

## SPSS for Correlation Analysis

### I. Data File Format

- need two columns; one for the data in independent variable  $X_1$  and the second for data for variable  $X_2$ . If you want to obtain correlations among more variables, simply add more columns and include them in the analysis below. See the data file example below, which is for two variables.

23	11
23	13
13	14
54	29
32	23
23	21
25	11
54	29
32	30
12	33
34	23
39	43
etc....	

### II. The Analysis

(1) From the pull-down menu:

*Analyze* → *Correlate* → *Bivariate* <click on this>

(2) Specify the appropriate variables:

Simply highlight the appropriate column name from the list on the left and click on the arrow button to include it as an independent variable. If you choose more than 2 variables, a separate correlation analysis will be done on each pair of variables listed.

(3) Specify the appropriate test statistic:

The default statistic is the parametric Pearson correlation. You can also select the non-parametric Spearman analysis by checking that circle on this dialog box. Then click “OK” to run the analysis.

### III. The Output

The output consists of a separate correlation matrix box for each statistic selected (i.e., one for Pearson and a separate one for Spearman). Listed are the test statistic, significance level, and sample size for each row x column variable comparison. See example below:

Correlations			
		Age When First Married	Total Family Income
Age When First Married	Pearson Correlation	1.000	.107**
	Sig. (2-tailed)	.	.000
	N	1202	1155
Total Family Income	Pearson Correlation	.107**	1.000
	Sig. (2-tailed)	.000	.
	N	1155	1434

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