**Statistics-I (1st continuous evaluation activity, November 2018)**

A researcher wants to examine whether reading comprehension differs when we read a text in an e-book and in the traditional format (i.e., a book), and also whether this effect is modulated by reading skill (including two groups: good readers vs. poor readers). She recruits a sample of 80 university students (40 good readers and 40 poor readers). Randomly, half of them read a 20-page text in an e-book, and the other half read the same 20-page text in a traditional book. The researcher measures text comprehension (using several two-choice questions), but to obtain the full picture on the differences between e-books vs. books, she also measures the time spent reading the text for each individual (i.e., a measure of reading speed).

**Question 1**

a) What is/are the independent variable/s? What is/are the dependent variable/s?

b) How would you organize the data in SPSS? (#rows, #columns)

**Question 2**

a) Is this an experiment? Justify your answer.

b) Let’s assume that the researcher found an advantage in reading comprehension for the traditional format (i.e., books). Can you think of a follow-up study?

We have the following dataset (<http://www.uv.es/mperea/iperson.sav>) in which we have data from a number of individuals: Gender, Age, Neuroticism, Extraversion, Agreeableness, Conscientiousness, and Sincerity (for sincerity: higher scores, less sincerity)

**Question 3**

We want to detect which individuals have a very high degree of neuroticism. To that end, we want to know which data point leaves below it the 95% of observations. So you need to indicate the value of this cutoff point—also copy/paste from the SPSS output.

**Question 4**

We want to examine whether extraversion differs between men and women, but before doing this analysis, we want to exclude from the sample all those individuals with a sincerity score higher than 1. Summarize the findings with the appropriate graph and stats—also copy/paste from the SPSS output.