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EDUCATION

Ph.D. Educational Psychology, University of Illinois, 2007

Specialization: Applied statistics & measurement

M.S. Statistics, University of Illinois, 2005

B.A. Economics, *summa cum laude*, University of New Mexico, 2003

RESEARCH EXPERIENCE

- 2021- **Professor of Inquiry Methodology**, Counseling and Educational Psychology, Indiana University, Bloomington, IN
- 2018- **Associate Professor of Inquiry Methodology**, Counseling and Educational Psychology, Indiana University, Bloomington, IN
- 2018- **Professor II**, Centre for Educational Measurement at the University of Oslo, Norway
- 2015-2017 **Professor of Educational Measurement**, Centre for Educational Measurement at the University of Oslo, Norway
- 2010-2015 **Assistant Professor of Inquiry Methodology**, Counseling and Educational Psychology, Indiana University, Bloomington, IN
- 2007-2009 **Research Associate**, Research and Analysis Unit, IEA-DPC, Hamburg, Germany
- 2006-2007 **Statistical Research Consultant**, Women's Health Sciences Division National Center for Post-Traumatic Stress Disorder, Boston, MA
- 2006 **Research Analyst / Statistician**, Boston Veterans Affairs Research Service, Boston, MA
- 2004-2006 **Research Assistant**, Educational Psychology University of Illinois, Champaign, IL

TEACHING EXPERIENCE

- 2021- **Professor of Inquiry Methodology**, Counseling and Educational Psychology, Indiana University, Bloomington, IN
Courses: Covariance structure analysis, longitudinal data analysis, intermediate statistics
- 2018- **Associate Professor of Inquiry Methodology**, Counseling and Educational Psychology, Indiana University Bloomington, IN

Courses: Covariance structure analysis, advanced structural equation modeling, longitudinal data analysis

2015-2017 **Professor of Educational Measurement**, Centre for Educational Measurement, University of Oslo, Norway

Courses: Educational measurement; Introduction to international large-scale assessment

2010-2015 **Assistant Professor of Inquiry Methodology**, Counseling and Educational Psychology, Indiana University, Bloomington, IN

Courses: Multilevel modeling; covariance structure analysis; longitudinal data analysis; multivariate statistics; categorical data analysis

2011 **Visiting Faculty**, Hamburg University, Hamburg, Germany

Course: Longitudinal data analysis

2003-2007 **Teaching Assistant**, Educational Psychology University of Illinois, Champaign, IL

Courses: Statistical Inference in Education; Assessing Student Performance; Educational Statistics

PROFESSIONAL AWARDS & ACADEMIC HONORS

2019 Indiana University Trustee's Teaching Award (2017-2018)

2017 University of Illinois at Urbana-Champaign College of Education Distinguished Alumni Award.

2017 AERA Division D Award for Significant Contributions to Educational Measurement and Research Methodology for **Rutkowski, L.**, von Davier, M, & Rutkowski, D. (Eds.). (2014). *Handbook of international large-scale assessment: Background, technical issues, and methods of data analysis*. London: Chapman & Hall/CRC Press.

2016 American Psychological Association Division 5 *Anne Anastasi Early Career Award* for outstanding contributions to assessment, evaluation, measurement, quantitative or qualitative research methods and/or statistics, and promise of outstanding work.

2014 School Effectiveness and School Improvement SIG Most Highly Scored Session at AERA 2014: "Using the World as an Educational Laboratory": Merging Educational Effectiveness Research and International Comparative Studies.

2013 Mensa Award for Excellence in Research for: Rutkowski, D., **Rutkowski, L.**, & Plucker, J. (2012). International trends in excellence gaps: A growth modeling perspective. *High Ability Studies*, 23(2), 143-166.

2013 Overseas Conference Grant, Indiana University Office of the Vice President of International Affairs.

2011 Short-term faculty exchange award, Indiana University Office of the Vice President of International Affairs and Hamburg University.

2010 Overseas Conference Grant, Indiana University Office of the Vice President of International Affairs.

GRANTS AND CONTRACTS

Funded

2021 **Co-Principal Investigator:** Analyzing International Large-Scale Assessments in Bosnia and Herzegovina. US State Department, \$38,009.

2020 **Co-Principal Investigator:** Evaluation of Indiana's Interim Assessments. Indiana Department of Education, \$14,940

2020 **Principal Investigator:** Impacts of the new ILEARN platform: Implications for policy and

practice, IU SOE Proffitt Grant, *\$18,070 + student tuition and fee remission.*

- 2019 **Co-Principal Investigator:** Global evidence in education research, IU SOE Start Over Grant, *\$4,000*
- 2019 **Co-Principal Investigator:** Global evidence in education research, IU's Institute for Advanced Study Collaborative Research Award, *\$10,000*
- 2018-2020 **Principal Investigator:** Embracing heterogeneity in international surveys: Optimal test design and parameter estimation, University of Oslo, *\$211,244.*
- 2017 **Principal Investigator:** A look at partial measurement invariance in TALIS 2013: A commissioned report, OECD, *€4,100.*
- 2016-2020 **Principal Investigator:** Embracing heterogeneity in international surveys: Optimal test design and parameter estimation, Norwegian Research Council, *13,197,000 NOK (\$1,539,000).*
- 2013 **Principal Investigator:** Developing a method to correct for measurement error in large-scale assessment conditioning models. Indiana University Kempf Trust Award, *\$12,000 + student tuition and fee remission.*
- 2012-2013 **Principal Investigator:** Examining the sensitivity of population achievement estimates to missing and noisy data in the conditioning model. AERA Research Grant, *\$20,000.*
- 2012 **Principal Investigator:** Examining cultural equivalence of TALIS field trial data. OECD Contract. *\$13,867 plus travel expenses.*
- 2012 **Principal Investigator:** Assessing the impact of measurement error in models for sparse matrices. Indiana University Proffitt Grant, *\$19,000 + student tuition and fee remission.*
- 2010-2011 **Co-Principal Investigator:** International Association for the Evaluation of Educational Achievement, Development of the Teaching and Learning International Survey 2013: *\$34,386 plus travel expenses.*
- 2008 **Co-Principal Investigator:** Arab Bureau of Education, Gulf States, Training Grant, *€30,000 / \$45,000*

