Wednesday, October 06, 2010

Ask CRRC | Survey vs Census

Q: What's the difference between a survey and a census?

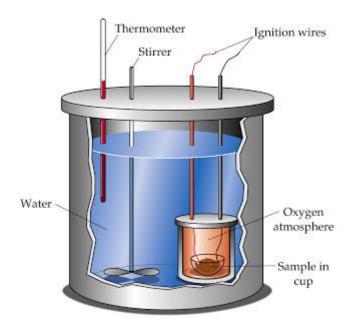
A: In short – census takers attempt to contact all members of a population, while surveyors select a sample of people from the population and use the responses of those people to draw conclusions about the proportions of people in the greater population holding various opinions.

There are many advantages to conducting a survey rather than a census, and here are some key examples:

Firstly, results can be produced much more quickly with a survey than with a census. Imagine that you want to gauge Georgian political opinion just before an election. How much time would it take you to interview every adult Georgian? How many interviewers would you need to train in order to conduct all of the interviews in the month before the elections? A political opinion survey conducted by CRRC immediately before the May 2010 elections employed 100 interviewers to attempt 3,284 interviews. The adult population of Georgia is approximately 3.5 million persons, meaning that a census would require roughly 106,577 interviewers.

Secondly, the far smaller number of interviews conducted in a survey means that you can allocate more of your resources towards ensuring quality. Would you want to spend your money providing a competitive salary to 100 quality interviewers and training them well, or would you rather spend your money paying a minimal wage to 106,577 interviewers and training them insufficiently? In short, a survey allows for more resources to be allocated to other aspects of the process. CRRC invests resources in ensuring quality throughout the survey process, including performing checks to ensure interviewer integrity and entering the data from each interview into the database twice in order to catch data entry errors.

Thirdly, with a survey you can spend your time and money making sure that you collect information on all members of your sample. You can revisit houses where you didn't find people at home the first time. This is important because certain parts of the population are harder to reach than others. For example, women, older people, and unemployed people are all more likely to be at home when an interviewer visits. These demographic groups may have different answers to survey questions than their counterparts, and a sample that over-represents them may be biased. CRRC interviewers randomly select a respondent in each selected household. If that household member isn't home, the interviewer schedules a re-visit to the household, and makes a total of three visits to attempt to find that household member at home. This ensures that the sample contains a representative mix of men and women, young and old, employed and unemployed.



The reasons listed above are all interrelated – time, money, and manpower are always limited, and conducting a survey allows an organization to gain as much information as possible for the resources that they expend. However, in some cases the situation is even more extreme – in some cases, the object of measurement has to be destroyed in order to be measured. Think of how a manufacturer measures the number of calories per cookie: they burn a cookie in a machine called a bomb calorimeter, shown in the figure above. The number of calories in the cookie is a measure of how much heat the cookie produces when burned. Not every cookie is identical, so manufacturers take a sample of cookies. They burn each one in a bomb calorimeter, and report the average number of calories generated per cookie in the sample. If they performed a census on the population of cookies and burned every cookie, there would be nothing left to sell.

Nutrition Facts Serving Size 1.98 ounce(s) (56g)	
Amount Per Serving	
Calories 211 Calories from Fat	113
% Daily Value	
Total Fat 12.5g	19 %
Saturated Fat 7.2g	36 %
Trans Fat 0.0g	
Cholesterol 41.2mg	14 %
Sodium 138.9mg	6 %
Total Carbohydrate 23.8g	8 %
Dietary Fiber 3.3g	13 %
Sugars 13.9g	
Protein 3.8g	
Vitamin A 6 % Calcium	4 %
Vitamin C 0 % Iron	6 %