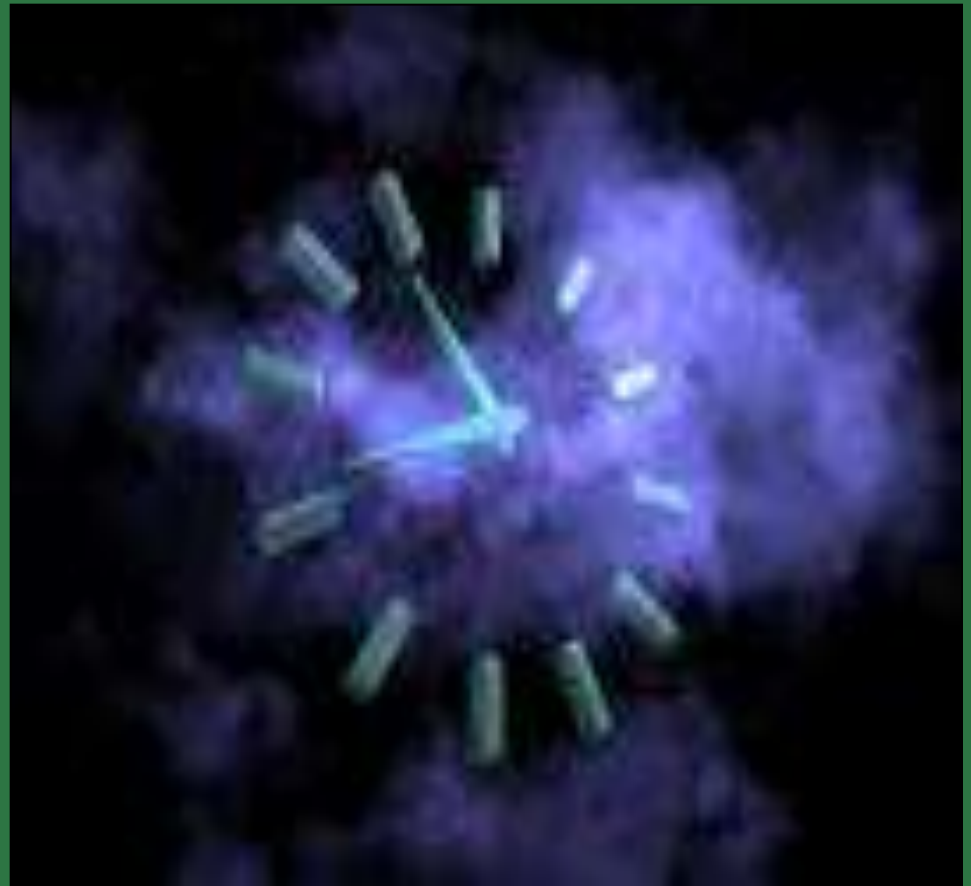


The Time Dimension

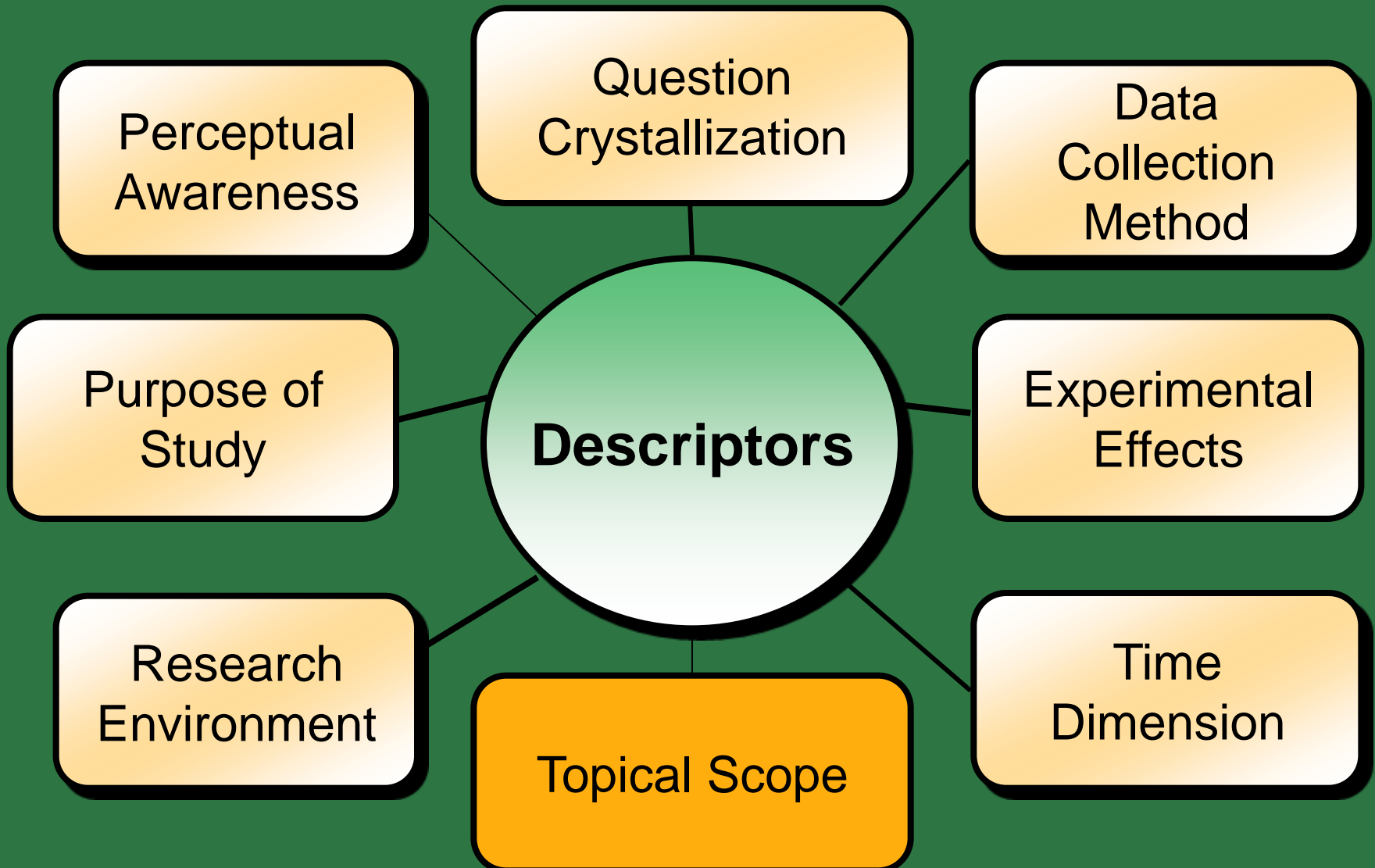
Cross-sectional

Longitudinal

- Panel
- Cohort



Descriptors of Research Design



The Topical Scope

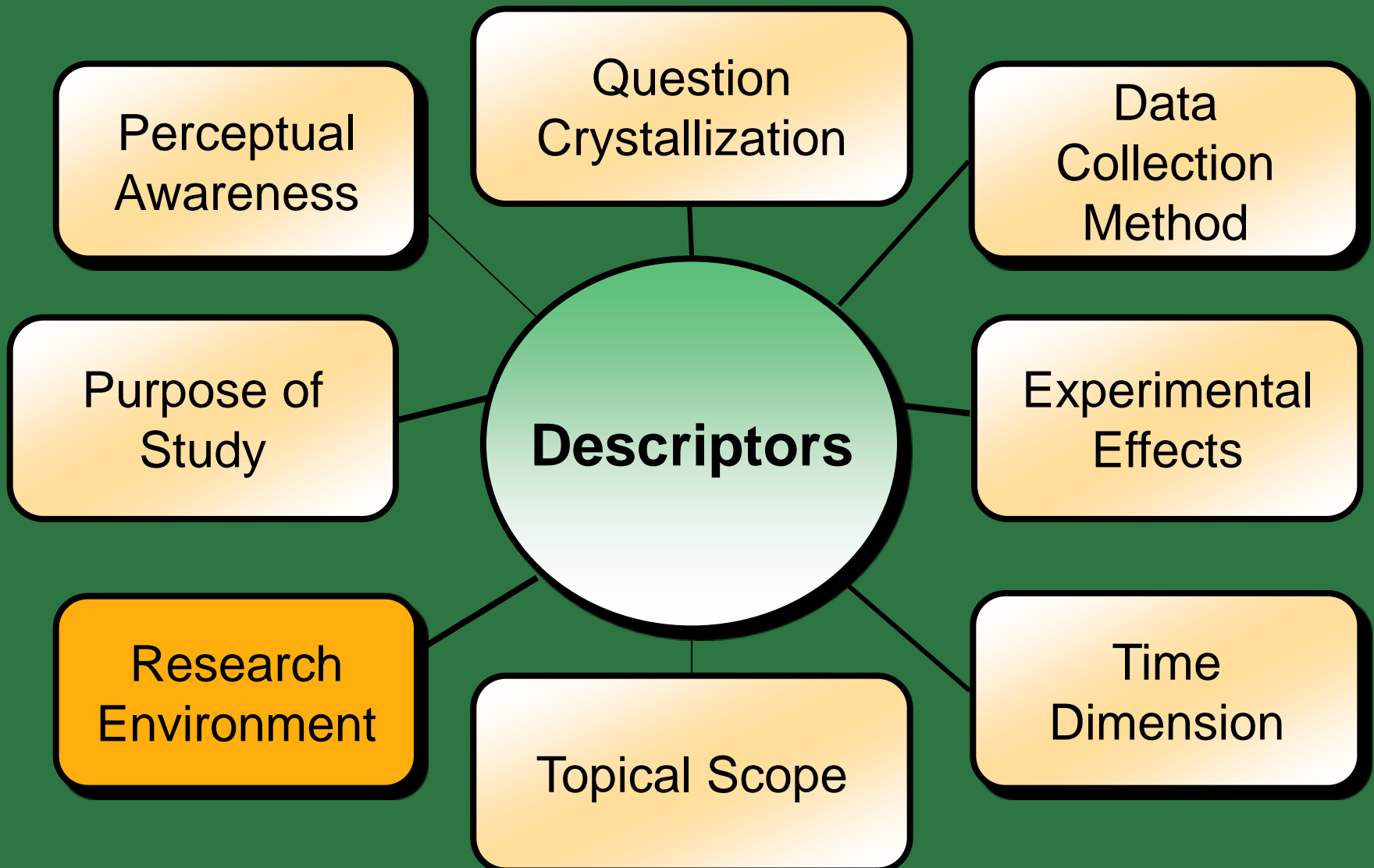
Statistical Study

- Breadth
- Population inferences
- Quantitative
- Generalizable findings

Case Study

- Depth
- Detail
- Qualitative
- Multiple sources of information

Descriptors of Research Design



Unit of Analysis

- Individual
- Group
- Dyad
- Country
- Division
- Industry

Think about this

- A researcher wants to know what is the impact of top management support, on firm performance. To test this, he takes 200 employees from a MNC firm in Bayan Lepas as his respondents.
- What problem will he encounter?

