

Allan S. Cohen

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Education

Ph.D.	1972	Educational Psychology and Measurement	University of Iowa
M.A.	1972	Educational Psychology and Measurement	University of Iowa
B.A.	1964	Psychology	University of Minnesota

Relevant Experience

2021	Professor Emeritus, Department of Educational Psychology, University of Georgia
2003-2021	Professor, Department of Educational Psychology, University of Georgia
2003-2021	Director, Georgia Center for Assessment, University of Georgia
2010-2015	Director, Institute for Interdisciplinary Research on Education & Human Development, University of Georgia
2008-2010	Interim Director, Educational Policy & Evaluation Center, University of Georgia
1999-2003	Associate Professor, Department of Educational Psychology, University of Wisconsin-Madison
1993-1999	Senior Lecturer, Department of Educational Psychology, University of Wisconsin-Madison
1990-2003	Director, UW-System Center for Placement Testing, University of Wisconsin-Madison
1979-2003	Director, Office of Testing & Evaluation Services, University of Wisconsin-Madison
1978-1979	Professional Associate, Educational Testing Service, Evanston, Illinois
1974-1978	Assistant Professor, Purdue University
1974-1976	Director of Research, Child Development Laboratories, Purdue University
1972-1974	Assistant Professor, Pennsylvania State University
1972-1974	Deputy Head, Pennsylvania Day Care Project and Research Associate, Center for Human Services Development

Awards & Honors

2011-2021 Omer Clyde & Elizabeth Parr Aderhold Professor of Research Methodology, University of Georgia

2012 NCME Award for Career Contributions to Educational Measurement

2011 NCME Award for an Outstanding Application of Educational Measurement Technology to Solve a Specific Problem in Educational Measurement

2008 Korea Research Foundation Award for Outstanding Scholarship, Basic Research Program (Humanities & Social Sciences)

Recent Grants

Cohen, A.S. (PI). *The Georgia Testing Program for Development of Educational Achievement Tests*. UGA Office of the Vice-President for Research, Date: 1/1/2004 - 12/31/2004, \$40,000.

Hickey, D. (PI), Beckmann-Kazez, S. (Co-PI), Cohen, A.S. (Co-PI), Mewborn, D. (Co-PI) & Lanehart, S. (Co-PI) *Multilevel Assessment for Enhancing Mathematical Discourse, Curriculum and Achievement in Diverse Elementary School Classrooms*. National Science Foundation. Award Date: 7/1/2005 \$285,282.

Cohen, A.S. (PI). *Mixture Model Analysis of Mathematics Tests Anchored in a Technology-Rich Environment*. Sub-contract on U.S. Department of Education, Institute of Education Sciences grant awarded to Brian Bottge (PI), University of Wisconsin, Center for Education Research. Dates: 08/25/2005 - 07/31/2006, \$61,452.

Cohen, A.S. (PI). *Evaluation of Motivation Effects on National Assessment of Educational Progress Test Items*. Subcontract on U.S. Department of Education, Institute of Education Sciences grant awarded to HumRRO, Alexandria, VA. Dates: 9/1/2004 - 8/31/2005. \$50,000.

Cohen, A.S. (PI). *Using Mixture IRT Models with Covariates for Identifying Comparable Comparison Groups*. The College Board. (Faculty Mentor to Sun-Joo Cho, the student who did the work on this project.) Dates: 8/15/2006 - 8/15/2007. \$26,500.

Recesso, A. (PI), Hannafin, M. (Co-PI), Cohen, A.S. (Co-PI). *Teacher Success Model*. Georgia Department of Education. Dates: 9/16/2005 - 8/1/2007. \$1,475,000.

Orrill, C. (PI), Iszák, A. (Co-PI), & Cohen, A.S. (Co-PI). *Does it Work?: Building Methods for Understanding Effects of Professional Development*. National Science Foundation. Dates: 1/1/2007 - 12/31/2009. \$999,958.

Kamphaus, R. (PI), Cohen, A.S. (Co-PI), Roach, A. (Co-PI), & Templin, J. (Co-PI). *Georgia Measurement and Assessment Training - Postdoctoral Program (GMAT-PD)*. U.S. Department of Education, Institute for Education Science. Dates: 10/1/2008 - 9/30/2012. \$596,562 (Subcontract to UGA from Georgia State University: \$293,474).

Iszák, A. (PI), Cohen, A. S. (Co-PI), Orrill, C. (Co-PI), Lobato, J. (Co-PI), Templin, J. L. (Co-PI). *Diagnosing Teachers' Multiplicative Reasoning*. National Science Foundation. Dates: 10/1/2008-12/31/2010. \$944,163 (Subcontract to UGA from San Diego State University: \$511,369).

Oliver, S. J. (PI), Moore, J. (Co-PI), Cohen, A.S. (Co-PI). *Learning Biological Processes Through Animations and Inquiry: A New Approach*. National Institutes of Health, National Center for Research Resources Special Emphasis Panel (SEPA), Dates: 10/1/2008-9/30/2012, \$1,296,570 (plus \$369,070 cost sharing).

Bottge, B. (PI), Ma, X. (Co-PI), & Cohen, A.S. (Co-PI). *Evaluating the Efficacy of Enhanced Anchored Instruction for Middle School Students with Learning Disabilities in Math*. U.S. Department of Education, Institute for Education Science. Dates: 7/1/2009-6/30/2014. Amount awarded: \$2,330,164 (Subcontract to UGA from University of Kentucky: \$88,587).

Evans, M. (PI), Project Title: *EngageMe-P.L.E.A.S.E.* U.S. Department of Education, Institute for Education Sciences i3. Subcontract to UGA: Gregg, K. N. (PI), Cohen, A. S. (Co-PI). Dates: 10/1/2010 to 7/15/2015. \$800,000.

Buxton, C. (PI), Allexsaht-Snider, M. (Co-PI), & Cohen, A.S. (Co-PI) *Language-Rich Inquiry Science with English Language Learners (LISELL)*. National Science Foundation. Dates: 8/15/2010 - 7/31/2013. \$515,756.

Iszák, A. (PI), Cohen, A. S. (Co-PI), & Remillard, J. (Co-PI). *An Interdisciplinary Conference on Assessment in K-12 Mathematics: Collaborations Between Mathematics Education and Psychometrics*. National Science Foundation. Dates: 3/31/2011 - 12/31/2011. \$99,844.