Unfunded

- 2020 **Co-Principal Investigator (Finalist):** Evaluation of the Policy Linking Process. Gates Foundation Grant, *\$475,695.*
- 2020 **Co-Principal Investigator:** Data Fusion of National and International Databases: Expanding Usability & Research Possibilities. Indiana University Social Sciences Research Grant, *\$35,665*
- 2014 **Principal Investigator:** Embracing heterogeneity in national and international surveys: optimal design and estimation through unique items and item parameters. National Science Foundation, *\$110,816*
- 2010 **Principal Investigator:** Using National Assessment of Educational Progress data in education and the social sciences: Basic and advanced methods of analysis. U.S. Dept. of Education, *\$291,124*

PUBLICATIONS

(R = Research; T = Teaching; S = Service; ¶ = work with students)

Peer-Reviewed Journal Articles

- R Rutkowski, D. & **Rutkowski, L.** (2021). Running the wrong race? The case of PISA for Development. *Comparative Education Review*, 65(1), 147-165
- R Svetina, D., **Rutkowski, L.**, & Rutkowski, D. (2020). Multiple-group invariance with categorical outcomes using updated guidelines: An illustration using Mplus and the lavaan/semTools packages. *Structural Equation Modeling: A Multidisciplinary Journal*, 27(1), 111-130.
- R¶ Duckworth, J., **Rutkowski, L.**, & Waldron, M. (2020). Sexual risk behaviors during adolescence: Associations with childhood and adolescent BMI. *Journal of Youth and Adolescence*. 49, 1433-1446.

- R Lee, K., **Rutkowski, L.**, Ewert, A. (2020). Testing the associations between climbers' characteristics and motivations with various levels of self-determination. *Lesure/Loisor*, 44(1), 27-50.
- R Tijmstra, J., Liaw, Y., Bolsinova, M., **Rutkowski, L.**, & Rutkowski, D. (2020). Sensitivity of the RMSD for detecting item-level misfit in low-performing countries. *Journal of Educational Measurement*, 57(4), 566-583. <https://doi.org/10.1111/jedm.12263>
- S **Rutkowski, L.** & Valdivia Medinaceli, M. (2020). Review of Computerized adaptive and multistage testing with R: Using packages *catR* and *mstR*. *Journal of Educational and Behavioral Statistics*, 45(1), 108-115.
- R **Rutkowski, L.**, Rutkowski, D., & Liaw, Y. (2019). The existence and impact of floor effects in international assessments. *Assessment in Education: Principles, Policy & Practice*, 26(6), 643-664.
- R Ip, E., Strachan, T., Fu, Y., Lay, A., Willse, J., Chen, S., **Rutkowski, L.**, & Ackerman, T. (2019). Bias and bias correction method for non-proportional abilities requirement (NPAR) tests. *Journal of Educational Measurement*, 56(1), 147-168.
- R Svetina, D., Liaw, Y., **Rutkowski, L.**, Rutkowski, D. (2019). Routing strategies and optimizing design for multistage testing in international large-scale assessments. *Journal of Educational Measurement*, 56(1), 192-213.
- R **Rutkowski, L.**, & Svetina, D. (2019). Collapsing categorical variables and measurement invariance. *Structural Equation Modeling: A Multidisciplinary Journal*, 26(5), 790-802.
- R Rutkowski, D., **Rutkowski, L.**, & Liaw, Y. (2019). Measuring widening proficiency differences in international assessments: Are current approaches enough? *Educational Measurement: Issues and Practice*, 37(4), 40-48.
- R Matta, T., **Rutkowski, L.**, Rutkowski, D., & Liaw, Y. (2018). *Isasim*: An R package for simulating large-scale assessment data. *Large-Scale Assessments in Education*, 6(15), 1-33.
- R Liaw, Y., Wu, Y., Rutkowski, D., & **Rutkowski, L.** (2018). Evaluating PISA scales across Chinese economies. *Asia Pacific Journal of Education*, 38(3), 432-451.
- R Rutkowski, D., **Rutkowski, L.**, Wild, J., & Burroughs, N. (2018). Poverty and educational achievement in the U.S.: A less biased estimate using PISA 2012 data. *Journal of Children and Poverty*, 24(1), 47-67.
- R **Rutkowski, L.** & Rutkowski, D. (2018). Improving the comparability of international assessments: A look back and a way forward. *Scandinavian Journal of Educational Research*, 62(3), 354-367.
- R Svetina, D. & **Rutkowski, L.** (2017). Multidimensional measurement invariance in an international context: Fit measure performance with many groups. *Journal of Cross-Cultural Psychology*, 48(7), 991-1008.
- R **Rutkowski, L.** (2017). Design considerations for planned missing auxiliary data in a latent regression context. *Psychological Test and Assessment Modeling*, 59(1), 55-70.
- R **Rutkowski, L.** & Svetina, D. (2017). Measurement invariance in international surveys: Categorical indicators and fit measure performance. *Applied Measurement in Education*, 30(1), 39-51.
- R **Rutkowski, L.** & Rutkowski, D. (2016). A call for a more measured approach to interpreting and using PISA results. *Educational Researcher*, 45(4), 252-257.
- R **Rutkowski, L.** (Ed). (2016). Introduction to special issue on quasi-causal methods. *Large-Scale*