The Research Environment

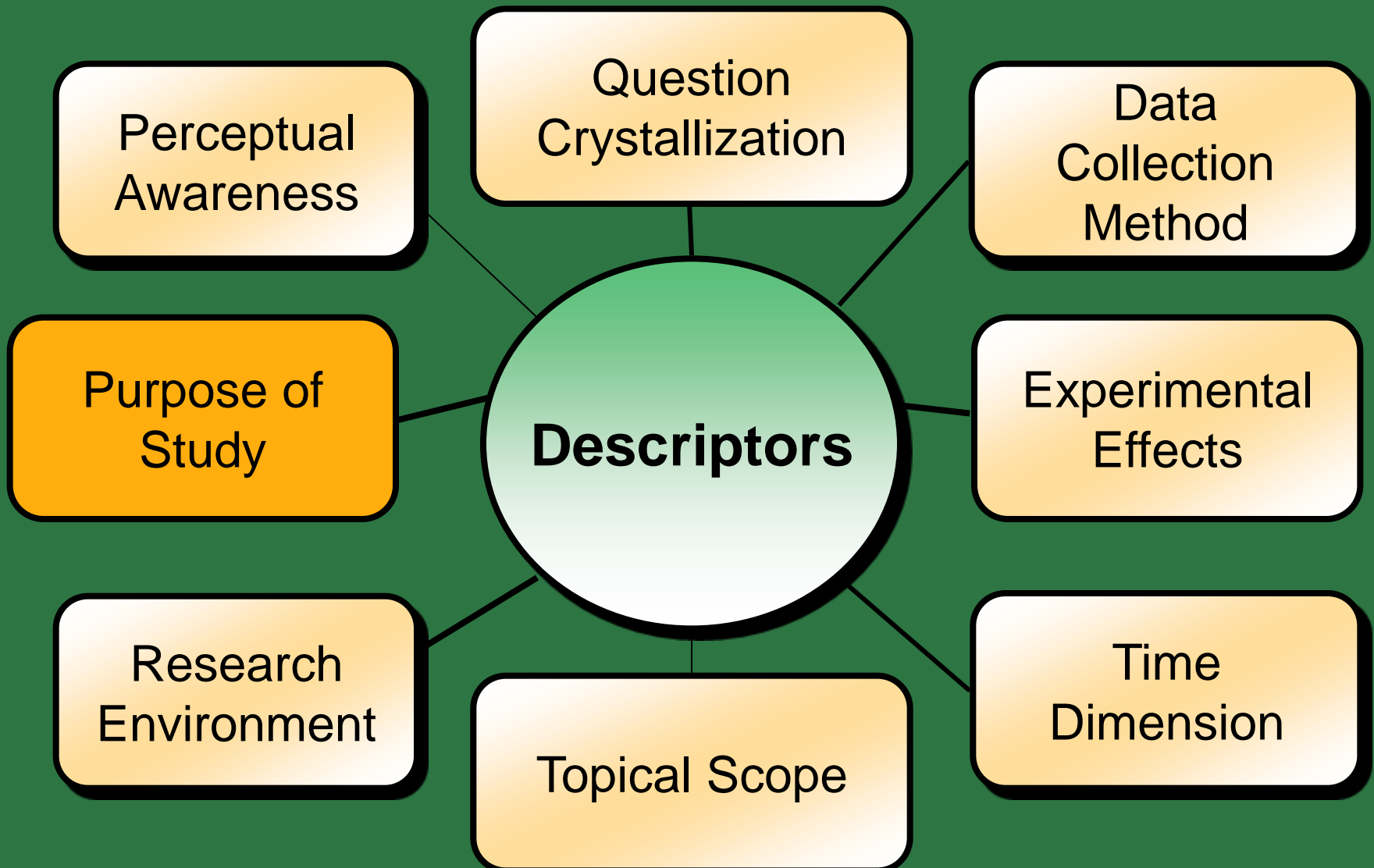
Field conditions

Lab conditions

Simulations



Descriptors of Research Design



Purpose of the Study

Reporting

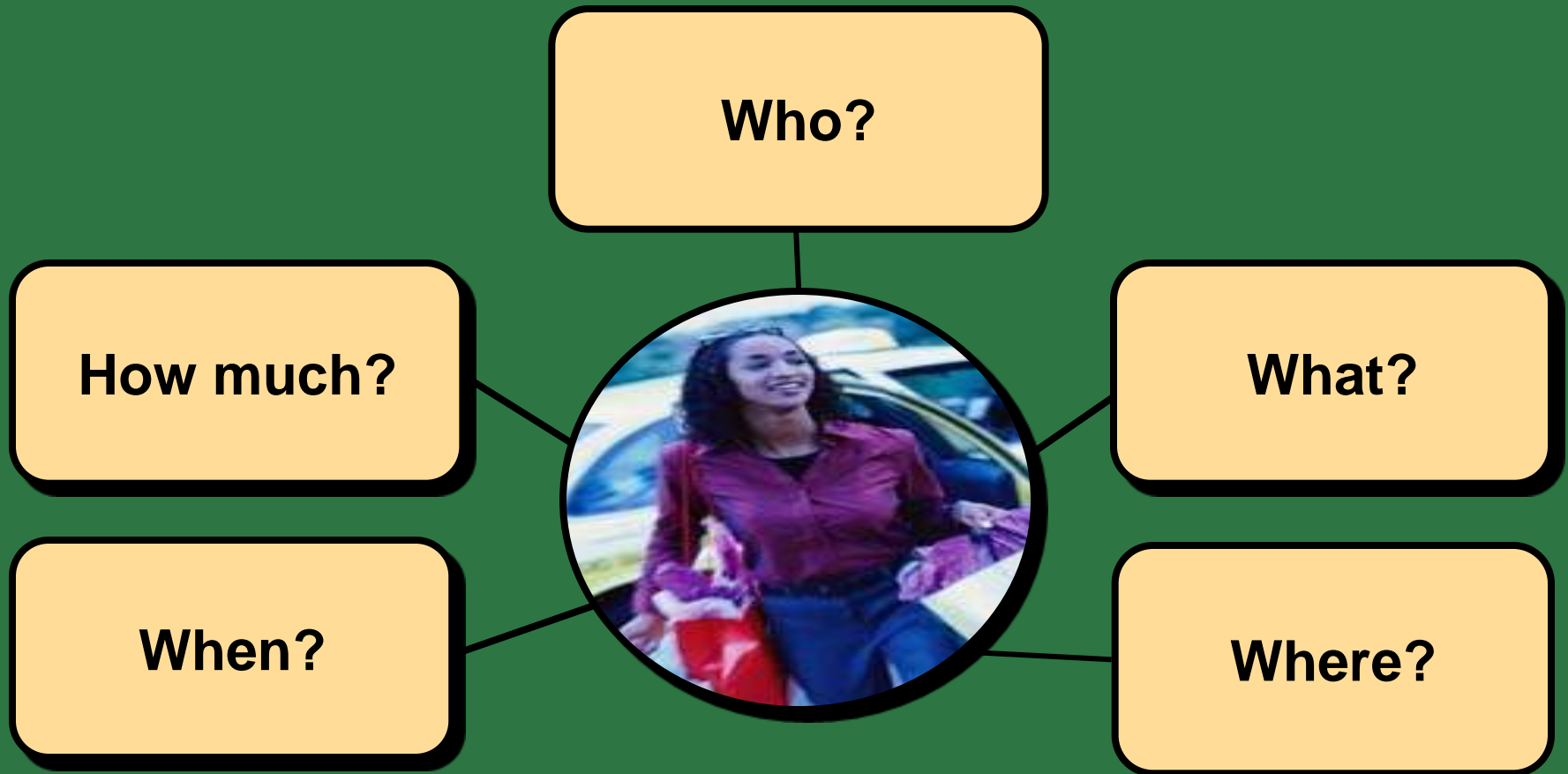
Descriptive

Causal -
Explanatory

Causal -
Predictive



Descriptive Studies



Example of a Descriptive Research

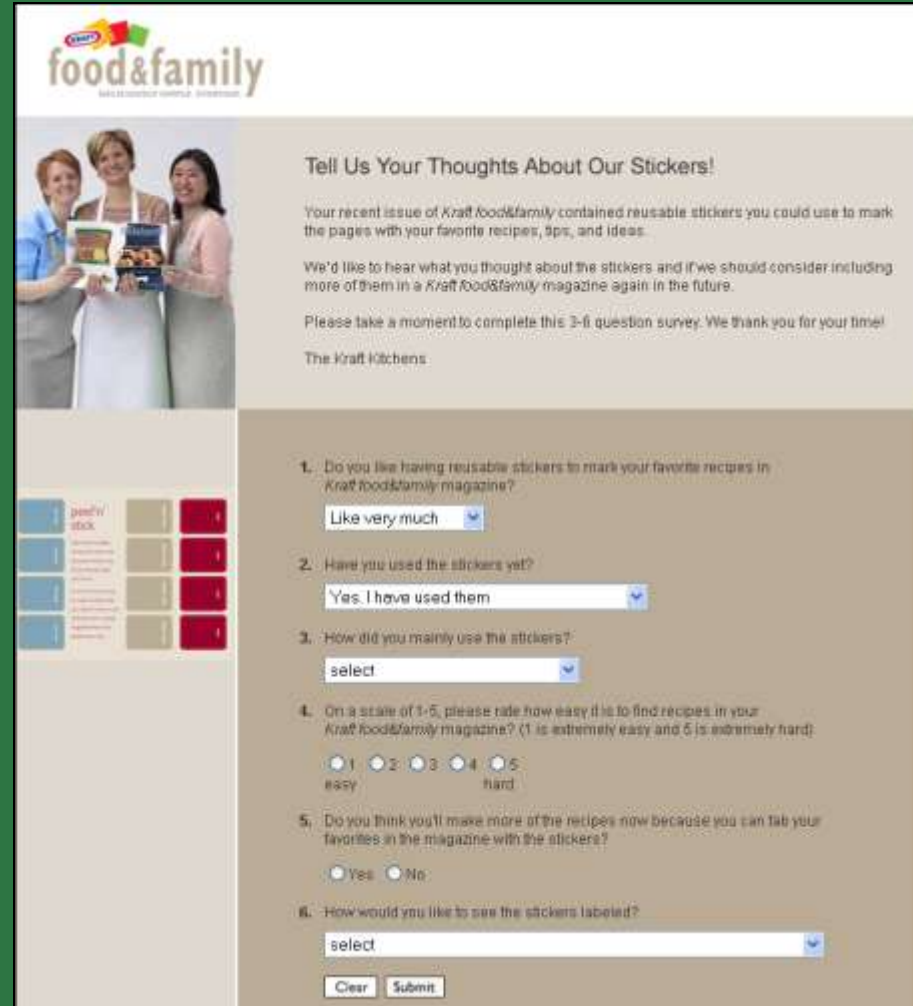
- A bank manager would like to profile the individuals who are behind on payment more than 6 months. The profile will describe the individual in terms of age, income, type of job and whether the person is employed full time or part time. This information will help him in making future decisions related to loans to the same individuals

Descriptive Studies

Descriptions of population characteristics

Estimates of frequency of characteristics

Discovery of associations among variables



food&family
KRAFT FOOD & FAMILY MAGAZINE

Tell Us Your Thoughts About Our Stickers!

Your recent issue of *Kraft food&family* contained reusable stickers you could use to mark the pages with your favorite recipes, tips, and ideas.

We'd like to hear what you thought about the stickers and if we should consider including more of them in a *Kraft food&family* magazine again in the future.

Please take a moment to complete this 3-ft. question survey. We thank you for your time!

