PROGRAM OF THE 77TH ANNUAL MEETING OF THE PSYCHOMETRIC SOCIETY

The 77th Annual Meeting of the Psychometric Society (IMPS2012) was held at the Cornhusker Hotel in Lincoln, Nebraska, USA, July 9–12, 2012.

Monday, July 9, 2012

PRE-CONFERENCE WORKSHOPS

PSYCHOMETRICS WITH R. Facilitators: Florian Wickelmaier and Hannah Frick

ANALYZING LARGE SCALE ASSESSMENT DATA WITH THE GENERAL DIAGNOSTIC MODEL. Facilitators: Matthias von Davier and Claus H. Carstensen

MODELS OF MEASUREMENT: FROM AN ENGINEERING POINT OF VIEW. Facilitator: Luca Mari

Tuesday, July 10, 2012

BALLROOM SESSIONS

KEYNOTE ADDRESS
Stephen Raudenbush; *Modeling Mediation: Causes, Markers, and Mechanisms.*

PLENARY SESSIONS
Conference Opening Ceremony & Group Photo
Lifetime Achievement Award & Travel Awards Announcements

ARBOR I SESSIONS

ESTIMATION I. Moderator: Grant Orley
Chunmei Zheng, Zairul Nor Deana Md Desa, Amy Gaumer Erickson, and William P. Skorupski; *Comparison of Bifactor Model by WinBUGS, BMIRT, Mplus, and LISREL for Graded Response Data.*
Scott Monroe and Li Cai; *Estimation of a Ramsay-Curve IRT Model Using the Metropolis-Hastings Robbins-Monro Algorithm.*
Jodi M. Casabianca and Brian Junker; *Estimating Latent Distributions with Loglinear Smoothing Models.*
Steffi Pohl and Linda Graefe; *Modeling Missing Responses in Competence Tests.*

FACTOR ANALYSIS I. Moderator: Grant Orley
Myrsini Katsikatsou, Irini Moustaki, Fan Yang-Wallentin, and Karl G. Jöreskog; *Pairwise Likelihood Estimation for Factor Analysis Models with Ordinal Data.*

Edgar C. Merkle and Achim Zeileis; *Tests for Measurement Invariance when Subgroups Are Unknown*.

Michio Yamamoto; *A Rotation Technique in Functional Principal Component Analysis*.

CAT. Moderator: Grant Orley

Lianghua Shu; *On Initial Ability Guesses to Start an Adaptive Test*.

Wen Zeng, Chun Wang, and Hua-Hua Chang; *The Item-Weighted Likelihood Method for Mixed Item Type Computerized Adaptive Testing*.

Yi Zheng, Chun Wang, and Hua-Hua Chang; *Making Multistage Testing More Secure—An Analysis Under the Item Theft Scenario*.

Hyeon-Ah Kang and Hua-Hua Chang; *Exploring the Mutual Information and Bayesian D-Optimality Item Selection Methods in Multidimensional Adaptive Testing*.

Betsy J. Feldman, Todd C. Edwards, R.J. Wirth, Laura E. Gibbons, Christopher B. Forrest, Donald L. Patrick, Heidi M. Crane, and Paul K. Crane; *Improving the Clinical Interpretability of Computerized Adaptive Tests: Development of a Hybrid CAT*.

ARBOR II SESSIONS

DIAGNOSTIC MODELING I. Moderator: Ayo Akinleye

Dong Gi Seo and Adisack Nhouyvanisvong; *Strength Profiles in Large-Scale Assessment: Comparison of the Accuracy and Consistency Using the Rasch and the DINA Diagnostic Classification Models*.

Shiyu Wang and Jeff Douglas; *Consistency of Nonparametric Classification in Cognitive Diagnosis*.

Li Xiao-Min and Wang Wen-Chung; *Detection of Differential Item Functioning in DINA Model*.

Zhang Shumei and Bao Yu; *A Cognitive Diagnosis Model Based on a Particular Polytomous Case*.

Li Xiao-Min and Wang Wen-Chung; *Effects of Q-Matrix Misspecification for Cognitive Diagnosis Models*.

APPLICATIONS I. Moderator: Ayo Akinleye

Yueqin (Jean) Hu, John R. Nesselroade, and Monica K. Erbacher; *Test Reliability at the Individual Level: How Well Are We Measuring Intraindividual Change?*

Tiffany Sheffield, Jennifer Nelson, Megan Butcher, and Kimberly Espy; *The Implication of Model Selection for ADHD Structure and Its Impact on the ADHD—Inhibitory Control Relationship*.

Hao Luo; *Factors Associated with Successful Aging: A Structural Equation Modeling Approach*.

Kei Miyazaki and Takahiro Hoshino; *An Estimation Method for the Effects of Household Inventory and of Brand Switching Separately on No-Purchase Behavior for Products*.

Jingjing Yao and Magdalena Mo Ching Mok; *Multidimensional Rasch Analysis of 21st Century Core Competencies for Higher Education Questionnaire with Multiple Subscales*.

STATISTICS & DATA ANALYSIS I. Moderator: Ayo Akinleye

Yoshio Takane and Lixing Zhou; *Decompositions of Chi-Square Statistics in Contingency Tables*.

Prathiba Natesan and Xing Qin; *Multitrait Multirank Model: Formulation and Demonstration Using LibQUAL+Æ*.

