Applied Statistics Lab: Collecting and Analysing Real Data

Survey in Action: Exploring Career Expectations Together

Objective

The goal of this laboratory is to design and administer a short Google Forms survey exploring students' career expectations and concerns about the labour market.

The collected data will form the class dataset used in subsequent statistical analyses carried out with R software.

Through this activity, you will experience the full process of turning real-world questions into data that can be analyzed statistically.

Context

- Understanding how university students perceive their future job prospects and challenges in the labour market is an important topic for economists and social scientists.

By designing a real survey and analysing your own data, you will connect statistical theory with empirical evidence drawn from your own experience.

Part 1 – Design the questionnaire with google moduli

Part 2 — Data collection

Part 3 – Data analysis with R

Part 4 – communicate the results

Survey title: Career Expectations and Labour Market Concerns among University Students

Section A — Background information

1. **Age** *(quantitative – numeric)*
2. **Gender** *(categorical – male / female / other / prefer not to say)*
3. **Year of study** *1st / 2nd / >2nd)*
4. **Have you ever had a part-time or summer job?** *(binary – yes / no)*

Section B — Career goals and expectations

5. **In which sector would you like to work after graduation?** *(categorical – marketing, finance, public administration, sustainability, entrepreneurship, academia)*
6. **How important are the following aspects in choosing a job?** *(Likert 1–5: not important → very important)*
   - Salary
   - Work–life balance
   - Job stability
   - Career opportunities
   - Social/environmental impact
   - Possibility to work abroad
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7. **Expected net monthly salary for your first job (€):** *(quantitative – numeric)*
8. **Ideal number of working hours per week:** *(quantitative – numeric)*
9. **How confident are you about finding a job related to your studies within one year after graduation?** *(Likert 1–5)*

Section C — Labour market concerns

10. **Which of the following factors worry you the most about entering the labour market?** *single choice: job insecurity, low pay, limited experience, lack of opportunities in my region, automation, gender inequality)*
11. **How much do you agree with the statement: "University provides adequate skills for the labour market."***(Likert 1–5)*
12. **Would you be willing to move abroad for better job opportunities?** *(ordinal – definitely yes / probably yes / not sure / probably no / definitely no)*

Section D — Behaviour and attitudes

13. **How often do you attend job fairs or career events?** *(ordinal – never / rarely / sometimes / often / very often)*
14. **Have you already prepared a CV or LinkedIn profile?** *(binary – yes / no)*
15. **How many hours per week do you spend searching for internships, training, or job opportunities?***(quantitative – numeric)*

Collecting and using the data

Once the Google Form is finalized, each student will fill in the survey anonymously. The resulting dataset will be exported to **R** (and Excel for the first steps), and throughout the course we will use it to provide statistics and indicators.