The Kraft Kitchens

- Do you like having reusable stickers to mark your favorite recipes in *Kraft food&family* magazine?
Like very much
- Have you used the stickers yet?
Yes, I have used them
- How did you mainly use the stickers?
select
- On a scale of 1-5, please rate how easy it is to find recipes in your *Kraft food&family* magazine? (1 is extremely easy and 5 is extremely hard)
1 2 3 4 5
easy hard
- Do you think you'll make more of the recipes now because you can tab your favorites in the magazine with the stickers?
Yes No
- How would you like to see the stickers labeled?
select

Clear Submit

Exploratory

- ***Exploratory*** study is needed when the researcher has no idea about the problem or issue to be studied





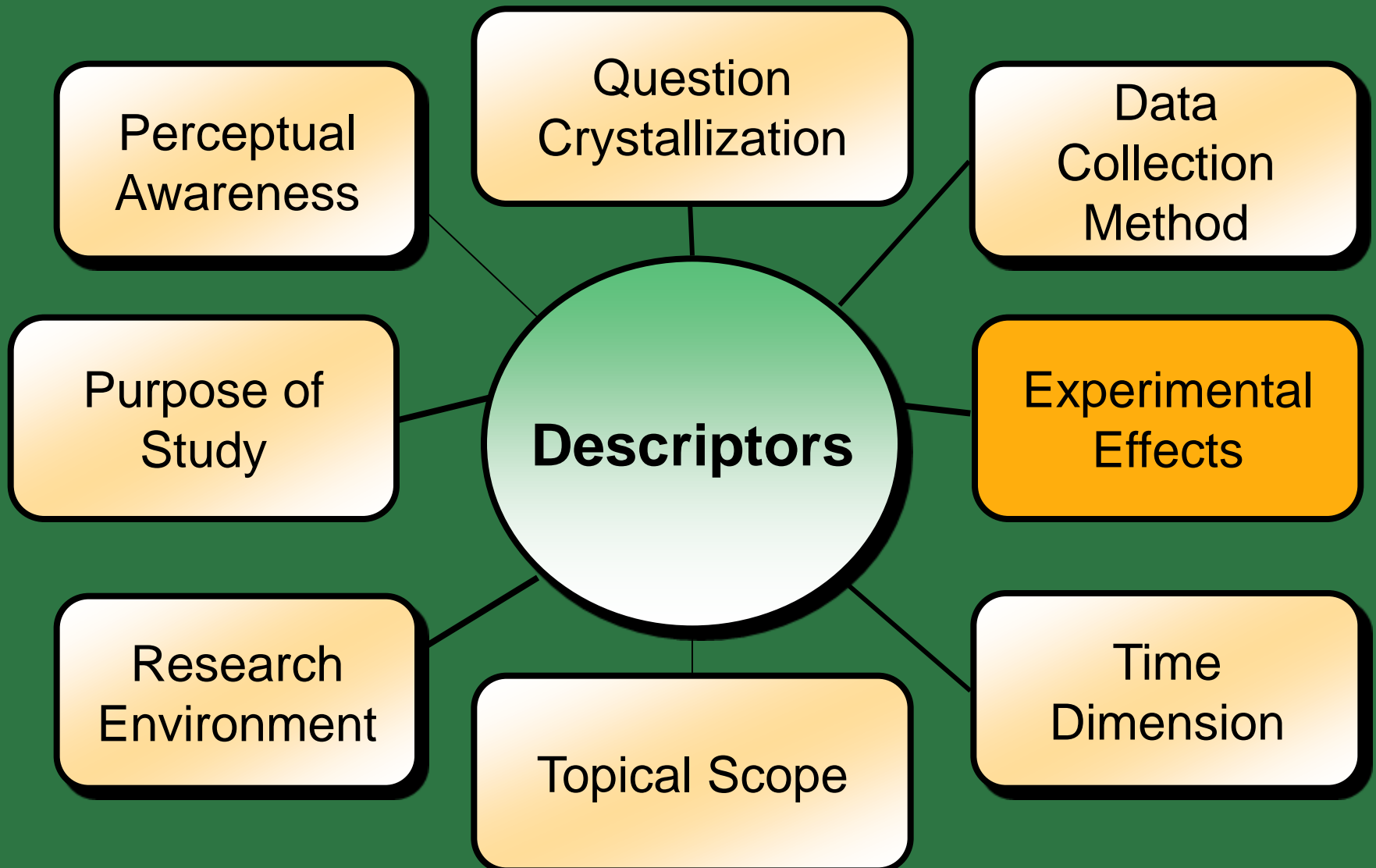
Why is an Exploratory study Important?

- Determine whether research should be done or not?
- Some unknown variable may be identified
- Is the research practical?
- Helps in the operational definition and design

Example

- A manager of a MNC company would like to know the work ethics of a subsidiary in Tanah Merah as compared to the Americans

Descriptors of Research Design



Experimental Effects

Ex Post Facto Study

- After-the-fact report on what happened to the measured variable

Experiment

- Study involving the manipulation or control of one or more variables to determine the effect on another variable

Causation

- The basic element in causal research is that **A “*produces*” B** atau **A “*forces*” B** to happen

Causation and Experimental Design

The diagram features a large, jagged orange starburst shape in the center of a dark green background. Inside this starburst are two white, arrow-shaped boxes pointing towards each other. The left box is light green and contains the text 'Control/Matching'. The right box is light orange and contains the text 'Random Assignment'.

Control/
Matching

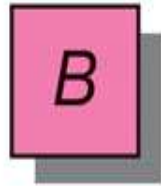
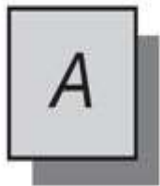
Random
Assignment

Mills Method of Agreement

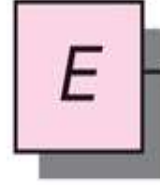
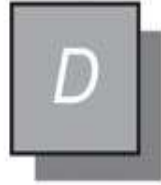
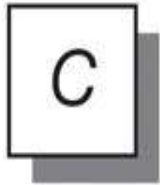
Descriptive Factors

Outcome

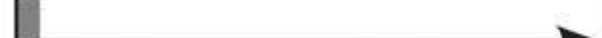
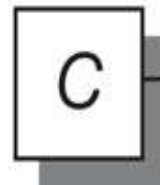
No. 1