Laura Castro-Schilo, Keith F. Widaman, and Kevin J. Grimm; *Neglect the Structure of Multitrait-Multimethod Data at Your Peril: Implications for Associations with External Variables*.

Rivka M. de Vries and Richard D. Morey; *Statistical Analysis of Single-Subject Data: A Bayesian Model.*

Mohan Dev Pant and Todd Christopher Headrick; *Augmenting Fleishman's Power Method Using a Doubling Technique Based on Standard Normal and Logistic Distributions.*

LANCASTER I, II, III SESSIONS

STATE-OF-THE-ART TALK
Jennifer Hill; *Multiple Imputation: State of the Art and Future Directions.*

INVITED TALK
Alberto Maydeu-Olivares; *Testing for Approximate Fit in Categorical Data Analysis (with Applications to IRT).*

LANCASTER IV, V, VI SESSIONS

STATE-OF-THE-ART TALK
Emilio Ferrer; *Modeling the Dynamics in Dyadic Interactions.*

INVITED TALK
John (Jack) McArdle; *The Importance of Modeling Measurement Errors in Longitudinal Data Analysis.*

OLIVE BRANCH SESSIONS

INVITED SYMPOSIUM (Cognitively Diagnostic Assessment: Methods and Practices). Organizer: Bor-Chen Kuo

Bor-Chen Kuo, Huey-Min Wu, and Shu-Chuan Shih Kuo; *The Validity of Q-Matrix Design for DINA Model: A Practical Perspective.*

Huey-Min Wu, Bor-Chen Kuo, and Chih-Wei Yang; *Using DINA Model and Automated Scoring of Complex Tasks in Computer-Based Testing.*

Shu-Chuan Shih, Shu-Chuan Lee, and Chih-Wei Yang; *Application of Higher-Order DINA Model to Game-Based Number Sense Assessment.*

Hsiao-Shan Pai, Bor-Chen Kuo, and Chun-Hua Chen; *Cognitive Diagnostic Indices with Pattern and Attribute Level Adjustment.*

INVITED SYMPOSIUM (Quality Control in Assessments). Organizer: Yi-Hsuan Lee

Richard Wanjohi, Peter van Rijn, and Alina A. von Davier; *A State Space Approach to Modeling IRT and Population Parameters from a Long Chain of Test Administrations.*

Yi-Hsuan Lee and Shelby J. Haberman; *Applying Harmonic Regression to Examine Stability of Mean Scale Scores.*

Minzhao Liu, Yi-Hsuan Lee, and Alina A. von Davier; *Detection of Unusual Administrations Using a Linear Mixed Effects Model.*

Jiahe Qian, Alina A. von Davier, and Yanming Jiang; *Achieving a Stable Scale for an Assessment with Multiple Forms—Weighting Test Samples in IRT Linking and Equating.*

Alina A. von Davier, Yi-Hsuan Lee, and Charles Lewis; *Maintaining Test Integrity and Quality Control for Multi-stage Tests.*

INVITED SYMPOSIUM (Structured High-Dimensional IRT Models for Educational Surveys). Organizer: Frank Rijmen

Minjeong Jeon, Frank Rijmen, and Sophia Rabe-Hesketh; *A Generalization of the Multiple-Group Bifactor Model with an Application of Differential Item Functioning*.

Matthias von Davier, Frank Rijmen, Minjeong Jeon, and Sophia Rabe-Hesketh; *Stochastic Estimation for Discrete Higher Order Latent Structure Models*.

Peter W. van Rijn, Paul Deane, Frank Rijmen, and Randy E. Bennett; *Local Dependence and Dimensionality Considerations in Applying Multidimensional IRT Models to Innovative Writing Assessment*.

Frank Rijmen, Minjeong Jeon, Matthias von Davier, and Sophia Rabe-Hesketh; *A Third Order Item Response Theory Model for Modeling the Effects of Domains and Subdomains in Large-Scale Educational Assessment Surveys*.

YANKEE HILL I, II SESSIONS

IRT I. Moderator: Michael Zweifel

Johan Braeken; *Archimedean Item Response Models*.

Li Cai and Carol Woods; *Maximum Marginal Likelihood Item Bifactor Analysis with Estimation of the General Dimension as an Empirical Histogram*.

Lale Khorramdel and Matthias von Davier; *Measuring Response Styles and Response Processes in Rating-Scales: Comparing Multidimensional Simple Structure IRT Models with Bifactor and Higher Order Factor Models*.

Yu-Wei Chang, Rung-Ching Tsai, and Nan-Jung Hsu; *Statistical Properties for the Leave-the-Harder-Till-Later Speeded Rasch Model*.

Joseph F. Lucke; *A Positive Trait Item Response Model*.

LONGITUDINAL. Moderator: Michael Zweifel

Paul Dudgeon; *Local Solutions in Latent Growth Mixture Models for Longitudinal Data*.

Patrick E. Shrout and Sean P. Lane; *Generalizability Theory Estimates of Reliability of Change: How Useful in Assessing Measurement Error Bias in Longitudinal Studies?*

Zhaohua Lu, Sy-Miin Chow, Andrew Sherwood, and Hongtu Zhu; *Fitting Nonlinear Latent Diffusion Process to Irregularly Spaced Longitudinal Data with Efficient MCMC Algorithm*.

Ji Hoon Ryoo; *Testing Measurement Invariance in Latent Transition Analysis*.

