

Assignment:

Point Estimates from Multiple Regression

Print Your Name _____

Use the Excel regression tool on the dataset sat-ed-sal.xls to find the least squares estimates b_0 , b_1 , and b_2 of the parameters in the regression model β_0 , β_1 , and β_2

$$\text{JOBSAT} = \beta_0 + \beta_1 * \text{EDUCATION} + \beta_2 * \text{SALARY} + \epsilon$$

Attach the printout and answer the following questions in the blanks provided.

For extra credit, also attach a corresponding SPSS or SAS printout

Important: Write numbers, not words, symbols or formulas, in all blanks

1. The least squares estimate of JOBSAT is

1. $\widehat{\text{JOBSAT}} = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} * \text{EDUCATION} + \underline{\hspace{2cm}} * \text{SALARY}$

Use the regression results to give a point estimate of the following:

Fill in the blanks below, expressing job satisfaction rounded to four decimals.

(Four decimals is not practical for business purposes, but it helps me to be sure you've done it right, or to help me diagnose what you've done wrong.)

2. The regression point estimate of the average job satisfaction of all past present & future employees earning \$50,000 with 12 years of education is _____

3. The regression point estimate of the average job satisfaction of all past present & future employees earning \$50,000 with 18 years of education is _____

2. The regression point estimate of the average job satisfaction of all past present & future employees earning \$70,000 with 12 years of education is _____

3. The regression point estimate of the average job satisfaction of all past present & future employees earning \$70,000 with 18 years of education is _____