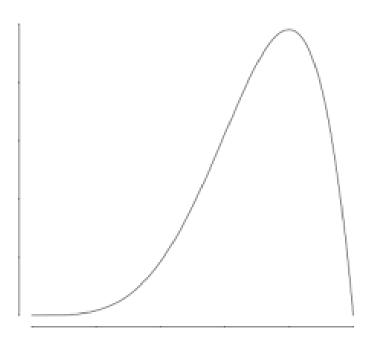
What is the relationship between the Mean, Median and Mode in Left Skewed and Right Skewed Distribution?

What is Skewness?

Skewness is a measure of the asymmetry of a distribution. A distribution is asymmetrical when its left and right side do not mirror. A distribution can have right (or positive), left (or negative), or zero skewness

Left Skewed Distribution

Left Skewed Distribution



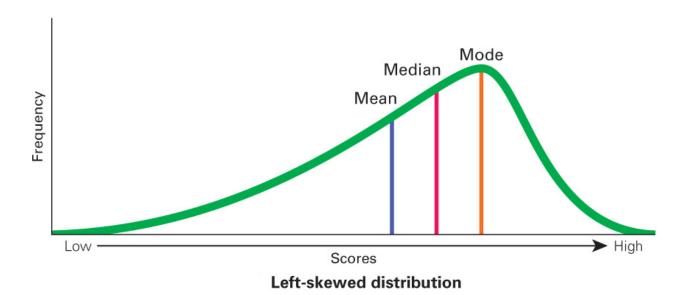
In this type of distribution more data falls on the right-hand side and the distribution becomes asymmetrical. In this type of distribution, the frequency of the data is higher on the right side. Hence, Mode will be more on the right-side of distribution as compared to median and mean. It is also known as negative skewed.

While median is the middle or center value that lies between mean and mode

Mean is lower than median and mode i.e.the average of the data is on the lower side.

An example of this type of distribution is the Life span of people. Due to advancement in the medical facilities less number of people die in young age. Hence the left is Skewed while the death rate gradually increases as age increases towards the right and the frequency of death gets more and more i.e. mode becomes highest at the tip of the curve as compared to the median and mean in this distribution.

Thus, Mode > Median > Mean



Right Skewed Distribution

Right Skewed Distribution



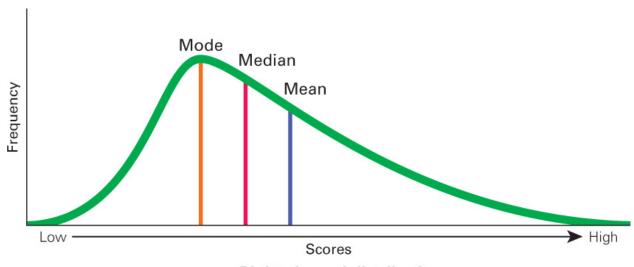
In this type of distribution more data falls on the left-hand side of the distribution and the distribution becomes asymmetrical. In this type of distribution, the frequency of the data is higher on the Left side. Hence, Mode will be less as compared to median and mean.

While median is the middle or center value that lies between mean and mode.

Mean is Higher than median and mode i.e. the average of the data is on the higher side.

The best example of this type of distribution is wealth distribution. The world's richest people lie on the extreme right and as we move towards the left the income level of individuals decreases and the majority i.e. middle class and lower middle class come on the left tip of the curve while the poor would come on the extreme left of the distribution.

Thus, Mean > Median > Mode



Right-skewed distribution