MULTILEVEL. Moderator: Michael Zweifel

Jiseung Yang and Li Cai; *Estimation of Contextual Effects through Nonlinear Multilevel Latent Variable Modeling with a Metropolis-Hastings Robbins-Monro Algorithm*.

Yong Luo, Hong Jiao, and Anna Van Wie; *Using a Bayesian Method for Simultaneous Estimation of Student Ability and Teacher and School Effects in a Four-Level Three-Parameter Item Response Theory Model*.

Shonte Stephenson and Katherine Masyn; *A Procedural Framework to Detect School-Level Influences on Item Functioning Using a Two-Level Mimic Modeling Approach*.

Takahiro Hoshino; *Causal Inference for Multilevel Modeling Under Nonrandom Allocation of Level-2 Units*.

Ehri Ryu; *Interaction of Level-1 Variables in Multilevel Structural Equation Models*.

YANKEE HILL III SESSIONS

FIT I. Moderator: Kevin Dahlman

Carol Woods, Li Cai, and Mian Wang; *Evaluation of the Langer Improved Wald Test for DIF Testing*.

Zhen Li and Li Cai; *Summed Score Based Fit Indices for Testing Latent Variable Distribution Assumption in IRT*.

Yang Liu and Alberto Maydeu-Olivares; *The Use of Quadratic Form Statistics of Residuals to Identify IRT Model Misfit in Marginal Subtables*.

Ying-Fang Chen and Hong Jiao; *Does Model Misspecification Lead to Spurious Latent Classes in the Population?*

Sedat Sen, Allan S. Cohen, and Seock-Ho Kim; *Dimensionality Check Using Several Programs*.

OMNIUM GATHERUM. Moderator: Kevin Dahlman

Eric Loken; *Applications of IRT and Diffusion Models*.

Willem J. Heiser and Antonio D'Ambrosio; *Classification of Rankings Within a Kemeny Distance Framework*.

Carina McCormick, John Sabatini, Kelly Bruce, Sandip Sinharay, and Tenaha O'Reilly; *Subscore Evaluation for a Test of Reading Skills*.

William P. Fisher and A. Jackson Stenner; *Units, Laws, Theory, and Metrology in Physics and Psychometrics*.

Vicente Cassepp-Borges and Luiz Pasquali; *Multidimensional Scaling as an Alternative Statistical Method to Analyze Love Attitudes Scale*.

EQUATING I. Moderator: Kevin Dahlman

Minji K. Lee, Hyunjoo Oh, and Hongwen Guo; *The Sensitivity of Equating on Differences in Score Distributions*.

Jiwon Choi and Guemin Lee; *Equating Subscores Using Augmented Scores of Anchor Items*.

Jinghua Liu, Jiyun Zu, Edward Curley, and Jill Carey; *Test Score Equating Using Discrete Anchor Items Versus Passage-Based Anchor Items: A Comparison Study Using Operational Data*.

Daniel M. Bolt; *Measurement of Growth and the Problem of Scale Shrinkage: A New IRT Perspective*.

Michael Chajewski and Kevin Sweeney; *Investigating Equating Anchor Item Stability Using Iterative Bootstrap and Jackknife Derived Standard Errors of Equated True Scores*.

ATRIUM SESSIONS

PLENARY SESSIONS
Opening Reception

POSTER SESSION I

Lawrence Lo and Eric Loken; *An Application of Diffusion Models for Two-Choice Response Tasks in Implicit Association Tests*.

Jianshen Chen and David Kaplan; *Covariate Balance in a Two-Step Bayesian Propensity Score Approach for Observational Studies*.

Rung-Ching Tsai and Sen-Ren Tsai; *Investigating Population Heterogeneity in Preference Judgment with Paired Comparison Data*.

Nan L. Kong; *A Nonparametric Ability Measure*.

Youngmi Cho; *Detecting Extreme Responders Using a Polytomous Mixture Rasch Model*.

Yudan Chen Wang and Richard A. Faldowski; *Linking Typologies Derived from Latent Class Analysis to Outcome Variables: Comparison Among Three Procedures*.

Adela C. Timmons; *Testing Lagged Intraindividual Mediation Models in a Multilevel Structural Equation Modeling Framework*.

Jung Yeon Park, Matthew Johnson, Young-Sun Lee, Jianzhou Zhang, and Ruchi Sachdeva; *Comparing Attribute Distribution Across Countries; Application to TIMSS 2007 Mathematics*.

Liu Hui and Bian Yufang; *A Research on Diagnosis of International Students' Attribute-Mastery Patterns of Basic Chinese Color Terms*.

Yeongyu Lim and Susan Embretson; *Diagnosing Knowledge States in Mathematical Ability Using Rule Space Model with Different Q-Matries*.

Zhaosheng Luo, Hua-Hua Chang, and Chun Wang; *The Validation of Q-Matrix in a Large Scale Cognitive Diagnostic Assessment*.

Kyungtae Kim and Jwa K. Kim; *Effects of Inter-Trait Correlation on Parameter Estimation in Multidimensional Item Response Theory (MIRT)*.

Wei Wang, Fritz Drasgow, and Liwen Liu; *A Bi-factor Approach to Within-Item Multidimensionality Analysis and Subscore Estimation*.

Katherine Rhodes and Chris Oshima; *Using Mplus Software for IRT Modeling: A Guide for Practitioners*.

