Selecting the right study sample essay examples

Sociology, Population



Selecting the right study sample is influenced by the intended population size and purpose of the study. It is also essential to understand the sampling error/precision to determine the range where the true value should be drawn from and the estimated risk level also known as the confidence level and the variability involved (Israel, 2013). In selecting the sample size, the researcher can use several basic methods which involves using the entire population as the research sample in case the study population is small, use of sample sizes that have been used in similar studies or use of already published tables that provide sample sizes in accordance to the study or alternatively, the researcher can opt to determine the sample size through simple calculations. Calculating the required sample size is determined by the precision, variability and confidence level the research.

Calculating the sample size using Raosoft sample calculator is done by filling in the percentage margin of error, confidence level, total population and the expected percentage of response distribution (Raosoft Inc., 2004). For instance, if the margin of error is 4. 5 percent with 95 percent confidence level whereby the population is 10000 unite and the distribution response is 50 percent, then the recommended sample size is 453 units. In the second calculator (Creative Research Systems), the sample size is achieved by filling in the expected confidence level and confidence interval while filling in the population size is optional especially if the actual size is unknown. For instance using the same confidence interval/margin of error of 4. 5 and confidence level of 95 percent where the actual population is unknown, the required sample size for the research is 474 units. If the population is known to be 10000 units, then the sample size is 453 units. The results from the two calculators are similar with the only difference emerging when the population is unknown in the second calculator.

References

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