

## **Special topic:** **Current issues in educational and psychological measurement: Design, calibration, and adaptive testing (Part 2)** *Guest editorial*

*Ulf Kröhne<sup>1</sup> & Andreas Frey<sup>2</sup>*

Part 2 of the special topic “Current issues in educational and psychological measurement: Design, calibration, and adaptive testing” of *Psychological Test and Assessment Modeling* continues the series of research papers dealing with empirical research questions related to calibration designs and computerized adaptive testing. This part includes three papers that add to the foregoing publications.

The first paper entitled “Effect of item order on item calibration and item bank construction for computer adaptive tests” by Walter and Rose (2013) focuses on the central independence assumption and its relation to item calibration designs, bridging the gap to the papers by Yousfi and Böhme (2012), Kubinger, Steinfeld, Reif and Yanagida (2012) as well as Frey and Bernhardt (2012) published in the Part 1 of this special issue. Walter and Rose (2013) provide an experimental comparison to investigate the effect of two different calibration designs on the estimated item parameters and the ability estimates of simulated adaptive tests using the resulting item banks.

The second paper entitled “Too hard, too easy, or just right? The relationship between effort or boredom and ability-difficulty fit” by Asseburg and Frey (2013) turns the attention to motivational and emotional aspects of achievement tests and their relation to test performance. Similar to Hartig and Buchholz (2012), individual differences in measures derived from Item Response Theory are investigated. In analyzing data from a second testing day of the PISA 2006 assessment in Germany, Asseburg and Frey (2013) show the correlation of the individual difference between the estimated ability and the mean difficulty of the processed items to self-reported effort and boredom.

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<sup>1</sup> Correspondence concerning this article should be addressed to: Ulf Kröhne, PhD, German Institute for International Educational Research (DIPF), Schloßstr. 29, 60486 Frankfurt am Main, Germany; email: Kroehne@dipf.de

<sup>2</sup> Friedrich-Schiller-University Jena, Germany

The final paper entitled “The sequential probability ratio test for multidimensional adaptive testing with between-item multidimensionality” by Seitz and Frey (2013) analyzes the sequential probability ratio test (SPRT) that was also addressed by Patton, Cheng, Yuan and Diao (2012) in Part 1. In comparison to Patton et al. (2012) who use the SPRT in combination with unidimensional adaptive testing, Seitz and Frey (2013) examine this method for classifying individuals into one of several ability categories within multidimensional adaptive testing with between-item multidimensionality.

As guest editors of both parts of this special topic, we would again like to thank the contributing authors for their elaborated and highly interesting articles that are providing new and important insights in the field of “Educational and Psychological Measurement”.

## References

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