

The Space of Nordic Erasmus+ Students

A Multivariate Statistical Analysis of Characteristics, Preferences and Experiences

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Aims of the research

• To explore *similarities* and *differences* between the Erasmus+ students from the different Nordic countries.

 \rightarrow to enhance the understanding of how varying national contexts among Nordic Erasmus+ students may affect students' motivations, destinations, and experiences.

<u>Focus</u> on: -Structure of higher education systems -Student finance schemes -Historical international student mobility trends

• Contribute with knowledge that may be useful in National Agencies' mission of increasing participation in Erasmus+ and improving the programme.





Research Questions

Descriptive Statistics

1. Who goes abroad on Erasmus+?

Multivariate Statistical Analysis

- 2. How are Nordic Erasmus+ students different from one another? -Motivations for studying abroad -Criteria for selecting institution -Satisfaction with the quality of studies
- 3. What patterns can be seen between these differences and students' background characteristics, domestic studies, abroad studies and overall experience?

Contexualisation of Results

4. How can these results be understood in relation to the Nordic countries' systems of higher education, student finance and varying historical practices with regard to international student mobility?





• Based on data on Nordic Erasmus+ students (KA1 – Student mobility for studies in higher education) from the call years 2016 and 2017.

-Anonymised survey data -Anonymised data on student background and studies

• 94.3 percent of all Nordic Erasmus+ study abroad exchanges included

-25,079 out of 26,594 student exchanges

Students appear to have taken the survey seriously

-97.2 percent of surveys represent unique response patterns based on active variables -24,382 unique response patterns







Descriptive Statistics

Who goes abroad on Erasmus+?

How does the Erasmus+ population compare with the national higher education population?



Share of Nordic Countries – Absolute and Relative Numbers

Denmark

5,413 (5,572) students \rightarrow 21.6% 0.9% of total HE students

Norway

3,878 (4,358) students → 15.5% 0.7% of total HE students

Sweden

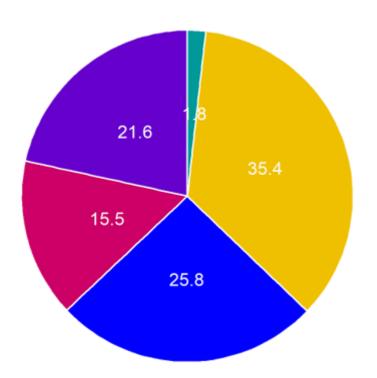
6,470 (6,847) students → 25.8% 0.8% of total HE students

Finland

8,872 (9,362) students → 35.4% 1.5% of total HE students

Iceland

446 (455) students \rightarrow 1.8% 1.2% of total HE students



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Gender and Age

<u>Gender</u>

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6 out of 10 students female

In general, small overrepresentation of Scandinavian female students Overrepresentation of FI female students

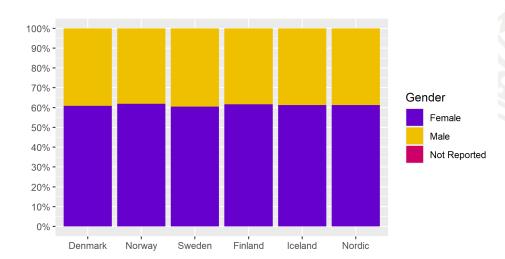
Small Underrepresentation of IS female students

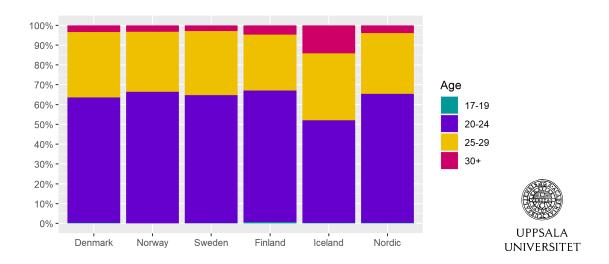
<u>Age</u>

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Nordic countries follow fairly similar trends <u>Exception</u>: Iceland \rightarrow older students Average Age (DK, NO, SE, FI): **24** Average Age (IS): **26**