- R[¶] **Rutkowski, L.**, & Rutkowski, D., & Zhou, Y. (2016). Parameter estimation methods and the stability of achievement estimates and system rankings: Another look at the PISA model. *International Journal of Testing*, 16(1), 1-20.
- R[¶] **Rutkowski, L.** & Zhou, Y. (2015). Correcting measurement error in latent regression covariates via the MC-SIMEX method. *Journal of Educational Measurement*, 52(4), 359-375.
- R[¶] **Rutkowski, L.** & Zhou, Y. (2015). The impact of missing and error-prone auxiliary information on sparse-matrix sub-population parameter estimates. *Methodology*, 11(3), 89-99.
- R Rutkowski, D., **Rutkowski, L.**, & Plucker, J. (Dec. 2014/Jan. 2015). Should individual schools participate in PISA? Some cautions and recommendations for interested participants. *Phi Delta Kappan*, 96(4), 68-73.
- R Svetina, D., & **Rutkowski, L.** (2014). Detecting differential item functioning using generalized logistic regression in the context of large-scale assessments. *Large-Scale Assessments in Education*, 2(4), 1-17.
- R Rutkowski, D., **Rutkowski, L.** & Engel, L. (2014). Inclusive schooling: Fostering citizenship among immigrant students in Europe. *Intercultural Education*, 25(4), 269-282.
- R Wong, Y. J., Brownson, C., **Rutkowski, L.**, Nguyen, C. P., & Becker, M. (2014). A mediation model of professional psychological help seeking for suicide ideation among Asian American and White American college students. *Archives of Suicide Research*, 18(3), 259-273
- R Engel, L., Rutkowski, D., & **Rutkowski, L.** (2014). Global mobility and rising inequality: A cross-national study of immigration, poverty, and social cohesion. *Peabody Journal of Education*, 89(1), 123-140.
- R **Rutkowski, L.** (2014). Sensitivity of achievement estimation to conditioning model misclassification. *Applied Measurement in Education*, 27(2), 115-132.
- R **Rutkowski, L.** & Svetina, D. (2014). Assessing the hypothesis of measurement invariance in the context of large-scale assessments. *Educational and Psychological Measurement*, 74(1), 31-57.
- R Rutkowski, D., & **Rutkowski, L.** (2013). Measuring socioeconomic background in PISA: One size might not fit all. *Research in Comparative and International Education*, 8(3), 259-278.
- R **Rutkowski, L.**, Rutkowski, D., & Engel, L. (2013). Sharp contrasts at the boundaries: School violence and educational outcomes internationally. *Comparative Education Review*, 57(2), 232-259.
- R Rutkowski, D., **Rutkowski, L.**, & Plucker, J. (2012). International trends in excellence gaps: A growth modeling perspective. *High Ability Studies*, 23(2), 143-166.
- R **Rutkowski, L.**, Rutkowski, D, & Plucker, J. (2012). International determinants of private school attendance. *Educational Research and Evaluation*, 18(4), 375-391.
- R Steinfeldt, J., **Rutkowski, L.**, & Orr, T. (2012). Moral atmosphere and masculine norms in American college football. *The Sport Psychologist*, 36, 341-358.
- R Rutkowski, D., **Rutkowski, L.** & Langfeldt, G. (2012). Reading economics, thinking education: The relevance – and irrelevance – of economic theory for curriculum research. *Journal of Curriculum Studies*, 44(2), 165-192.
- R **Rutkowski, L.** (2011). The impact of missing background data on subpopulation estimation. *Journal of Educational Measurement*, 48(3), 293-312.

- R Steinfeldt, J., **Rutkowski, L.**, Vaughn, E., & Steinfeldt, M. (2011). Masculinity, moral atmosphere, and moral functioning of high school football players. *Journal of Sport and Exercise Psychology*, 33(2), 215-234.
- R Rutkowski, D., **Rutkowski, L.**, & Sparks, J. (2011). Information and Communication Technologies Support for 21st Century Teaching: An International Analysis. *Journal of School Leadership*, 21(2), 190-215.
- R/T Gonzalez, E., & **Rutkowski, L.** (2010). Principles of multiple matrix booklet designs and parameter recovery in large-scale assessments. *IEA-ETS Research Institute Monograph*, 3, 125-156.
- R **Rutkowski, L.**, & Rutkowski, D. (2010). Getting it ‘better’: The importance of improving background questionnaires in international assessment. *Journal of Curriculum Studies*, 42(3), 411-430.
- R/T **Rutkowski, L.**, Gonzalez, E., Joncas, M., & von Davier, M. (2010). International large-scale assessment data: Recommendations for secondary analysis and reporting. *Educational Researcher*, 39(2), 142-151.
- R **Rutkowski, L.**, Vasterling, J.J. & Proctor, S.P., Anderson, C. J. (2010). Posttraumatic stress disorder and standardized test-taking ability. *Journal of Educational Psychology*, 102(1), 223-233.
- R Engel, L., Rutkowski, D. & **Rutkowski, L.** (2009). The harsher side of globalization: Violent conflict and academic achievement. *Globalisation, Societies and Education*, 7(4). 433-456.
- R Barth, J., **Rutkowski, L.**, Neuschmidt, O., & Gonzalez, E. (2009). Curriculum coverage and scale correlation on TIMSS 2003. *IEA-ETS Research Institute Monograph*, 2, 85-112.
- R **Rutkowski, L.**, & Rutkowski, D. (2009). Trends in TIMSS responses over time: Evidence of global forces in education? *Educational Research and Evaluation*, 15(2), 137-152.
- S **Rutkowski, L.** (2007). Review of *Clustering for data mining: A data recovery approach*. *Psychometrika*, 72(1), 109-110.

Books and Book Chapters

- R **Rutkowski, L.**, Rutkowski, D., & Svetina, D. (in press). Multistage test design considerations in international large-scale assessments of educational achievement. In T. Nilsen, A. Stancel-Piatak, & J.E. Gustafsson (Eds.) *International Handbook of Comparative Large-Scale Studies in Education*. London: Springer.
- R Rutkowski, D. & **Rutkowski, L.** (in press). Expanding the scope and expanding the challenges: Measuring diverse population in international assessment. In T. Nilsen, A. Stancel-Piatak, & J.E. Gustafsson (Eds.) *International Handbook of Comparative Large-Scale Studies in Education*. London: Springer.
- R Rutkowski, D., **Rutkowski, L.**, & Thompson, G. (2020). Understanding the policy influence of international large-scale assessments in education. In H. Wagemaker (Ed.) *Validity and Reliability: Quality Control Strategies in IEA’s Large-scale Assessments*. London: Springer.
- R **Rutkowski, L.** & Rutkowski, D. (2019). Methodological challenges to measuring heterogeneous populations internationally. In L. Suter, E. Smith, and B. Denman (Eds.), *The Sage Handbook on Comparative Studies* (p. 124-138). London: Sage.
- R **Rutkowski, L.** & Rutkowski, D. (2016). The relation between students’ perception of instructional quality and bullying victimization. In T. Nilsen and J.E. Gustafsson (Eds.), *Teacher quality, instructional quality and student outcomes* (p. 115-134). Amsterdam: IEA.
- R **Rutkowski, L.**, von Davier, M., & Rutkowski, D. (Eds.). (2014). *Handbook of international large-scale assessment: Background, technical issues, and methods of data analysis*. London: Chapman & Hall/CRC Press.
- R **Rutkowski, L.**, von Davier, M. Gonzalez, E., & Zhou, Y. (2014). *Assessment design for international large-scale assessment*. In L. Rutkowski, M. von Davier, & D. Rutkowski (Eds.), *Handbook of international large-scale assessment: Background, technical issues, and methods of data*

