Correlations

The correlation tells you the magnitude and direction of the association between two variables.

```
. pwcorr happy sexfreq age , obs sig

             |    happy  sexfreq      age
-------------+---------------------------
       happy |   1.0000
             |
             |     1369
             |
     sexfreq |  -0.1053   1.0000
             |   0.0006
             |     1060     2151
             |
         age |  -0.0453  -0.4370   1.0000
             |   0.0944   0.0000
             |     1362     2143     2751
             |
```

Here is the correlation between age of respondent and frequency of sex. The correlation coefficient is -.437 (and is significant). This suggests a negative correlation with moderate magnitude. As age increases, the frequency of sex decreases. The correlation between age and frequency of sex is -.437. If we square this value, we get .190969, or 19.1 out of 100, or 19.1 percent. From this we can claim that 19.1% of the correlation in frequency of sex is attributed to respondent's age.

This cell represents the correlation (and significance and sample size) between age and general happiness. The top value (-.045) is the correlation coefficient. The middle value (.094) is the significance. The bottom value (1362) is the number of cases. In this example, the correlation is not significant, at the p < .05 level.

Note

The following general categories indicate a quick way of interpreting correlations.

0.0 – 0.2	Very weak correlation
0.2 – 0.4	Weak correlation
0.4 – 0.7	Moderate correlation
0.7 – 0.9	Strong correlation
0.9 – 1.0	Very strong correlation