Older students underrepresented (30+) Younger overrepresented (20-24, 24-29)





Nationality

- DK stands out \rightarrow nearly $\frac{1}{4}$ of students with foreign nationalities
- Of the foreign nationalities:
- $DK \rightarrow mostly European$

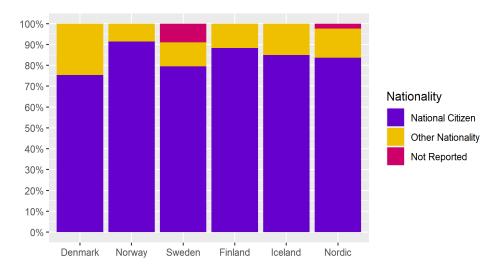
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- $FI \rightarrow 50\%$ Russian or Vietnamese
- IS \rightarrow nearly 40% Anglo-Saxon
- NO \rightarrow more global, Swedes in #1 spot

All countries in E+ overrepresented with students with foreign nationalities

 $DK \rightarrow$ highest proportion of foreign students in HE system & highest overrepresentation in E+

 $FI \rightarrow$ lowest overrepresentation of foreign nationals in E+ despite 2nd highest participation rate in HE system





Education Level and Field

Education Level

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FI bachelor students vs. NO master students

Overrepresentation at bachelor level in SE, FI, DK Strong underrepresentation in NO, to some extent IS

Overrepresentation at master level in all countries, but to differing degrees

Underrepresentation at doctoral level

Education Field

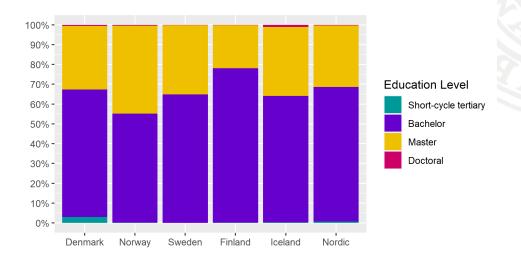
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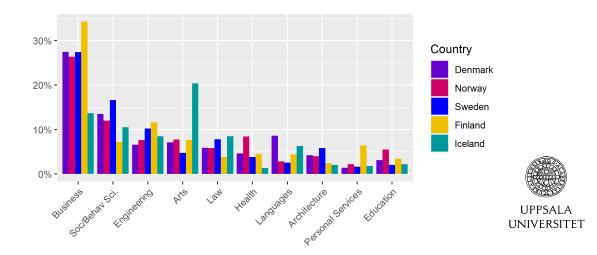
Business most popular subject

Exception: Iceland \rightarrow Arts most popular (Business 2nd)

Business, Arts, Law consistently overrepresented Health, Education consistently underrepresented

- $FI \rightarrow$ highest overrepresentation of Business (2x more)
- $IS \rightarrow$ highest overrepresentation of Arts (6x more)





Sending Institution

Concentrated among a handful of institutions

- → Large, broad traditional universities
 → Some specialised institutions
 → Few university colleges

Exception: Finland

 \rightarrow Wider participation across institutions & institution types \rightarrow UAS important

List of institutions comprising 2/3 of E+ population

<u>FI</u>

University of Helsinki Aalto University University of Turku Haaga-Helia UAS Metropolia UAS University of Jyvaskyla University of Tampere Turku UAS University of Eastern Finland University of Vaasa University of Oulu Tampere UAS South-Eastern Finland UAS Lahti UAS Hanken School of Economics

DK

University of Copenhagen Aarhus University **Copenhagen Business School** University of Southern Denmark **VIA University College**

NO

Norwegian University of Science & Technology University of Oslo University of Bergen **BI Norwegian Business School** NHH Norwegian School of Economics Oslo and Akerhus University College (now OsloMet)

