

Basic statistics: correlation

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□ Linear correlation analysis

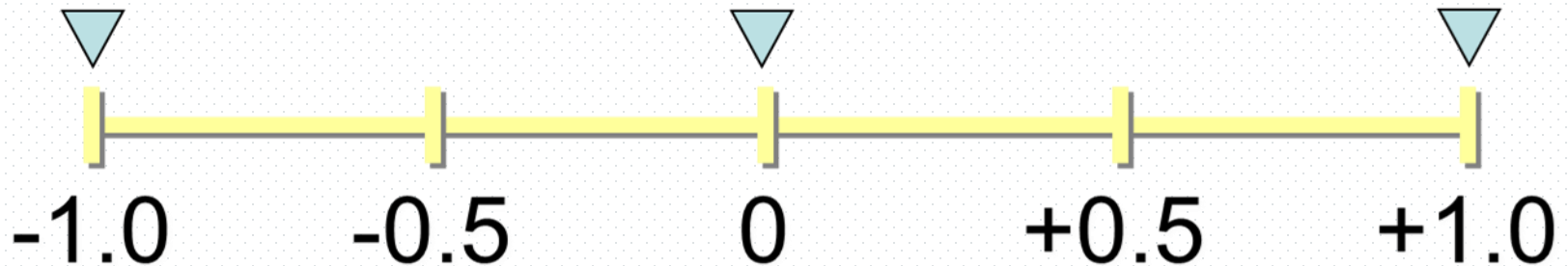
- ✓ Correlation coefficient is a measure of the linear relationship between two variables.
- ✓ r = samples correlation, ρ = population correlation
- ✓ It is identify correlation between the elements, the degree of correlation, and positive or negative correlation
- ✓ $+r$ = positive correlation, $-r$ = negative correlation
- ✓ magnitude of the absolute value of r indicates the degree of correlation

□ Correlation coefficient

Perfect negative correlation

No correlation

Perfect positive correlation



The degree of negative correlation increased

The degree of positive correlation increased