

DID YOU GET WHAT YOU WANTED? PERSPECTIVES ON FAIRNESS IN EDUCATION ACROSS EUROPE



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⚡ Key Takeaways

- Perceived chances to attain the education one wants vary based on **individual (household) characteristics**
- Policy-Makers should also focus on measures **related to the household** (e.g., youth welfare and social work in families)
- **Structural variables** like the youth unemployment seem to have **no strong association**

📖 Background & Motivation

- **Discrepancy** between 'objective' education quality and perceived quality and fairness (Boyadjieva et al., 2024)
- **Regional variables** also influence changes and might moderate associations (Boyadjieva et al., 2024)
- Access to (higher) education researched mostly with **individual characteristics** like gender, race, and income (Naim, 2025)
- Data Summary on Make it Strong indicates differences with respect to **age and educational background** (Stoilova et al., 2025)
- 🔍 To what extent do **people's perceived chances of attaining the education they wanted** depend on their **own background** and on **structural aspects** of their region?

🔧 Methods and Data

- **Linear Mixed Models** with **three levels**: Individual and
 - Country (fixed effect)
 - Region (random effect)
- Descriptive **interactive** map: <https://jonasr.shinyapps.io/pfee/>
- **robustness analysis** and variable selection using the **BIC**

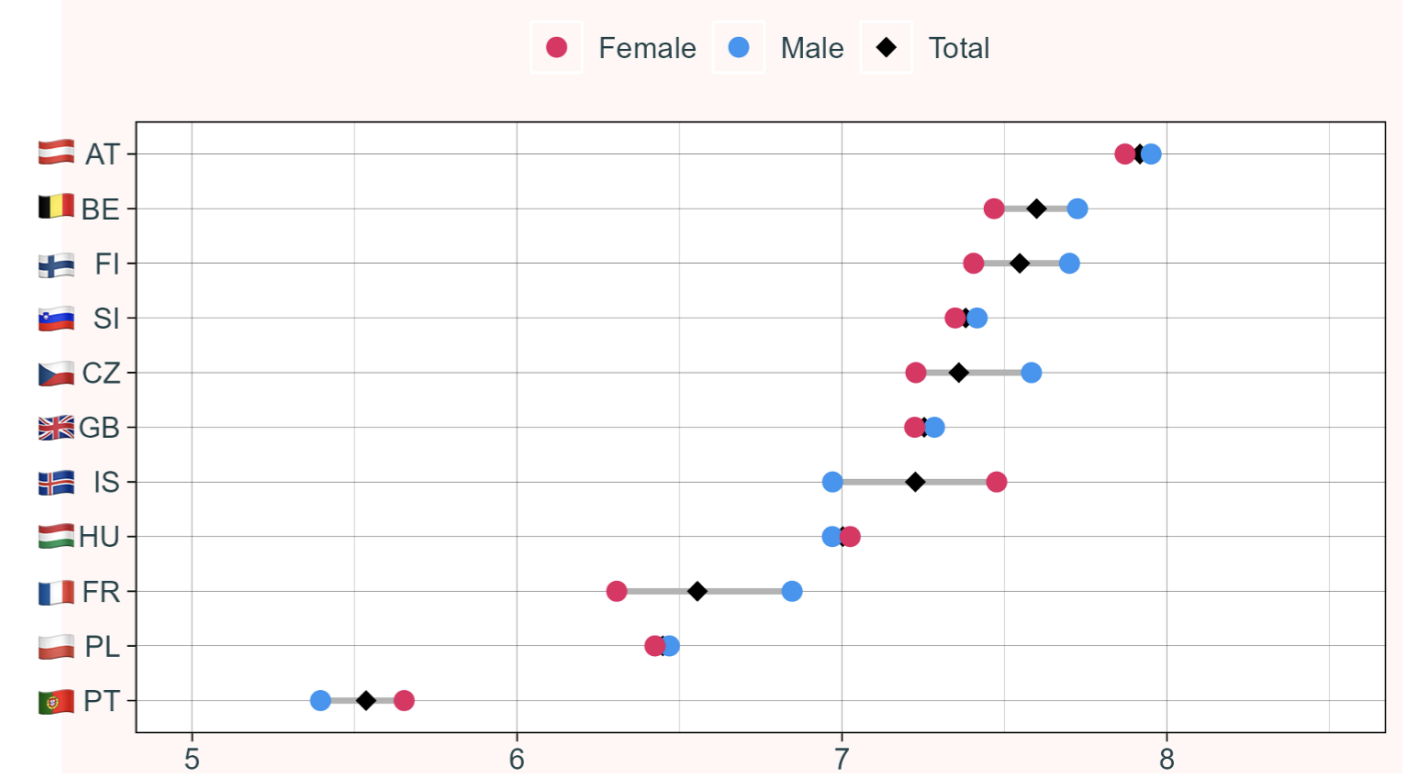


Figure 1: Mean perceived fairness by gender and country. Note: X-axis adjusted for better visibility (own calculations)

Dataset	Pillar / Name	Items
CRONOS-3 (Wave 1) (ESS ERIC, 2025a)	Make it Strong	- Perceived fairness of own education - Satisfaction with own education
CRONOS-3 (Wave 3) (ESS ERIC, 2025b)	Make it Strong	- Current occupation matches education
CRONOS-3 (Wave 5) (ESS ERIC, 2025c)	Make it Healthy	- Felt safe with at least one carer in first 18 years - Serious conflict in household in first 18 years - Severe financial difficulties in family first 18 years
Eurostat (2026a)	ilc_li41	- Regional At-risk-of-poverty rate
Eurostat (2026b)	edat_lfse_16	- Regional early leavers from education
Eurostat (2026c)	edat_lfse_22	- Regional young NEET rate