Tufi Machado Soares, Sarah Martins Salomão Brodbeck, and Neimar da Silva Fernandes; *Understanding the Student's Anxiety Effect over the Probability of a Correct Answer Using IRT Models*.

Ah Young Shin; *Alternative Verbal Scores for English Language Learners: Examining the Validity Evidence for Score Reporting Modification in a Large Scale Ability Test*.

Mona Rahimi and Yanyan Sheng; *A High Performance Gibbs Sampler for the 2PNO IRT Model*.

Ja Young Kim; *Sample Size and Item Parameter Recovery of Generalized Partial Credit Model*.

David R. King, Zane Blanton, and James S. Roberts; *A Fully Bayesian MCMC Solution to Torgerson's Least Constrained Model for the Law of Categorical Judgement*.

Equating Methods, Seohong Pak, and Guemin Lee; *An Investigation of the Performance of 'Minitest' vs. 'Miditest' for Anchor Test on Kernel and Traditional*.

Chiou-Yueh Shyu; *A Study of the Effect of Representativeness of Anchor Items on Report Scores in Computerized Adaptive Testing*.

Hyung Jin Kim; *The Impact of Synthetic Population Weights on the Accuracy of Different Equating Methods*.

Anna Topczewski; *Examining Grade-to-Grade Variability in the Context of IRT Vertical Scaling*.

Chien-Ming Cheng and Teng-Ming Wang; *The Study of the Accuracy and Consistency of a Series of IRT Observed Score Equatings Using Various Scale Transformation Methods by BIB Design*.

Po-Hsi Chen, Pei-Yu Lee, and Chun-Yu Hsu; *The Validity of Automatic Rating System for Assessing the Creativity Process*.

Su-Ping Hung and FengShuo Yu; *Applying Object-Oriented Design on the Development of an e-Testing System*.

Kentaro Kato; *Setting a Target Test Information Function for Assembly of IRT-Based*.

Shu-Ying Chen and Hsiu-Yi Chao; *A Comparative Study of Test Overlap Control Methods in Computerized Adaptive Testing*.

Wednesday, July 11, 2012

ARBOR I SESSIONS

ESTIMATION II. Moderator: Grant Orley

Chueh-An Hsieh; *The Effect of Varying Degrees of Nonnormality in Associative Latent Trajectory Models*.

Jared K. Harpole and Carol M. Woods; *Evaluation of Bandwidth Selection Methods Using Kernel Density Estimation*.

Gongjun Xu, Chun Wang, Hua-Hua Chang, and Zhiliang Ying; *Deriving the Reliability Measures for Multistage Testing*.

Jennifer Wright and Li Cai; *Logistic Function of a Monotonic Polynomial Using MML-EM*.

Silvia Bianconcini, Silvia Cagnone, and Dimitris Rizopoulos; *Approximate Likelihood Inference in Generalized Linear Latent Variable Models*.

FACTOR ANALYSIS II. Moderator: Grant Orley

Takashi Murakami; *Semimetric Principal Components Analysis for Ordered Ternary Variables*.

Xiaoling Zhong and Wen-Chung Wang; *Choosing an Invariant Reference Indicator when Testing Invariance in Multiple Group Factor Analysis*.

Yiu-Fai Yung and Ke-Hai Yuan; *Computing Bartlett's Factor Scores with Exogenous Observed Predictors*.

Zijun Ke and Guangjian Zhang; *Standard Errors for Parameter Estimates of Dynamic Factor Analysis with Non-normal Data*.

Roger E. Millsap; *Ordering of the Factor Score by the Sum of the Observed Measures: When Is It Monotonic?*

APPLICATIONS II. Moderator: Ayo Akinleye

Sangeeta Agrawal, Jim Asplund, and Yongwei Yang; *Correlates to Non-response Behaviors on a Web-Based Assessment*.

Xiaoling Fan, Cuiping Yang, Jiashu Xie, and Zhiming Yang; *Development of Learning Adaptability Scales For Pupils*.

Wenjing Guo, Yufang Bian, and Wenchao Ma; *General Growth Mixture Analysis of Adolescents' Developmental Trajectories of Internet Addiction Disorder: Patterns, Antecedents, and Consequence*.

Hector Ponce and Prathiba Natesan; *Simulation of LibQUAL+Æ Lite from LibQUAL+Æ: An Analysis of Confidence Intervals, Root Mean-Square Deviations and Bias*.

Zairul Nor Deana Md Desa, William P. Skorupski, and Paul E. Johnson; *Bi-factor Compensatory and Partially Compensatory Multidimensional Item Response Theory for Subscores Estimation, Reliability and Validity*.

CROSS CULTURAL. Moderator: Grant Orley

Jonathan Weeks, Matthias von Davier, and Kentaro Yamamoto; *Design Considerations for the Programme for International Student Assessment*.

Eunike Wetzel and Claus H. Carstensen; *Linking PISA 2000 and PISA 2009: Implications of Instrument Design on Measurement Invariance*.

David Kaplan and Alyn Turner; *Statistical Matching of International Large Scale Assessments: A Case Study of the OECD PISA and TALIS Surveys*.

Jouni Kuha, Irini Moustaki, and Sally Stares; *Sensitivity of Conclusions to Incorrect Assumptions About Cross-National Measurement Equivalence*.