<u>SE</u> Uppsala University Lund University Stockholm University Linköping University University of Gothenburg **KTH Royal Institute of Technology** Chalmers University of Technology Umeå University

<u>IS</u>

University of Iceland Iceland University of the Arts





Destination Country and City

Destination Country

Scandinavian students, most similar \rightarrow UK most popular, FI \rightarrow Germany, IS \rightarrow Denmark

UK, Germany, France, Netherlands and Spain consistently in top 5 for all countries except IS

IS went most to other Nordic countries (3), Norway (2), Finland (1), Denmark (1)

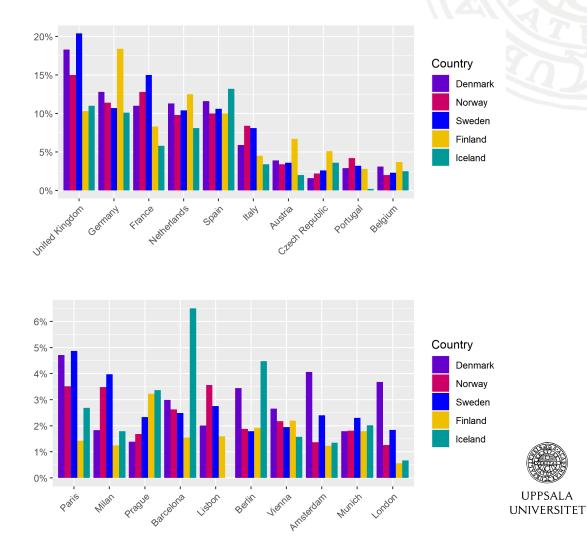
Czech Republic only CEEC to make top 10 in some Nordic countries (FI, IS, SE)

Destination City

Despite popularity of UK, London only made top 10 for DK

Paris and Milan consistently popular for Scandinavian students, Copenhagen top for Norway

- $FI \rightarrow$ Prague, with many German and Dutch cities
- IS \rightarrow Barcelona, with five Nordic cities



Receiving Institution

Broad distribution with \approx 1,300 institutions of many types

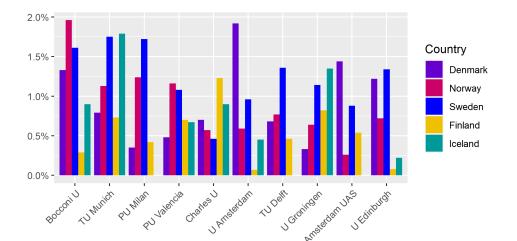
Most popular institution was Bocconi University (1 percent of Nordic E+ population)

Top traditional unis: Charles U, U Amsterdam, U Groningen and U Edinburgh

<u>Top technical unis</u>: TU Munich, PU Milan, PU Valencia, TU Delft and Amsterdam UAS

FI → CEEC HEI as most popular – Charles University

IS → two Nordic HEIs as most popular – Aarhus U, U Oslo







Multivariate Statistical Analysis

How are Nordic Erasmus+ students different from one another?

- Motivations for studying abroad
- Criteria for selecting institution
- Satisfaction with the quality of studies



Main Survey Questions

Motivations – Was the following a motivation for studying abroad?

- To experience different learning contents/curricula
- To experience different learning and teaching practices
- The quality of the receiving institution
- To learn/improve a foreign language
- To gain knowledge of another country
- The length of the study period was appropriate
- To develop soft skills (adaptability, problem-solving, curiosity, etc.)
- To enhance future employability in home country
- To enhance future employability abroad
- To build a personal and professional network

Criteria – How important was the following criterion in selecting an HEI?

