

Differences between correlations:

Directions: For Dependent samples, click on the three variables representing X, Y and Z (in that order.) The test will compare the $r(x,y)$ with the $r(x,z)$. For Independent samples, click on the X and Y variables to be correlated and then the variable representing the group coding variable. The correlations obtained in each of two groups will be compared.

Example 1. Comparing Independent Correlations Entered on the Form.

Comparison of Two Correlations

Data Entered From:

- ☒ Values entered on this form.
- ☐ Values in the data grid from a file.

Test Assumptions:

- ☒ Independent Correlations.
- ☐ Dependent Correlations.

First Correlation: .4

Sample Size 1: 40

Second Correlation: .6

Sample Size 2: 50

Help Reset

Cancel Compute

Return

Percent Confidence Interval 95.0

COMPARISON OF TWO CORRELATIONS

Correlation one = 0.400
Sample size one = 40
Correlation two = 0.600
Sample size two = 50
Difference between correlations = -0.200
Confidence level selected = 95.0
z for Correlation One = 0.424
z for Correlation Two = 0.693
z difference = -0.269
Standard error of difference = 0.220

z test statistic = -1.226
Probability > |z| = 0.890
z Required for significance = 1.960
Note: above is a two-tailed test.
Confidence Limits = (-0.605, 0.160)

Example 2. Comparison of Two Independent Correlations (Data on the Grid: ANCOVA3.LAZ)

Comparison of Two Correlations

Data Entered From:

☐ Values entered on this form.

☒ Values in the data grid from a file.

Test Assumptions:

☒ Independent Correlations.

☐ Dependent Correlations.

Select Variables:

Row
Col
Slice
X
Cov1
Cov2

X = X

Y = Cov1

Group = Row

Help Reset

Cancel Compute

Return

Percent Confidence Interval 95.0

COMPARISON OF TWO CORRELATIONS

Correlation one = 0.099
Sample size one = 36
Correlation two = -0.229
Sample size two = 36
Difference between correlations = 0.328
Confidence level selected = 95.0
z for Correlation One = 0.099

z for Correlation Two = -0.233

z difference = 0.332

Standard error of difference = 0.246

z test statistic = 1.350

Probability $> |z|$ = 0.089

z Required for significance = 1.960

Note: above is a two-tailed test.

Confidence Limits = (-0.149, 0.672)

Mean X for group 1 = 3.500

Mean X for group 2 = 4.667

Std.Dev. X for group 1 = 1.276

Std.Dev. X for group 2 = 2.318

Mean y for group 1 = 3.778

Mean Y for group 2 = 4.111

Std.Dev. Y for group 1 = 1.807

Std.Dev. Y for group 2 = 1.545