Spearman's rank correlation coefficient

In statistics, Spearman's rank correlation coefficient or Spearman's rho, named after Charles Spearman and often denoted by the Greek letter \rho (rho) or as r_s, is a nonparametric measure of statistical dependence between two variables. It assesses how well the relationship between two variables can be described using a monotonic function. If there are no repeated data values, a perfect Spearman correlation of +1 or −1 occurs when each of the variables is a perfect monotone function of the other.

Spearman's coefficient, like any correlation calculation, is appropriate for both continuous and discrete variables, including ordinal variables.

Spearman's \rho and Kendall's \tau can be formulated as special cases of a more general correlation coefficient.