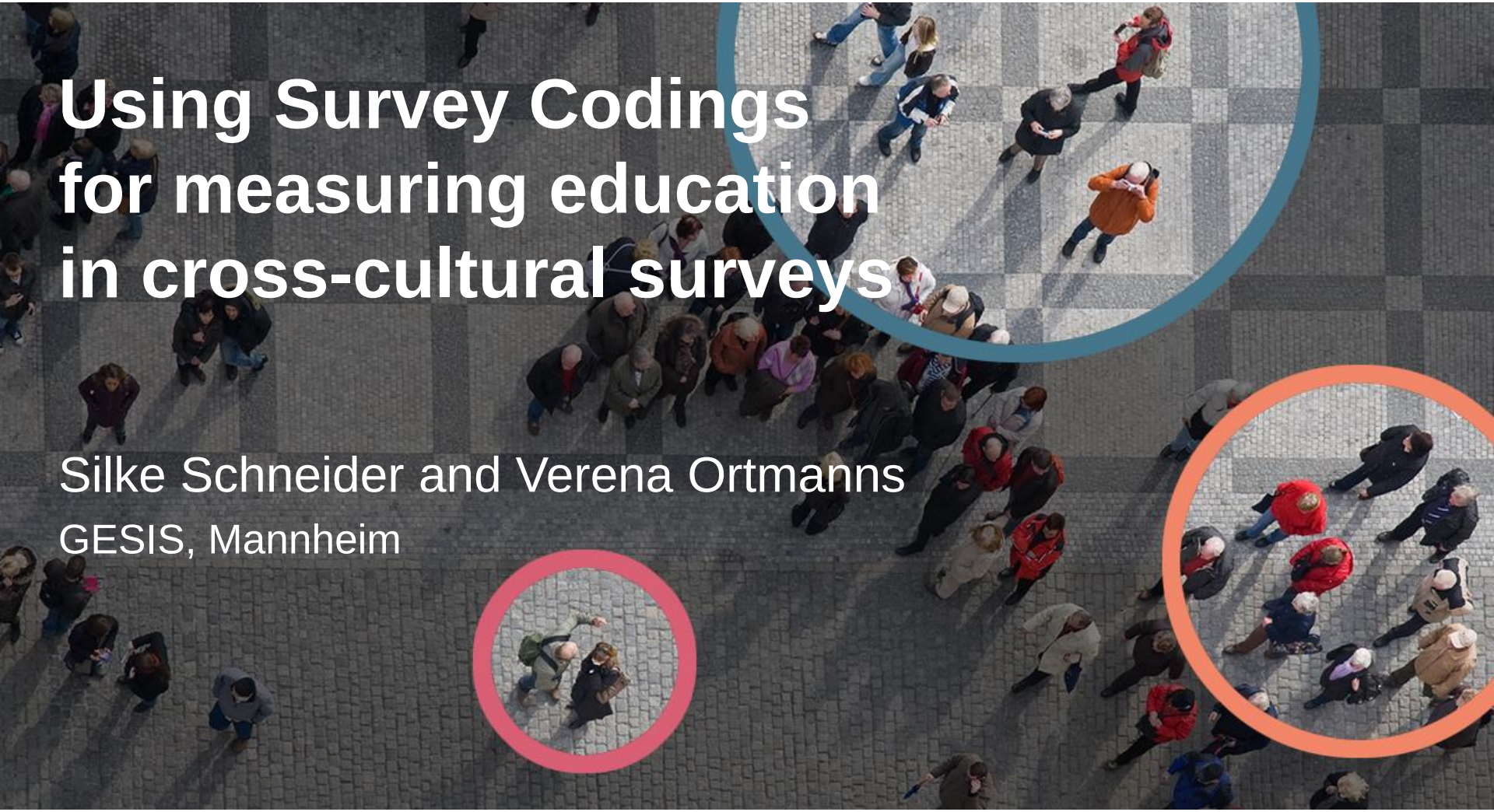
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Using Survey Codings for measuring education in cross-cultural surveys

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This project has received funding from the *European Union's Horizon 2020 research and innovation programme* under grant agreement No 654221.

About me – Silke Schneider

- Quantitative Sociologist trained in Cologne, Paris, Oxford
- PhD on cross-national measurement of education in surveys
- Work a GESIS – Leibniz Institute for the Social Sciences in Mannheim, Germany
- Led project "Computer-assisted measurement and coding of education in surveys" CAMCES, 2013-17
- Consultant for ESS, SHARE, EVS and the next cycle of OECD's PIAAC, 2008-today



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Outline

1. What is meant by "education" in the context of survey research?
2. Why is education important to be measured in surveys?
3. How is education usually measured and harmonized in surveys?
4. How can Survey Codings improve the measurement and harmonization of education?
5. Which standard classification supports the harmonization of education using Survey Codings?
6. What does the Survey Codings questionnaire for education look like?
7. Can I access the education database directly?

