

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

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Presented at the 2014 International Workshop on
Comparative Survey Design and Implementation
in Bethesda, March 27-29, 2014

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

- | | |
|--|---|
| <ul style="list-style-type: none"> • Advance letter • Brochure and flyer • Endorsement letter/tailored letters • Press releases • Website | <ul style="list-style-type: none"> • 129 experienced interviewers with excellent track record • 5-day interviewer training • 4-week exclusive assignment for PIAAC |
| <ul style="list-style-type: none"> • First contact in-person • 4 contact attempts minimum • Refusal conversion • Tracing respondents | <ul style="list-style-type: none"> • Attractive interviewer remuneration • Add-on for addresses in cities with 100 000 inhabitants or more |
| <ul style="list-style-type: none"> • Non-monetary unconditional incentive • Attractive conditional incentive of 50 Euros | <ul style="list-style-type: none"> • Thorough fieldwork supervision and monitoring by SO and NPM Team |

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

Number of countries	Registry Country	Screener Country
Overall ^{1), 2)}	14	11
... with RR < 50%	2	---
... with RR between 50% and 70%	12	6
... with RR ≥ 70%	---	5
∅ Response Rate*	55.9%	66.3%

- 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 und 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).

Member of the

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 ineligible
- 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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