

## **DEVELOPING A CONCEPTUAL MODEL**





# The seven-step deductive research process



- Analyze data
- **5** Collect data
- Choose a research design
- Develop a theoretical framework
- Formulate the problem statement
- Define the business problem



# **Agenda**

- How to define variables?
- How to build a conceptual model?



# 1. How to define variables?





## What makes a good variable definition?

☐ Informative variable name (keep it short if possible) Variable definition without jargon Based on a careful literature review Unless very obvious (e.g., sales, profits) Pitfall: Examples do not substitute for a definition One or two supporting references per variable definition



#### Variable definitions

What if many different definitions exist in the literature?

Number of brand loyalty definitions

> 50

Number of attitude definitions

- Acknowledge the major differences
- End with a definition that focuses on the shared meaning across definitions
   or Pick one definition and justify why

## Variable definitions

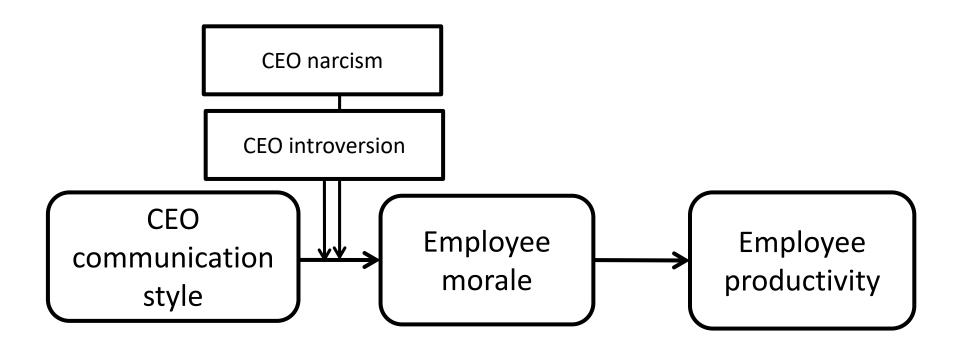
Always use **EXACTLY** the same variable names throughout your research



# 2. How to build a conceptual model?



## **Example**



## Variables are building blocks

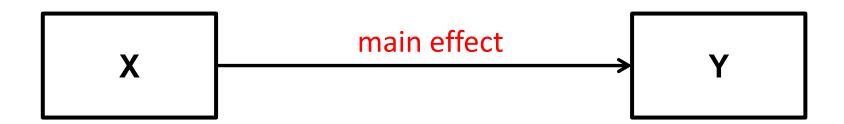
- Dependent variables
- Independent variables
- Mediating variables
- Moderating variables

## Relationships are arrows

- Main effect
- Direct / indirect effect
- Moderating effect



## Dependent and independent variables



#### Independent variable:

Influences the dependent variable

- in a positive way, or
- in a negative way

#### **Dependent variable:**

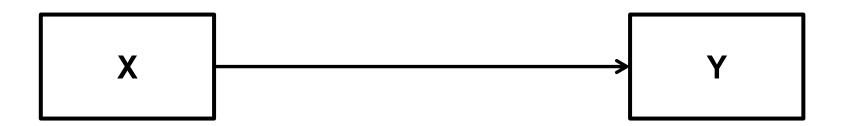
The variable of primary interest

Aka: predictor variable, IV

Aka: criterion variable, DV



## **Examples**



- Employee morale after merger Employee productivity
- Salary levels Job satisfaction
- New product introductions Company sales