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1. What is meant by "education" in the context of survey research?

- Education usually means "educational attainment": the highest formal education program completed by the respondent (or proxy)
  - Not non-formal education, e.g. continuing training
- Attainment mostly reflects vertical differentiation in education
  - See separate presentation on *fields of education* for horizontal differentiation

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2. Why is education important to be measured in surveys?

- *The* most central background variable in surveys of individuals, next to age and sex
- Education is an indicator for:
  - Human capital
  - Trainability
  - Cultural capital
  - Socialization in the formal education system
  - Social status (but there are better indicators for this)
  - Cognitive skills (but attainment only explains 25% of variation in literacy/numeracy skills across countries!)

More in this GESIS Survey Guideline: https://doi.org/10.15465/gesis-sg_en_020

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3. How is education measured and harmonized in cross-cultural surveys?

- Educational qualifications more reliable and valid than years of education
- Open questions and post-coding rare for education, usually closed question
- But idiosyncratic institutional differences across countries, translation of names of qualifications impossible.
- Thus use of country-specific education categories and output-harmonization (recoding) after data collection
  - Substantial logistics of ex-ante output harmonization to ensure comparability (otherwise a lot of inconsistency across surveys)
  - Migrant surveys: use of pseudo-international categories, not taking context of origin into account. Validity, reliability, comparability?
- Surveys (CA or not) need 'short' response lists
  - Often incomplete in light of increasing differentiation of educational systems
  - Shorter list always less burdensome for respondent than less abstract longer list?

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

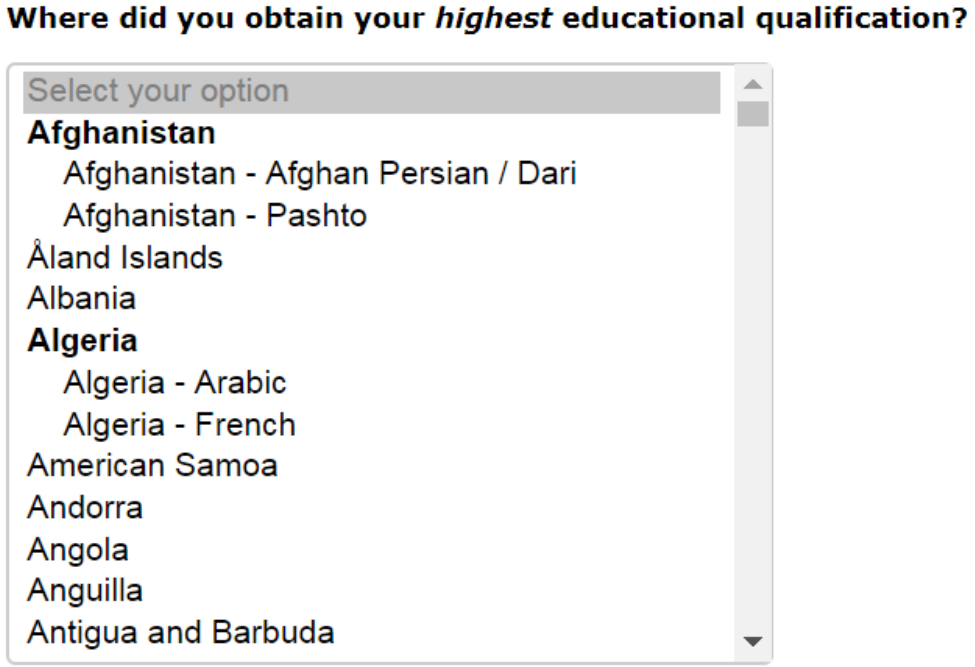
1. Foreign qualifications directly measured via context-sensitive questionnaire

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4.1 Measuring foreign qualifications via context-sensitive questionnaire

Where did you obtain your highest educational qualification?

- ☐ United Kingdom - England, Wales or Northern Ireland
- ☐ United Kingdom - Scotland
- ☐ Abroad



