

# Statistical methods and data analysis essay examples

[Sociology](#), [Population](#)



There are many statistical tests that a researcher can choose to use in testing the available information. The researcher should choose the statistical test after considering several aspects of the available information. The researcher should first ask himself one very important question before choosing the most appropriate statistical test to use. The question that the researcher should seek to answer is “ What type of data have I collected and what is my aim with this data?”

Normally, any kind of data that a researcher has can be analyzed using several statistical tests to give correct results. However, the researcher can select the most appropriate statistical test basing on the number of dependent variables as well as the nature of his independent variables. These two characteristics of the type of data an individual owns is what helps a researcher choose a statistical test depending on the ease with which the information will be analyzed. The dependent variables' nature, which can be ordinal, interval or categorical or normal distribution will also help the researcher determine the most suitable statistical test.

The objective of the researcher is important in determining the type of statistical test. This is because it is the researcher's objective of the study that will help identify the appropriate statistical test. For instance, if the objective is to describe only one group of data, the researcher will select a different type of statistical test from the one he could choose when comparing one group of data to a hypothetical value. The type of data that can help determine a statistical method could be the measurements obtained from a Gaussian population, score or rank in a non-Gaussian

population, the time of survival or binomial data in the case of two possible results. It is therefore imperative that the researcher considers the type of data he is dealing with and the objective of the study when deciding on the best statistical test.

Singh, R., Singh, J., & Smarandache, F. (2009). *Studies in Statistical Inference, Sample Techniques and Demography*. New York: American Research Press.