

PRACTICAL Week 8 – Multiple linear regression

1. Open dataset students.sav
2. Paste all calculations and answers to syntax file and save it regularly!

3. We will predict hours of sleep
 - a. Recode gender into a new variable female (0=male, 1 = female)
 - b. Enter in female and age in the first step
 - c. Enter hours spent on the internet in the second step
 - d. Which variables are significant? Are the models (blocks) significant?
 - e. What are the predicted hours of sleep for 15-year-old male, spending 4 hours on the internet per day?
 - f. What is the R^2 ? What is the adjusted R^2 ?
 - g. Write-up the results.

4. Include Grade in Model 1 and rerun the regression.
 - a. How did the estimate for Age change?
 - b. Obtain VIF and tolerance. Interpret.

5. Run a stepwise regression with all the variables predicting hours of sleep.
 - a. Which variables are in the final model?
 - b. What is the adjusted R^2 ?

Submit your practical:

Save your syntax file to Homework Vaults