Individualism, Human Capital Formation, and Labor Market Success

Katharina Hartinger¹

Jens Ruhose⁴,⁵,⁶

Simon Wiederhold¹,²,⁴,⁷

Sven Resnjanskij²,³

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¹KU Eichstätt-Ingolstadt, ²ifo Institute, ³University of Munich
⁴CESifo, ⁵University of Kiel, ⁶IZA, ⁷ROA
Motivation

“We are fast becoming a nation of alienating individualists, unwilling to put the unifying values of patriotism ahead of our narrow self-interests.”

John McCain, NY Times, March 26, 2008

• Individualism as a **polarizing element** of our Zeitgeist (Dionne 2012)
  • Culture of personal freedom and achievement

• Opposing economic effects at the **aggregate level**
  • Positive effects on long-run growth (Gorodnichenko & Roland 2017)
  • Negative effects on redistribution & pandemic response (Bazzi et al. 2020/21)

• We do not know if / how individualism affects **individual economic success**
  • Positive skill effects due to uniqueness- and autonomy-focused mindset
  • Negative skill effects due to lower provision of public goods
We study the role of individualistic culture in human capital formation and labor market outcomes

- Scarce evidence on the importance of cultural traits for educational success
- Figlio et al. (2019) and Kinne et al. (forthcoming) look at long-term orientation and/or risk preferences

Data from PIAAC – an international adult skills assessment administered by the OECD (31 countries)

Complementary identification strategies exploiting within-country variation in individualism between migrants (1st and 2nd generation) and natives

Our results show that more individualistic people:

1. have higher levels of cognitive skills
2. invest more in education, also over the life-cycle
3. achieve better / different labor market outcomes (i.e., higher wages, more research-focused occupations)
Measuring Individualism

Aggregate measures

• Hofstede (2001) index based on IBM employee surveys (IDV)
  • Part of six-dimension model of national culture by Geert Hofstede
  • Index is based on questions about time for personal life, job security, and challenge at work
  • Country-level

• Kashima & Kashima (1998) index of pronoun drop
  • Pronoun drop (conservation): emphasis on the action (actor)
  • Binary (reverse coded; 1 = individualistic)
  • Language-level

Personal measure

• Seven PIAAC questionnaire items are closely related to classic individualism survey items (Oyserman et al. 2002)
  • Combination of work-related and private-life questions (freedom, intellectual challenge-seeking, broad-mindedness, intellectual openness)
  • Aggregation of items following Kling et al. (2007) and Deming (2017)
At First Glance

- Simple cross-country evidence, 14% of international variation in skills explained
- Main empirical challenge: Hold the institutional and economic environment constant when evaluating the effects of culture
Estimation Strategies

Epidemiological Approach (Fernández 2007; Figlio et al. 2019)

• Migrants take their original cultural toolkit to their destination country → compare migrants from different origin countries within the same destination country

\[ NUM_{iydo} = \beta_0 + \beta_1 IDV_{o} + X'_{iydo} \gamma + \mu_d \times \mu_y + c_o + u_{iydo} \]

• First- and second-generation migrants

• Additions:
  • Language-based and person-level IDV allow for including origin country FE

Other Sources of Variation

• Within-country across-natives approach
• Value-added approach
### Overview of the Results

<table>
<thead>
<tr>
<th>IDV and Numeracy Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hofstede &amp; personal IDV &amp; test scores standardized to mean 0 and SD 1</strong></td>
</tr>
<tr>
<td><strong>SE clustered at the origin level</strong></td>
</tr>
<tr>
<td><strong>Weight of 1 for each destination country</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Classic Epi</th>
<th>Epi + language (1st only)</th>
<th>Person-level IDV</th>
<th>IV</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1st Gen</td>
<td>1st Gen</td>
<td>2nd Gen</td>
<td></td>
</tr>
<tr>
<td>Hofstede IDV</td>
<td>0.290***</td>
<td>0.246***</td>
<td>0.228***</td>
<td>0.349***</td>
</tr>
<tr>
<td></td>
<td>(0.049)</td>
<td>(0.057)</td>
<td>(0.056)</td>
<td>(0.116)</td>
</tr>
<tr>
<td>Kashima IDV</td>
<td>0.654***</td>
<td>0.215***</td>
<td>0.289***</td>
<td>0.258***</td>
</tr>
<tr>
<td></td>
<td>(0.082)</td>
<td>(0.064)</td>
<td>(0.021)</td>
<td>(0.013)</td>
</tr>
<tr>
<td>Person-level IDV</td>
<td></td>
<td></td>
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</tbody>
</table>

**Fixed Effects**
- Destination country
- Continental
- Year of migration
- Destination country x year of migration
- Different language
- Destination country x different language
- Origin country
- Destination country x origin country
- Origin language
- Destination country x origin language

<table>
<thead>
<tr>
<th></th>
<th>1st Gen</th>
<th>1st Gen</th>
<th>2nd Gen</th>
<th>Between origin</th>
<th>Within origin</th>
<th>1st Gen</th>
<th>2nd Gen</th>
<th>Natives</th>
<th>1st Gen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Origins</td>
<td>68</td>
<td>68</td>
<td>84</td>
<td>39</td>
<td>39</td>
<td>212</td>
<td>123</td>
<td>31</td>
<td>33</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.24</td>
<td>0.26</td>
<td>0.14</td>
<td>0.26</td>
<td>0.41</td>
<td>0.44</td>
<td>0.24</td>
<td>0.26</td>
<td>0.07</td>
</tr>
</tbody>
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Robustness

• Selective migration
  • Control for migration costs: distance between countries (geo., ling., genetic)
  • Direct investigation of migrant selection on culture

• Country-of-origin controls
  • GDP per capita
  • PISA score

• Other cultural controls
  • Hofstede dimensions (e.g., long-term orientation)
  • Patience, trust, risk-taking, altruism, reciprocity

• Alternative IDV measures
  • GLOBE
  • Schwartz
  • Suh
Individualism and Skill Formation over the Life-Cycle

• More individualistic persons tend to increase their skill advantage over the life-cycle
  • Consistent with the idea of dynamic skill complementarities (Cunha & Heckman 2007; Cunha et al. 2010)
  • German skill panel data (PIAAC-L) to distinguish between age and cohort effects

• We find strong positive associations of individualism with:
  • Formal education: Years of schooling, university degree
  • Adult learning at work: On-the-job training, other training
  • Adult learning at home: Reading newspapers, professional journals, or books

• Mediation analysis (Heckman & Pinto 2013, 2015)
  • Almost half (45 percent) of the increase in skills is mediated through the abovementioned channels
  • Both formal education (32 percent) and adult learning (13 percent) explain sizeable fractions of the effect of individualism on skills
Conclusion

• Individualism is an important determinant of **human capital formation** and **labor market outcomes** in adulthood

• Results consistent across various estimation strategies using **different specifications and populations**
  • We use measures of individualism that vary at various levels (country, language, individual) to provide a consistent picture about why this cultural trait matters for economic outcomes

• Next step: Gain a more complete picture of the economic impact of individualism
  • Positive effects of individualism on individual-level outcomes, but **potential negative effects at societal level** (Hofstede 2001; Gorodnichenko & Roland 2012; Bazzi et al. (forthcoming))
Thank you for your attention!

simon.wiederhold@ku.de
@simonwiederhold