ARBOR II SESSIONS

DIAGNOSTIC MODELING II. Moderator: Ayo Akinleye

Pei-Hua Chen, Wenhao Gui, and Haiyan Wu; *A Randomization and Classification Approach to Construct Parallel Test Forms Based on DINA Model*.

Haiyan Wu; *The Comparison of the General Diagnostic Model (GDM) and Bayesian Networks Using a Middle School Mathematics Test*.

Chanjin Zheng, Chun Wang, and Hua-Hua Chang; *Aggregate Ranked Information Method (ARI) for CD-CAT in a Large Scale Assessment*.

Koken Ozaki; *Complexity Index in Cognitive Diagnosis Models*.

Hans-Friedrich Koehn, Chia-Yi Chiu, and Michael J. Brusco; *Heuristic Cognitive Diagnosis when the Q-Matrix is Unknown*.

STATISTICS & DATA ANALYSIS II. Moderator: Ayo Akinleye

Matthew S. Johnson and Jessica Marini; *Measuring the Effectiveness of an Educational Intervention when Assignment Is Related to Pre-Intervention Ability*.

Ian Carroll and Carol Woods; *MIMIC DIF Testing when the Latent Variable Variance Differs Between Groups*.

Hye Won Suk and Heungsun Hwang; *Kernel Generalized Structured Component Analysis*.

Hye Won Suk, Ji Yeh Choi, and Heungsun Hwang; *Hierarchically Structured Fuzzy c-Means Clustering*.

LANCASTER I, II, III SESSIONS

INVITED TALK

Valerie Shute; *Stealth Assessment in Games*.

STATE-OF-THE-ART TALK

Pascal Deboeck; *From Modeling Long-Term Growth to Short-Term Fluctuations: Differential Equations are the Language of Change*.

LANCASTER IV, V, VI SESSIONS

INVITED TALK

Stanley Wasserman; *Correspondence Analysis of Multilevel Networks*.

KEYNOTE ADDRESS

Luca Mari; *An Overview on Measurement Uncertainty*.

STATE-OF-THE-ART TALK

Melanie Wall and Jung Yeon Park; *Item Response Theory Methodology Extensions Motivated by Applications to Psychiatric Disorder Criteria*.

INVITED SYMPOSIUM (Nonparametric Item Response Theory). Organizers: L. Andries van der Ark and Rob R. Meijer

Klaas Sijtsma; *Introduction to Nonparametric IRT*.

J. Hendrik Straat; *Minimum Sample Size Requirements for Mokken Scale Analysis*.

Renske E. Kuijpers; *Standard Errors and Confidence Intervals for Scalability Coefficients in Mokken Scale Analysis Using Marginal Models*.

Rob R. Meijer; *Investigating Invariant Item Ordering in Personality and Clinical Scales: Some Empirical Findings and a Discussion.*

Wilco H. M. Emons; *Ordinal Assessment in Clinical and Medical Psychology.*

EQUATING II. Moderator: Michael Zweifel

Robert L. Smith, Charles Lewis, and Tammy J. Trierweiler; *Nonparametric IRT Equating.*

Anton Bèguin, Michael Nering, Won-suk Kim, and Louis Roussos; *Random Equivalent Group Equating Corrected for Population Differences.*

Chien-Ming Cheng, Bor-Chen Kuo, and Hsuan-Po Wang; *The Comparison of Subscale Score Estimating Based on Horizontal and Vertical Equating Effects.*

Yuehmei Chien and Chingwei David Shin; *An Recursive Algorithm for IRT Observed Score Equating.*

Xiaoting Huang and Prashant Loyolka; *Constructing Vertically Scaled Math Tests to Measure the Value-Add in China's VET Schools.*

OLIVE BRANCH SESSIONS

INVITED SYMPOSIUM (Metaphors and Measurement: An Invited Symposium on Validity). Organizer: Andrew Maul

Andrew Maul; *Are We Measuring or Just "Measuring"?: On the Role of Metaphor in Human Science Measurement.*

William Fisher; *Metaphor as Measurement and Vice Versa.*

Michael Kane; *The Syntax and Semantics of Measurements.*

Klaas Sijtsma; *Validity as a Two-Sided Problem.*

INVITED SYMPOSIUM (Multilevel Modeling Applications). Organizer: R.J. De Ayala

Mathew Grady; *Multilevel IRT Models for Mixed-format Tests with Multiple Content Areas.*

Leslie Shaw; *Incorporating Latent Variable Outcomes in Value-Added Assessment: An Evaluation of Univariate and Multivariate Measurement Model Structures.*

Houston Lester, Chaorong Wu, and James A. Bovaird; *Evaluating Contextual Effects in Multilevel SEM: The Effects of Non-invariant Measurement at the Macro and Micro Levels with Small Sample Sizes.*

Anna Van Wie, Yong Luo, and Hong Jiao; *A Four-Level Item Response Theory Model for Simultaneous Estimation of Student, Teacher, and School Effects.*

YANKEE HILL I, II SESSIONS

IRT II. Moderator: Weldon Smith

Mario Luzardo, Diego Forteza, Dario Padula, and Nelson Chavez; *Conditions for the Joint Consistency of a Multidimensional Ramsay, Äôs Model.*

Jinsong Chen and Jimmy de la Torre; *Insulated Nominal Categories Models for Multiple-Choice Response Data.*

Peter van Rijn and Frank Rijmen; *On the Relation Between the Explaining Away Phenomenon and Paradoxical Results in Multidimensional Item Response Theory.*