No. 2



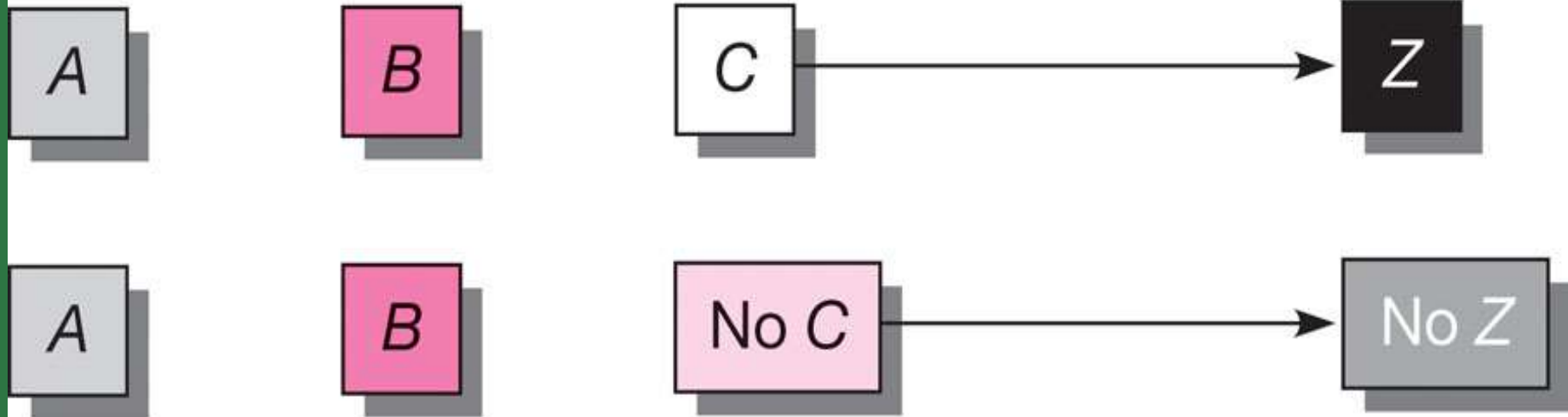
Therefore



Mills Method of Difference

Descriptive Factors

Outcome



Therefore

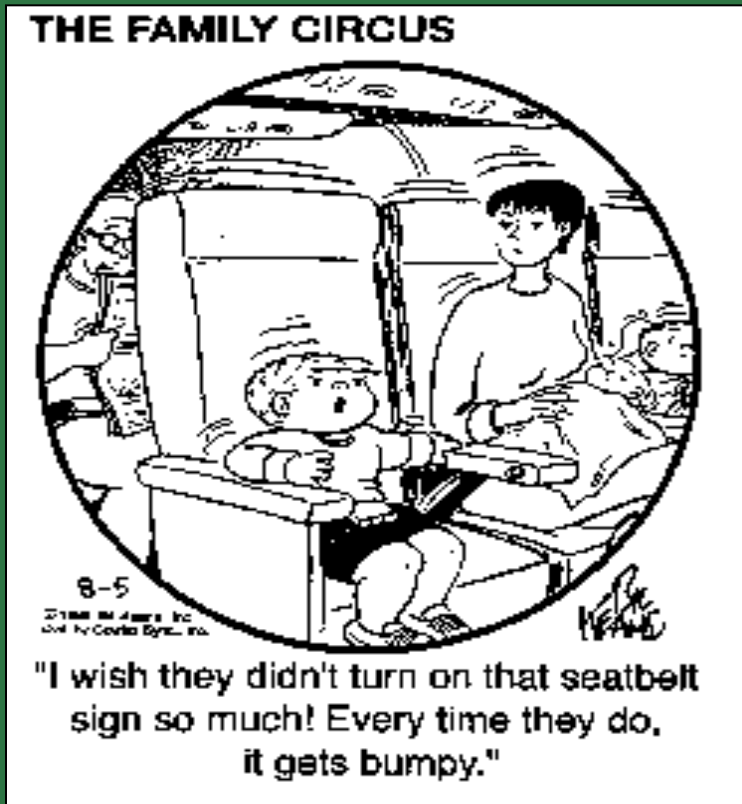


Causal Studies

Symmetrical

Reciprocal

Asymmetrical



Understanding Causal Relationships



Stimulus

- Is an event or force (eg. Drop in temperature, crash in stock market, product recall, explosion in factory)

Understanding Causal Relationships



Response

- Is a decision or reaction to some stimulus

Understanding Causal Relationships



Property

- An enduring characteristic of a subject that does not depend on circumstances for its activation (eg. Age, gender, family status, religious affiliation, ethnic group or physical condition)

Understanding Causal Relationships



Disposition

- Is a tendency to respond in a certain way under certain circumstances (eg. Attitudes, opinions, habits, values, and drives)

