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Using Survey Codings for measuring fields of education and training in cross-national surveys

Verena Ortmanns and Silke Schneider
GESIS, Mannheim



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Outline

1. What is meant by “fields of education” in the context of survey research?
2. Why are fields of education important to be measured in surveys?
3. How are fields of education usually measured and harmonized in surveys?
4. How can Survey Codings improve the measurement and harmonization of fields of education?
5. Which standard classification supports the harmonization of education using Survey Codings?





1. What is meant by “fields of education” in the context of survey research?

- “A field is the broad domain, branch or area of content covered by an education programme or qualification” (UNESCO-UIS, 2014, p. 5)
- Fields of education reflects horizontal differentiation within education levels
- Fields of education are defined across levels of education, i.e. the same field (e.g. health) can exist at several levels (e.g. nursing programmes and medicine)





2. Why are fields of education important to be measured in surveys?

- Labour market research:
 - (Mis-)Match between field of education and occupation or industry
 - Returns to fields of education
- Social inequality research:
 - Social selection into the fields of education by family background, e.g. parents' occupation (van de Werfhorst et al. 2003, van de Werfhorst, Luijkx 2010)
- Gender inequality research:
 - Gender segregation across fields of education (Jonsson 1999, Bradley 2000, Charles & Bradley 2008) to some degree explains the gender income gap





3. How are fields of education measured and harmonized in cross-cultural surveys?

- Commonly in international surveys, highly aggregated categories are used





Example question of PIAAC, round 1:

What is the main subject area of your highest qualification?

01 General programmes

02 Teacher training and education science

03 Humanities, languages and arts

04 Social sciences, business and law

05 Science, mathematics and computing

06 Engineering, manufacturing and construction

07 Agriculture and veterinary

08 Health and welfare

09 Services





3. How are fields of education measured and harmonized in cross-cultural surveys?

- Commonly in international surveys, highly aggregated categories are used
- Classification biased towards academic fields and thus easier for academically educated respondents
- Vocational fields much more difficult to locate at high level of aggregation especially
- In national surveys also open question with post-coding, but this is usually too expensive for international surveys
- In contrast to educational qualifications, fields of education can be translated, so harmonization is easy in this case





4. How can Survey Codings improve the measurement and harmonization of fields of education?

1. Detailed measurement of fields, including vocational fields, by an innovative questionnaire design that enables 'long lists' without need for costly post-coding
 - Development of a 3-level search tree
2. Stimuli standardized across surveys via central database of fields education
3. Since fields of education can be translated, we can use input harmonization
 - we will provide 34 languages (but no source yet for Italian list of fields of education – can anybody here help?)





5. Which standard classification supports the harmonization of fields of education using Survey Codings?

- UNESCO's International Standard Classification of Education - Fields of Education and Training (ISCED-F) of 2013
- Classification consists of 3 digits/levels:
 - 1st level: 11 entries
 - 2nd level: 29
 - 3rd level: around 80





Broad fields (1st level) of ISCED-F

00 Generic programmes and qualifications

01 Education

02 Arts and humanities

03 Social sciences, journalism and information

04 Business, administration and law

05 Natural sciences, mathematics and statistics

06 Information and Communication Technologies (ICTs)

07 Engineering, manufacturing and construction

08 Agriculture, forestry, fisheries and veterinary

09 Health and welfare

10 Services





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Contact

- Verena.Ortmanns@geis.org
- Silke.Schneider@geis.org



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