Isabella Sulis and Vincenza Capursi; *Building up Adjusted Indicators of Students' Evaluation of University Courses Using Generalized Item Response Models.*

Yanyan Sheng and Mohan Pant; *An Empirical Study of the Three-Parameter Multi-unidimensional Model.*

BAYESIAN. Moderator: Weldon Smith

Tanja Krone, C.J. Albers, and M.E. Timmerman; *Psychological Time Series Analysis: ARIMA or Bayesian Dynamic Linear Modeling?*

Prathiba Natesan; *Bayesian Estimation of One-Step Ordinal Structural Equation Models Using IRT Scores.*

Kensuke Okada; *Estimation of Reliability: A Bayesian Model Averaging Approach.*

Tomoya Okubo; *Applying Mixed-Multivariate Beta Distribution to Item Response Theory.*

TEST DESIGN. Moderator: Weldon Smith

Alina A. von Davier and Minh Q. Duong; *Heterogeneous Populations and Test Design.*

Usama S. Ali, Hongwen Guo, and Gautam Puhan; *The Correspondence of the Classical and IRT Methods in Statistical Test Specifications.*

Vincent Kieftenbeld and Song Foh Chew; *Constructing Locally Invariantly Ordered Test Forms.*

Russell G. Almond, Yoon Jeon Kim, Gertrudes Velasquez, and Valerie J. Shute; *How Task Features Impact Evidence from Assessments Embedded in Simulations and Games.*

Xinhui Xiong and Wim Van der Linden; *Automated Assembly of Test Forms with Anchors.*

YANKEE HILL III SESSIONS

FIT II. Moderator: Kevin Dahlman

Kristian E. Markon; *The Effect of Response Model Misspecification and Uncertainty on the Psychometric Properties of Estimates.*

Mark Hansen and Li Cai; *When Local Independence Diagnostics Mislead.*

Taehun Lee and Li Cai; *A Note on a Tucker-Lewis Index for Item Response Theory Modeling.*

Andries van der Ark; *Visualizing Results from Nonparametric IRT.*

ASSESSMENT. Moderator: Kevin Dahlman

Chun Wang, Yi Zheng, and Hua-Hua Chang; *A New Index to Measure TEST Security for Online Testing.*

Shu-chuan Kao and Jerry Gorham; *Examining Relationships Between Item Latency, Item Statistics, and Examinee's Demographic Characteristics for Compromised Items.*

Hye-Jeong Choi and Caron A.C. Clark; *An Integrative Model to Combine Response Time with Response Accuracy.*

Jay Powell; *Are We Assessing Students Using the System Noise from Our Data Matrices?*

SEM. Moderator: Kevin Dahlman

Sunthud Pornprasertmanit, Wei Wu, and Todd D. Little; *Using a Monte Carlo Approach for Nested Model Comparisons in Structural Equation Modeling.*

Po-Hsien Huang and Li-Jen Weng; *Structural Equation Modeling with Intraclass Correlated Observations: A Comparison of Two Existing Approaches and Their Extension.*

Suzanne Jak, Frans J. Oort, and Debora L. Roorda; *Meta-Analytic Structural Equation Modeling with Maximum Likelihood Estimation.*

Ben Goodrich; *Step Zero: Selecting a Structural Equation Model Via a Dispersion Function.*

Michael D. Hunter; *The Addition of LISREL Model Specification to OpenMx.*

ATRIUM SESSIONS

POSTER SESSION II

Mario Luzardo, Diego Forteza, Dario Padula, and Nelson Chaves; *Design and Implementation of Computerized Adaptive Test for Student Assessment in Uruguay.*

Jonathan Helm and Emilio Ferrer; *Modeling Change in a Correlation over Time: An SEM Approach.*

Yi-Chun Lin and Chung-Ping Cheng; *Power Analysis of Path Coefficients in SEM with OpenMx.*

Kelly S. Crowe, Whitney G. Moore, Mijke Rhemtulla, and Todd D. Little; *Leveraging Planned Missing Data Designs to Increase Information and Efficiency.*

Richard M.Kinai, Terrance D. Jorgenson, Graham G. Rifenbark, Fan Jia, Alexander M. Schoemann, Todd D. Little, and Wei Wu; *Power and Bias in Three-Forms Planned Missing Data Designs for Longitudinal Mediation.*

Kimberly Gibson, Alexander M. Schoemann, Fan Jia, Graham G. Rifenbark, Terrance D. Jorgenson, Mijke Rhemtulla, Wei Wu, and Todd D. Little; *Power of Planned Missing Designs in Longitudinal Panel Designs.*

Geneva T. Dodson, Steven M. Boker, John R. Nesselroade, Michele K. Evans, and Alan B. Zonderman; *Confirming Construct Validity Across Literacy and Income Levels Using a Higher-Order Invariance Factor Model.*

Brian French and Holmes Finch; *Latent Variable Model Parameter Invariance Testing Under a Variety of Measurement Invariance Conditions: A Monte Carlo Study.*

Naoya Todo; *An Effect of Local Dependency for Reliability Estimation.*

Yi-Fang Wu, Mengyao Zhang, and Anthony Fina; *Bayesian Statistical Framework for Coefficient Alpha Under Different Testing Modes.*

Kevin A. Hallgren and Katie Witkiewitz; *Inter-Rater Reliability on the Unitization of Continuous Data: Untangling Accuracy and Precision Agreement.*

