## scatter plot

A way of visualizing the *correlation* of *random variables* by plotting the values of one variable as dots offset from the *x*-axis and the other one as dots offset from the *y*-axis. See figure SCP.



Figure **SCP:** scatter plots; left: correlated variables (correlation coefficient: r = 0.59); right: very weakly correlated variables (coefficient: r = -0.0043); dotted line = regression line

When the scatter plot shows some shape, like a diagonal line, a skewed triangle, or a parabola, there usually is more than a weak correlation. When the data points appear to be scattered randomly, the correlation is so weak that the variables can be assumed to be uncorrelated.

When drawing a *regression line* through a scatter plot, a horizontal line will indicate a weak correlation or no correlation at all, a line with an ascending *slope* indicates correlation, and a descending slope indicates *anticorrelation*.