Orrill, C. (PI). *CAREER: Coherence as a Basis for Understanding Teachers' Mathematical Knowledge*. National Science Foundation, Subcontract to UGA: Cohen, A.S. (PI), \$30,230, Dates: 4/5/2011 to 3/31/2013

Williamson Shaffer, D. (PI). *AUTOMENTOR: Virtual Mentoring and Assessment in Computer Games for STEM Learning*. National Science Foundation, Subcontract to UGA: Cohen, A. S. (PI). \$200,000, Dates: 8/1/2012 to 7/31/2014.

Brown, S. A. (PI), Odonnell, C. (Co-PI), Robertson, T. P. (Co-PI), Moore, J.N. (Co-PI), Higgins, B. P. (Co-PI), Cohen, A. S., (Co-PI), & Edwards, G.L. (Co-PI). *Engaging Students In Diabetic Kidney Disease: An Interactive Inquire Approach*. National Institutes of Health. \$492,757, Dates: 1/7/2013 to 12/31/2017.

Buxton, C. (PI), Allexsaht-Snider, M. (Co-PI), Cohen, A.S. (Co-PI), & Lu, Zhenqiu (Co-PI) *Language-Rich Inquiry Science with English Language Learners through Biotechnology (LISELL-B)*. National Science Foundation. Dates: 8/1/2013 - 7/31/2017. \$2,648,051. Supplemental Funding, Buxton, C. (PI) & Cohen, A.S. Dates: 7/1/2017 to 6/30/2018. \$109,000.

Hodges, G. W. (PI), Cohen, A. S. (Co-I), Moore, J. (Co-I), Robertson, T. (Co-I), Brown, S. (Co-I), & Ward, C. (Co-I). *Stimulating Young Scientists to Engage, Motivate and Synthesize (SYSTEMS)*. National Institutes of Health, National Center for Research Resources Special Emphasis Panel (SEPA). Dates: 7/1/2014 to 6/30/2019. \$1,341,173.

Bottge, B. A. (PI), Ma, X. (Co-PI), Cohen, A. S. (Co-PI), Bradshaw, L. P. (Co-PI), & Choi, H.-J. (Co-PI). *Developing Enhanced Assessment Tools for Capturing Students' Procedural Skills and Conceptual Understanding in Math*. Institute for Education Sciences. Dates: 7/1/2015-6/30/2019. \$1,597,496 (PI on subcontract to UGA: \$394,206.)

Copur-Gencturk, Y. (PI), Orrill, C.H. (Co-PI), Nye, B. (Co-PI), & Cohen, A.S. (Co-PI), *Advancing Middle School Teachers Understanding of Proportional Reasoning for Teaching*. National Science Foundation. Dates: 7/1/2018-6/30/2022. \$1,399.982 (PI on subcontract to UGA: \$189,243.)

Copur-Gencturk, Y. (PI), Cohen, A.S. (Co-PI), Orrill, C.H. (Co-PI), & Templin, J. (Co-PI), *Usable Measures of Teacher Understanding: Exploring Diagnostic Models and Topic Analysis as Tools for Assessing Proportional Reasoning for Teaching*. National Science Foundation. Dates: 9/1/2018-8/31/2022. \$2,168,584. (PI on subcontract to UGA: \$394,005.)

Dolan, E.L. (PI), Choi, H.-J. (Co-PI), Cohen, A.S. (Co-PI), Johnson, K.J. (Co-PI), & Ramirez Lugo, J.S. (Co-PI). *Momentary Assessment of Research Learning Environments*. National Science Foundation. Dates: 10/1/2019-9/30/2022. \$1,420,571.

Orrill, C.O. (PI), Cohen, A.S. (Co-PI), & Brown, R.E. (Co-PI). Collaborative Research: Applying and Refining a Model for Dynamic, Discussion-Based Professional Development for Middle School Teachers About Fractions, Ratios, and Proportions. National Science Foundation. Dates: 8/1/2022-7/31/2026. \$1,794,273 (PI on amount at UGA: \$626,376).

Hodges, G.W. (PI), Cardozo-Gaibisso, L. (Co-I), Zhai, X. (Co-I), & Cohen, A.S. (Co-PI). *SYSTEMAS: Stimulating Immersive Science Through Engaging Motivating and Authentic Scenarios*. National Institutes of Health. Dates: 4/1/2022-3/31/2027. \$1,340,555.

Copur-Gencturk, Y. (PI), Wang, S. (Co-PI), Tang, J. (Co-PI), & Cohen, A.S. (Co-PI) Intelligent, Adaptive Program with Just-in-time Feedback for Preservice Teachers. National Science Foundation. Dates: 8/1/2023-7/31/2027. \$1,999,680.

Articles

Adams, G.R., & Cohen, A.S. (1974). Children's physical and interpersonal characteristics that affect teacher-student interactions. *Journal of Experimental Education*, 43(1), 1-5.

Peters, D.L., Cohen, A.S., & McNichols, M.M. (1974). The training and certification of early childhood personnel. *Child Care Quarterly*, 3(1), 39-53.

Adams, G.R., & Cohen, A.S. (1976). An examination of cumulative folder information used by teachers in making differential judgments of children's abilities. *The Alberta Journal of Educational Research*, 22(3), 216-225.

Cohen, A.S., Peters, D.L., & Willis, S.L. (1976). The effect of early childhood education student teaching on program preferences, beliefs, and behaviors. *Journal of Educational Research*, 70(1), 15-20.

Adams, G.R., & Cohen, A.S. (1976). Characteristics of children and teacher expectancy: An extension to the child's social and family life. *Journal of Educational Research*, 70(2), 87-90.

Cohen, A.S., Hulls, J.J., & Rhine, P. (1978). The influence of context on activity level of young children. *Journal of Genetic Psychology*, 132(2), 165-175.

Cohen, A.S., & Van Tassel, M.E. (1978). A comparison of partial and complete paired-comparisons in sociometric measurement of preschool groups. *Applied Psychological Measurement*, 2(1), 31-40.

Cook, T.P., & Cohen, A.S. (1978). The effect of interpersonal attraction on manipulatory curiosity in preschool children. *Journal of Social Psychology*, 106, 49-56.

Gruen, G.E., Doherty, J., & Cohen, A.S. (1979). The moral judgments of preschool children. *Journal of Psychology*, 101, 287-291.