Ethan R. Van Norman, Cengiz Zopluoglu, and Theodore Christ; *The Effects of Baseline Estimation on the Validity, Reliability, and Precision of Estimates of Growth of Curriculum Based Measures of Reading (CBM-R): Implications for Practice.*

Hanjoe Kim and Roger Millsap; *Using the Bollen-Stine Bootstrapping Method for Evaluating Approximate Fit.*

Stephen France; *Implementing a Family of Agreement Metrics.*

Ching Lin and Chung-Ping Cheng; *Bootstrapping Chi-Square Statistics and Fit-Index Structural Equation Models with OpenMx.*

Jihye Kim and C. Oshima; *Effect of Standard Deviation Difference of Ability Distributions in DIF Detection.*

Kazuya Ikehara; *Scheffe's Method for Incomplete Paired Comparisons Considering Latent Class.*

Shu-Ping Chen and Chung-Ping Cheng; *Estimating Latent Nonlinear Effects with OpenMx.*

Satoshi Usami; *Exploratory Non-hierarchical Cluster Analysis for Pre-Post Designs.*

Kenpei Shiina, Saori Kubo, Yoshihiro Ouchi, and Takashi Ueda; *An Aberrant Behavior of Pearson's Correlation Coefficient when Two Variables Have Unequal Number of Categories.*

Graham G. Rifenbark and Carol M. Woods; *Verifying Classification Effect by a Guttman-Based Person-Fit Index Set on a Two-Tier Number Sense Test.*

Tsai-Wei Huang; *Developing and Validating Bullying Bystander Perception Scale (BBPS) with Two Stages of Factor Analysis Process.*

Chiao-Lin Huang, Tsai-Wei Huang, and I-Chi Tsao; *Evaluation of Alternative Measures for Assessing Goodness-of-Fit Within the Cumulative Logit Proportional Odds Model.*

Michael Thomas, Gregory G. Brown, Ruben C. Gur, and John A. Hansen; *Cognitive-Psychometric Modeling of Army Soldiers' Executive Functioning Performance on the Penn Conditional Exclusion Test.*

Man Hung, Charles L. Saltzman, Shirley Hon, Stefan Rhodewalt, Ashley M. Woodbury, Philip
   Tang, Florian Nickisch, Timothy Beals, Daniel O. Clegg, and Tom Greene; *Psychometric Comparison of Three Patient-Reported Outcomes Instruments: LE CAT, FFI and FAAM*.

Justin Young; *Augmenting the Achievement Goal Questionnaire-Revised*.

Lee LaFond, Kathleen Banks, and Catherine Welch; *Exploring Gender Differential Bundle Functioning in an Algebra Readiness Assessment*.

Tomoya Okubo; *Applying Mixed-Multivariate Beta Distribution to Item Response Theory*.

Thursday, July 12, 2012

ARBOR I SESSIONS

ESTIMATION IV. Moderator: Michael Zweifel

Jaehoon Seol, Seonho Shin, and Larissa Smith; *Optimal Estimation Method of Multidimensional IRT Using Simulated Annealing*.

Kotaro Ohashi, Hideki Toyoda, and Kazuya Ikehara; *A Proposal for an Index of Saturation of Ideas Using Estimation Methods of Population*.

Peter F. Halpin and Raoul P.P.P. Grasman; *An EM Algorithm for Hawkes' Process*.

Zhenqiu (Laura) Lu, Zhiyong (Johnny) Zhang, and Allan Cohen; *Latent Growth Models with Non-ignorable Missing Data: Bayesian Inference and Model Selection Criteria*.

Joost R. Van Ginkel, Anita J. van der Kooij, and Mariëlle Linting; *Multiple Imputation Using CATREG*.

ARBOR II SESSIONS

APPLICATIONS III. Moderator: Ayo Akinleye

Mariano Porcu and Isabella Sulis; *Generalized Mixed Models to Adjust Programme Degree Efficiency Indicators for Students' Socio-Cultural Characteristics*.

Anne Thissen-Roe; *Modeling Situational Judgment Items with Multiple Distractor Dimensions*.

Takashi Akiyama, Koken Ozaki, and Hideki Toyoda; *The Measurement of the Individual Price Sensitivity Using Item Response Theory*.

Hongli Li, Charles Hunter, and Takako Chris Oshima; *Gender DIF in Reading Tests: A Meta-Analysis*.

LANCASTER I, II, III SESSIONS

STATE-OF-THE-ART TALK
Nicole A. Lazar; *The Challenges of Functional Magnetic Resonance Imaging Data*.

STATE-OF-THE-ART TALK
Michael Kane; *The Theory and Practice of Validation*.

INVITED TALK
Wen Chung Wang; *The Random-Effect Strategy in the IRT Framework*.