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

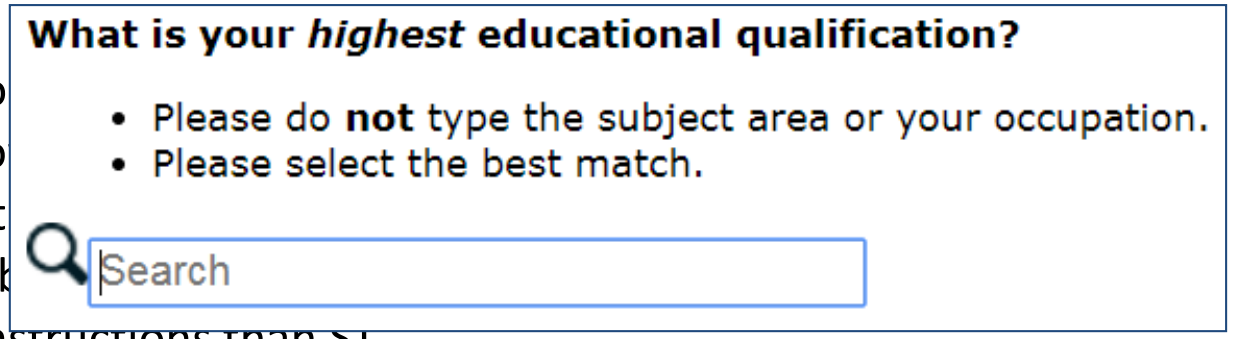
1. Foreign qualifications directly measured via context-sensitive questionnaire
2. Innovative questionnaire design enables 'long lists' to better reflect increasing differentiation of educational systems

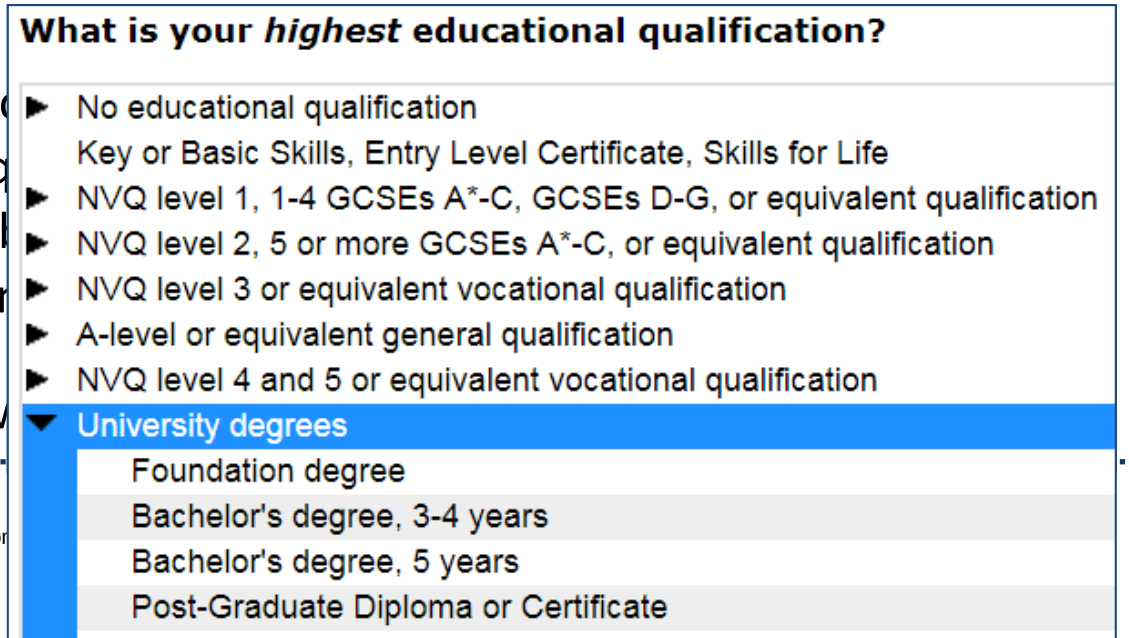
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4.2 Linking survey questionnaire and education database via long-list interfaces

A. Combination Box (CB)
- text entry box fo
- algorithm to sho
- selection of best
- 👎 may not always k
- 👎 requires more instructions than ST

B. Search Tree (ST)
- equivalent
- nesting of q
- used as falll
- 👎 may entail r design
- 👎 may be slov





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research and innovation programme

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

1. Foreign qualifications directly measured via context-sensitive questionnaire
2. Innovative questionnaire design enables 'long lists' to better reflect increasing differentiation of educational systems
3. Stimuli standardized across surveys via central database of educational qualifications

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4.3 Standardize stimuli across surveys via central database of educational qualifications

- One education context, one search tree interface – across surveys! No constant re-design by individual surveys.
- Combination box works in the same way for all countries and respondents (standard algorithm), across surveys
- …unless individual surveys start tweaking.
- But revisions/updating will be necessary (limits to standardization).

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

1. Foreign qualifications directly measured via context-sensitive questionnaire
2. Innovative questionnaire design enables 'long lists' to better reflect increasing differentiation of educational systems
3. Stimuli standardized across surveys via central database of educational qualifications
4. Transparent, consistent and (almost) effortless harmonization of national education categories into international categories

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4.4 Transparent, consistent and (almost) effortless harmonization

Respondent selects educational qualification from database using one of the questionnaire interfaces (ST or CB)

Survey system records unique code for this educational qualification (database entry)

Survey Codings provides syntax to recode this unique qualification code into internationally harmonized variables

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

- UNESCO's International Standard Classification of Education (ISCED)
  - Official 1997 and 2011 (ISCED-A) mappings
  - Alternative (own) ISCED 2011 (ISCED-A) mappings
  - ISCED-based coding scheme used in EU-LFS
  - ISCED-based coding scheme used in the ESS and EVS (edulvlb)

More at: https://www.surveycodings.org/education/classification-educational-qualifications

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6. What does the Survey Codings questionnaire for education look like?