- T † **Rutkowski, L.** & Zhou, Y. (2014). *Structural models for international large-scale assessment data*. In L. Rutkowski, M. von Davier, & D. Rutkowski (Eds.), *Handbook of international large-scale assessment: Background, technical issues, and methods of data analysis*. London: Chapman & Hall/CRC Press.
- R Neuschmidt, O., Barth, J., **Rutkowski, L.**, & Rutkowski, D. (2010). Effective schools in the Arab region: A Multi-level approach using TIMSS 2003 data. In D. Sharpes (Ed.), *Handbook on International Studies in Education*. Charlotte, NC: Information Age Publishing.
- T Anderson, C.J., & **Rutkowski, L.** (2008). Logistic regression models for multicategory variables. In J. Osborne (ed.), *Best Practices in Quantitative Methods*. Thousand Oaks, CA: Sage.

Reports and Other Published Work

- R Oliveri, M. E., Rutkowski, D., & **Rutkowski, L.** (2018). Bridging validity and evaluation to match international large-scale assessment claims to country aims. *ETS Research Report, RR-18-27*. Princeton, NJ: Educational Testing Service.
- S Rutkowski, D. & **Rutkowski, L.** (2018). No one likes a bully: How systematic is international bullying and what relationship does it have with mathematics achievement in 4th grade? *IEA Compass: Briefs in Education, 1*.
- R **Rutkowski, L.** (2016). *A look at the most pressing methodological issues in international assessment*. Paper commissioned by the U.S. National Academy of Education. https://naeducation.org/wp-content/uploads/2016/12/Pressing-Methodological-Issues-in-International-Assessment-Rutkowski-2016_web-version.pdf
- S **Rutkowski, L.**, & Rutkowski, D. (2016). *International surveys, educational*. In G. Ritzer (Ed.), *The Wiley-Blackwell Encyclopedia of Globalization*. Hoboken, NJ: Blackwell.
- S Rutkowski, D., & **Rutkowski, L.** (2016). *What teachers can't and can learn from international assessments*. Centre for Educational Measurement at the University of Oslo Working Paper.
- S Carney, C., Rutkowski, D., & **Rutkowski, L.** (2015). *Indiana educational policy context: The case of the Rules for Educator Preparation and Accountability (REPA)*. Paper commissioned by Indiana University School of Education Policy Council and Long Range Planning Committee.
- S Rutkowski, D., **Rutkowski, L.** & Plucker, J. (2014). What matters is what's measured — not who measures it. PDK Blog: Learning on the edge. <http://pdkintl.org/blogs/learning-on-the-edge/matters-whats-measured-measures/>
- S Plucker, J., **Rutkowski, L.**, & Rutkowski, D. (2014, December 2). Should local districts participate in international assessments? *Education Week*. Retrieved from http://blogs.edweek.org/edweek/rick_hess_straight_up/2014/12/should_local_districts_participate_in_international_assessments.html
- S **Rutkowski, L.**, & Rutkowski, D. (2014, March 20). So how overblown were No. 1 Shanghai's PISA results? *Washington Post*. Retrieved from <http://www.washingtonpost.com/blogs/answer-sheet/wp/2014/03/20/so-how-overblown-were-no-1-shanghais-pisa-results/>
- R/S OECD. (2013). *The TALIS 2013 conceptual framework*. Document commissioned by the Organisation for Economic Cooperation and Development. Paris: OECD.
- S Rutkowski, D., & **Rutkowski, L.** (2013, October 2). Schools good, schools bad: Reducing the American education debate to absurdity. *Education Week*, pp. 28, 32.
- S † Rutkowski, D., Wild, J., & **Rutkowski, L.** (2013). Indiana's TIMSS 2011 performance: Outperforming much of the world in math and science, but issues remain for gender achievement and high performers. *CEEP Education Policy Brief, 11*(1), 1-8.

- R **Rutkowski, L.**, & Svetina, D. (2013). *Evaluation of distributional assumptions and hypotheses of measurement invariance in the 2013 Teaching and Learning International Survey*. Paper commissioned by the Organisation for Economic Co-operation and Development. Paris: OECD.
- R/S[¶] OECD. (2012). *Analysis of TALIS 2013 field trial data – summary report*. Document commissioned by the Organisation for Economic Cooperation and Development. Paris: OECD.
- R[¶] **Rutkowski, L.**, Rutkowski, D., Plucker, J., & Prusinski, E. (2011). *Differential impacts of dual and advanced placement credits on higher education outcomes*. Report commissioned by the Office of the Vice President for University Regional Affairs, Planning, and Policy, Indiana University Bloomington.
- R/S OECD. (2009). Chapter five: School evaluation, teacher appraisal and feedback and its impact upon schools and teachers. *Creating Effective Teaching and Learning Environments: First Results from TALIS*. Paris: OECD.
- T **Rutkowski, L.** (2009). Analyzing the TALIS 2008 data using WesVar. *TALIS User Guide for the International Database*. Paris: OECD.

Manuscripts Under Review

- R[¶] Valdivia, M., **Rutkowski, L.**, Svetina, D., & Rutkowski, D. (under review). *Differential item functioning under a multistage test design*. Manuscript submitted to *Journal of Experimental Psychology*.
- R Joo, S.-H., Valdivia, M., Svetina, D., & **Rutkowski, L.** (under review). *Alternatives to weighted item fit statistics for establishing measurement equivalence in many groups*. Manuscript submitted to *Journal of Educational and Behavioral Statistics*.
- R Bolsinova, M., Tijmstra, J., Rutkowski, D., & **Rutkowski, L.** (under review). *Generalizability of cross-cultural measurement differences: A permutation test method*. Manuscript submitted to *Journal of Educational and Behavioral Statistics*.
- R Rutkowski, D., Andrews, C., & Rutkowski, L. (under review). *Understanding standardized assessment literacy in Indiana*. Manuscript submitted to *Educational Assessment*.
- R **Rutkowski, L.** Rutkowski, D., Svetina, D., & Liaw, Y.L. (under review). *Multistage test design considerations for measuring heterogeneous populations*. Manuscript submitted to *Applied Psychological Measurement*.
- R Steinmann, I. & **Rutkowski, L.** (under review). *The link between gender gaps in school enrollment and school achievement*. Manuscript submitted to *Comparative Education Review*.