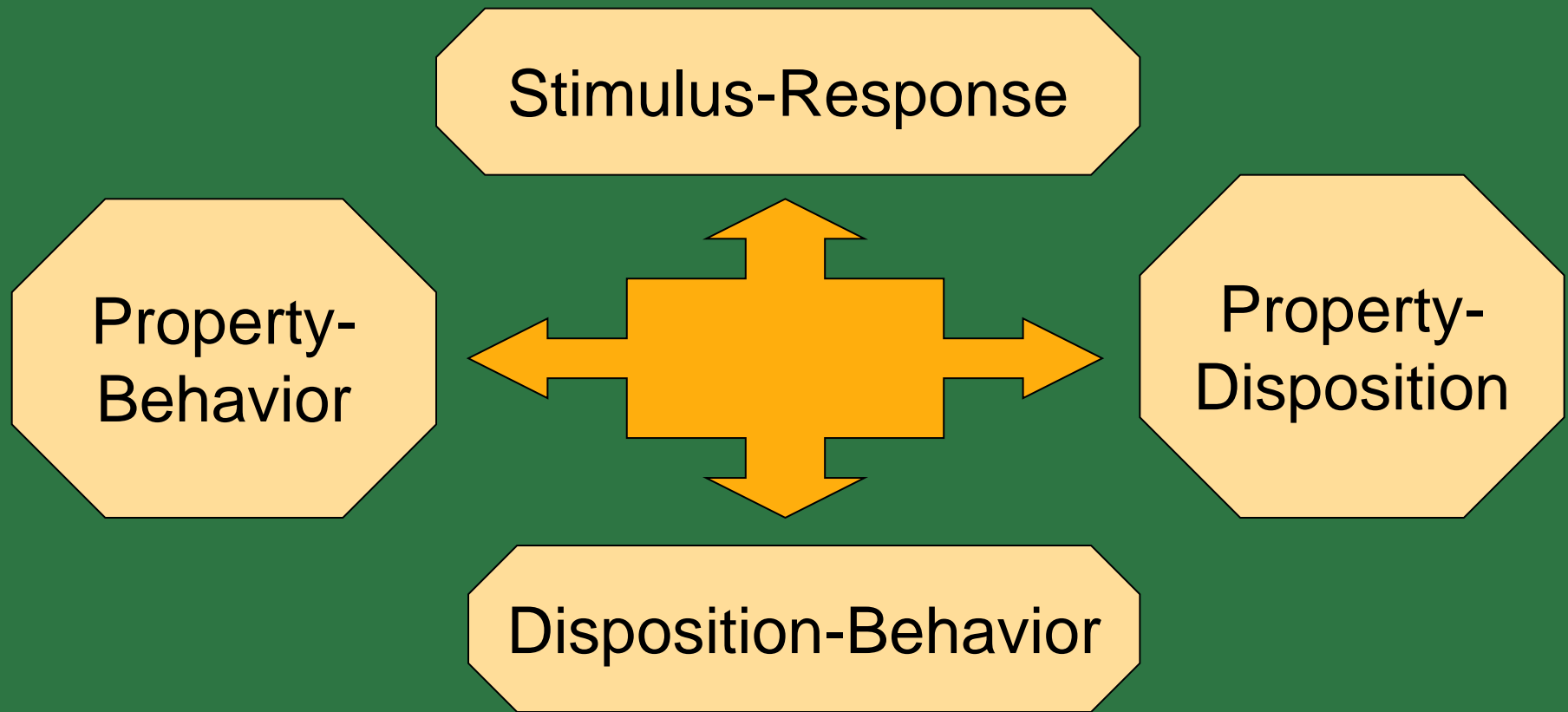
Understanding Causal Relationships



Behavior

- Is an action (eg. consumption practices, work performance, interpersonal acts, and any other kinds of performance)

Asymmetrical Causal Relationships



Types of Asymmetrical Causal Relationships

Relationship Type	Nature of Relationship	Examples
Stimulus-response	An event or change results in a response from some object.	<ul style="list-style-type: none"> • A change in work rules leads to a higher level of worker output. • A change in government economic policy restricts corporate financial decisions. • A price increase results in fewer unit sales.
Property-disposition	An existing property causes a disposition.	<ul style="list-style-type: none"> • Age and attitudes about saving. • Gender attitudes toward social issues. • Social class and opinions about taxation.
Disposition-behavior	A disposition causes a specific behavior.	<ul style="list-style-type: none"> • Opinions about a brand and its purchase. • Job satisfaction and work output. • Moral values and tax cheating.
Property-behavior	An existing property causes a specific behavior.	<ul style="list-style-type: none"> • Stage of the family life cycle and purchases of furniture. • Social class and family savings patterns. • Age and sports participation.

Evidence of Causality

Covariation between
A and B

Time order of events

No other possible
causes of B

AIDS causes blindness.

