

Inferential and descriptive statistics

[Science](#), [Statistics](#)



A hypothesis should be formulated following the analysis of the central tendency of the data, for example, a hypothesis may aim at finding out whether more participants prefer the red T-shirt, another hypothesis may be aimed at finding out whether more male prefers the red T-shirt or whether more female prefer red shirt.

Finally, in order to undertake inferential statistics, the sampling method should be random, this involves selecting an appropriate method that will ensure that data is reliable. Example a random sample of cluster sample should be selected. The random sample ensures that the population is properly represented and that if another study is undertaken a study will yield the same results.

There are a number of advantages associated with inferential statistics, one of the advantages is that inferential statistics will provide more information than descriptive statistics, for example, descriptive statistics regarding the gender variable will indicate percentages of male and female participants, inferential statistics will involve determining the percentage of male, and also will also involve an analysis of the gross income for the year 1993.

Inferential statistics may involve determining whether the average male gross income is greater than the average female income in 1993. Further inferential statistics will also provide information regarding the relationship between variables as shown in the above example.

Another advantage of inferential statistics is that it reveals causes and effects, for example, gender may influence preference. The other advantage is that inferential statistics help in prediction, for example, results may help in predicting the level of demand for both types of T-Shirts.

This form of analysis also has an advantage in that it provides convincing results that are widely accepted, hypothesis or theory under test in a study will require inferential statistics such as chi-square tests, the results are compared and a conclusion is made regarding the hypothesis or theory.

Therefore inferential statistics have an advantage over descriptive statistics whereby inferential statistics will aid in making a conclusion about the data.

Conclusion:

From the above discussion, it is evident that there are a number of changes that should be undertaken in the analysis in order to perform inferential statistics, frequencies and measures of central tendencies should be determined. A hypothesis should be stated that will be tested in order to make conclusions. There is a number of advantages associated with inferential statistics which include the fact that inferential analysis will provide more information, reveal cause and effect and help in making a conclusion that widely acceptable.