Manuscripts in Preparation

- R **Rutkowski, L.**, Withrow, A., Rutkowski, D., & Svetina, D. (in preparation). *Survival analysis: A model for understanding test-quitting behavior cross-nationally*.
- T **Rutkowski, L.** & Rutkowski, D. (in preparation). *Introduction to international large-scale assessments*. NCME ITEMS module.
- R Bolsinova, M., **Rutkowski, L.**, Tijmstra, J., & Rutkowski, D. (in preparation). *Explaining differences in test-taking time*.
- R[¶] **Rutkowski, L.** & Zhou, Y. (in preparation). *A fly in the ointment? The effect of observed variable constraints in lavaan*.
- R[¶] Valdivia, M., Joo, S., Svetina Valdivia, D., & **Rutkowski, L.** (in preparation). *Linearizing the root mean-squared deviation*.

PRESENTATIONS

(R = Research; T = Teaching; S = Service; ¶ = work with students; = work supported by Norwegian Research Council Grant; = in rank as associate professor)

- R **Rutkowski, L.**, Sibberns, H., & Rutkowski, D. (2021, November). *Survival models in TIMSS: A model for understanding quitting behavior*. 2021 IEA Research Conference, Dubai, United Arab Emirates.
- R Rutkowski, D., Rutkowski, L., & Plucker, J. (2021, November). *24 years of excellence (gaps)*. 2021 IEA Research Conference, Dubai, United Arab Emirates.
- R **Rutkowski, L.** (2021, July). *Beyond carrying capacity: Have international assessments been stretched too far?* Invited talk at the 2021 International Meeting of the Psychometric Society, online.
- R¶ **Rutkowski, L.**, Withrow, A., Rutkowski, D., & Svetina, D. (2020). *Survival models in international assessment: A model for understanding quitting behavior*. 2020 International Meeting of the Psychometric Society, online.
- R¶ Mughogho, K., **Rutkowski, L.**, & Rutkowski, D. (2019). *An application of PRMSE to evaluate subscale score value in TIMSS 2015 fourth grade mathematics*. 2019 IEA Research Conference, Copenhagen, Denmark.
- R Svetina, D., **Rutkowski, L.**, Liaw, Y.-L., Rutkowski, D. (2019). *Module length and routing methods in a multistage test design: Design and implementation considerations*. 2019 IEA Research Conference, Copenhagen, Denmark.
- R Liaw, Y.-L., **Rutkowski, L.**, & Rutkowski, D. (2019). *Effects of aberrant responding in multistage testing and the changes of country rankings*. 2019 IEA Research Conference, Copenhagen, Denmark.
- R¶ Validivia, M., **Rutkowski, L.**, Svetina, D., & Rutkowski, D. (2019). *Differential item functioning in multistage testing*. 2019 IEA Research Conference, Copenhagen, Denmark.
- S **Rutkowski, L.** & Rutkowski, D. (2019). *No one likes a bully: How systematic is international bullying and what relationship does it have with mathematics achievement in 4th grade?* 2019 IEA Research Conference, Copenhagen, Denmark.
- R **Rutkowski, L.**, Svetina, D., Liaw, Y.-L., & Rutkowski, D. (2019). *Parameter estimation stability and probabilistic routing in multistage testing*. 2019 IEA Research Conference, Copenhagen, Denmark.
- R Liaw, Y.L., Bolsinova, M., Rutkowski, D., **Rutkowski, L.** & Tijmstra, J. (2019) *RMSD: Limitations to DIF detection in low-performing populations*. 2019 IEA Research Conference, Copenhagen, Denmark.
- R Liaw, Y.L., Bolsinova, M., Rutkowski, D., **Rutkowski, L.** & Tijmstra, J. (2019) *RMSD: Limitations to DIF detection in low-performing populations*. 2019 National Council on Measurement in Education Meeting: Toronto, Canada.
- R Svetina, D., Liaw, Y.L., **Rutkowski, L.**, & Rutkowski, D. (2019). *Routing strategies and optimizing design for multistage testing in international large-scale assessments*. 2019 National Council on Measurement in Education Meeting: Toronto, Canada.
- R **Rutkowski, L.** (2018, November). *Measurement challenges in international assessment: RMSD performance among low-performing countries*. Invited discussion at 2018 OECD conference on measurement invariance: Paris, France.

