Job Satisfaction Exercises 3

Results for (g):

The $f$ test in the ANOVA for the regression to predict job satisfaction score from square root of the reflected satisfaction with supervisor score is statistically significant at the 0.05 level ($f_{1, 212} = 30.73$, $f_{1, 212; 0.05} = 3.94$, $n = 214$, $p < 0.001$). We conclude that the linear relationship between job satisfaction score and square root of the reflected satisfaction with supervisor score is significant, and the data suggest a negative relationship.

With a $t$ test, the sample slope ($-2.20$) is statistically significantly different from zero at the 0.05 level ($t_{212} = -5.543$, $t_{212; 0.025} = 1.960$, $n = 214$, $p < 0.001$). We can be 95% confident that the slope in the regression to predict edict job satisfaction score from square root of the reflected satisfaction with supervisor score is between $-2.982$ and $-1.417$.

Results for (h):

With a $t$ test concerning employees whose satisfaction with supervisor score is 31, the estimated job supervisor score ($61.32$, $n = 214$) is statistically significantly different from the hypothesized mean ($64$) at the 0.05 level ($t_{212} = -2.604$, $t_{212; 0.025} = 1.960$, $0.001 < p < 0.01$). We can be 95% confident that for employees whose satisfaction with supervisor score is 31, the mean job supervisor score is between 59.29 and 63.35.

Results for (i):

We are 95% confident that for employees whose satisfaction with supervisor score is 31, the job supervisor score is between 44.97 and 77.66.

OR

At least 95% of employees whose satisfaction with supervisor score is 31 will have a job supervisor score between 44.97 and 77.66.