

Chapter 10

Correlations

[DataSet1] /Users/spark/SAT and GPA.sav

| | | SAT Verbal Scores | Freshman GPA |
|-------------------|---------------------|-------------------|--------------|
| SAT Verbal Scores | Pearson Correlation | 1 | .831** |
| | Sig. (2-tailed) | | .001 |
| | N | 12 | 12 |
| Freshman GPA | Pearson Correlation | .831** | 1 |
| | Sig. (2-tailed) | .001 | |
| | N | 12 | 12 |

** . Correlation is significant at the 0.01 level (2-tailed).

NONPAR CORR
/VARIABLES=SAT GPA
/PRINT=SPEARMAN TWOTAIL NOSIG
/MISSING=PAIRWISE.

Nonparametric Correlations

| | | SAT Verbal Scores | Freshman GPA |
|----------------|-------------------|-------------------------|--------------|
| Spearman's rho | SAT Verbal Scores | Correlation Coefficient | 1.000 |
| | | Sig. (2-tailed) | . |
| | | N | 12 |
| Spearman's rho | Freshman GPA | Correlation Coefficient | .825** |
| | | Sig. (2-tailed) | .001 |
| | | N | 12 |

** . Correlation is significant at the 0.01 level (2-tailed).

Pearson r

The relationship between SAT Verbal scores and Freshman GPA is direct and very strong (Pearson $r = .83$). The Value of the Pearson r is 1.00, which indicates a *perfect, direct relationship*.

Spearman's rho

Chapter 10 (Exercise)

Correlations

[DataSet1] /Users/spark/Words Typed and Success.sav

| | | Words Typed per Minute | Success on the Job |
|------------------------|---------------------|------------------------|--------------------|
| Words Typed per Minute | Pearson Correlation | 1 | .749** |
| | Sig. (2-tailed) | | .000 |
| | N | 20 | 20 |
| Success on the Job | Pearson Correlation | .749** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 20 | 20 |

** . Correlation is significant at the 0.01 level (2-tailed).

NONPAR CORR
/VARIABLES=Words Success
/PRINT=SPEARMAN TWOTAIL NOSIG
/MISSING=PAIRWISE.

Nonparametric Correlations

| | | Words Typed per Minute | Success on the Job |
|----------------|------------------------|-------------------------|--------------------|
| Spearman's rho | Words Typed per Minute | Correlation Coefficient | 1.000 |
| | | Sig. (2-tailed) | . |
| | | N | 20 |
| Spearman's rho | Success on the Job | Correlation Coefficient | .659** |
| | | Sig. (2-tailed) | .002 |
| | | N | 20 |

** . Correlation is significant at the 0.01 level (2-tailed).

a. What is the value of the Pearson r ? 0.749

b. What is the value of Spearman's rho? 0.659

c. Write a sentence that presents the Pearson r for the relationship between words typed and success.

-> The relationship between Words Typed per Minute and Success on the Job is direct and very strong (Pearson $r = .75$). The Value of the Pearson r is 1.00, which indicates a *perfect, direct relationship*.