Title: A mixture IR-Tree approach for measuring response styles using timing information
Authors: Lale Khorrampdel (Educational Testing Service (ETS), USA) & Matthias von Davier (National Board of Medical Examiners (NBME))

Abstract
The measurement of noncognitive constructs using rating or Likert-type scales in international large-scale assessment gained in importance but comes not without problems. Response styles (RS) can occur and harm the validity and comparability of the rating data, especially in low stakes assessments where test-taking motivation might not be high. A new IRT approach (Böckenholt, 2012) and its multidimensional extension (Khorramdel & von Davier, 2014; von Davier & Khorrampdel, 2013) seem to be promising in the measurement and correction of RS and have already been tested on personality and large scale assessment data. The current study is examining data from PIAAC (the Programme for International Assessment of Adult Competencies) and aims to optimize and validate this extended approach using mixture IRT models and variables such as cognitive scores and timing information. The examined rating data come from the PIAAC 2012 background questionnaire. The responses to selected questionnaire scales using a 5-point rating scale are decomposed into multiple response sub-processes and modeled through unidimensional and multidimensional IRT models. The advantages and challenges of a unidimensional measurement of RS will be discussed together with the attempt to use external variables for optimization and validation of the IRT approach.

Title: Response styles in factual items: Personal, contextual, and cultural correlates
Authors: Jia He & Fons van de Vijver (Tilburg University, Netherlands)
Abstract
This study investigated response styles in factual items and explored their associations with personal, contextual, and cultural factors. Responses on various factual questions, cognitive tests, and interviewers' observational data from a total of 152,514 respondents in 22 countries in the Programme for the International Assessment of Adult Competencies (PIAAC) were analyzed. Indexes of extreme, midpoint, and acquiescent response styles were extracted from Likert-scale and dichotomous responses of factual items. A general response style with a positive loading of extreme response style and negative loadings of midpoint and acquiescent response style was confirmed. This factor showed a similar crosscultural patterning as another general factor from attitudinal and self-evaluative items of Likert scales in a previous study, which indicated the pervasiveness of response styles irrespective of types of survey items. In a multilevel analysis, the individual-level general response style was found to be negatively related to being male, educational level, and literacy competency, and positively related to third person presence and background noise, and at country level negatively associated with socioeconomic development. Cross-level interactions were also found. Implications on the pervasiveness and nature of response styles are discussed.

Title: Prevalence and magnitude of question order effects in household surveys

Authors
David Richter & Martin Kroh (DIW Berlin, Germany)

Abstract
Question order effects refer to the phenomenon that different orders in which questions (or response options) are presented may influence respondents' answers in a systematic way. We draw on three large panel surveys (SOEP, SOEP-IS, PIAAC-L), in which the order of questions in the questionnaire often changes in an essentially random fashion over time. Analyses showed that distributions, means, and standard deviations of responses to questions on attitudes, beliefs, and opinions were highly comparable and almost identical across the different panels and across different survey years. We conclude that household panel surveys are robust with regard to question order effects.