PRACTICE ENGAGEMENT AND SOCIAL OUTCOMES IN U.S. HOUSEHOLDS AND PRISONS

Stephen Reder
Portland State University

reders@pdx.edu
PRACTICE ENGAGEMENT THEORY

• Social scientists have long been interested in differences between what people know, what they say, and what they do.

• Colleagues and I have developed *practice engagement theory* to address how engagement in information-processing practices (something people do) reciprocally interacts with the development of their proficiencies (something people know).

• Numerous studies with PIAAC and predecessor surveys point to the joint effects of educational attainment and proficiencies on these economic and social outcomes.

• Research with PIAAC data shows a strong impact of practice engagement (“skills use”) on a range of economic and social outcomes for individuals and societies.
EMBEDDING OF PRACTICE ENGAGEMENT IN ECONOMIC AND SOCIAL OUTCOMES

• Recurring practice engagement can affect the development of individuals’ skills, knowledge and attitudes and, more generally, their positions in society

• In the context of a longitudinal study, I’ve previously shown how practice engagement and proficiency development reciprocally influence each other over time

• In a cross-sectional study such as PIAAC, the importance of practice engagement can be seen in another way, using the concept of the embedding of practices in particular economic and social outcomes

• I define an information-processing practice as being embedded in an outcome if it is significantly associated with that outcome after taking into account the effects of education, proficiency and demographic variables
CONSTRAINTS & AFFORDANCES IN PRACTICE ENGAGEMENT

• With the effects of education and proficiency taken into account, increasing levels of practice engagement at work are positively associated with increased employment and earnings.

• Because they design work and jobs, employers partly determine the skills used at work, so PIAAC’s measures of individuals’ skill use at work may be attributes of both the jobs as well as of the individual workers who hold the jobs.

• In this sense, workplace, job and task design both constrain and afford practice engagement.
EMBEDDING OF PRACTICE ENGAGEMENT IN SOCIAL OUTCOMES

• Practice engagement is also important to understand outside of work contexts

• For social outcomes, previous PIAAC research suggests that information processing practices outside of work are embedded in the social outcomes measured by PIAAC:
  • health
  • social trust
  • political efficacy
  • Volunteerism

• Relatively little is known about how societies and their institutions constrain and afford information-processing practices in ways that affect social outcomes
EDUCATIONAL ATTAINMENT, LITERACY PROFICIENCY AND SOCIAL OUTCOMES

**United States**

- High levels of health
- High levels of political efficacy
- High levels of trust
- Participation in volunteer activities

**Germany**

- High levels of health
- High levels of political efficacy
- High levels of trust
- Participation in volunteer activities

- Level 2 or below, lower than upper secondary
- Level 2 or below, tertiary
- Level 3 or higher, lower than upper secondary
- Level 3 or higher, tertiary
EMBEDDING OF LITERACY & NUMERACY PRACTICES IN SOCIAL OUTCOMES

OECD (Round 1 countries), Age 25-65

Uses of Reading, Writing & Math Outside of Work

<table>
<thead>
<tr>
<th></th>
<th>HEALTH</th>
<th>TRUST</th>
<th>POLITICAL</th>
<th>VOLUNTEER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Writing</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Math</td>
<td>√</td>
<td>X</td>
<td>√</td>
<td>√</td>
</tr>
</tbody>
</table>

Adjusted for effects of age, gender, nativity, linguistic status, education & proficiency

Source: Ch.3 of Grotlüschen et al (2016)
EXTENDING OUR UNDERSTANDING OF THE EMBEDDING OF PRACTICE ENGAGEMENT

• Will focus on new PIAAC data from the U.S. that allows us to compare populations age 25-74 in households in incarcerated inmates

• Will focus on comparison between social outcomes in these two major populations for whom practice engagement is embedded in potentially different ways

• Will present here today on just the embedding of reading practices in three of the social outcomes measured in both populations (volunteering wasn’t included in the prison survey)

• Standard ordinal and binary logistic regression methods were used to model the simulataneous influence of practice engagement, education and proficiency (along with demographic variables) on the social outcomes
SOCIAL OUTCOMES IN THE U.S. (AGE 25-74)
LEVEL OF READING ENGAGEMENT OUTSIDE OF WORK (U.S., AGE 25-74)
PERCENT AT HIGH LEVEL OF HEALTH BY LEVEL OF READING ENGAGEMENT OUTSIDE OF WORK, U.S. ADULTS AGE 25-74

