

NODES OF KNOWLEDGE

A Network Perspective on ERASMUS+ Educational Mobility in 2021

Rebekka Koch

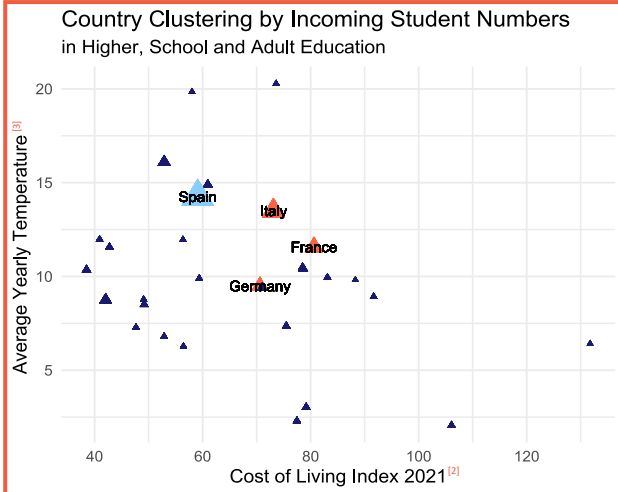
M.Sc. Economics
Supplementary Study Program Data Literacy
Mail: bt710829@uni-bayreuth.de
Seminar Social Network Analysis WS 23/24

MOTIVATION

Driven by the complexity of international student exchanges via the ERASMUS+ program, this analysis aims to gain insights into the dynamics of student mobility among European countries.

RESEARCH QUESTIONS

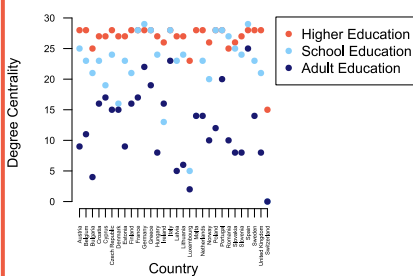
1. How does the structure of the ERASMUS+ networks vary across adult, higher and school education?
2. How well is the ERASMUS+ study program adopted across different countries?
3. What are the top countries in each education sector that attract the most incoming ERASMUS+ students in 2021, and what factors could contribute to this phenomenon?



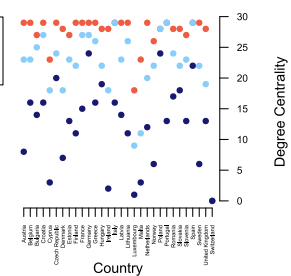
ANALYSIS

In- and Out-Degree Centrality Per Education Level

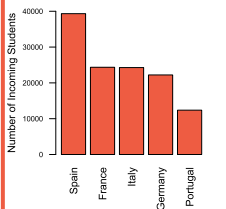
In-Degree Centrality Comparison



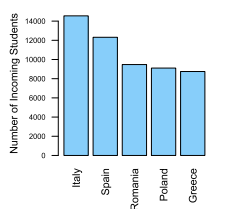
Out-Degree Centrality Comparison



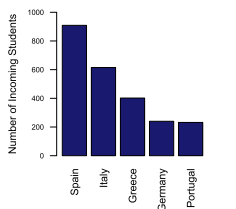
Top 5 Countries - Higher Education



Top 5 Countries - School Education

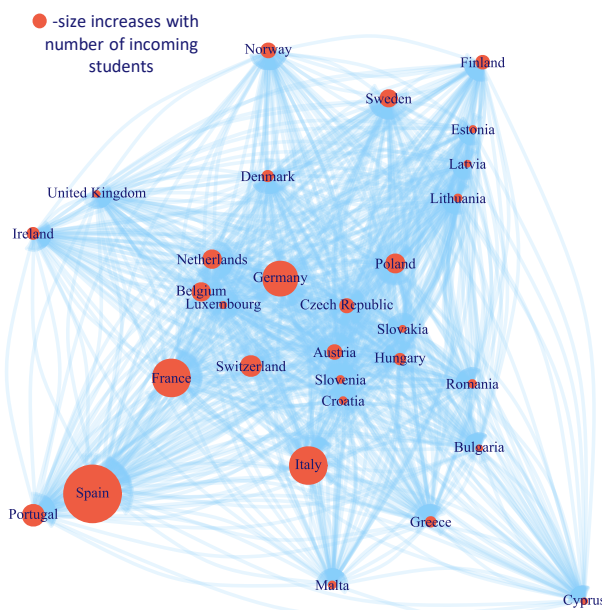


Top 5 Countries - Adult Education



Top Five Destination Countries Per Education Level

TOTAL ERASMUS+ HIGHER EDUCATION NETWORK FOR 2021



→ 237.915 ERASMUS+ students

RESULTS

1. There are few variations in the different networks:

- Higher Education: density = 0.92
- School Education: density = 0.81, 113.768 participants
- Adult Education: density = 0.45, 4.785 participants

2. The ERASMUS+ program is mostly well adopted:

- In- and out-degree centralities show high participation in study program in both directions
- Especially higher and school education

3. Top players overlap across the different networks:

- Spain and Italy in Top Five destinations of all networks
- Spain as overall favorite: relatively lower cost of living index and higher temperature

DATASET:

ERASMUS+ Annual Report 2021^[1]

Period: 01/01/2021- 31/12/2021

[1] <https://data.europa.eu/data/datasets/erasmus-mobility-statistics-2021?locale=en>

[2] <https://de.numbeo.com/lebenshaltungskosten/ranking-nach-land?region=150&title=2021>

[3] https://www.swp.de/panorama/durchschnittstemperatur-in-welchem-land-ist-es-am-waermersten_-_der-grosse-europa-vergleich-71270921.html