

# Sampling questions



**ASSIGN  
BUSTER**

Sampling Questions Differentiate between the concepts of a sample and a population. A population is all the elements that are included and usually observed in a study. It is usually very large and cannot be used in a research and hence a subset of it that is the sample is used. The sample is hence only part of the population but it is representative of the entire population under study (Cozby, Paul and Bates, 143).

2. Explain what a confidence interval is. How is a confidence interval related to sampling error?

Confidence interval is a range of values at different intervals and which estimates population parameters that are unknown. The results got indicate how reliable the estimates are. Sampling error on the other hand is the inaccuracy in the sample brought about by deviation of the samples from the population traits, values, behaviors among other characteristics. Confidence interval with its reliability around the population measures the sampling error and ensures that it provides confidence of the samples by around 95% hence making the samples more reliable. It therefore tries to reduce the sampling error.

3. What is the relationship between sample size and the confidence interval?

The relationship between the two is based on inverse square root. This means that as the sample size increases the confidence intervals increases by squares. This relationship is so because an increase in sample size means a reduction in sampling error and a more reliable representation of the population that will be known and hence the reduction in the confidence interval.

4. What are the advantages and disadvantages of probability sampling and nonprobability sampling?

Probability sampling is a sampling technique where all the elements in the population have an equal chance of being included as samples. This method therefore reduces bias and it is fair. It is effective where large samples are required and time is not of the essence. The disadvantage is that it is a costly process, requires higher level of expertise and resources like time (Cozby, Paul and Bates, 146).

Non-probability sampling is a technique where there is no guarantee of an equal chance of the elements in the population being included in the study. This is because the samples are chosen according to their convenience to the researcher and not randomly. The advantage of this technique is that it is time saving, very effective when the samples required are few and it is also more flexible. The lack of randomness introduces the disadvantages of bias, lack of reliability and also generalizability of the results.

#### 5. What are some ways to maximize response rate?

Response rates in surveys are sometimes lower than expected. In order to reduce this tendency it is important for the researcher to assure the respondents of the confidentiality of their responses, provide them with a bit of background information about the research hence making them informed, keep the questions short and the language simple depending on the respondents, offering incentives like appreciation or encouraging statements can also increase the response rate and also reassurance of follow up and provision of the copy of the research once it's done may also increase response rates (Cozby, Paul and Bates, 136).

#### 6. What is a convenience sample and what are some of its advantages and disadvantages?

This is a sample drawn from the population based on its suitability and

proximity to the researcher. Such samples are cheap to obtain and very time saving. They also usually collect basic data about the research that forms the basis of the research findings. Since they lack randomness when collected, they are not representative of the population under study; the results are unreliable making them hard to be replicated. Biasness is also another disadvantage associated with this sample since its collection relies on the researcher's judgment (Cozby, Paul and Bates, 151).

#### Work Cited

Cozby, Paul and Bates, Scott. *Methods in Behavioral Research*. New York: McGraw-Hill, 2012.