- Reputation/Rankings
- Learning Offer
- Country
- City and Culture
- Social Life
- Language

Satisfaction – Were you satisfied with:

- The quality of content of courses at the receiving institution
- The quality of teaching methods at the receiving institution

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Three Analytical Themes

- Academic
- Cultural
- Labour market





The Space of Nordic Erasmus+ Students

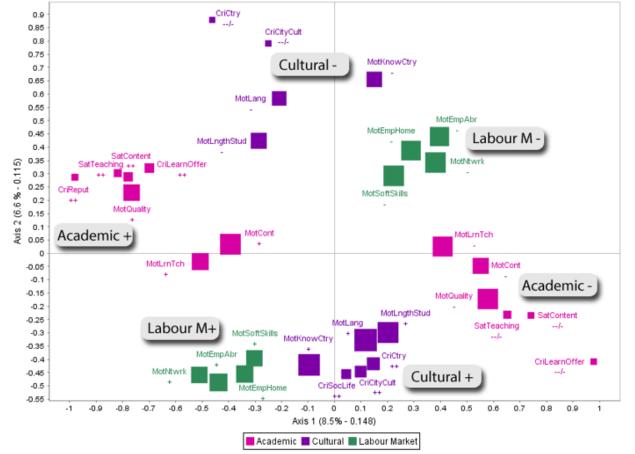
Three Oppositions

- Academic
- Cultural
- Labour Market

 → Relationship to Academic, but
 → Closer relationship to culture

Six Clusters → Orientations

- Academic + (Left)
- Academic (Right)
- Cultural + (Bottom)
- Cultural (Top)
- Labour Market + (Lower left)
- Labour Market (Upper right)





Multivariate Statistical Analysis

What patterns can be seen between motivations, criteria and academic satisfaction and students'

-background characteristics -domestic studies -abroad studies -overall experience?





Nordic country positions in the space

Scandinavian students

- Not particularly differentiated from each other
- Located centrally in the space

 → most commonly selected response patterns of the entire Nordic E+ population
 → have had a variety of motivations in different combinations, no specific trend

Finland

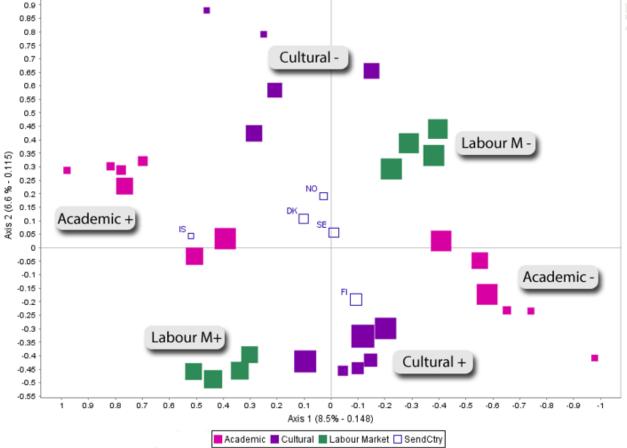
More culturally oriented

 → large proportion of bachelor students and business students as well as wider participation

 \rightarrow cultural orientation can be interpreted in light of other studies (Vossensteyn et al. 2010; CIMO, UHR & SIU, 2013)

Iceland

- More academically oriented
 - \rightarrow Arts most popular field
 - \rightarrow Older students
 - ightarrow More than just composition of student group
 - (Eg. IS business students still more academic)





Gender, Age and Nationality

<u>Gender</u>

 \rightarrow No significant differences in gender

<u>Age</u>

 \rightarrow As age increases, so does academic orientation (lower cultural orientation)

 \rightarrow The younger the student, the more culturally oriented he/she is likely to be (lower academic orientation)

Nationality

 \rightarrow Students with foreign nationalities tend to be more academically oriented and less culturally oriented



Education Level and Field

Education Level

 \rightarrow As educational level increases, so does academic orientation (lower cultural orientation)

→ Bachelor students tend to have a higher cultural orientation (lower academic orientation)

Education Field

Business and languages→ stronger cultural orientation / weaker academic orientation