Cohen, A.S., & Melson, G.F. (1980). The influence of friendship on children's communication. *Journal of Social Psychology*, 112, 207-213.

Hulls, J.J., Melson, G.F., & Cohen, A.S. (1980). Situation and person factors in young children's communication. *Home Economics Research Journal*, 8(6), 394-398.

Melson, G.F., & Cohen, A.S. (1981). Contextual influences on children's activity: Sex differences in effects of peer presence and interpersonal attraction. *Genetic Psychology Monographs*, 103, 243-260.

Baker, F.B., Cohen, A.S., & Barmish, B.R. (1988). Characteristics of items selected by linear programming. *Applied Psychological Measurement*, 12(2), 189-199.

Safrit, M.J., Cohen, A.S. & Costa, M.G. (1989). Item response theory and the measurement of motor behavior. *Research Quarterly for Exercise and Sport*, 60(4), 325-335.

Cohen, A.S., Kim, S.-H., & Subkoviak, M.J. (1991). Influence of prior distributions on detection of DIF. *Journal of Educational Measurement*, 28(1), 49-59.

Kim, S.-H., & Cohen, A.S. (1991). A comparison of two area measures for detecting differential item functioning. *Applied Psychological Measurement*, 15, 269-278.

Cohen, A.S., & Moeser, E. (1991). Standardizing essay scores: Correcting for differences in difficulty among essay questions. *The Bar Examiner*, 60, 20-24. Reprinted in *The Bar Examiner*, 69(1), 20-25.

Kim, S.-H., & Cohen, A.S. (1992). Effects of linking methods on detection of DIF. *Journal of Educational Measurement*, 29, 51-66.

Kim, S.-H., & Cohen, A.S. (1992). IRTDIF: A computer program for IRT differential item functioning analysis. *Applied Psychological Measurement*, 16(2), 158.

Cohen, A.S., & Kim, S.-H. (1992). Detecting calculator effects on item performance. *Applied Measurement in Education*, 5(4), 303-320.

Nystrand, M., Cohen, A. S., & Dowling, N. M. (1993). Addressing reliability problems in the portfolio assessment of college writing. *Educational Assessment*, 1, 53-70.

Cohen, A.S., & Kim, S.-H. (1993). A comparison of Lord's χ^2 and Raju's area measures in detection of DIF. *Applied Psychological Measurement*, 17(1), 39-52.

Cohen, A.S., Kim, S.-H., & Baker, F.B. (1993). Detection of differential item functioning in the graded response model. *Applied Psychological Measurement*, 17(4), 335-350.

Kim, S.-H., Cohen, A.S., Baker, F.B., Subkoviak, M.J., & Leonard, T. (1994). An investigation of hierarchical Bayes procedures in item response theory. *Psychometrika*, 59(3), 405-421.

Kim, S.-H., Cohen, A.S., & Kim, H.O. (1994). An investigation of Lord's procedure for detection of differential item functioning. *Applied Psychological Measurement*, 18(3), 217-228.

Zhu, W., Safrit, M.J., & Cohen, A.S. (1994). Development of a high school physical fitness knowledge test: A preliminary report. *Research Quarterly for Exercise and Sport*, 65 (Suppl. 1), A-60.

Kim, S.-H., Cohen, A.S., & Park, T.H. (1995). Detection of differential item functioning in multiple groups. *Journal of Educational Measurement*, 32(3), 261-276.

Kim, S.-H., & Cohen, A.S. (1995). A comparison of Lord's chi-square, Raju's area measures, and the likelihood ratio test on detection of differential item functioning. *Applied Measurement in Education*, 8(4), 291-312.

Kim, S.-H., & Cohen, A.S. (1995). A minimum χ^2 method for equating tests under the graded response model. *Applied Psychological Measurement*, 19(2), 167-176.

Zhu, W., Safrit, M.J., & Cohen, A.S. (1995). Development of an high school physical fitness knowledge test: A follow-up. *Research Quarterly for Exercise and Sport*, 66(Suppl. 1), A-50 - A-51.

Cohen, A.S., Kim, S.-H., & Wollack, J. A. (1996). An investigation of the likelihood ratio test for detection of differential item functioning. *Applied Psychological Measurement, 20*(1), 15-26.

Kane, M.T., Cohen, A.S., Smith, E.R., Lewis, C., & Reidy, C. (1996). 1995 Commission on Dietetic Registration dietetics practice audit. *Journal of the American Dietetics Association, 96*(12), 1-10.

Kim, S.-H., & Cohen, A.S. (1996). Tables of percentage points of the Behrens-Fisher distribution. *Journal of Statistical Computation and Simulation, 55*, 181-187.

Crooks, T.J., Kane, M.T., & Cohen, A.S. (1996). Threats to the valid use of assessments. *Assessment in Education, 3*(3), 265-285.

Cohen, A.S., & Kim, S.-H. (1998). An investigation of linking methods under the graded response model. *Applied Psychological Measurement, 22*(2), 116-130.

Kim, S.-H., & Cohen, A.S. (1998). A comparison of linking and concurrent calibration under item response theory. *Applied Psychological Measurement, 22*(2), 131-143.

Wollack, J.A., & Cohen, A.S. (1998). Detection of answer copying with unknown item and trait parameters. *Applied Psychological Measurement, 22*(2), 144-152.

Kim, S.-H., & Cohen, A.S. (1998). Detection of differential item functioning under the graded response model with the likelihood ratio test. *Applied Psychological Measurement, 22*(4), 345-355.

Kim, S.-H., & Cohen, A.S. (1998). On the Behrens-Fisher Problem: A review. *Journal of Educational and Behavioral Statistics, 23*(4), 356-377.

Kane, M.T., Crooks, T.J., & Cohen, A.S. (1999). Validating measures of performance. *Educational Measurement: Issues & Practices, 19*(2), 5-17.

Cohen, A.S., Kane, M.T., & Crooks, T.J. (1999). A generalized examinee-centered method for setting standards on achievement tests. *Applied Measurement in Education, 12*(4), 343-366.

Kane, M.T., Crooks, T.J., & Cohen, A.S. (1999). Designing and evaluating standard-setting procedures for licensure and certification tests. *Advances in Health Sciences Education, 4*, 195-207.

Ibarra, R.A., & Cohen, A.S. (1999). Multicontextuality: A hidden dimension in testing and assessment. *GRE FAME Report Series, Vol. 3*.

