

Perspectives on Computational Research: Proposal

To Move or not to Move:
Disciplines and Geographical Mobility
from Education to Occupation

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Research Question

- ❖ What is the effect of educational location on occupational location, and further, is discipline playing a part in it?
- ❖ To be more specific:
 - ❖ 1. Is occupational location related to educational location?
 - ❖ 2. If yes, does the relationship remain the same across all disciplines (majors)?

Literature Review

- ❖ Theoretical Framework
 - ❖ Social Mobility
 - ❖ Locational Dependency (?)
- ❖ Empirical Background

Hypotheses

- ❖ H_1: Locational Dependence Hypothesis
 - ❖ H_1a: Occupational location is influenced by educational location
 - ❖ H_1b: Occupational location is not significantly influenced by educational location
- ❖ H_2: Discipline Interference Hypothesis
 - ❖ H_2a: Discipline of college education is relevant to

Data & Method

- ❖ Data:

- ❖ The 2015 National Survey of College Graduates (NSCG)
 - ❖ longitudinal biennial survey

- ❖ Method:

- ❖ Supervised learning:
 - ❖ SVM or tree-based model

Difficulties

- ❖ Data: NSCG 📌 NLS? CPS?
 - ❖ the accuracy of location information?
 - ❖ biased to science and engineering workforce?
- ❖ Method:
 - ❖ The ability of SVM in dealing with a relatively large sample size and small number of features
 - ❖ Possible solutions:
 - ❖ adjust the model?
 - ❖ use tree-based model instead?

References

Groen J A. The effect of college location on migration of college-educated labor[J]. Journal of Econometrics, 2004, 121(1): 125-142. Geist C, McManus P A. Geographical mobility over the life course: Motivations and implications[J]. Population, Space and Place, 2008, 14(4): 283-303. Porter J R, Howell F M. Geographical sociology: Theoretical foundations and methodological applications in the sociology of location[M]. Springer Science & Business Media, 2012.