PRACTICAL Week 6 – Simple linear regression

- 1. Open dataset students.sav
- 2. Paste all calculations and answers to syntax file and save it regularly!
- 3. Test whether age predicts height.
 - a. Diagnostics
 - i. Are there any outliers in IV and DV?
 - ii. Are the residuals homoscedastic?
 - iii. Are the residuals normally distributed?
 - b. Results
 - i. What is the predicted height for 15,05 years old participants?
 - ii. What proportion of variance in height does age explain?
 - iii. Is the proportion statistically significant?
 - iv. What is the magnitude and significance of the regression coefficients (B, β)
 - v. Interpret the coefficients.
 - vi. Write-up the results.

4. Test whether the number of hours spent online predicts the number of hours slept per night.

- a. Diagnostics
 - i. Are there any outliers in IV and DV?
 - ii. Are the residuals homoscedastic?
 - iii. Are the residuals normally distributed?
- b. Results
 - i. What is the predicted number of hours slept per night for participants who spend 3 hours per day online?
 - ii. What proportion of variance in hours slept per night do hours spent online explain?
 - iii. Is the proportion statistically significant?
 - iv. What is the magnitude and significance of the regression coefficients (B, β)
 - v. Interpret the coefficients.
 - vi. Write-up the results.

Submit your practical:

• Save your syntax file to Homework Vaults