

PRIMARY RESEARCH (INTERMEDIATE)

PRIMARY VERSUS SECONDARY

Primary Research: conducting research and recording the outcomes

Secondary Research: reading the outcomes of someone's research and using this research to justify your own claims

TYPES OF PRIMARY RESEARCH

Quantitative (rooted in "quantity"): collecting numerical data -> counts for patterns

Example:

Counting the number of cars that pass through an intersection. Then, using the number of cars to create statistics

Qualitative (rooted in "quality"): observational data -> observes for patterns

Example:

Giving interviews of members of a community to ascertain different trends of behavior/nuances

Experimental [(rooted in "experiment") also called empirical]: experiments/testing leads to results -> experiments to find facts through repeatable outcomes.

Example:

Conducting a series of tests to prove a result, such as place various chemicals into water to discover potential reactions.

Analytical (rooted in "breaking up," untying, or loosening): identification of components/parts making up the whole of something

Example:

Identifying the different kinds of sentences in a document....

OBJECTIVE VERSUS SUBJECTIVE RESEARCH

Main Text Example: Text

Objective (object = he/she/they/it): Data-Driven, Factual, Non-Biased, Non-Emotional, Impersonal

Subjective (subject = I/me/my/us): Sensory-Driven, Opinion-Based, Feelings, Emotional, Personal

THE SCIENTIFIC METHOD

The Scientific Method: Remember Me? In Primary Research, a researcher follows the scientific method.

To review: The scientific method is defined as a series of steps:

- State the problem/research question.
- Create a hypothesis/Propose a Solution.
- Experiment or proceed in a study of the possible hypothesis/solution.
- Analyze the data from experimentation and review the results.

- Establish a conclusion from the data/results (to support or to dismiss the solution)
- Report findings/Establish a theory.
- Typically, when the scientific method is followed, one's hypothesis (if proven correct) becomes a theory. Or, one's solution (once validated) becomes applicable.

The applied and natural sciences, as well as the field of engineering, typically follow a series of experiments to prove a hypothesis or to find a viable solution to a problem. In the humanities and social sciences, typically, similar studies are used to prove hypotheses and find solutions.

OBSERVATIONS

INTRODUCTION

Qualitative Research focuses essentially on "observing" a target group or a single "research subject." The point of an observation is to focus on a sample of the population (or a specific individual).

Research subject is another name for the person you are researching (for example, the person you study for a case study). Whereas, a target group is a group of multiple "research subjects"

Observational Research is something like Mystery Shopping. The researcher conducts observations, although this method is criticized as being sometimes too similar to qualitative research, unless the observation strictly involves isolating variables in a "counting" circumstance.

TWO TYPES OF RESEARCHERS

1) The Unseen Observer

Try sitting in a "non-obtrusive" or "inconspicuous" spot and observe the practices of the group by simply making notes, running a tape recorder, using a hidden camera, snapping a quick photo or two, or even asking friends/others about the people in question away from the people in question, etc.

2) The Participant Observer

Try observing by becoming part of the action. Become a participant in the group, then make your observations accordingly. I think you might learn more by getting your hands dirty and asking the "real joe" rather than getting the outsiders view? What do you think?

SURVEYING

Surveying is a quantitative method of doing research. Again, remember: "Quantitative research focuses on the statistical (that is, how many?). [Quantitative research] attempts to, in a sense, quantify the extent to which a "group" are aware of, think this, believe that or are inclined to behave in a certain way; otherwise, it simply focuses on finding how many."

Additionally, surveys and questionnaires are an excellent way to collect information and learn about a topic by examining a specific population.

Here are some terms to be introductory terms to be familiar with:

Subject or Informant = the person or group being researched

Data Set = data/findings collected from the survey

Coding = the process of "weeding out" variables and looking for patterns and commonalities

SAMPLES

Samples tend to reference the "Target Group," which is another name for the group of individuals you are studying

The "Sample" is essentially a piece of the Target Group.

There are two types of sample:

- Random Samples = absolutely random selection of subjects
- Quota/Specific Samples = selecting subjects who meet specific criteria

Note that usually a larger sample is better than a smaller one. A larger sample size will create a better correlation between the individuals in the sample and the outcomes of the study.

COLLECTION METHODOLOGY

There are two different collection methods:

- One-way research amounts to giving someone a questionnaire or survey without dialogue, they simply complete it and that's it. (e.g. a postal questionnaire, an e-mail questionnaire)
- Two-way research amounts to having an elaborate dialogue with someone to complete the research via question and answer (Socratic methodology). (e.g. a telephone survey, face-to-face interviews, a focus group)

Regardless of how air-tight or error-free you try to you're your study, there are always problems or possible sources of error. For example, people lying or exaggerating can affect the outcome of the study results. Also, sometimes a researcher might ask a badly written question.... Try not to let such things affect your attitude as you collect information, but be prepared to reexamine your findings if you suspect such things.

QUESTIONS TYPES

There are two forms of information are sought through questioning:

- General Information (ask for demographic information)

- Specific Information (ask specifically about information needed within a given circumstance)

One thing that researchers often try to do is begin an interview or questionnaire (or lead with) general questions in order to “open up” the subject or make them comfortable to the act of answering questions honestly and succinctly.

QUESTION FORMATS

Researchers will also create questions in two different formats: Closed & Open.

CLOSED QUESTIONS

Closed-format questions only allow the research subject to answer with the choices offered. This may be good for finding out specific quantitative information that is easy to interpret.

THE BENEFITS OF CLOSED QUESTIONS

- Forced-choice format
- Easy and quick to fill in
- Minimize discrimination against the less literate (in self-administered questionnaire) or the less articulate (in interview questionnaire)
- Easy to code, record, and analyze results quantitatively
- Easy to report results

OPEN QUESTIONS

Open-format questions allow the research subject to answer in their own words. This may be good for finding out what people think and feel – the qualitative things." Think of the dreaded essay question on those blasted Humanities tests.

THE BENEFITS OF OPEN QUESTIONS

- Allow exploration of the range of possible themes arising from an issue
- Can be used even if a comprehensive range of alternative choices cannot be compiled

HYBRID QUESTIONS: SCALES AND RANKINGS

Hybrid questions combine the format of open and closed and add different dynamics. For example, Hybrid questions can also be answered along the lines of best to worst. Consider using questions which ask about rankings or scale preferences.

Here are a few different types of hybrid questions:

a) Likert Scale

Statement: I like computers.

Strongly Disagree _____ Strongly Agree

This system asks the respondent to rank the degree he or she agrees or disagrees with the statement.

b) Semantic Differentials

Simple _____ Difficult

Interesting _____ Boring

This type of question asks the respondent to choose between sides of a continuum of opposing adjectives.

c) Simple Ranking

Question:

Please select the time most suitable to your needs. Put a 1 next to the time you most prefer. Put a 2 next to the time you prefer as your second choice, and so on.

8:00AM _____

9:00AM _____

10:00AM _____

11:00AM _____

d) Short Answer Rankings

Question:

Please tell me your biggest worries about the course. Please list your worst fear first, followed by the second and third.

1. _____

2. _____

3. _____

