15.13: Survey Sample Types- Probability

Probability sampling methods, while more difficult, costly, and time-consuming, allow the survey researcher a much better chance of accurately choosing representative respondents. In fact, it is the only method that makes it possible to estimate the amount of error that the sample will produce.

The term "random sample" (referring to a sample that is constructed using probability sampling methods) can be confusing. “Random” does not mean haphazard. Instead, a random sample is set up systematically so that every member of the population being studied has an equal and non-zero chance of being included in the sample.

There are variations of random samples including:

• simple random sample
• stratified random sample
• disproportionate random sample

The key for your purposes is to recognize that a random sample based on a probability sampling method results in findings that are likely to be generalizable to the larger group, although several other factors, such as the wording of questions, must also be considered.

Even the most carefully selected random sample will never provide a perfect representation of the population being studied, however. There will always be some degree of error. That is called sampling error, the yardstick that measures the potential for variation between the survey responses and what the entire population might have answered if everyone had been questioned.

For instance, a poll might indicate that 41 percent of the adults polled had a positive opinion of your client company,
while 43 percent had a negative opinion, and the rest don’t have an opinion. The stated sampling error is plus or minus 4 percent. That means that those who feel positively may be as many as 45 percent or as few as 37 percent (41 plus 4 or 41 minus 4 percent). Those who feel negatively may be as many as 47 percent or as few as 39 percent. In other words, you can’t draw any conclusions about the audience for your PR campaign for that client except to say that the opinions are evenly divided between the two camps.