📊 Results

- Variables concerning the **family** (i.e., feeling safe, conflicts and financial difficulties) in youth **significantly associated** for perceived fairness of education
- Results also emphasize existing association with **current income**
- Close association with **the own education**: The more I am satisfied with my own education, the fairer I perceive my chances
- **Female respondents** tend to perceive educational chances as **less fair – even after controlling for age**
- **Regional attributes** have **almost no predictive power**

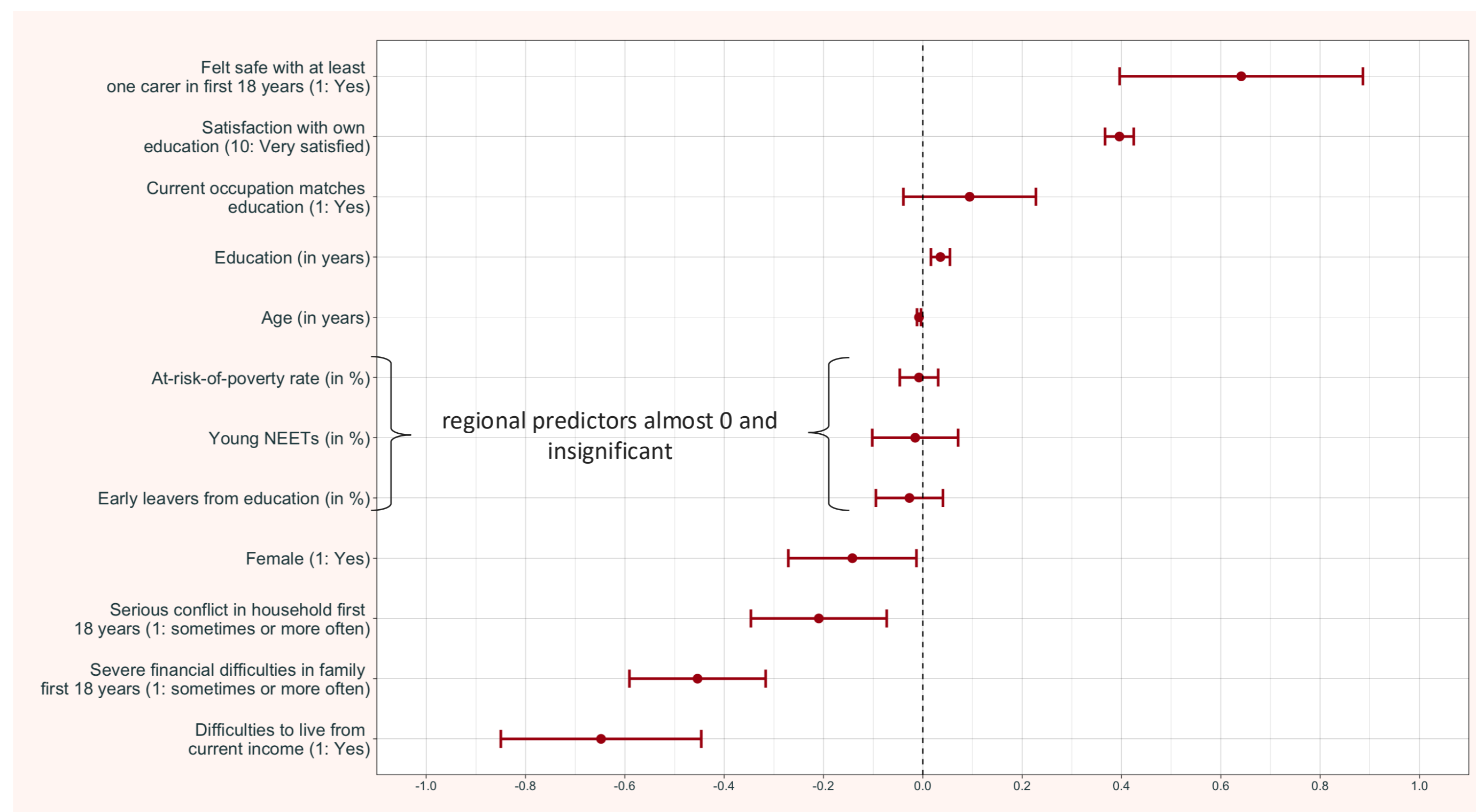


Figure 2: LMM coefficients of linear mixed model. Error bars indicate 95% confidence interval. wlpweight applied. Note: In the model, fixed effects for countries (dummy variables) are included as well but not depicted here (own calculations).

📄 Discussion

- Findings **do not** suggest strong influence **regional variables**
- **Individual aspects** seem to be more important, especially concerning the childhood household
- **Gender** and **income** remain crucial factors
- Results must be interpreted in context of some **limitations**:
 - missing data on regional level
 - small sample sizes in some regions
- Further research: **small area methods** (e.g., Fay-Harriot models) and focus on **educational quality** in regions

References
 Boyadjieva, P., Haralampiev, K., & Ilieva-Trichkova, P. (2024). Social Justice Profiles: An Exploratory Study towards an Empirically Based Multi-Dimensional Classification of Countries Regarding Fairness of Participation in Higher Education. *Societies*, 14(4), 44. <https://doi.org/10.3390/soc14040044>
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GitHub Repository



https://github.com/nippisch/datathon_make_it_strong

Interactive Map



<https://jonasr.shinyapps.io/pfee/>

