**Chapter 2 Exercises: Solutions**

1.

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

2.

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| --- |
| . 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 89.64neither 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.

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| --- |
| . 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.

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

5.

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| . 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

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| . 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 esizeEffect 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.