McHorney, C.A., & Cohen, A.S. (2000). Using Item Response Theory for equating measures of health status assessment: Practical and methodological challenges. *Medical Care, 389*, Supplement II.

Cohen, A.S. (2000). High stakes testing in grades K - 12: Comments on Paris et al. *Issues in Education*, 6, 133-138.

Cohen, A.S., Kane, M.T., & Kim, S.-H. (2001). The precision of simulation study results. *Applied Psychological Measurement*, 25(2), 136-145.

Douglas, J., & Cohen, A.S. (2001). Nonparametric item response function for assessing model fit. *Applied Psychological Measurement*, 25(3), 234-243.

Cohen, A.S., Bottge, B.A., & Wells, C.S. (2001). Using item response theory to assess effects of mathematics instruction in special populations. *Exceptional Children*, 68(1), 23-44.

Wollack, J.A., Cohen, A.S., & Serlin, R.C. (2001). Defining error rates and power for detection of answer copying. *Applied Psychological Measurement*, 25(4), 385-404.

Bolt, D.M., Cohen, A.S., & Wollack, J.A. (2001). A mixture model for multiple choice data. *Journal of Educational and Behavioral Statistics*, 26(4), 381-409.

Kim, S.-H., & Cohen, A.S. (2002). A comparison of linking and concurrent calibration under the graded response model. *Applied Psychological Measurement*, 26(1), 25-41.

Wollack, J.A., Bolt, D.M., Cohen, A.S., & Lee, Y.-S. (2002). Recovery of item and ability parameters in the nominal response model: A comparison of marginal maximum likelihood estimation and Markov chain Monte Carlo methods. *Applied Psychological Measurement*, 26(3), 339-352.

Bolt, D. M., Cohen, A. S., & Wollack, J. A. (2002). Item parameter estimation under conditions of test speededness: Application of a mixture Rasch model with ordinal constraints. *Journal of Educational Measurement*, 39(4), 331-348.

Wollack, J. A., Cohen, A. S., & Wells, C. S. (2003). A method for maintaining scale stability in the presence of test speededness. *Journal of Educational Measurement*, 40, 307-330.

Li, Y., Cohen, A.S., & Ibarra, R.A. (2004). Characteristics of mathematics items associated with gender DIF. *International Journal of Testing*, 4(2), 115-136.

Cohen, A. S., & Bolt, D. M. (2005). A mixture model analysis of differential item functioning. *Journal of Educational Measurement*, 42(2), 133-148.

Cohen, A.S., Gregg, N., & Deng, M. (2005). The role of extended time and item content on a high-stakes mathematics test. *Learning Disabilities: Research and Practice*, 20(4), 225-233.

Kim, S.-H., Lin, Y.-H., & Cohen, A.S. (2006). LDIP: A computer program for local dependence indices for polytomous items. *Applied Psychological Measurement*, 30, 509-510.

Kang, T.-H., & Cohen, A.S. (2006). A mixture IRT approach to differential item functioning. *Journal of Education Evaluation*, 19, 165-192.

Hong, J.Y., Li, F., Cho, S.-J., Schutz, P.A., & Cohen, A.S. (2006). Why students do not respond to NAEP reading questions: The relationship between students' response patterns and reading motivation. *Sun-Chung-Uh-Mun, 34*, 179-199.

Kim, S.-H., Cohen, A.S., Alagoz, C., & Kim, S. (2007). DIF detection and effect size measures for polytomously scored items. *Journal of Educational Measurement, 44*(2), 93-116.

Kang, T.-H., & Cohen, A.S. (2007). IRT model selection methods for dichotomous items. *Applied Psychological Measurement, 31*(4), 331-358.

Webb, M.-Y., Cohen, A. S., & Schwanenfluegel, P. (2008). A mixture model analysis of differential item functioning on the Peabody Picture Vocabulary Test-III. *Educational and Psychological Measurement, 68*(2), 335-351.

Goegebeur, Y., De Boeck, P., Wollack, J. A., & Cohen, A. S. (2008). A speeded item response model with gradual process change. *Psychometrika, 73*(1), 65-87.

Lee, Y.-S., Cohen, A., & Toro, M. (2009). Examining Type I error and power for detection of differential item and testlet functioning. *Asia Pacific Education Review, 10*(3).

Li, F., Cohen, A.S., Kim, S.-H., & Cho, S.-J. (2009). Model selection methods for dichotomous mixture IRT models. *Applied Psychological Measurement, 33*(5), 353-373.

Kang, T.-H., Cohen, A.S., & Sung, H.-J. (2009). IRT model selection methods for polytomous items. *Applied Psychological Measurement, 33*(7), 499-518.

Wells, C.S., Cohen, A.S., & Patton, J. (2009). A range-null hypothesis approach for testing DIF under the Rasch model. *International Journal of Testing, 9*(4), 310-332.

Cho, S.-J., & Cohen, A.S. (2010). A multilevel mixture model with applications to DIF. *Journal of Educational and Behavioral Statistics, 35*(3), 336-370.

Cho, S.-J., Cohen, A.S., Kim, S.-H., & Bottge, B.A. (2010). Latent transition analysis with a mixture item response theory measurement model. *Applied Psychological Measurement, 34*(7), 583-604.

Izsák, A., Orrill, C. H., Cohen, A. S., & Brown, R. E. (2010). Measuring middle grades teachers' understanding of rational numbers with the mixture Rasch model. *Elementary School Journal, 110*(3), 279-300.

Cho, S.-J., Bottge, B. A., Cohen, A. S., & Kim, S.-H. (2011). Detecting cognitive change in the math skills of low-achieving adolescents. *Journal of Special Education, 45*(2), 67-76.

Alexeev, N., Templin, J. L., & Cohen, A. S. (2011). Spurious latent classes in the mixture Rasch model. *Journal of Educational Measurement, 48*(3), 313-332.

Li, F., Cohen, A. S., & Shen, L. (2012). Investigating item position effects in computer-based tests. *Journal of Educational Measurement*, 49(4), 362-379.

Cho, S.-J., Cohen, A. S., & Bottge, B. A. (2013). Detecting intervention effects using a multilevel latent transition analysis with a mixture IRT model. *Psychometrika*, 78, 576-600.

Cho, S.-J., Cohen, A. S., & Kim, S.-H. (2013). Markov Chain Monte Carlo estimation of a mixture item response theory model. *Journal of Statistical Computation and Simulation*, 83(2), 278-306.