International Percentile of Reading Outside of Work

- Households
- Prisons
PERCENT AT HIGH LEVEL OF HEALTH BY LEVEL OF READING ENGAGEMENT OUTSIDE OF WORK, U.S. ADULTS AGE 25-74

Adjusted by demographics, education & literacy proficiency

International Percentile of Reading Outside of Work

- Households
- Prisons
PERCENT WITH SOME SOCIAL TRUST BY LEVEL OF READING ENGAGEMENT OUTSIDE OF WORK, U.S. ADULTS AGE 25-74
PERCENT WITH SOME SOCIAL TRUST BY READING ENGAGEMENT OUTSIDE OF WORK, U.S. ADULTS AGE 25-74

Adjusted by demographics, education & literacy proficiency
PERCENT WITH HIGH POLITICAL EFFICACY BY READING ENGAGEMENT OUTSIDE OF WORK, U.S. ADULTS AGE 25-74
PERCENT WITH HIGH POLITICAL EFFICACY BY READING ENGAGEMENT OUTSIDE OF WORK, U.S. ADULTS AGE 25-74

Adjusted by demographics, education & literacy proficiency

International Percentile of Reading Outside of Work

- Households
- Prisons

Graph showing the percentage of high political efficacy by reading engagement outside of work for U.S. adults age 25-74, adjusted by demographics, education, and literacy proficiency.
HEALTH AND POLITICAL INFORMATION SOURCES

• U.S. background questionnaire had country-specific questions about sources of information about health and questions about sources of information about politics and government

• Responses were aggregated into binary variables:
  • HEAPRED: print sources predominant for health information
  • POLPRED: print sources predominant for political/gov’t information

• HEAPRED was added to embedding regressions for HEALTH status outcome
• POLPRED was added to embedding regressions for POLITICAL efficacy outcome
PREFERENCES FOR PRINT INFORMATION
(U.S., AGE 25-74)

Percent of Population

<table>
<thead>
<tr>
<th></th>
<th>Households</th>
<th>Prisons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Information</td>
<td>50%</td>
<td>60%</td>
</tr>
<tr>
<td>Political/Gov't Info</td>
<td>40%</td>
<td>50%</td>
</tr>
</tbody>
</table>
HIGH LEVEL OF HEALTH BY LEVEL OF READING ENGAGEMENT OUTSIDE OF WORK & PREFERENCE FOR PRINT SOURCES OF HEALTH INFORMATION

Adjusted by demographics, education & literacy proficiency
HIGH POLITICAL EFFICACY BY READING ENGAGEMENT OUTSIDE OF WORK & PREFERENCE FOR PRINT SOURCES OF POLITICAL/GOV'T INFORMATION

Adjusted by demographics, education & literacy proficiency

---

**International Percentile of Reading Outside of Work**

- **Households, Print**
- **Households, Nonprint**
- **Prisons, Print**
- **Prisons, Nonprint**
SUMMARY

• Two related but distinct concepts can help us understand the relationship between practice engagement and social outcomes: the constraints and affordances of practice engagement and the embedding of practices in social and economic outcomes.

• In the workplace, employers constrain and afford opportunities for practice engagement through the design of work, jobs and organizations. Outside of work, institutions such as prisons constrain and afford opportunities for engagement in information-processing practices.

• Much less embedding of reading engagement was found in the social outcomes within the prison environment — this holds also for writing and math but there wasn’t time to consider those results today.

• None of these results are meant to imply causality between practice engagement and outcomes, but their close relationships are worthy of further consideration and research.
IMPLICATIONS

• Extending/enhancing Practice Engagement Theory
• Work design / lifelong learning
• Prison design
• Re-entry programs
FURTHER RESEARCH NEEDS

• More detailed modeling of possible mediation/moderation of social outcomes by practice engagement and uses of specific information sources

• Systematic development and improvement of practice engagement (skill use) measures

• Longitudinal data on and analyses of the development of practice engagement, proficiency, and social outcomes

• Difficult to add detailed content about social contexts and practices to existing longitudinal studies, so there may be a role for more linkages between studies