

Group Exercise – Career Expectations Survey Analysis (R-based)

Course: Statistics for Business and Decision Making – A.Y. 2025/2026

Date: 14 October 2025

Objective

Work in small groups to analyze one thematic area of the Career Expectations Survey. Each group will perform descriptive analyses and correlations (Pearson or Chi-square, depending on the variables). At the end of the session, submit:

- an R script (.R file) with your code, and
- a short written report (max 2 pages) summarizing your findings.

Thematic Areas

1. Demographics and Study Background

- Variables: Age, Gender, Year of study, Part-time/Summer job.
- Tasks: Compute measures of central tendency and variability for numerical variables; produce frequency tables and bar plots for categorical variables; explore whether gender or year of study are associated with previous work experience (χ^2 test).

2. Job Preferences and Sectors

- Variables: Desired sector, Importance of Salary, Job stability, Work-life balance, Career opportunities.
- Tasks: Summarize the relative importance of each aspect (mean, mode, distribution); visualize results with boxplots or bar charts;
- test correlations among 'importance' variables (e.g. Chi-square or Pearson's r).

3. Mobility and International Aspirations

- Variables: Willingness to move abroad, Work abroad, Travel abroad, Expected salary, Ideal working hours.
- Tasks: Describe patterns of mobility attitudes; compare expected salaries between students who would move abroad and those who would not (eg. chi-squared or boxplot); check correlation between expected salary and ideal working hours.

4. Career Confidence and Labour Market Concerns

- Variables: Confidence in finding a job, Main worries, Perception of university skills.
- Tasks: Describe the distribution of confidence levels; identify the most common worries about entering the labour market; test whether confidence is related to perceived adequacy of university skills (e.g. chi-square).

5. Job Search and Preparation Behavior

- Variables: Job fairs attendance, CV/LinkedIn preparation, Hours spent searching for opportunities.
- Tasks: Summarize participation in career-related activities; analyze relationship between job fairs attendance and CV/LinkedIn preparation (eg. chi.-square); examine correlation between hours spent searching and confidence in finding a job.

Report Structure

1. Introduction: Describe your thematic focus and variables.
2. Descriptive statistics and plots: Tables, histograms, bar charts, boxplots, etc.
3. Correlation or association tests: χ^2 , Pearson's r, or t-tests where appropriate.
4. Interpretation: Write a short paragraph summarizing your main insights (clear, concise, and data-driven).

Each group will present a short summary of their results in the next class.
Upload your report and R script on the Moodle page before the next lesson.