Cho, S.-J., Cohen, A. S., & Kim, S.-H. (2014). A mixture group bi-factor model for binary responses. *Structural Equation Modeling*, 21(3), 375-395.

Buxton, C., Allexsaht-Snider, M., Aghasaleh, R., Kayumova, S., Kim, S., Choi, Y.-J., & Cohen, A. S. (2014). Potential benefits of bilingual constructed response science assessments for understanding bilingual learners' emergent use of the language of scientific investigation practices. *Double Helix: A Journal of Critical Thinking and Writing*, 2, 1-21.

Wang, L., Cohen, A. S., & Carr, M. M. (2014). Spatial ability at two scales of representation: A meta analysis. *Learning and Individual Differences*, 36, 140-144.

Buxton, C., Allexsaht-Snider, M., Kayumova, S., Aghasaleh, R., Choi, Y., & Cohen, A. (2015). Teacher agency and professional learning: Rethinking fidelity of implementation as multiplicities of enactment. *Journal of Research in Science Teaching*, 52(4), 489-502.

Raczynski, K., Cohen, A. S., Lu, Z., & Engelhard, G. (2015). Comparing the effectiveness of rater training methods using generalized linear mixed models. *Journal of Educational Measurement*, 52(3), 301-318.

Brown, C. L., Templin, J. L., & Cohen, A. S. (2015). Comparing the two- and three-parameter logistic models via likelihood ratio tests: A commonly misunderstood problem. *Applied Psychological Measurement*, 39(5), 335-348.

Choi, Y.-J., Alexeev, N., & Cohen, A. S. (2015). Differential item functioning analysis using a mixture 3-parameter logistic model with a covariate on the TIMSS 2007 mathematics test. *International Journal of Testing*, 15(3), 239-253. DOI: 10.1080/15305058.2015.1007241.

Wollack, J. A., Cohen, A. S., & Eckery, C. (2015). Detecting test tampering using item response theory. *Educational and Psychological Measurement*, 75(6), 931-953.

Orrill, C. H., & Cohen, A. S. (2016). Why defining the construct matters: An examination of teacher knowledge using different lenses on one assessment. *The Mathematics Enthusiast*, 13(1 & 2), 93-110.

Sen, S., Cohen, A. S., & Kim, S.-H. (2016). The impact of latent non-normality on extraction of spurious latent classes in mixture IRT models. *Applied Psychological Measurement*, 40(2), 98-113.

Li, F., Cohen, A. S., Bottge, B. A., & Templin, J. (2016). A latent transition analysis model for assessing change in cognitive skills. *Educational and Psychological Measurement*, 76(2), 181-204.

Orrill, C. H., & Cohen, A. S. (2016). Purpose and conceptualization: Examining assessment development questions through analysis of measures of teacher knowledge. *Journal of Research in Mathematics Education Monograph*, 139-154.

Kim, S., Kwak, M., Cardozo-Gaibisso, L.A., Buxton, C.A., & Cohen, A.S. (2017). Statistical and qualitative analyses of students' answers to a constructed response test of science inquiry knowledge. *Journal of Writing Analytics*, 1(1), 82-102.

Sen, S., Kim, S.-H., & Cohen, A.S. (2017). Comparative analysis of common statistical models used for value-added assessment of school performance. *Journal of Measurement and Evaluation in Education and Psychology*, 8(3), 303-310.

Bottge, B.A., Choi, H.-J., & Cohen, A.S. (2018). Comparisons of mathematics intervention effects in resource and inclusive classrooms. *Exceptional Children*, 84(2), 197-212.

Kim, S., Lu, Z., & Cohen, A.S. (2018). An improved estimation using Polya-Gamma augmentation for Bayesian structural equation models with dichotomous variables. *Measurement: Interdisciplinary Research and Perspectives*, 16(2), 81-91.

Hodges, G.L, Wang, L., Cohen, A.S., Lee, J., & Jang, Y. (2018). An exploratory study of blending the virtual world and the laboratory experience in secondary chemistry classrooms. *Computers & Education*, 122, 179-193.

Shermis, M.D., & Cohen, A. S. (2018) International and national perspectives on machine scoring. *Applied Measurement in Education*, 31(3), 175-176.

Raczynski, K., & Cohen, A.S. (2018). Appraising the scoring performance of automated essay scoring systems – some additional considerations: Which essays? Which human raters? Which scores? *Applied Measurement in Education*, 31(3), 233-240.

Jang, Y., Kim, S.-H., & Cohen, A.S. (2018). The impact of multidimensionality on extraction of latent classes in mixture Rasch models. *Journal of Educational Measurement*, 55(3), 403-420.

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Slawski, E.J., & Cohen, A.S. (1979). *Potential problems in equating tests for Title I evaluation using the Rasch model*. Paper presented at the annual conference of the National Assessment of Educational Progress, Denver, CO.

Slawski, E.J., & Cohen, A.S. (1980). *A comparison of the 1- and 2-parameter ICC models for calibrating and vertical equating of a criterion-referenced mathematics test*. Paper presented at the annual conference of the National Council on Measurement in Education, Boston, MA.

Cohen, A.S. (1980). Discussant at paper session on *Applications of latent-trait theory to large scale and college course assessment*. At the annual meeting of the American Educational Research Association, Boston, Ma.

Cohen, A.S., & Kappy, K.A. (1980). *Achievement level testing effects on Rasch item difficulty estimates*. Paper presented at the annual meeting of the American Educational Research Association, Boston, MA.

Cohen, A.S. (1981). *Basic competencies and standardized testing*. Paper presented at the Second Annual Evaluation Conference, Madison, WI.

Cohen, A.S. (1981). *Diagnosing your own testing program*. Paper presented at the Evaluation Institute of the School Evaluation Consortium, Wisconsin Dells, WI.

Cohen, A.S. (1981). *The meaning of item analysis statistics*. Paper presented at the UW-System Conference for Improvement of Undergraduate Instruction, Eau Claire, WI.

Cohen, A.S., & Seeman, M.J. (1983). *High-speed data entry to administrative applications*. Paper presented at the annual meeting of the Wisconsin Association of Collegiate Registrar and Admissions Offices, Eau Claire, WI.

Cohen, A.S. (1986). *CAPE: Assessment, a tool for higher education from the College Assessment Program Evaluation*. Paper presented at the 7th annual conference on Learning in Higher Education, Kenosha, WI.

