

Statistics study

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



Statistics

Statistics is the systematic study and manipulation of numerical information, also known as data, to draw conclusions as to the relationship between different phenomena to predict or explain the occurrence of such phenomena. Statistics involves collecting data, organizing the data and analysing it to aid its presentation in a meaningful way to provide information about a given phenomenon. Statistics may fall under two main categories namely descriptive or inferential (Adams and Lawrence 142).

Descriptive statistics deals with the techniques and methods of collecting and interpreting data while inferential statistics involves systems and techniques used to make accurate predictions or determining probability of events happening and thus make decisions based on this probability (Adams and Lawrence 189).

Application of Statistics in Research

A researcher may apply statistics in the planning and execution of research. Throughout the process of research, the researcher should use some statistical process that will enable him or her collect data and process it to come up with meaningful information. The use of statistical tests will provide the researcher with a framework within which to operate during the research (Adams and Lawrence 339). Statistics helps break down complex situations to easily understandable formats. Given that a researcher may not subject the whole population to the research, he may apply statistics to determine samples from the population (Adams and Lawrence 185).

Findings from the research are not worth anything if they are in an incomprehensible format. A researcher can apply statistics to process the

large amount of data collected from research to give a comprehensive conclusion. Researchers use statistics to summarize their data to communicate their findings. Statistics helps give credibility to methods used, findings and conclusions of the research. Statistics helps one determine such variables as the mean, mode, variance, ratios among others. These summarize research findings and help in comparing the different phenomena. This evaluation of research information is important in making informed decision making.

Works Cited

Adams, Kathryn, A., and Eva K. Lawrence. Research Methods, Statistics, and Applications. New York: SAGE Publications. 2014. Print