- R **Rutkowski, L.** (2018, July). *Increased heterogeneity in international assessments and associated measurement challenges*. Invited keynote talk at 2018 International Test Commission annual meeting: Montreal, Quebec.
- R **Rutkowski, L., Rutkowski, D., & Liaw, Y.L.**, (2018, April). *Tailored booklets: Improved estimates of latent traits in large-scale assessment?* 2018 National Council on Measurement in Education Meeting: New York, NY.
- R **Rutkowski, L.** von Davier, M., & Rutkowski, D. (2018, April). *Advances in measurement and research methodology of large-scale assessments (AERA Division D Awardee Presentation)*. 2018 American Educational Research Association Meeting: New York, NY.
- R **Rutkowski, L.** (2018, April). *Comments on International Education Assessments: Cautions, Conundrums, and Common Sense*. 2018 National Academy of Education Methods and Policy Uses of International Large-Scale Assessments Meeting: Washington, DC.
- R **Rutkowski, L., Kaplan, D., & Matta, T.** (2017, June). *Imputation as a means to create a synthetic pre/post design*. 2017 IEA Research Conference: Prague, Czechia.
- R **Rutkowski, L., Svetina, D., & Liaw, Y.L.** (2017, June). *The impact of collapsing choices in categorical MG-CFA: A look at model fit and reliability*. 2017 IEA Research Conference: Prague, Czechia.
- R **Rutkowski, L.** (2017, March). *Methodological challenges to measuring heterogeneous populations internationally*. 2017 Comparative and International Education Society Conference: Atlanta, Georgia.
- S Rutkowski, D. & **Rutkowski, L.** (2016, June). *What teachers can't and can learn from international assessments*. 2016 Nordic NLS Teacher Union Conference: Loen, Norway.
- S **Rutkowski, L.** (2016, June). *A look at the most pressing design issues in international assessment*. National Academy of Education Workshop Series on International Large-Scale Assessment: Washington, DC.
- R **Rutkowski, L.** (2016, April). *Design considerations for planned missing auxiliary data in a latent regression context*. National Council on Measurement in Education 2016 Annual Meeting: Washington, DC.
- R Svetina, D. & **Rutkowski, L.** (2016, April). *Measurement invariance in international large-scale assessments: Ordered-categorical outcomes in a multidimensional context*. National Council on Measurement in Education 2016 Annual Meeting: Washington, DC.
- R Rutkowski, D., **Rutkowski, L.**, & Wild, J. (2016, April). *The impact of poverty on US PISA achievement: A propensity score matching approach*. American Educational Research Association 2016: Washington, DC.
- R **Rutkowski, L.** & Svetina, D. (2015, April). *Examining fit criteria in categorical measurement models with a large number of groups*. National Council on Measurement in Education 2015 Annual Meeting: Chicago, IL.
- R **Rutkowski, L., Rutkowski, D., & Zhou, Y.** (2015, April). *Parameter estimation methods and the stability of achievement estimates and system rankings: Another look at the PISA model*. National Council on Measurement in Education 2015 Annual Meeting: Chicago, IL.
- R Rutkowski, D & **Rutkowski, L.** (2015, March). *The OECD's leaning tower: A call for a more measured approach to using and interpreting PISA results*. Comparative and International Education Society Conference. Washington D.C.
- R **Rutkowski, L.** & Rutkowski, D. (2014, June). *The OECD's leaning tower of PISA: Approach with caution, use with care*. Invited expert presentation at the European Commission's Joint Research

- R **Rutkowski, L.** (2014, May). *Improving measurement and comparisons: Unique items and item parameters*. Invited expert presentation at the 2014 Center for Assessment's Colloquium on International Benchmarking: Rationale, Procedures and Validation, Boulder, CO.
- R **Rutkowski, L.** (2013, December). *Improving measurement and comparisons: Unique items and item parameters*. Invited expert presentation at the 2013 Lessons Learned for Understanding Civic and Citizenship Education Conference, University of Roma Tre, Rome, Italy.
- R[¶] Rutkowski, D., **Rutkowski, L.**, & Wild, J. (2013, June). *Predictors of school violence in immigrant populations internationally*. Paper presented at 2013 IEA International Research Conference, Singapore.
- R[¶] **Rutkowski, L.** & Zhou, Y. (2013, April). *The impact of missing and error-prone auxiliary information on sparse-matrix subpopulation parameter estimates*. In G. Wimberly (Chair), *Excellence in Education Research: Early Career Scholars and Their Work Invited Symposium*. Symposium conducted at annual meeting of the American Educational Research Association, San Francisco, CA.
- R **Rutkowski, L.** & Svetina, D. (2013, April). *Assessing the hypothesis of measurement invariance in the context of large-scale assessments*. Paper presented at the annual meeting of the National Council on Measurement in Education, San Francisco, CA.
- R Engel, L., Rutkowski, D., & **Rutkowski, L.** (2013, April). *Poverty, education, and social cohesion: An international perspective*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
- R **Rutkowski, L.**, Rutkowski, D., & Engel, L. (2012, April). *Finding local usefulness in international large-scale assessments*. Paper presented at the annual meeting of the American Educational Research Association, Vancouver, BC, CA.
- R Engel, L., Rutkowski, D., & **Rutkowski, L.** (2012, April). *Unraveled national borders: Assessing social cohesion among students in Europe*. Paper presented at the annual meeting of the American Educational Research Association, Vancouver, BC, CA.
- R **Rutkowski, L.** (2011, September). *Sensitivity of subpopulation achievement estimates to conditioning model misspecification*. Paper presented at the annual European Conference on Educational Research, Berlin, Germany.
- R Rutkowski, D., **Rutkowski, L.**, & Plucker, J. (2011, September). *Trends in excellence gaps: A 12-year international perspective via the multilevel model for change*. Paper presented at the annual European Conference on Educational Research, Berlin, Germany.
- R **Rutkowski, L.**, Rutkowski, D., & Engel, L. (2011, April). *Sharp contrasts at the boundaries: violence and educational outcomes internationally*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- R **Rutkowski, L.**, Rutkowski, D., & Plucker, J. (2011, April). *Trends in excellence gaps: A 12 year, international perspective*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- R **Rutkowski, L.** (2011, April). The impact of missing background data on subpopulation estimation. In B. Clauser (Chair), *Journal of Educational Measurement Invited Symposium*. Symposium conducted at the annual meeting of the National Council on Measurement in Education, New Orleans, LA.
- S **Rutkowski, L.** (2011, February). *Starting a career in large-scale assessment: Experiences of a junior researcher*. Invited presentation at the QUERIES Brownbag Seminar, University of Illinois,