- Introduction defining scope of formal education (only needed when using CB)
- Context question: Where did you obtain your highest educational qualification?
  - If not country of survey: context selection list
- What is your highest educational qualification?
  - CB
  - If CB not successful or switched off: ST
  - If no answer: open question (FTE)
- Optimal questions (year of completion, further qualifications, years of education)

Go to demo questionnaire

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7. Can I access the education database directly?

- Yes you can!

Go to live database search

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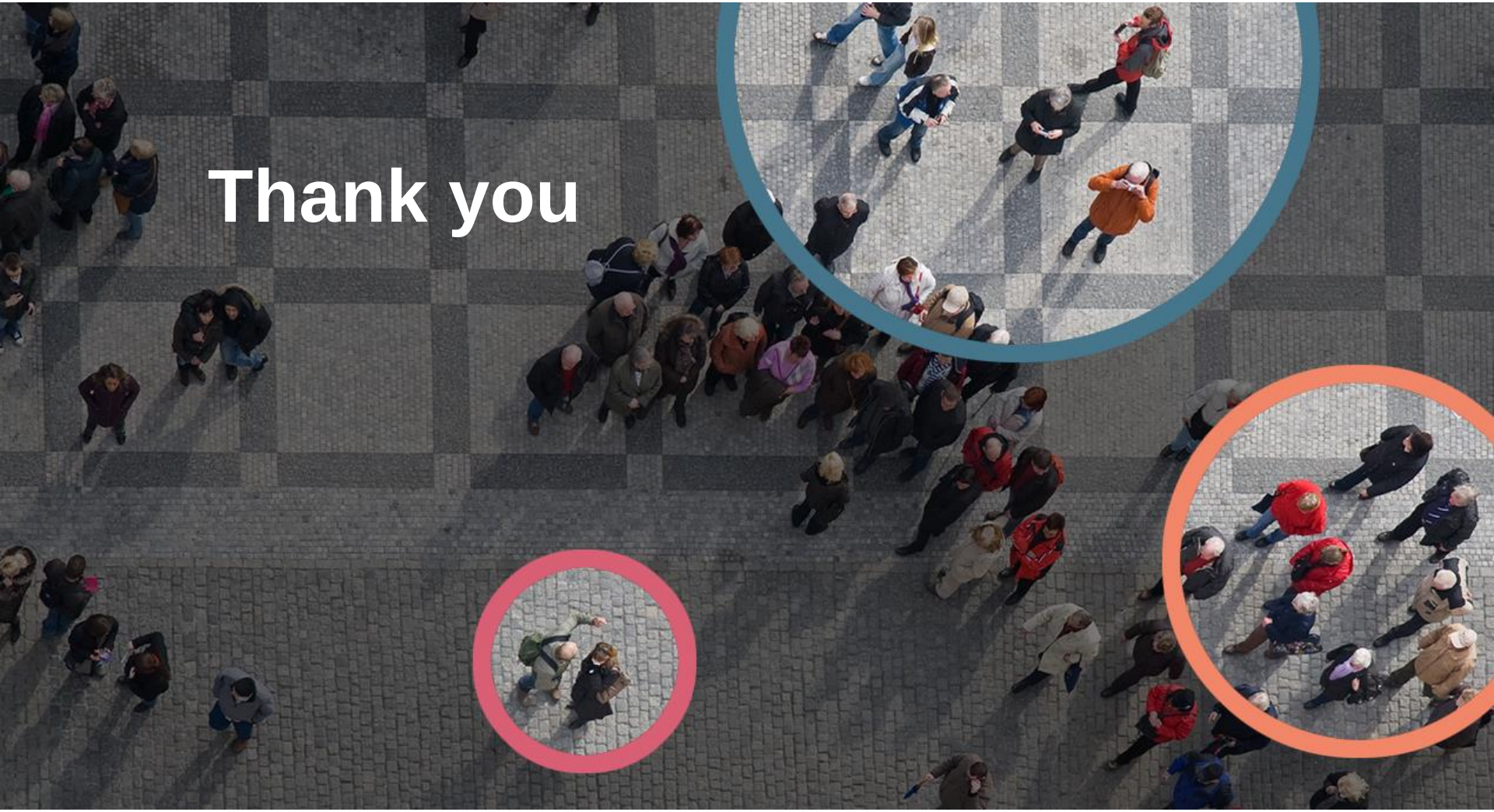
Find out more

https://www.surveycodings.org/education/

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