Cross-Sectional Study: Definition, Advantages, Disadvantages & Example

Cross-sectional study captures a population in a single point in time and can help to remove assumptions. In this lesson, you will learn about the features of this tool, consider advantages and disadvantages, and analyze a business and marketing example.

Cross-Sectional Study Defined

Have you ever wondered how marketers know how to target you for products? How do they capture your interest? How do they know how to price products and, especially, where to market these products? How do businesses know which new features to add to the new smartphone, iPad, or the 2015 Lexus? Do you think everyone gets the same ads in their mailboxes? These are all great questions.

Cross-sectional study is a research tool used to capture information based on data gathered for a specific point in time. The data gathered is from a pool of participants with varied characteristics and demographics known as variables. Age, gender, income, education, geographical locations, and ethnicity are all examples of variables. The variables, or demographics, used in a single study are based on the type of research being conducted and on what the study aims to prove or validate. The research findings help remove assumptions and replace them with actual data on the specific variables studied during the time period accounted for in the cross-sectional study.

This type of study is used across various industries. These industries include (but are not limited to) business, psychology, social science, retail, medicine, education, religion, and government. In each of these industries, cross-sectional research provides important data that informs all kinds of actions. For business marketing, in particular, this tool is used to learn more about various demographics for the purpose of analyzing target markets to sell to or introduce products and services.

Before you think that you've never been sampled in this type of study, think again! Many of the ways we use technology every day are contributing to data collection about our purchasing behaviors and preferences. For example, your grocery store purchases are tracked when you swipe your discount card or when you use a debit or credit card. This information is then stored and sold to marketing companies. These tracking programs offer ongoing cross-sectional study material for researchers and marketers. Businesses then hire marketing firms to help them determine where to market their products, based on this purchase history information collected about you and everyone else shopping at the same places! When you receive coupons in the mail, it is because of research done on data which includes your spending habits.

Advantages of Cross-Sectional Study

The advantages of cross-sectional study include:

- Used to prove and/or disprove assumptions
- Not costly to perform and does not require a lot of time
- Captures a specific point in time
- Contains multiple variables at the time of the data snapshot
- The data can be used for various types of research
- Many findings and outcomes can be analyzed to create new theories/studies or in-depth research

Disadvantages of Cross-Sectional Study

The disadvantages of cross-sectional study include:

- Cannot be used to analyze behavior over a period to time
- Does not help determine cause and effect
- The timing of the snapshot is not guaranteed to be representative
- Findings can be flawed or skewed if there is a conflict of interest with the funding source
- May face some challenges putting together the sampling pool based on the variables of the population being studied

A Cross-Sectional Study Example

Let's look at an example of a cross-sectional study in marketing.

Our assumption is that purchasers of new cell phones with advanced features are predominantly males between the ages of 25 - 30.

This material is only for the purpose of students education.