**Readings questions – Session 08. Experimental studies**

*Student name:*

*Remember, it should not take you more than this page to answer the readings questions!*

**1) Think about the causal hypothesis you would like to test. Now, imagine that you had data on your independent and dependent variables. If you were to perform a naive comparison (e.g., a difference-in-means) between two groups with different values on your independent variable (i.e., treated and control), what other variables may be confounding this relationship? In other words, list some variables that could be a source of selection bias among your treated and untreated groups[[1]](#footnote-1).**

**2) Randomization is the most effective way to eliminate selection bias. Think of a realistic situation in which you had enough financial resources to implement an experiment to test your hypothesis: how would this experiment look like?**

**3) Mention some challenges you may face to successfully implement this experiment.**

1. If your independent variable is continuous, turn it into a substantially meaningful categorical variable (for example, instead of age, you could use age groups, such as young vs. old). [↑](#footnote-ref-1)