

Measures of Dispersion

→ Introduction:

The measure of central tendency is only helpful in find out the central position of the series. It does not reveal all the characteristics and peculiarities of the size and quantities of the series or of the data. So, in order to find out all the characteristics regarding the distribution of the variable within the series we need the measures of dispersion.

→ Definition:

- Measures of dispersion defined as the measure of variability of the items of the series.
- It is the measure of the degree of spread out or the extent of the variability in individual items of the distribution.
- Dispersion simply refers to the lack of uniformity in the size or quantities of the items of a group or series.

→ Properties:

- (i). It should be rigidly defined.
- (ii). It should be simple to understand.
- (iii). It should be easy to compute.
- (iv). It should be based on the individual item of the distribution.
- (v). It should be capable of further algebraic treatment.
- (vi). It should have sampling stability.
- (vii). It should not be unduly affected by the extreme items.

→ Types of Dispersion:

- Relative Measure of Dispersion
- Absolute Measure of Dispersion

Absolute Measure of Dispersion

- (i) Range
- (ii) Quartile Deviation
- (iii) Mean deviation or Average deviation
- (iv) Standard Deviation