- R **Rutkowski, L.** (2010). *The impact of missing data on subgroup estimation in large-scale assessment*. Paper presented at the 2010 IEA International Research Conference. Gothenburg, Sweden.
- R **Rutkowski, L.** & Rutkowski, D. (2010). *Getting it 'better': The importance of improving background questionnaires in international assessment*. Paper presented at the 2010 American Educational Research Association annual meeting. Denver, CO.
- R Engel, L., Rutkowski, D. & **Rutkowski, L.** (2010). *The harsher side of globalization: Violent conflict and academic achievement*. Paper presented at the 2010 annual American Educational Research Association annual meeting. Denver, CO.
- R **Rutkowski, L.**, & Rutkowski, D. (2010). *Determinants of private school choice: evidence of cream skimming internationally*. Paper presented at the 2010 annual American Educational Research Association annual meeting. Denver, CO.
- T Gonzalez, E., & **Rutkowski, L.** (2009). *Practical approaches for choosing multiple-matrix sample designs*. Paper presented at the 2009 European Educational Research Association Annual Meeting. Vienna, Austria.
- R Engel, L., Rutkowski, D., & **Rutkowski, L.** (2009). *The harsher side of globalization*. Paper presented at the 2009 European Educational Research Association Annual Meeting. Vienna, Austria.
- T **Rutkowski, L.**, & Rutkowski, D. (2009). *Violence and achievement: A multilevel example with TIMSS 2007*. Paper presented at the 2009 IEA-ETS Research Institute Spring Academy. Hamburg, Germany.
- R **Rutkowski, L.**, & Rutkowski, D. (2009). *Private and public education: A cross-national exploration with TIMSS 2003*. Paper presented at the 2009 annual American Educational Research Association annual meeting. San Diego, CA.
- R Rutkowski, D., & **Rutkowski, L.**, & Sparks, J.L. (2009). *ICT, education, and the knowledge economy: Goals, support, and practice*. Paper presented at the 2009 annual American Educational Research Association annual meeting. San Diego, CA.
- R Neuschmidt, O., Hencke, J., **Rutkowski, L.**, & Rutkowski, D. (2009). *Effective Schools in Arab Educational Systems: An Analysis of TIMSS 2003*. Paper presented at the 2009 annual American Educational Research Association annual meeting. San Diego, CA.
- T **Rutkowski, L.** (2009). *Propensity score matching with SAS: An example with TIMSS 2003 data*. Invited presentation at University of Hamburg, Doctoral Seminar.
- R Rutkowski, D., & **Rutkowski, L.** (2008). *Private and public education using TIMSS data*. Paper presented at the 3rd IEA International Research Conference. Taipei, Taiwan.
- R **Rutkowski, L.**, & Rutkowski, D. (2008). *An empirical look at globalization in education*. Paper presented at the 3rd IEA International Research Conference. Taipei, Taiwan.
- R Sparks, J.L., **Rutkowski, L.**, & Rutkowski, D. (2008). *ICT, education and the knowledge economy: Goals, support and practice*. Paper presented at the 3rd IEA International Research Conference. Taipei, Taiwan.
- R **Rutkowski, L.**, & Rutkowski, D. (2008). *Private and public education: A cross national exploration*. Paper presented at the 2008 IEA-ETS Research Institute Spring Academy. Hamburg, Germany.
- R Barth, J., **Rutkowski, L.**, Neuschmidt, O., & Gonzalez, E. (2008). *Curriculum coverage and scale correlation on TIMSS 2003*. Paper presented at the 2008 annual National Council on Measurement in Education annual meeting. New York, NY.

- R **Rutkowski, L.**, Vasterling, J.V., & Proctor, S.P. (2007). *PTSD and standardized test performance: An example of IRT with covariates*. Paper presented at the 2007 annual American Educational Research Association annual meeting. Chicago, IL.
- R **Rutkowski, L.**, & Rutkowski, D. (2007). *Gender and cultural unity and diversity in PISA 2003 mathematics items*. Poster presented at the 2007 annual American Educational Research Association annual meeting. Chicago, IL.
- R **Rutkowski, L.** (2006). *Comparison of one heuristic and one globally optimal unidimensional scaling technique*. Paper presented at the annual Classification Society of North America meeting. DIMACS Center, Rutgers University, Piscataway, N.J.
- T **Rutkowski, L.**, Proctor, S.P., & Vasterling, J.V. (2006). *Explanatory item response theory in trauma research*. Paper presented for the annual Conference on Innovations in Trauma Research Methods meeting. Hollywood, CA.

INSTRUCTED SEMINARS

- Aug 2021 **A Primer on International Large-Scale Assessments**, US Embassy Workshop for Bosnia and Herzegovina, *virtual*.
- Sep 2021 **Multilevel Modeling with International Assessment Data**, US Embassy Workshop for Bosnia and Herzegovina, *virtual*.
- June 2019 **Multilevel Modeling with IEA Data**, IEA Research Conference, Copenhagen, Denmark
- May 2019 **Introduction to International Large-scale Assessments**, Central China Normal University, Wuhan, China
- May 2019 **Assessment Literacy for Educators**, Bartholomew County School Corporation, Indiana
- April 2019 **Assessment Literacy for Educators**, Mooresville School Corporation, Indiana
- Jun 2017 **Workshop on Multilevel Modeling with IEA Data**, IEA Research Conference, Prague, Czechia
- Mar 2017 **Seminar in Introductory Statistical Analysis**, OECD-commissioned workshop
- Sep 2016 **Seminar in Cross-Cultural Invariance Methods**, OECD-commissioned webinar
- Apr 2015 **Hierarchical Linear Modeling with Large-Scale International Databases**, AERA Professional Development Course, Annual Meeting, Chicago, IL
- Feb 2015 **A Brief Introduction to Multilevel Modeling: Concepts & Applications**, Workshop in Methods Series, Indiana University, Bloomington, IN
- Dec 2014 **Seminar in Multiple-Groups Models**, Szkoła Wyższa Psychologii Społecznej (School of Social Sciences), Warsaw, Poland
- Oct 2014 **Workshop on Large-Scale Assessment Data Analysis**, Midwestern CIES Regional Conference, Bloomington, IN
- Sep 2014 **Seminar in Large-Scale Assessment Data Analysis**, Hamburg University, Germany
- Jun 2014 **Seminar in Structural Equation Modeling for TIMSS 2011 Data**, Charles University, Prague, Czech Republic

- Jun 2013 **Using HLM with International Large-Scale Assessment Data**, IEA Research Conference, Singapore
- Aug 2011 **Seminar in Structural Equation Modeling for PISA Data**, St. Patrick's College, Dublin, Ireland
- May-Jun 2011 **Lecture Series in Longitudinal Data Analysis**, Hamburg University, Germany
- May-Jul 2011 **Summer Seminar: Multilevel modeling of noesis data**, University of Vienna, Austria
- Jul 2010 **Using HLM with Large Scale Assessment Data**, University of Gothenburg, Sweden
- Jun 2010 **Summer Seminar in Large Scale Assessment**, University of Vienna, Austria
- Sep 2009 **Large-Scale Assessment Data: Analysis and Technical Complexities**, National Federation for Educational Research (NFER), Slough, England
- Aug 2009 **Introduction to Item Response Theory, II**, Pretoria, South Africa
- Jul 2009 **Introduction to Item Response Theory**, Pretoria, South Africa
- Apr 2009 **Using the SITES 2006 Database and Using the TIMSS 2007 Database**, AERA Annual Meeting, San Diego, CA
- Feb 2009 **Validating Indices**, Sharm-el-Sheikh, Egypt
- Dec 2008 **Using PISA Data**, Montreal, Canada
- Oct 2008 **Using Large-Scale Assessment Data**, Berlin, Germany
- Sep 2008 **Categorical Data Analysis in Large Scale Assessment**, Taipei, Taiwan
- Jul 2008 **Data Base Seminar**, Ljubljana, Slovenia
- Jun 2008 **Analyzing Your TIMSS 2007 Data**, Gaborone, Botswana
- May 2008 **Analysis for National Reports**, Manama, Bahrain
- Mar 2008 **Using Large-Scale Assessment Data**, AERA Annual Meeting, New York, New York
- Feb 2008 **PIRLS National Research Coordinator Seminar**, Madrid, Spain
- Jan 2008 **Arabic Seminar**, Cairo, Egypt
- Nov 2007 **Categorical Data Analysis**, IEA-ETS Research Institute Autumn Academy, Hamburg, Germany