Barmish, B.R., Cohen, A.S., & Baker, F.B. (1987). *Item selection in test design: Integer versus linear programming*. Paper presented at the annual meeting of the American Educational Research Association, Washington, DC.

Cohen, A.S., & Reynolds, W.M. (1988). *Psychometric quality of instructor-made tests*. Paper presented at the annual meeting of the National Council on Measurement in Education, New Orleans, LA.

Park, T.H., Cohen, A.S., & Serlin, R.C. (1989). *Estimation of parameters and tests of hypotheses in two-way ANOVA with missing cells*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

Reynolds, W.M., & Cohen, A.S. (1989). *Factors in the quality of university instructor-developed tests*. Paper presented at the annual meeting of the National Council on Measurement in Education, San Francisco, CA.

Kim, S.H., & Cohen, A.S. (1991). *Effects of linking methods on detection of DIF*. Paper presented at the annual meeting of the National Council on Measurement in Education, Chicago, IL.

Cohen, A.S., & Kim, S.H. (1991). *A comparison of Lord's χ^2 and Raju's area measures*. Paper presented at the meeting of the International Symposium on Modern Theories of Measurement: Problems and Issues. Montreal, Canada.

Cohen, A.S., Brower, A., & Martinez, N.M. (1991). *Assessment of student outcomes: The influence of background, prior performance and college experiences on academic quality*. Paper presented at the annual meeting of the American Evaluation Association. Chicago, IL.

Cohen, A.S., & Harvey, J.G. (1992). *The University of Wisconsin placement testing program: Mathematics placement test*. Paper presented at the annual meeting of the Mathematics Association of America, Baltimore, MD.

Nystrand, M., Cohen, A.S., & Martinez, N.M. (1992). *Implementation of portfolio analysis for assessment of verbal outcomes*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

Kim, S.H., Cohen, A.S., Baker, F.B., Subkoviak, M.J., & Leonard, T. (1992). *An investigation of hierarchical Bayes procedures in item response theory*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

Cohen, A.S., & Kim, S.H. (1993, April). *A comparison of equating methods under the graded response model*. Paper presented at the annual meeting of the National Council on Measurement in Education, Atlanta, GA.

Kim, S.H., Cohen, A.S., & Park, T.H. (1993, April). *Comparison of item parameters in multiple groups*. Paper presented at the annual meeting of the American Educational Research Association, Atlanta, GA.

Kim, S.H., & Cohen, A.S. (1994, April). *A comparison of Lord's chi-square, Raju's area measures, and the likelihood ratio test on detection of differential item functioning*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.

Kim, S.H., Cohen, A.S., & Kim, H.O. (1994, April). *An investigation of Lord's procedure for detection of differential item functioning*. Paper presented at the annual meeting of the National Council on Measurement in Education, New Orleans, LA.

Zhu, W., Safrit, M.J., & Cohen, A.S. (1994, April). Development of a high school test of physical fitness knowledge: A preliminary report [Summary]. *Proceedings of the annual convention of the American Association for Health, Physical Education, Recreation, and Dance, Denver, CO. Research Quarterly for Exercise and Sport, Vol 65*, A-60.

Zhu, W., Safrit, M.J., & Cohen, A.S. (1994, July). *The evaluation of physical fitness knowledge*. Paper presented at the World Congress of Physical Education and Sport '94: Changes and Challenges. Berlin, Germany.

Cohen, A.S., Kim, S.-H., & Wollack, J. A. (1995, April). *An investigation of the likelihood ratio test for detection of differential item functioning*. Paper presented at the annual meeting of the National Council on Measurement in Education, San Francisco, CA.

Zhu, W., Safrit, M.J., & Cohen, A.S. (1994, April). Development of a high school test of physical fitness knowledge: A follow-up report. *Proceedings of the annual convention of the American Association for Health, Physical Education, Recreation, and Dance, Denver, CO. Research Quarterly for Exercise and Sport, Vol 65*, A-60.

Kim, S.-H. & Cohen, A.S. (1995, June). *On the Behrens-Fisher problem*. Paper presented at the annual meeting of the Psychometric Society, Minneapolis, MN.

Cohen, A.S. (1995, November). *The relationship between French placement test scores and student performance*. Paper presented at the fall meeting of the Wisconsin Association of Foreign Language Teachers, Appleton, WI.

Kim, S.-H & Cohen, A.S. (1996, April). *A comparison of linking and concurrent calibration under item response theory*. Paper presented at the annual meeting of the American Educational Research Association, New York.

Kim, S.-H, Cohen, A.S., & Baker, F.B. (1996, June). *A comparison of a chi-square test and area measures for the detection of differential item functioning under the graded response model*. Paper presented at the annual meeting of the Psychometric Society, Banf, Canada.

Cohen, A.S. & Wollack, J.A. (1996, November). *Observations on the relationship between high school German language study and university placement in German courses*. Paper presented at the annual meeting of the Wisconsin Association of Foreign Language Teachers, Appleton, WI.

Cohen, A.S. & Wollack, J.A. (1996, November). *Observations on the relationship between high school Spanish language study and university placement in Spanish courses*. Paper presented at the annual meeting of the Wisconsin Association of Foreign Language Teachers, Appleton, WI.

Wollack, J.A. & Cohen, A.S. (1997, March). *Detection of answer copying with unknown item and ability parameters*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.

Kim, S.-H. & Cohen, A.S. (1997, March). *A comparison of linking and concurrent calibration under the graded response model*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.

Kim, S.-H. & Cohen, A.S. (1997, March). *An investigation of the likelihood ratio test for detection of differential item functioning under the graded response model*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.

Kane, M.T., Cohen, A.S., & Crooks, T.J. (1997, March). *Justifying the passing scores for written certification tests*. Paper presented at the annual meeting of the National Council on Measurement in Education, Chicago, IL.

Seong, T.-J., Kim, S.-H., & Cohen, A.S. (1997, March). *A comparison of procedures for ability estimation under the graded response model*. Paper presented at the annual meeting of the National Council on Measurement in Education, Chicago, IL.

Cohen, A.S., Kim, S.-H., Wollack, J.A. (1998, April). *Comparison of chi-square, signed area, unsigned area, and likelihood ratio DIF detection measures for the graded response model*. Paper presented at the annual meeting of the National Council on Measurement in Education, San Diego, CA.