Arts → stronger academic orientation / weaker cultural orientation (Less clear in Iceland)
→ tend to be overrepresented among those who study abroad in another Nordic country

Icelandic business students \rightarrow both culturally and labour market oriented

Finnish business students \rightarrow high proportion could be part of explanation for Finland's stronger cultural orientation





Destination Countries

Destination Countries

Southern Europe \rightarrow Overrepresentation of more culturally and less academically oriented students

Scandinavian countries \rightarrow Overrepresentation of more academically and less culturally oriented students

Netherlands \rightarrow also attracts these students, perhaps due to large English offer, many highly ranked institutions and relative geographical proximity compared to other European countries

 \rightarrow perception of being less culturally dissimilar

CEECs \rightarrow tend to attract students not characterised by any particular orientation

Germany & UK → as very popular destinations, can attract students of many orientations = more balanced profile







Destination Cities and Instruction Language

Destination Cities

- \rightarrow Follows similar pattern to destination countries
- → Barcelona, Paris, Lisbon tend to be chosen by students with high cultural orientation
- → Oslo, Aarhus, Copenhagen, Groningen by students with high academic orientation
- → Milan is an exception as a Southern European city that attracts academically oriented students (Bocconi University)
- → Munich drew labour-marketed oriented students from FI, while Barcelona drew labour-market oriented students from IS.

Instruction Language

- \rightarrow Follows similar pattern to destination countries and cities
- → English and German were common instruction languages for many kinds of students
- → French, Spanish, Italian tended to be chosen by students with high cultural orientation
- → Danish and Norwegian were associated with low cultural orientation and high academic orientation



Receiving Institution

Attended by students with stronger academic orientation

→Specialised and highly reputable institutions in the Nordic countries, Netherlands and the UK Many specialised in the fields of **Arts, Technology** or **Business**

- \rightarrow Education generally offered in English
- → Location is modestly culturally different and geographically distant from students' home countries

Attended by students with stronger cultural orientation

- → City universities in Spain and France, some business schools in Paris and some German institutions
- \rightarrow Usually not HEIs of international renown

Interesting to highlight relationship between receiving institution and field of study

King's College London University College London University of St. Andrews KTH Royal Institute of Technology KU Leuven Delft University of Technology Sciences Po Bocconi University Uniarts Helsinki Copenhagen Business School NHH Norwegian School of Economics Chalmers University of Technology Lund University

Middlesex University University of Barcelona University of Saragoza Lumière University Lyon 2 Sapienza University of Rome EDC Paris Business School PSB Paris School of Business Munich UAS Nuremberg Institute of Technology





Overall Satisfaction

Large majority of Nordic Erasmus+ are satisfied with Erasmus+ exchange

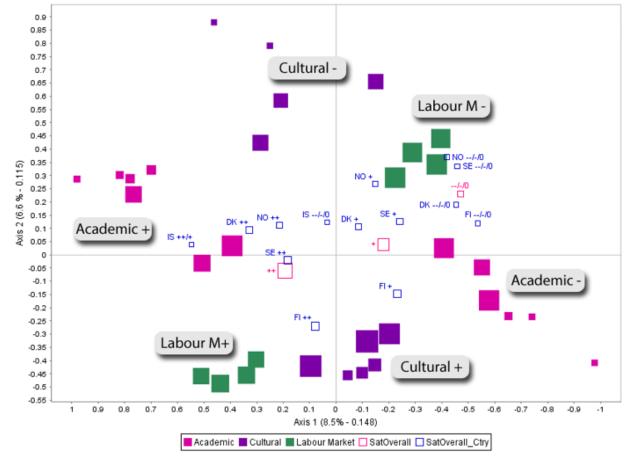
-92.4 percent 'very' or 'rather' satisfied

-7.6 percent 'neither satisfied nor dissatisfied,' 'rather dissatisfied' or 'very dissatisfied'

Academic orientation most associated with high satisfaction

Students who reported more neutral or negative experiences also tended to have lower academic/labour market orientations.

