

1. What is Central Tendency?

Central Tendency

A measure of central tendency is a single value that attempts to describe a set of data by identifying the central position within that set of data. As such, measures of central tendency are sometimes called measures of central location. They are also classed as summary statistics.

There Are three basic types of measure Central tendency:

1. Mean
2. Median
3. mode

2. What is Mean?

Mean

Mean is also known as Average of Data. The mean (or average) is the most popular and well known measure of central tendency. It can be used with both discrete and continuous data, although its use is most often with continuous data.

The mean is equal to the sum of all the values in the data set divided by the number of values in the data set.

Formula for sample Data

$$\bar{x} = \frac{x_1 + x_2 + \dots + x_n}{n}$$

Formula for Population Data

$$\bar{x} = \frac{\sum x}{n}$$

Median

The median is the middle score for a set of data that has been arranged in order of magnitude. The median is less affected by outliers and skewed data.

Mode

The mode is the most frequent score in our data set. On a histogram it represents the highest bar in a bar chart or histogram. You can, therefore, sometimes consider the mode as being the most popular option