OLIVE BRANCH SESSIONS

INVITED SYMPOSIUM (New Developments in Psychometrics with R). Organizer: Florian Wickelmaier

Alexander M. Schoemann, Sunthud Pornprasertmanit, and Patrick J. Miller; *simsem: SIMulated Structural Equation Modeling in R.*

Florian Wickelmaier, Carolin Strobl, and Achim Zeileis; *Model-Based Recursive Partitioning for Bradley-Terry Models.*

Hannah Frick, Carolin Strobl, Friedrich Leisch, and Achim Zeileis; *Mixtures of Rasch Models with R Package Psychomix.*

Phil Chalmers; *mirt: A Multidimensional Item Response Theory Package in R.*

ESTIMATION III. Moderator: Michael Zweifel

Phillip M. Mangos, Anne Thissen-Roe, and John Morrison; *Predicting Psychometric Parameters Derived Under Dominance and Ideal Point Assumptions.*

Xinming An and Yiu-Fai Yung; *Rethinking the Newton Type Algorithms for the Estimation of Item Response Theory Model.*

Todd Christopher Headrick and Yanyan Sheng; *A Proposed Measure of Internal Consistency Reliability: Coefficient L-alpha.*

Shin-ichi Mayekawa and Kensuke Okada; *Expanded Orthogonal Procrustes Transformation and Its Applications to Individual Differenced Multidimensional Scaling and Multiple-Group Factor Analysis.*

Shiau-Chian Tseng, Bor-Chen Kuo, and Huey-Min Wu; *Higher-Order Item Response Theory Based Plausible Values Method.*

FIT III. Moderator: Grant Orley

Nina Deng and Ronald Hambleton; *Evaluating IRT- and CTT-Based Approaches of Estimating Measurement Classification Consistency and Accuracy Indices.*

Jungkyu Park and Hsiu-Ting Yu; *The Investigations of Information Criteria on Selecting the Numbers of Latent Classes in Multilevel Latent Class Model.*

Won-Chan Lee and Mikyung Lee; *Comparison of IRT Classification Accuracy Indices.*

Cheng-Te Chen, Wen-Chung Wang, and Ching-Lin Shih; *Effect of Scale Purification on the Assessment of Differential Rater Functioning.*

Douglas Steinley; *Properties of the Adjusted Rand Index.*

YANKEE HILL I, II SESSIONS

IRT III. Moderator: Weldon Smith

David Thissen; *Using the Testlet Response Model as a Shortcut to Multidimensional Item Response Theory Subscore Computation.*

Ronli Diakow, David Torres Irribarra, and Mark Wilson; *Evaluating the Impact of Alternative Models for Between and Within Construct Relations.*

Yoav Bergner, Stefan Droschler, Saif Rayyan, Daniel Seaton, Gerd Kortemeyer, and David Pritchard; *Item Response Theory in the Style of Collaborative Filtering.*

Yan Huo, Jimmy de la Torre, Eun-Young Mun, Helene White, Anne Ray, and Yand Jiao; *A New IRT Approach Using MCMC for Integrative Data Analysis of Alcohol Intervention Studies.*

APPROACHES II. Moderator: Weldon Smith

Ulf Bockenholt; *Modeling Motivated Misreports to Sensitive Survey Questions*.

Marie-Anne Mittelhaeuser, Anton Bèguin, and Klaas Sijtsma; *An Application of the Mixture Rasch Model: Modeling Differences in Test-Taking Motivation*.

Jamie Marincic; *Differences in Vague Quantifier Interpretation: Influences on and Detection by Latent Variable Models*.

Yongwei Yang, Sangeeta Agrawal, James K. Harter, and Dan Witters; *A Multi-faceted Look at Context Effects*.

Hong Jiao, George Macready, and Matthew Johnson; *A Four-Parameter Mixture Item Response Theory Model*.

YANKEE HILL III SESSIONS

APPROACHES I. Moderator: Kevin Dahlman

Pieter Oosterwijk, Andries van der Ark, and Klaas Sijtsma; *Sample Fluctuations of Reliability Coefficients*.

Pascal R. Deboeck and Kristopher J. Preacher; *No Need to be Discrete: A Method for Continuous Time Mediation Analysis*.

Yen Lee, Shlomo Sawilowsky, and Chung-Ping Cheng; *Comparison Between the Power Method and Maximum Entropy Procedure as a Real Data Approximated Data Generation Procedure*.

Justin Kern and Sungjin Hong; *Mapping of Cognitive Maps via Bidimensional and Bivariate Polynomial Regressions*.

Gabriela Koppenol-Gonzalez, Samantha Bouwmeester, and Jeroen Vermunt; *Revealing Switches in Children's Memory Processes: A Dynamic Latent Variable Model*.

STATISTICS & DATA ANALYSIS III. Moderator: Kevin Dahlman

Clintin P. Davis-Stober and Jason Dana; *The Random Estimator Paradox: Irreplicability in the Behavioral Sciences*.

Lawrence Lo, Peter Molenaar, Michael Rovine, and Nilam Ram; *Hybrid Kalman Filter Models for Unequally Spaced Time Series Designs*.

Hao Wu and Michael C. Neale; *Confidence Interval for a Bounded Parameter: With Application to Variance Component Models in Twin Studies*.

Jeffrey N. Rouder, Richard D. Morey, and Jordan M. Province; *Default Bayes Factors to Replace ANOVA Tests*.

Hsiu-Ting Yu; *On the Decisions of the Random Component Structure for Applying Linear Mixed Effect Regression Models to Psycholinguistic Data*.

BALLROOM SESSIONS

DISSERTATION AWARD TALK

Brandon Turner; *Likelihood-Free Bayesian Modeling*.

PRESIDENTIAL ADDRESS

Mark Wilson; *Seeking a Balance Between the Statistical and Scientific Elements in Psychometrics*.

PLENARY SESSIONS

Conference Closing Ceremony

Business Meeting

Banquet and Best Junior Presenter Award and Best Poster Presentation Award