Home > Statistical Treatment Of Data

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Statistical treatment of data is essential in order to make use of the data in the right form. Raw data collection is only one aspect of any experiment; the organization of data is equally important so that appropriate conclusions can be drawn. This is what statistical treatment of data is all about.

There are many techniques involved in statistics that treat data in the required manner. Statistical treatment of data is essential in all experiments, whether social, scientific or any other form. Statistical treatment of data greatly depends on the kind of experiment and the desired result from the experiment.

> For example, in a survey regarding the election of a Mayor, parameters like age, gender, occupation, etc. would be important in influencing the person's decision to vote for a particular candidate. Therefore the data needs to be treated in these reference frames.

An important aspect of statistical treatment of data is the handling of errors. All experiments invariably produce errors and noise. Both systematic and random errors need to be taken into consideration.

Depending on the type of experiment being performed, Type-I and Type-II errors also need to be handled. These are the cases of false positives and false negatives that are important to understand and eliminate in order to make sense from the result of the experiment.

Treatment of Data and Distribution

Trying to classify data into commonly known patterns is a tremendous help and is intricately related to statistical treatment of data. This is because distributions such as the normal probability distribution [1] occur very commonly in nature that they are the underlying distributions in most medical, social and physical experiments.

Therefore if a given sample size is known to be normally distributed, then the statistical treatment of data is made easy for the researcher as he would already have a lot of back up theory in this aspect. Care should always be taken, however, not to assume all data to be normally distributed, and should always be confirmed with appropriate testing.

Statistical treatment of data also involves describing the data. The best way to do this is through the measures of central tendencies [2] like mean [3], median [4] and mode [5]. These help the researcher explain in short how the data are concentrated. Range, uncertainty and standard deviation [6] help to understand the distribution of the data. Therefore two distributions with the same mean can have wildly different standard deviation, which shows how well the data points are concentrated around the mean.

Statistical treatment of data is an important aspect of all experimentation today and a thorough understanding is necessary to conduct the right experiments with the right inferences from the data obtained.

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[2] https://explorable.com/measures-of-central-tendency
[3] https://explorable.com/statistical-mean
[4] https://explorable.com/calculate-median
[5] https://explorable.com/statistical-mode
[6] https://explorable.com/measurement-of-uncertainty-standard-deviation