



Bridging Social Capital and Sustainable Behavior

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Overview

Overview

Introduction

Observation

Model

Data

Estimation

Outlook

Framework

REdMig Project

Non-monetary returns to education in the form of social inclusion:
Estimation and interdependence of private and social Returns to
Education of Migrants and non-migrants.

- ▶ Value and relationships between non-monetary returns to education on the personal and social level for both migrants and non-migrants

REdMig

- ▶ Cooperative project University of Hamburg & University of Giessen
- ▶ Funded by the German federal ministry for education and research (BMBF), duration: February 2016 - June 2019
- ▶ Project members: Prof. Dr. Ingrid Gogolin, Prof. Dr. Bernhard Nauck, Prof. Dr. Peter Winker, Dr. Marina Lagemann, Andreas Genoni, Kyra Hagge

Quote

"You never change things by fighting the existing reality. To change something, build a new model that makes the existing model obsolete."

R. Buckminster Fuller

Observation

- ▶ Even though climate research has been around for more than a century now (with more activity since the 70ies) behavior changes are "sticky"
- ▶ More educated people have more sustainable behavior *intentions* but a larger carbon footprint
- ▶ \Rightarrow RQ: How does a higher education influence sustainable behavior?

Model Idea: Fusing different strings of literature together

Education

- ▶ Increasing education → more thoughts about the personal environmental impact [Olli, Grendstad & Wollebaek, 2001]
- ▶ Increasing education → more affluent lifestyle [Kollmuss & Agyeman, 2002], air travel [Bruderer Enzler, 2017], energy use [Poortinga, Steg & Vlek, 2004]
- ▶ All income effects (see Moser & Kleinhuekelkotten, 2018)? Might there be indirect effects which work through social networks? What would be the direction?

Model Idea ctd.

Social Networks

- ▶ Social capital, instrumentalist approach: resources, that are embedded in social relationships [Lin, 2001]
- ▶ Strong vs. weak ties, knowledge/information dispersion over weak ties [Granovetter, 1973]
- ▶ Network cohesion: Belief homophily [Bruhn, 2009], brokerage [Burt, 1992]
- ▶ Geographic distance: Spatial dispersion of SN and earlier residential mobility
History of residential mobility \Rightarrow dispersed SN \Rightarrow more access to different social circles (information dissemination)
[Viry, 2012]

Model Idea ctd.

Delay Discounting

- ▶ "A phenomenon in which individuals choose a response option that produces a lesser amount of a resource (reinforcer) sooner, rather than a response option that produces more of that resource at a later time" [Madden & Bickel, 2010].
- ▶ Monetary discounting and environmental discounting comparable [Berry, Nickerson & Odum, 2017]

Model

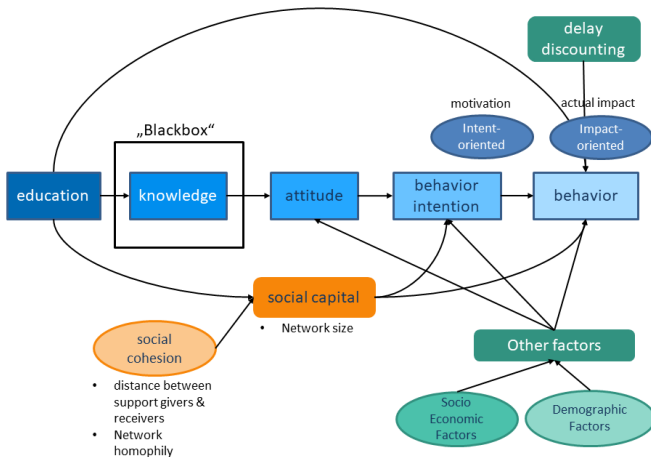


Figure 1: Theoretical concept

Data

- ▶ German Socio-Economic Panel Study (G-SOEP)
 - ▶ Panel dataset since 1984
 - ▶ Surveying over 12,000 households (approx. 50,000 individuals)
 - ▶ Rich panel, very few gaps and alterations
- ▶ Excluding respondents who still attended school
- ▶ SOEP-Innovation Sample 2012/2014: Includes questions on environmental behavior as well as section on valuation of monetary gains (delay discounting) → more than 3,000 observations

Data ctd.

Potential variables:

- ▶ Attitude: Care for the environment, do you want to preserve the environment?
- ▶ Behavior: Energy usage (renewables), waste separation, meat consumption, transportation, consumerism (Q: compose index?)
- ▶ Module on evaluation of future monetary gains
- ▶ Highest educational degree
- ▶ Network size, network homophily, distance to support ties
- ▶ Controls: Income, gender, age, ethnic background

Estimation Strategy (preliminary)

Research Questions

1. Is education a determinant of sustainable behavior in Germany?
2. If so, is there an indirect link of education via the structural dimensions of geographic distance or network homophily within social networks to sustainable behavior?
3. Does this effect change when including a measure for delayed discounting?

Estimation Strategy ctd.

Methodological Approach

- ▶ Logit and ordered logit estimations on cross-sectional data from the SOEP, wave 2014
- ▶ Propensity score matching (or other statistical matching) to compare average treatment effect of education (high vs. low)?

Next steps

- ▶ Finalize theoretical model
- ▶ Compose data set
- ▶ Test theoretical model

Thank you very much for your attention,
I am incredibly happy to receive
your feedback!

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