

Standard Error:-

* Standard Error occurs during the sampling distribution.

* It is the approximate standard deviation of a statistical sample population.

* Sample means deviates from the actual mean of a population, this deviation is the standard error of the mean.

* More data points involved in the calculations of the mean, the smaller the standard error, tends to be.

* Simply, standard error is the ~~sample~~ std deviation of sample statistics such as mean, median.

$$SE = \frac{\sigma}{\sqrt{n}}$$

~~no sample no. of samples~~
 ~~σ = sample std dev~~

σ = Sample std dev

n = sample size.

* $SE \propto \frac{1}{n}$ larger the sample size, smaller the std error

* Smaller the std error, more representative the sample will be of overall population.

* Std error and Std dev were measures of variability.

* In case multiple samples were collected, the mean of each sample may vary slightly from others, creating a spread among variables.

* This spread is std error.

* If std error is large there is more irregularities in data.

* Std error approaches to determine the accuracy of the sample or the accuracy of multiple samples