**Chapter 2 Exercises: Solutions**

1.

|  |
| --- |
| . summarize coninc  Variable | Obs Mean Std. Dev. Min Max  -------------+--------------------------------------------------------  coninc | 1758 48384.83 46743.55 383 178712.5 |

2.

|  |
| --- |
| . tabulate happy7  how happy r is | Freq. Percent Cum.  --------------------------+-----------------------------------  completely happy | 148 11.53 11.53  very happy | 563 43.85 55.37  fairly happy | 440 34.27 89.64  neither happy nor unhappy | 77 6.00 95.64  fairly unhappy | 35 2.73 98.36  very unhappy | 16 1.25 99.61  completely unhappy | 5 0.39 100.00  --------------------------+-----------------------------------  Total | 1,284 100.00 |

The frequency analysis shows that 43.85% of respondents are very happy.

3.

|  |
| --- |
| . tabulate degree class  rs highest | subjective class identification  degree | lower cla working c middle cl upper cla | Total  ---------------+--------------------------------------------+----------  lt high school | 61 128 89 5 | 283  high school | 110 517 321 19 | 967  junior college | 16 72 61 1 | 150  bachelor | 10 107 212 24 | 353  graduate | 3 29 156 16 | 204  ---------------+--------------------------------------------+----------  Total | 200 853 839 65 | 1,957 |

4.

|  |
| --- |
| . correlate satfam7 satfin  (obs=1258)  | satfam7 satfin  -------------+------------------  satfam7 | 1.0000  satfin | 0.2294 1.0000 |

5.

|  |
| --- |
| . tabulate degree class, chi2  rs highest | subjective class identification  degree | lower cla working c middle cl upper cla | Total  ---------------+--------------------------------------------+----------  lt high school | 61 128 89 5 | 283  high school | 110 517 321 19 | 967  junior college | 16 72 61 1 | 150  bachelor | 10 107 212 24 | 353  graduate | 3 29 156 16 | 204  ---------------+--------------------------------------------+----------  Total | 200 853 839 65 | 1,957  Pearson chi2(12) = 292.0832 Pr = 0.000 |

6

|  |
| --- |
| . regress tvhours i.sex educ age  Source | SS df MS Number of obs = 1295  -------------+------------------------------ F( 3, 1291) = 28.70  Model | 665.522337 3 221.840779 Prob > F = 0.0000  Residual | 9977.72554 1291 7.72867974 R-squared = 0.0625  -------------+------------------------------ Adj R-squared = 0.0604  Total | 10643.2479 1294 8.22507564 Root MSE = 2.7801  ------------------------------------------------------------------------------  tvhours | Coef. Std. Err. t P>|t| [95% Conf. Interval]  -------------+----------------------------------------------------------------  sex |  female | -.1208375 .1552787 -0.78 0.437 -.4254639 .1837888  educ | -.1810576 .02521 -7.18 0.000 -.2305147 -.1316005  age | .0249115 .0043726 5.70 0.000 .0163333 .0334897  \_cons | 4.430287 .4190495 10.57 0.000 3.608194 5.252379  ------------------------------------------------------------------------------  . estat esize  Effect sizes for linear models  -------------------------------------------------------------------  Source | Eta-Squared df [95% Conf. Interval]  --------------------+----------------------------------------------  Model | .06253 3 .0381043 .0879126  |  sex | .0004689 1 0 .0057496  educ | .0384191 1 .0204933 .0609384  age | .0245249 1 .0106108 .0434998  ------------------------------------------------------------------- |

b. *F*(3, 1,291) = 28.70, *p* < .001, which indicates that the overall model with four predictor variables is statistically significant.

c. The regression coefficients for educ and age are significant, whereas the coefficient for sex is not significant.

d. The eta-squared value for the overall model is .063. The eta-squared values for sex, educ, and age are 0, .038, and .025, respectively.