

8.Group

Task 1: Descriptive statistics

Choose one variable

Provide a descriptive statistics:

- table with descriptives
- frequency table
- descriptive plots

Optional: for those who are familiar - do the normality test and interpret, please

Task 2: Difference between two group

1.Research question

- find a research question based on differences between two groups

A. choose one variable (fe life satisfaction, satisfaction at work, perceived quality of health, etc, check your data for inspiration),

B. choose also a factor of difference (for example male vs female, employee vs self-employed, etc.).

Important note, obligatory: use the Mann-Whitney test

Optional: for those who are familiar - do the normality test and interpret, please

2.Working hypothesis

- formulate an empirical expectation/assumption = relation between variables, which we verify by means of statistical analysis

3.Statistical hypotheses testing: H_0 vs $H_{\text{alternative}}$

H_0 there is not a significant difference between two groups

H alternative - we reject the H_0 , and accept H alternative

Task 3: Correlation analysis

1. Research question

- find an interesting research question based on correlations between two variables.
- choose three variables (fe. job satisfaction at work and life satisfaction, life satisfaction and CASP or perceived quality of health, job satisfaction and adequacy of salary, support at work place, recognition for work, etc.)
- carry out the correlation and interpret

Important note: Use the Spearman coefficient Rho

Optional: for those who are familiar - do the normality test and interpret, please

2. Working hypothesis

- formulate an empirical expectation/assumption = relation between variables, which we verify by means of statistical analysis

3. Statistical hypotheses testing: H_0 vs H alternative

H_0 there is not a statistically significant correlation between the chosen variables

H alternative - we reject the H_0 , and accept H alternative

Task 4: Creation of a linear regression model

1. Research question

- find an interesting research question in form: output (dependent) variable vs input (independent) variables, form: y depends on X_1 and x_2 and x_3 , etc.

2. Use the method "ENTER" of the linear model construction, copy and paste it here. Also copy R^2 , and interpret

2. Use the method "FORWARD" of the linear model construction, copy and paste it here and interpret. Also copy R^2 and interpret