PROFESSIONAL MEMBERSHIPS

- 2011-2017 American Psychological Association (APA), Division 5
- 2004-2015 American Education Research Association (AERA)
- 2005-2009 Classification Society of North American (CSNA)
- Since 2007 National Council on Measurement in Education (NCME)

SERVICE

International

- 2020- **Chair**, OECD PISA Technical Advisory Group
- 2018- Mentor for Post-doctoral Researcher, University of Oslo
- 2018 Member, Promotion and Tenure Committee, University of Cyprus
- 2018-2019 Member, OECD Teacher Well Being Survey Technical Advisory Group
- 2017- Editor, *IEA Research in Education Book Series* (Springer)
- 2017- Associate Editor, *Large-Scale Assessments in Education* journal (Springer)
- 2016-2020 Member, OECD PISA Technical Advisory Group
- 2007- Member, IEA Research Conference Scientific Committee
- 2017-2019 Member, OECD PISA for Development Technical Advisory Group
- 2013-2017 Member, *Large-Scale Assessments in Education* journal editorial board
- 2012 Chair, OECD Teaching and Learning International Survey (TALIS) Analysis Expert Group
- 2008-2019 Chair/Discussant, IEA Research Conference

National (US)

- 2020-2023 Member, NCME Budget and Finance Committee
- 2019-2022 **Chair**, U.S. National Assessment for Educational Progress (NAEP) Questionnaire Standing Committee
- 2019 Referee, Promotion and Tenure for Arizona State University candidate
- 2018- Member, Journal of Educational Measurement editorial board
- 2013-2018 Member, US National Assessment of Educational Progress Questionnaire Standing Committee
- 2013-2014 Advisor, Human Anatomy and Physiology Society Comprehensive Examination Validation Project
- 2012-2015 Member, NCME Brenda Lloyd Dissertation Award Committee
- 2008-2014 Chair/Discussant, American Educational Research Association Annual Meeting
- 2008- Reviewer, National Council on Measurement in Education Annual Meeting
- 2007-2010 Reviewer, American Educational Research Association Annual Meeting

Local/University

- 2021 Member, Constitution and Rules Committee, IU Bloomington
- 2021 Judge, CEWIT Poster Competition
- 2020 Chair, IU School of Education Policy Council
- 2020 Chair, IU School of Education Agenda Committee
- 2020 Judge, CEWIT Poster Competition
- 2019- Program coordinator, Inquiry Methodology Program
- 2019-2021 Member, IU School of Education Policy Council
- 2019 Chair, Third Year Review Committee for Inquiry Methodology
- 2018-2021 Member, IU Bloomington Faculty Council
- 2018-2020 Member, IU Mediation Committee
- 2018-2021 Member, IU School of Education Faculty Affairs Committee
- 2017 Chair, Post-Doctoral Researcher Hiring Committee, CEMO, University of Oslo
- 2015-2017 Coordinator, Post-Doctoral Mentoring Program, CEMO, University of Oslo
- 2014-2015 Member, School of Education Self-Study Task Force, Indiana University Bloomington
- 2014-2015 Member, Faculty Council, Indiana University, Bloomington
- 2013-2015 Member, Workshop in Methods Advisory Board, Indiana University, Bloomington
- 2013-2015 Member, Graduate Statistics Committee, Indiana University, Bloomington
- 2013 Member, CEEP Director Search Committee, Indiana University, Bloomington
- 2011-2015 Member, Minor in Social Sciences Research Methods Advisory Committee, Indiana University
- 2011-2014 Member, International Programs Committee, School of Education, Indiana University, Bloomington
- 2011-2013 Member, CEEP Advisory Board, Indiana University, Bloomington
- 2011-2012 Analyst, Faculty Affairs Committee, Equity Review Project, School of Education, Indiana University

- University, Bloomington
- 2011 Volunteer, Indiana University Veterans Support Services Remembrance Day Ceremony
- 2011 Member, Value-Added Modeling Initiative Committee, School of Education, Indiana University, Bloomington
- 2010-2012 Reviewer, Frieda Renfro Dissertation Award Committee, School of Education, Indiana University, Bloomington
- 2010 Member, Inquiry Methodology Search Committee, School of Education, Indiana University, Bloomington

PROFESSIONAL DEVELOPMENT

- 2016 Norwegian Language Instruction, Oslo, Norway
- 2015 Multilevel IRT in R, AERA Annual Meeting, Chicago, IL
- 2015 Equating in R, AERA Annual Meeting, Chicago, IL
- 2009 Measurement for Large Scale Assessment, ETS, Princeton, NJ.
- 2007-2009 German Language Instruction, Hamburg, Germany
- 2005 Programme for International Student Assessment (PISA) data and analysis workshop, National Center for Educational Statistics, Washington, DC.
- 2006 Mplus Workshop, Johns Hopkins School of Public Health, Baltimore, MD.

OTHER PROFESSIONAL EXPERIENCE

- 1996-1999 **Explosive Ordnance Disposal Technician**, United States Air Force, enlisted, Misawa Air Base, Japan
- 1994-1996 **Explosive Ordnance Disposal Technician**, United States Air Force, enlisted, Barksdale Air Force Base, LA

RESEARCH INTERESTS

Large-scale assessment, latent variable modeling, cross-cultural measurement, behavioral statistics, educational and psychological measurement.