The Measurement of Teenagers’ General Cognitive Abilities in the German Socio-Economic Panel Study (SOEP)

SOEP-Pretest in 2005
- Pilot study on 217 teenagers
  - Testing teenage first-time respondents’ full cognitive abilities and potentials and school/training attainment
  - Test: I-S-T 2000 R (Amthauer et al. 2001)
  - (copy fee = 1 € / Interview)
  - Interview time: max. 30 minutes for test (stopwatch as additional incentive)

Dimensions
- Verbal potential (analogies)
- Numerical potentials (number sequences)
- Figural potentials (matrices/pictorial material)
- Reasoning (= sum score)

Results of Pretest in 2005

Analysis of Social Disparities between Cognitive Potentials and School Attainment

Initial findings
- Cognitive abilities explain part of the intra-group variation for children with highly educated parents as well as for those whose parents have a lower level of education
- For both social groups, the likelihood of attending a Gymnasium increases with the child’s learning potential. For children from lower-educated families, the initial results indicate the (general) social disadvantage in educational opportunities
- Teachers’ recommendations and children’s general cognitive abilities
  - Teachers’ recommendations for children from higher-educated families seem to be fairly independent of children’s general cognitive abilities
  - But for children with less-educated parents, teachers’ recommendations are associated with general cognitive abilities

Outlook
The measurement of general cognitive abilities of seventeen-year-olds will add an innovative component to the SOEP with future high analytic potential
- to investigate the relationships between school careers, educational attainment (school degrees achieved) and cognitive abilities
- to disentangle the impact of school attainment and learning potential on future life-course outcomes (e.g., training careers, participation in lifelong learning, employment careers, health behavior, etc.)

The “Discovery” of Youth Learning Potential Early in the Life Course
A project funded by (2007-2011)
PI – Heike Solga (WZB, Berlin)
in cooperation with E. Stern (ETH Zurich), Jürgen Schupp & Gert G. Wagner (SOEP, DIW Berlin)

Objectives
- Insights for improving skill formation processes among young people (skill acquisition)
- Contribution to interdisciplinary research efforts on social disparities in educational attainment and labor market success