AIDS

Put AIDS out of work

The work place is no place for AIDS

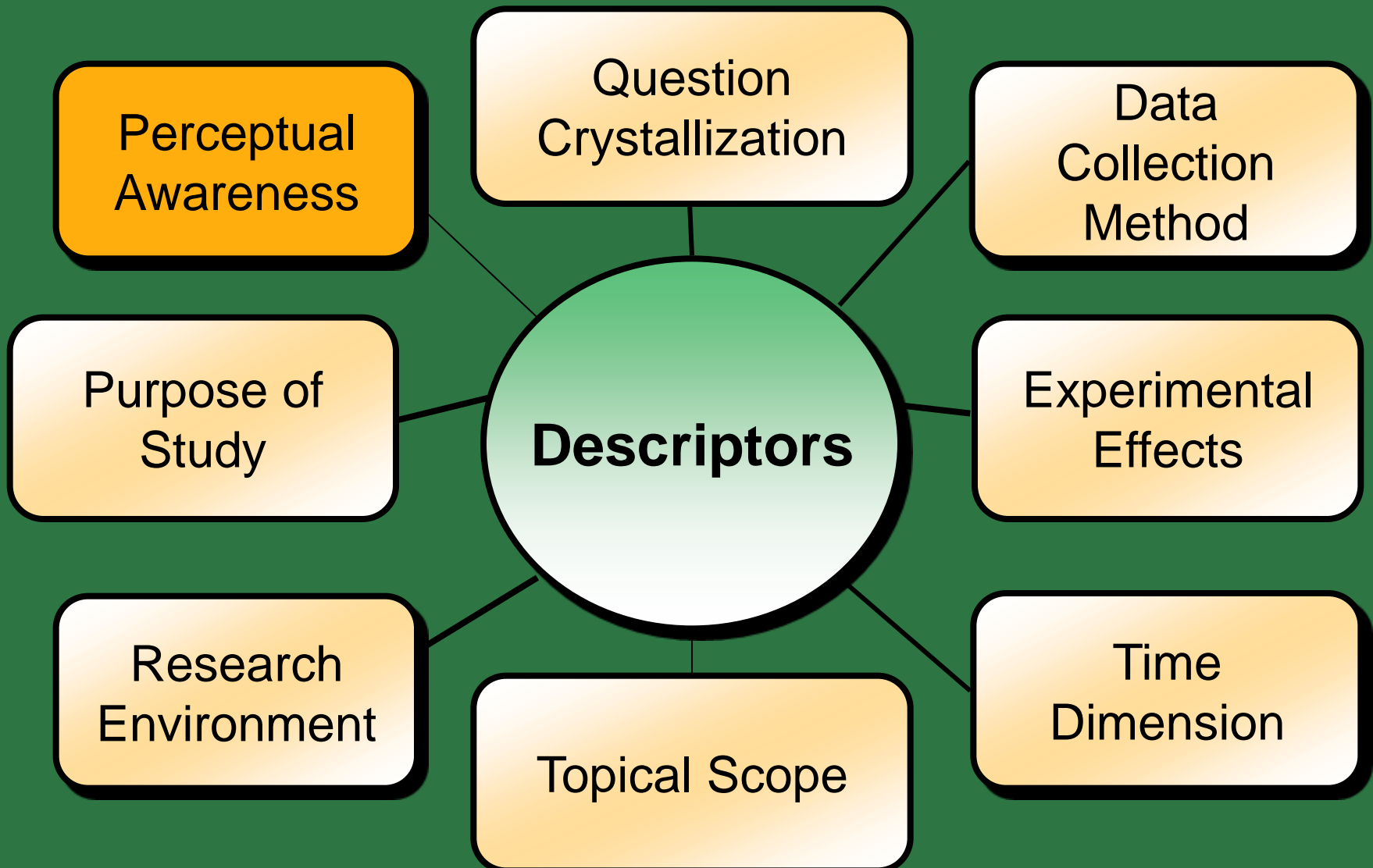
KEEP AIDS OUT

EMPLOYEES AGAINST AIDS

People with AIDS know there's a chance they'll lose their sight. But that's no reason for the people around them to lose sight of the fact that AIDS cannot be caught by touching someone. Or by working around them. Which means the best way to fight AIDS is not with fear and anger, but with compassion and support.

AIDS ACTION COMMITTEE
401 Beethoven Street, Boston, MA 02218
1 800 235 2341

Descriptors of Research Design



Participants' Perceptual Awareness



No deviation perceived

Deviations perceived
as unrelated

Deviations perceived as
researcher-induced

Descriptors of Research Design

Category	Options
The degree to which the research question has been crystallized	<ul style="list-style-type: none"> • Exploratory study • Formal study
The method of data collection	<ul style="list-style-type: none"> • Monitoring • Communication Study
The power of the researcher to produce effects in the variables under study	<ul style="list-style-type: none"> • Experimental • Ex post facto
The purpose of the study	<ul style="list-style-type: none"> • Reporting • Descriptive • Causal-Explanatory • Causal-Predictive
The time dimension	<ul style="list-style-type: none"> • Cross-sectional • Longitudinal
The topical scope—breadth and depth—of the study	<ul style="list-style-type: none"> • Case • Statistical study
The research environment	<ul style="list-style-type: none"> • Field setting • Laboratory research • Simulation
The participants' perceptual awareness of the research activity	<ul style="list-style-type: none"> • Actual routine • Modified routine

What is Important in this Chapter?

- Definition of research design
- Classification of Research design
- Qualitative Techniques
- Causal research

Exercise

Based on the scenarios given below please suggest how a researcher can use a suitable research design (give reasons for your choice)

- Type of research
- Extent of researcher interference
- Study Setting
- Time horizon
- Unit of analysis

Exercise 1

- Joyce Lynn, the owner of a small business (a women's boutique), has invited a consultant to tell her how she is different from similar small businesses within a sixty mile radius with respect to usage of the modern computer technology, her sales volume, her profit margin, and the way she trains her staff.

Exercise 2

- The sales of ACER and COMPAQ computers of a retailer, Mr. Lim Goh Poh, is suffering a major decline. Lim Goh Poh decides to test out two sales approach. He divides 12 salespeople into two groups. One group is trained using the hard selling method while the other group is trained using the soft selling method. This is carried out to identify which approach is more effective in increasing the sale of his computers.

Exercise 3

- The manager of International College sat in his office, lost in his thoughts. The words of his an employer who hired his college's graduate were playing in his mind. "The students from your college are very weak in their English and this is affecting their work performance, the Nusantara College students are better in their language efficiency."
- International College is a private college which offers diploma in management with an option of majoring in either marketing, finance or operations. To continuously compete effectively in this education industry, the manager aims to improve the situation by introducing an English language efficiency project called "BBC". Through the "BBC" project, students will be assigned under certain lecturers who will be responsible to guide them for one semester. The purpose of the "BBC" project is to increase the language efficiency among International College students. However, the manager is doubtful whether the project will turn out to be a success or not. Thus, he wants to test this project first among the marketing major students. At the end of the semester, he plans to give an English language efficiency test to all the students.

Exercise 4

- Tan Mei Mei, a matron in a general hospital, found that the nurses in Pulau Angsa General Hospital often complain about the extreme stress that they are facing at work due to the lack of emotional support. She records all the complaints received according to the ward to date in the hospital's book of complaints. In order to test how far each complaint is true, Tan Mei Mei decides to conduct a research concerning the relationship between the perceived emotional support and the stress faced by the nurses.
- The Pulau Angsa General Hospital is divided into 3 divisions, the accident ward, the children's ward and the maternity ward. According to the report, the nurses at the accident ward are the most stressed. Tan Mei Mei then arranged a strategy whereby two counselors will be stationed at the accident ward, 1 counselor at the maternity ward while no counselor will be placed at the children's ward.
- She will begin the strategy today. After a month she will check the hospital's book of complaints to ascertain whether the complaints have increased or decreased.