Benefit and challenges in the implementation of international survey design standards in a national context: Lessons learned from PIAAC

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PIAAC at a glance

- OECD survey of adults aged 16-65 years across 24 countries
- Goal: Production of high-quality and internationally comparable data
- BQ (F2F) and assessment in literacy, numeracy and problem solving in technology-rich environments
- Data collection period: August 2011 – March 2012
- Publication of first results: October 8, 2013
International Activities for Achievement of PIAAC Objective

- Comprehensive set of standards and guidelines (OECD, 2010)
  - Well structured, provide orientation and guidance for the implementation of best practices, standardization
  - Not always flexible enough to accommodate national standards or constraints

- Thorough quality control by international Consortium
  - Provide custom-made information to the Consortium, support countries in planning and organization of processes
  - Very time consuming; not always adequate for national processes

- Final judgment of global quality of data
  - Feedback on “fitness for use”
  - Strict classification scheme with partially restricted focus
Special focus I: Response Rate Standard

• Minimum overall response rate of 70%
  → Data generally be included in reports unless indication of serious levels of bias in country data
  → Evidence: Basic NRB analyses

• Response rates between 50% and 70% acceptable
  → Data included in reports if countries provided analyses indicating that the potential nonresponse and undercoverage biases within acceptable limits
  → Evidence: Basic and extended NRB analyses
PIAAC in Germany

• Funded by Federal Ministry of Education and Research
• Registry sample
• Sample size: 5,465 completed cases
• Implementation of two main fieldwork periods with various re-issues
• Response rate challenge
  – German field test → 36%
  – ESS Germany → Round 5: 31% / Round 6: 34%
  – German General Social Survey → 2008: 40% / 2010: 34%
• Considerable efforts to achieve high response rate while keeping bias low
Set of measures for PIAAC Germany

- Advance letter
- Brochure and flyer
- Endorsement letter/tailored letters
- Press releases
- Website

- 129 experienced interviewers with excellent track record
- 5-day interviewer training
- 4-week exclusive assignment for PIAAC

- First contact in-person
- 4 contact attempts minimum
- Refusal conversion
- Tracing respondents

- Attractive interviewer remuneration
- Add-on for addresses in cities with 100,000 inhabitants or more

- Non-monetary unconditional incentive
- Attractive conditional incentive of 50 Euros

- Thorough fieldwork supervision and monitoring by SO and NPM Team

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Results for PIAAC in Germany

• Achieved overall PIAAC response rate: 55% → very good result for Germany
• Basic and extended NRB analyses: Pass
• Data adjudication result for domain “Coverage and Nonresponse Bias“: Caution-Bias low

→ Caution because RR < 70%
**International Response Rate Results**

<table>
<thead>
<tr>
<th>Number of countries</th>
<th>Registry Country</th>
<th>Screener Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall(^1), (^2)</td>
<td>14</td>
<td>11</td>
</tr>
<tr>
<td>… with RR &lt; 50%</td>
<td>2</td>
<td>---</td>
</tr>
<tr>
<td>… with RR between 50% and 70%</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>… with RR ≥ 70%</td>
<td>---</td>
<td>5</td>
</tr>
<tr>
<td>Ø Response Rate*</td>
<td>55.9%</td>
<td>66.3%</td>
</tr>
</tbody>
</table>

- Majority of countries could not fulfill RR standard of minimum 70%
- In general, screener countries achieve higher response rates
- Re-assess response rate requirement for registry countries

Notes: 1) Total of 25 countries, because England and Northern Ireland are counted separately. 2) Number of registry/screener countries and response rates see OECD (2013). --- = none. *) Difference between response rates significant (p<.01).
Special focus II: Validation Standard

- Verification of 10% of each interviewer’s finalized work
- Validation of all dispositions (completes, ineligibles, non-contacts, refusals)
- Random selection of cases
- Validation by phone or in-person
- Review of at least two audio-taped interviews per interviewer
Standard Validation for Registry Samples at German Survey Organization

- Validation of all completed cases with the focus on identifying falsification
  - Via consistency checks of interview and register data
  - Via mail with validation questionnaire; if needed, resolution by phone
- No validation of other dispositions
  - Falsification risk highest for interviews, because interviewers are paid a piece rate
  - Legal national restrictions: By law, it is not allowed to reapproach hard refusals
Non-standard validation measures implemented in PIAAC Germany

• Validation of some ineligibles
• Validation of all non-interviews due to disability by mail
• Validation of some non-contacts by phone
• Validation of some soft refusals by person
• Audio recordings
Assessment of validation standards in German context

• Validation of all dispositions: questionable
  – Ineligibles: no longer traceable
  – SP with disability: ethically not justifiable
  – Hard refusal: legal restrictions
  – Soft refusals after main working phase: primary goal is refusal conversion
  – Non-contacts & movers: How do they know that they were contacted by an interviewer?
Assessment of validation standards in national context (cont.)

• Random selection of cases → closely connected with validation of all dispositions

• Validation by phone → difficult
  – No phone numbers available from register
  – Quite a number of SPs have no landline but only unlisted cell phone numbers

• Review of at least two audio-taped interviews per interviewer → very useful
Conclusion

• Definition of and adherence to best practice standards for high quality data are of utmost importance

• Some standards should be revisited to be optimized for registry countries

• In part allow for more degrees of freedom to account for national constraints
Thank you for your attention

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References