 \rightarrow Likely means that our analysis (and thus the survey) did not adequately capture motivations and reasons for students who end up neutral or dissatisfied with their study abroad period.





Summary & Contextualisation of Results

How can our results be understood in relation to:

Nordic countries' systems of higher education
 Student Finance
 Varying historical practices with regard to international student mobility?



Discussion and Summary

- Participation and profile of Nordic countries varied Descriptive Statistics - Variations between participation rates, age, foreign nationalities, education levels and fields, destination countries and cities, etc among the Nordic nations
- Academic, cultural and labour market orientations differentiate students
 → Academic orientation being the most important differentiating factor
- Scandinavian countries most similar to each other, while Iceland and Finland stood out the most

One crucial differentiating factor \rightarrow Field of Study (IS ~ Arts, FI ~ Business) IS also had many older students, while FI had high number of bachelor students

Icelandic students have reasons to be more goal-oriented

- \rightarrow Comparatively higher debt burden due to loan-based study finance system
- → Benefit of significantly higher Erasmus+ grants (and EU travel grants)

Finnish students impacted by language skills, recruitment or financial factors

Finnish students conceive of Erasmus+ studies as relatively more beneficial in terms of cultural experiences and language development, but it is hard to say why...



Discussion and Summary

• Different students use Erasmus+ for different purposes

→ It is important to emphasise that while some students gravitated towards a particular orientation, many had a combination of academic, cultural and/or labour market orientation.
 → Also important to emphasise that all orientations can be understood as equally valuable

- Student Finance Swedish loans or Danish grants do not seem to matter
 Despite different funding regimes and levels of support between the Scandinavian countries,
 they have similar levels of Erasmus+ participation in relation to national HE population
 → Speaks against strictly financial explanations
- Historical patterns and size/expansion of higher education systems evident for inter-Nordic flows

Swedish students \rightarrow Consistently looked less toward Nordic neighbours than vice versa lcelandic students \rightarrow in particular, often went to Scandinavian countries, especially Denmark Norwegian students \rightarrow relatively often chose to study in Denmark or Sweden

This points to the strength of historical mobility patterns and the higher education systems themselves.



Discussion and Summary

North attracts academically, the South culturally

Southern European countries \rightarrow more culturally oriented / less academically oriented Nordic countries & Netherlands \rightarrow more academically oriented / less culturally oriented UK & Germany \rightarrow more balanced profile CEECs \rightarrow not characterised by any particular orientation; motivations likely not captured

 School languages and cultural appeal of destinations linked Patterns of movements and motivations seem to indicate that destination countries with languages similar to students' native languages exert less of a cultural attraction on students.

At the same time, countries whose languages were taught in school seem to either retain or even sometimes increase in their cultural appeal, as it offers the opportunity to improve a language one already has some knowledge of.

Academic orientation associated with higher levels of satisfaction
 Students who were highly academically oriented and less culturally oriented tended to be ones most satisfied, both overall and in academic terms.
 These students often studied Arts and went on exchange in the Nordic region, Netherlands or the UK.

Inverse relationship between cultural orientation and specifically academic satisfaction.

Students who were more culturally oriented and academically disinterested tended to be the most dissatisfied.

These students were overrepresented in southern European countries, like France and Spain.



Limitations of study point to areas of future research

- Motivations and reasons for some Nordic students to study abroad with Erasmus+ may not be captured in this analysis
- Practical challenges with regard to the comparison of statistical data for the contextualisation of our results further complicates interpretation.
- Scope of the analysis was further limited to national higher education systems, student finance schemes and historical traditions with regard to international student mobility in relation to analysing national context.

More research needs to be done to fully capture the variety of motivations and reasons for why Nordic students study abroad with Erasmus+.

Research on other contextual factors, such as national or local policy initiatives and institutional cultures, could help to further explain differences between the Nordic countries.