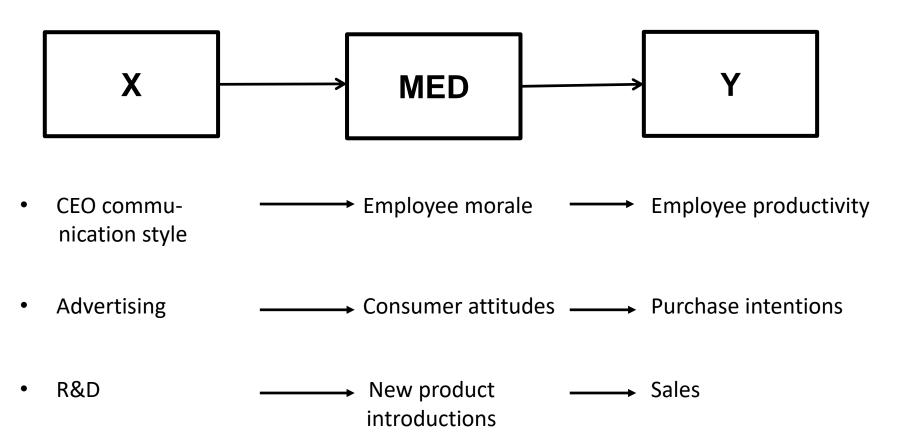
## Mediating variable



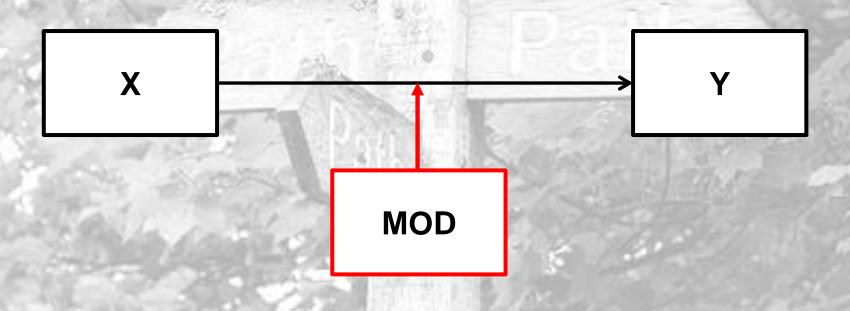
A variable that explains the mechanism at work between X and Y



## **Mediating variable: Examples**



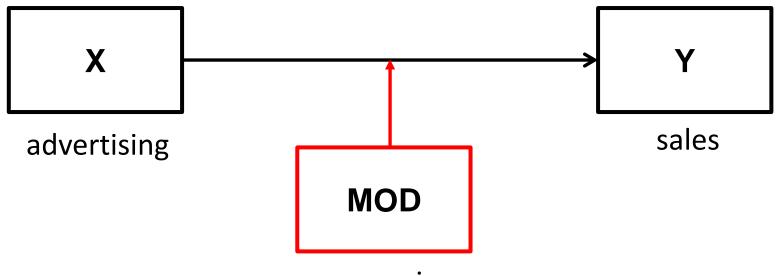
## Moderating variable



A variable that alters the strength and sometimes even the direction (positive ↔ negative) of the relationship between X and Y



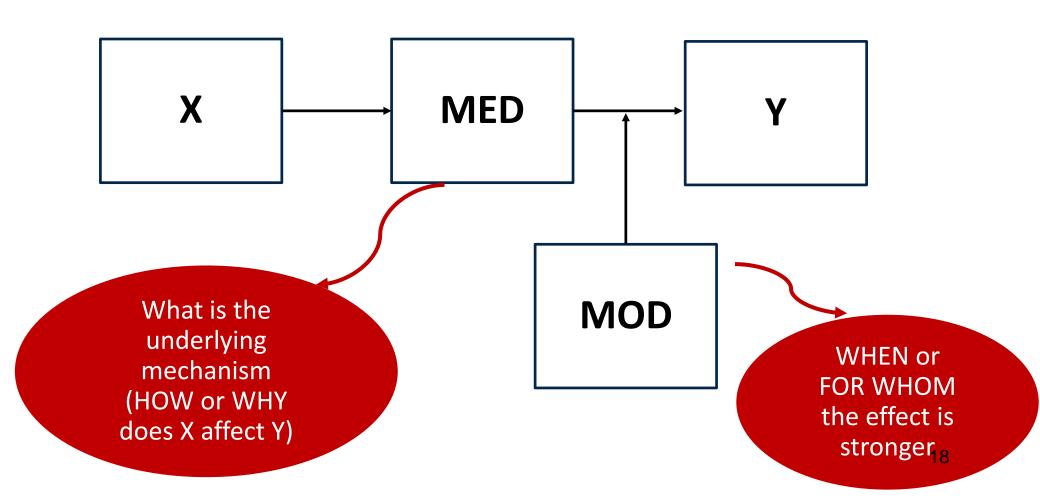
## **Moderating variable: Examples**



- recession
- TV advertising or internet advertising

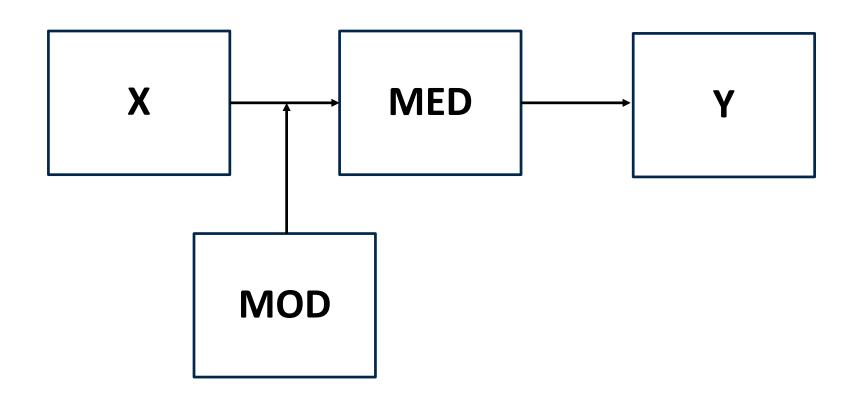


## **Conditional process model**





## **Conditional process model**





## **Example**

