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What is Survey Research?

Survey research is a way to study individual opinions, attitudes, behaviours, and/or beliefs by posing a set of questions to a relatively small group (i.e., a sample) selected from a population of interest. If the sample is selected properly, you can draw conclusions about the population from the answers provided by the sample.

What is Sampling?

Sampling is a technique for selecting the individuals from the group in which you are interested (i.e., the target population) who will be asked to complete the survey. Good sampling ensures that your sample represents the target population and, therefore, that the information you collect from the sample can be applied (generalized) to this population.

Types of Samples

There are many sampling techniques. Some of the most common include:

Random sampling: Participants are selected by nonsystematic, random rules. Each member of the population has an equal chance of being selected for the sample.

Proportionate stratified sampling: If particular characteristics (e.g., gender, age, geographic location) are important to your study, you may want to ensure that your sample accurately reflects the population with regard to these characteristics. To do this, you need to "stratify" your population (e.g., divide it into subgroups based on the characteristic of interest) and then randomly select the correct number of people from each subgroup. For example, 38% of the Canadian population lives in Ontario and 24% lives in Quebec. Therefore, in national surveys that are proportionately stratified by province, 38% of the sample is from Ontario and 24% is from Quebec. In some cases, researchers use *disproportionate* stratified sampling to ensure that they have enough people in each subgroup of their sample. **Convenience sampling:** Respondents are chosen for convenience and availability. This means that each member of the target population does *not* have an equal chance of being selected for the sample. Therefore, there is no way to know if the results of the survey can be generalized to the target population.

Snowball sampling: This technique can be used in conjunction with either random or convenience sampling. It involves asking individuals who have already responded to a survey to identify additional respondents. This technique is useful when the members of a population are hard to reach or identify (e.g., people who participate in a particular activity, members of a particular organization). This technique results in a sample that does not represent the entire population.

What is a Sampling Frame?

A sampling frame is a list from which you select a sample. Examples include telephone directories, membership lists, and directories of organizations or businesses. Your sampling frame should be current, prepared by a reliable source, and include all elements (e.g., people, organizations) that are part of your target population.

What is an Appropriate Sample Size?

Generally speaking, if a sample is randomly selected, the larger the sample the more likely it is to represent the population from which it was selected. However, selecting a large sample is not always possible because it requires a large budget and considerable time. There are statistical formulae available to determine appropriate sample size. To use these formulae, you need to know: (1) the size of your target population, (2) a confidence level that indicates how often your results are likely to be true (usually 95% in social research), and (3) a confidence interval that estimates the likely range of true values in the population if all members of the population completed the survey (usually plus or minus 3% or 4% in social research). There are online calculators that can compute sample sizes. See, for example:

> http://calculators.stat.ucla.edu/sampsize.php http://www.surveysystem.com/sscalc.htm.

How Can you Administer a Survey?

There are two major types of surveys: those that involve an interviewer and those that do not. Your choice should be based on the characteristics of your population, their location, and the type of information you want to collect. Practical issues such as time and budget may also be important.

Interview surveys can be conducted face-to-face or by telephone. Interviews can provide in-depth, comprehensive information and usually have a higher response rate than self-administered surveys. However, they require a skilled interviewer, a bigger budget, and more time to complete.

Self-administered surveys can be distributed by traditional mail or email, placed on-line, or distributed to a group of respondents gathered together (e.g., at a meeting). This method is appropriate if your questions are straightforward and/or when the privacy of participants is important. Selfadministered surveys are less expensive than interview surveys and take less time to complete. However, it can be difficult to get people to complete these surveys.

Steps in Conducting Survey Research

Before conducting your survey:

- 1. Determine what you need to know and from whom you should gather this information.
- 2. Choose an appropriate sampling technique.
- 3. Identify a sampling frame.
- 4. Choose your sample size.
- 5. Decide how you will administer the survey.
- 6. Design a questionnaire that is appropriate for your target population and test it (see our "Questionnaire Design" Tip Sheet for more information).

During the survey administration period:

- 1. Check the process of gathering data and ensure that it is working properly.
- 2. Decide how you will analyze the data (e.g., Excel or SPSS for quantitative data; N6 or NVivo for qualitative data) and develop a template for doing so.

After conducting your survey, you should:

- 1. Enter your data into a data analysis program and check the accuracy of the data entry.
- 2. Conduct appropriate analyses.
- 3. Organize the results into tables and graphs.
- 4. Interpret the findings and prepare your report.

Checklist for Conducting a Survey

- Have you identified your information needs and your population?
- Have you chosen an appropriate sampling technique?
- Have you identified a sampling frame?
- Is your sample size appropriate?
- Have you developed and tested your questionnaire?
- Have you chosen appropriate methods for collecting and analyzing data?
- Have you allocated skilled staff for data entry, data analysis, and report writing?

For More Information

Alreck, P.L., & Settle, R.B. (2004). The Survey Research Handbook, 3rd ed. McGraw Hill Irwin.

Athabasca University Centre for Psychology Resources. http://psych.athabascau.ca/html/aupr/tools. shtml#Research%20Methods

Creative Research Systems. The Survey Design System www.surveysystem.com/sdesign.htm

Scheuren, F., (2004). What is a Survey? American Statistical Association. www.amstat.org/sections/srms/

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