Kim, J.B., Cohen, A.S., Booske, J.H., Derry, S.J. (1998, April). *Cooperative learning in an undergraduate engineering course*. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.

Kim, S.-H., & Cohen, A.S. (1998, April). *An evaluation of a Markov chain Monte Carlo method for the two parameter logistic model*. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.

Park, T.-H., Serlin, R.C., & Cohen, A.S. (1998, April). *Modification of the Kruskal-Wallis statistic for the generalized Behrens-Fisher problem*. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.

Cohen, A.S., Kane, M.T., & Crooks, T.J. (1998, April). *A generalized examinee-centered method for setting standards on achievement tests*. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.

Kim, S.-H, Cohen, A.S., DiStefano, C.A., Kim, S. (1998, April). *An investigation of the likelihood ratio test for detection of differential item functioning under the partial credit model*. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.

Wollack, J.A., Cohen, A.S., & Serlin, R.C. (1998, April). *Defining error rates and power for detection of answer copying*. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.

Cohen, A.S., & Ibarra, R.A. (1998, April). *The influence of cultural context on differential item functioning*. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.

Ibarra, R.A., & Cohen, A.S. (1999, February). *Multicontextuality: A hidden dimension in testing and assessment*. Paper presented at the ETS Invitational Conference on Fairness, Access, Multiculturalism, and Equity (FAME), Princeton, NJ.

Cohen, A.S., Kane, M.T., & Kim, S.-H. (1999, April). *The precision of simulation study results*. Paper presented at the annual meeting of the American Educational Research Association, Montreal, Canada.

Kim, S.-H., & Cohen, A.S. (1999, April). *Accuracy of parameter estimation in Gibbs sampling under the two-parameter logistic model*. Paper presented at the annual meeting of the American Educational Research Association, Montreal, Canada.

Wells, C. S., Subkoviak, M. J. & Cohen, A. S. (1999, April). *The effect of item parameter drift on ability estimates*. Paper presented at the annual meeting of the National Council on Measurement in Education, Montreal, Canada.

McHorney, C.A., & Cohen, A.S. (1999, September). *Using Item Response for Equating Measures of Health Status Assessment: Practical and Methodological Challenges*. Paper presented at the U.S. Department of Health Care and Human Services, Agency for Health Care Policy and Research, Health Outcomes Methodology Symposium: Health Outcomes Measures in Assessing Treatment Effectiveness: Measurement Models, Validation, and Interpretation of Effects, Airlie House, Virginia.

Cohen, A.S., Bottge, B.A., & Wells, C.S. (2000, April). *Using item response theory for assessing treatment effects of mathematics in special populations*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.

Wollack, J.A., Bolt, D.M., Cohen, A.S., & Lee, Y.-S. (2000, April). *Recovery of item and ability parameters in the nominal response model: A comparison of marginal maximum likelihood estimation and Markov chain Monte Carlo methods*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.

Kim, S.-H., & Cohen, A.S. (2000, April). *An Investigation of Ability Estimation in Gibbs Sampling*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.

Bolt, D.M., Cohen, A.S., & Wollack, J.A. (2001, April). *A mixture model for multiple choice data*. Paper presented at the annual meeting of the American Educational Research Association, Seattle, WA also presented at the annual meeting of the International Psychometric Society, Kobe, Japan, (2001, July).

Cohen, A. S., & Bolt, D. M. (2002, April). *A mixture model analysis of differential item functioning*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.

Cohen, A. S., Wollack, J. A., Bolt, D. M., & Mroch, A. A. (2002, April). *A Mixture Rasch Model Analysis of Test Speededness* Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.

Wollack, J. A., Cohen, A. S., & Wells, C. S. (2002, April). *The Effects of Test Speededness on Score Scale Stability*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.

Cohen, A. S., & Webb, N. L. (2002, April). *Technical Issues: Precision, Inference and the Exploration of Differences in Student Performance on NAEP*.

Webb, N., Cohen, A. S., & Kang, T-H. (2002, April). A comparison of SSI and Non-SSI performance On State NAEP mathematics assessment items. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.

Cohen, A.S. (2002, April). *Standard setting methods for state bar examinations*. Paper presented at the biennial spring meeting of the National Conference of Bar Examiners, Chicago, IL.

Wollack, J.A., Wells, C.S., & Cohen, A.S. (2003, April). *A comparison of item- and testlet-level scoring on scale stability in the presence of test speededness*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.

Li, Y., Cohen, A.S., & Ibarra, R.A. (2003, April). *Characteristics of mathematics items associated with gender DIF*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.

Li, Y., & Cohen, A.S. (2003, April). *Equating tests composed of testlets: A comparison of a testlet response model and four polytomous response models*. Paper presented at the annual meeting of the National Council on Measurement in Education, Chicago, IL.

Kang, T.-H., & Cohen, A.S. (2003, April). *A mixture model analysis of ethnic group DIF*. Paper presented at the annual meeting of the National Council on Measurement in Education, Chicago, IL.

Kang, T.-H., & Cohen, A.S. (2004, April). *IRT model selection methods for dichotomous items*. Paper presented at the annual meeting of the National Council on Measurement in Education, San Diego, CA.

Seong, T.-J., Lee, Y.-S., Suh, Y., & Cohen, A.S. (2004, April). *Examining Type I Error and Power for Detection of Differential Item and Testlet Functioning*. Paper presented at the annual meeting of the National Council on Measurement in Education, San Diego, CA.

Wollack, J.A., & Cohen, A.S. (2004, April). *A model for simulating speeded test data*. Paper presented at the annual meeting of the American Educational Research Association. San Diego, CA.

Cohen, A.S., & Ibarra, R.A. (2004, September). *Some observations on examining differential item functioning in standardized tests*. Paper presented at the national symposium Multicontextuality, Unity and Diversity in a Pluralistic Society, September 17-19, 2004, The University of New Mexico, Albuquerque, NM.

Cohen, A.S., Gregg, N., & Deng, M. (2004, October). *A mixture model analysis of the item level impact of testing accommodations*. Paper presented at the annual conference of the International Test Commission, The College of William and Mary, Williamsburg, VA.

Cohen, A.S. (2004, October). *Some alternative perspectives on examining differential item functioning in standardized tests*. Paper presented at the annual conference of the International Test Commission, The College of William and Mary, Williamsburg, VA.

Cohen, A.S. (2005, March). *Hidden information in students' answers to test questions*. Paper presented at the Carnegie Initiative on the Doctorate Lecture Series, Department of Educational Psychology & Instructional Technology, The UGA Alumni Center, Buckhead, Georgia.

Cohen, A.S., Cho, S.-J., & Kim, S.-H. (2005, April). *A mixture IRT model for testlets*. Paper presented at the annual meeting of the American Educational Research Association, Montreal, Canada.

Cohen, A.S., Michaels, H., & Deng, M. (2005, April). *A mixture IRT model analysis of context effects*. Paper presented at the annual meeting of the American Educational Research Association, Montreal, Canada.

Kang, T.-H., & Cohen, A.S. (2005, April). *IRT model selection methods for polytomous items*. Paper presented at the annual meeting of the National Council on Measurement in Education, Montreal, Canada.

Kim, S.-H., Oswalt, S.B., & Cohen, A.S. (2005, April). *An investigation of DIF detection methods for Likert-type items*. Paper presented at the annual conference of the American Educational Research Association. Montreal, CA.

Lee, Y.-S., & Cohen, A.S. (2005, April). *Use of Bayesian model selection indices for detection of differential item functioning in testlet-based tests*. Paper presented at the annual meeting of the National Council on Measurement in Education, Montreal, Canada.

Kane, M.T., Mroch, A.A. & Cohen, A.S. (2005, April). *Comparing logistic regression and linear equating to estimate cutscores for generalized examinee-centered standard setting*. Paper presented at the annual meeting of the National Council on Measurement in Education, Montreal, Canada.

Wells, C.S., Cohen, A.S., & Serlin, R.A. (2005, April). *An equivalency test for differential item functioning*. Paper presented at the annual meeting of the National Council on Measurement in Education, Montreal, Canada.

Kim, S.-H, Cohen, A.S., Alagoz, C., & Kim, S. (2005, April). *DIF detection and effect size measures for polytomously scored items*. Paper presented at the annual meeting of the American Educational Research Association. Montreal, Canada.

Gregg, N., & Cohen, A.S. (2005, June). *The long-term impact of test accommodations on reading test performance*. Paper presented at the annual meeting of the Society for the Scientific Study of Reading, Montreal, Canada.

Li, F., Cohen, A.S., & Cho, S.-J. (2005, July). *A mixture model analysis of examinee motivation on a standardized achievement test*. Paper presented at the Tenth China - U.S. Conference on Education: Aligning assessment with instruction, Beijing, People's Republic of China.

Goegebeur, Y., De Boeck, P., Wollack, J. A., & Cohen, A. S. (2005, August) *A speeded item response model with gradual process change*. Paper presented at the annual meeting of the Psychometric Society, Tilburg, NE.

Cohen, A.S. (2005, October). *A multilevel mixture IRT model for educational data*. Paper presented at the October, 2005 meeting of the National Assessment of Educational Progress Design and Analysis Committee, National Center for Educational Statistics, Washington, DC.

Bandalos, D.L., & Cohen, A.S. (2006, April). *Using factor mixture models to identify differentially functioning test items*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

Hong, J.Y., Li, F., Cho, S.-J., Schutz, P.A., & Cohen, A.S. (2006, April). *Why students do not respond to NAEP reading questions: The relationship between students' response patterns and reading motivation*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

Wells, C.S., & Cohen, A.S. (2006, April). *Use of iterative linking with an equivalency test for DIF*. Paper presented at the annual meeting of the National Council on Measurement in Education, San Francisco, CA.

Li, F., Cohen, A.S., Kim, S.-H., & Cho, S.-J. (2006, April). *Model selection methods for dichotomous mixture IRT models*. Paper presented at the annual meeting of the National Council on Measurement in Education, San Francisco, CA.

Webb, M.-Y., Cohen, A. S., & Schwanenfluegel, P. (2006, April). *A mixture model analysis of differential item functioning on the Peabody Picture Vocabulary Test-III*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

Lin, Y.-H., Kim, S.-H., & Cohen, A.S. (June, 2006). *Local dependence indices and detection investigation for polytomous items*. Paper presented at the International Meeting of the Psychometric Society: The 71st annual meeting of the Psychometric Society, 2006, Montreal, Canada.

Cho, S.-J., Cohen, A.S., & Kim, S.-H. (2006, June). *An investigation of priors on the probabilities of mixtures in the mixture Rasch model*. Paper presented at the annual meeting of the Psychometric Society, Montreal, CN.

Li, F., & Cohen, A.S. (2006, June). *A higher-order DINA Rasch model for detection of differential item functioning*. Pacific Rim Objective Measurement Symposium, Hong-Kong, China.

Cohen, A.S. (November, 2006). *DIF detection procedures for the FCAT*. Paper presented at the annual meeting of the Florida Educational Research Association, Jacksonville, FL.

Li, F., Cohen, A.S., & Bottge, B.A. (2007, April). *A latent transition analysis model for assessing change in cognitive skills across repeated measures*. Paper presented at the annual meeting of the National Council on Measurement in Education, Chicago, IL.

Kim, S., Kim, S.-H., & Cohen, A.S. (April, 2007). *On effect size for DIF in polytomously scored items*. Paper presented at the annual meeting of the National Council on Measurement in Education, Chicago, IL.

Kim, S.-H., & Cohen, A.S. (April, 2007). *Detection of DIF in multiple groups using a MANOVA approach*. Paper presented at the annual meeting of the National Council on Measurement in Education, Chicago, IL.

Cho, S.-J., Cohen, A.S., Kim, S.-H., & Bottge, B.A. (April, 2007). *Latent transition analysis with a mixture item response theory measurement model*. Paper presented at the annual meeting of the National Council on Measurement in Education, Chicago, IL.

Cho, S.-J., & Cohen, A.S. (July, 2007). *A multilevel IRT model for DIF analysis*. Paper presented at the International Meeting of the Psychometric Society, Tokyo, Japan.

Kim, S.-H., & Cohen, A.S. (July, 2007). *A Brief history of testing in the ancient world and its implications today*. Paper presented at the International Meeting of the Psychometric Society, Tokyo, Japan.

Kim, I., Cohen, A.S., & Bandalos, D.L. (July, 2007). *A comparison of Bayesian and maximum likelihood algorithms for estimation of a multilevel IRT model*. Paper presented at the International Meeting of the Psychometric Society, Tokyo, Japan.

Cohen, A.S. (October, 2007). *Detection of differential functioning in motor behavior tasks*. