Contents

Continuation Ratio Model in Item Response Theory and Selection of Models for Polytomous Items ........................................ 1
Seock-Ho Kim

Using the Asymmetry of Item Characteristic Curves (ICCs) to Learn About Underlying Item Response Processes ..................... 15
Sora Lee and Daniel M. Bolt

A Three-Parameter Speeded Item Response Model: Estimation and Application................................................................. 27
Joyce Chang, Henghsiu Tsai, Ya-Hui Su, and Edward M. H. Lin

An Application of a Random Mixture Nominal Item Response Model for Investigating Instruction Effects ................................. 39
Hye-Jeong Choi, Allan S. Cohen, and Brian A. Bottge

Item Response Theory Models for Multidimensional Ranking Items ...... 49
Wen-Chung Wang, Xuelan Qiu, Chia-Wen Chen, and Sage Ro

Different Growth Measures on Different Vertical Scales ..................... 67
Dongmei Li

Investigation of Constraint-Weighted Item Selection Procedures in Polytomous CAT ........................................................ 79
Ya-Hui Su

Estimating Classification Accuracy and Consistency Indices for Multidimensional Latent Ability ............................................. 89
Wenyi Wang, Lihong Song, Shuliang Ding, and Yaru Meng

Item Response Theory Models for Person Dependence in Paired Samples ................................................................. 105
Kuan-Yu Jin and Wen-Chung Wang
Using Sample Weights in Item Response Data Analysis Under Complex Sample Designs .................................................. 123
Xiaying Zheng and Ji Seung Yang

Scalability Coefficients for Two-Level Polytomous Item Scores: An Introduction and an Application ........................................ 139
Daniela R. Crisan, Janneke E. van de Pol, and L. Andries van der Ark

Numerical Differences Between Guttman’s Reliability Coefficients and the GLB ........................................................ 155
Pieter R. Oosterwijk, L. Andries van der Ark, and Klaas Sijtsma

Optimizing the Costs and GT based reliabilities of Large-scale Performance Assessments .................................................. 173
Yon Soo Suh, Dasom Hwang, Meiling Quan, and Guemin Lee

A Confirmatory Factor Model for the Investigation of Cognitive Data Showing a Ceiling Effect: An Example ................... 187
Karl Schweizer

The Goodness of Sample Loadings of Principal Component Analysis in Approximating to Factor Loadings with High Dimensional Data .......................................................... 199
Lu Liang, Kentaro Hayashi, and Ke-Hai Yuan

Remedies for Degeneracy in Candecomp/Parafac ........................................ 213
Paolo Giordani and Roberto Rocci

Growth Curve Modeling for Nonnormal Data: A Two-Stage Robust Approach Versus a Semiparametric Bayesian Approach............. 229
Xin Tong and Zijun Ke

The Specification of Attribute Structures and Its Effects on Classification Accuracy in Diagnostic Test Design ...................... 243
Ren Liu and Anne Corinne Huggins-Manley

Conditions of Completeness of the Q-Matrix of Tests for Cognitive Diagnosis ........................................................ 255
Hans-Friedrich Köhn and Chia-Yi Chiu

Application Study on Online Multistage Intelligent Adaptive Testing for Cognitive Diagnosis .................................................. 265
Fen Luo, Shuliang Ding, Xiaoqing Wang, and Jianhua Xiong

Dichotomous and Polytomous Q Matrix Theory ................................. 277
Shuliang Ding, Fen Luo, Wenyi Wang, and Jianhua Xiong

Multidimensional Joint Graphical Display of Symmetric Analysis: Back to the Fundamentals ............................................. 291
Shizuhiko Nishisato
Quantitative Psychology Research
The 80th Annual Meeting of the Psychometric Society,
Beijing, 2015
Wiberg, M. (Eds.)
2016, IX, 398 p. 50 illus., 29 illus. in color., Hardcover
ISBN: 978-3-319-38757-4