

MICROSOFT EXCEL: DESCRIPTIVE STATISTICS

Requests

1. Copy the **PA3-2.xls** file on yopur folder.
2. Insert a new sheet and name it as Histograms. Copy in this sheet the quantitative continuous variables.
3. Create for the whole sample the histograms of Cholesterol variable using the following intervals of classes: ≤ 131 , (131-175], (175-219], (219-263], (263-307], (307-351], > 351 .
4. Using the same intervals as above-presented, create the histogram of Cholesterol separately for female and male.
5. What can you say about the normality of cholesterol? (visually interpret each histogram).
6. Under assumption of normal distribution, compute descriptive statistics parameters for all quantitative variables. Put the results in a new sheet called Descriptive statistics.
7. Calculate the 95% confidence intervals for means for all quantitative variable separately for female and male. **What can you say about the difference of cholesterol between female and male?**
8. Create a PowerPoint representation with the following structure:
 - 1st slide: title (Summaries of Quantitative Variables), author (your name) and authors' affiliation (as the name of University and of the Faculty).
 - 2nd slide: Type of variables (title). For each variable, please identify:
 - Type of variable: qualitative vs quantitative (discrete / continuous).
 - Scale of measurement: Nominal, Ordinal, Interval, Ratio.
 - 3rd slide: *Histogram of "Cholesterol"* as title. Copy the Histogram obtained for whole sample.
 - 4th slide: *Histogram of "Cholesterol"* as title. Copy the Histogram obtained for female.
 - 5th slide: *Histogram of "Cholesterol"* as title. Copy the Histogram obtained for male.
 - 6th slide: *Descriptive statistics* as title. Create a table in this slide to include the following parameters for Cholesterol (whole sample): mean and 95% confidence interval, median, kurtosis, skewness; and Count.
 - 7th slide: *Descriptive statistics* as title. Include the same information as on the previous slide for male and female.
 - 8th - x^{th} slide: *Results Interpretation* as title. Interpret the results presented in 6th and 7th slides.
 - $(x+1)^{\text{th}}$ slide: compare the mean of cholesterol obtained for male with the mean of cholesterol obtained for the female – please use the values of the 95% confidence interval.
 - Final slide: The end slide.
 - Save the presentation with the name of **Descriptive Statistics2** as PowerPoint Show.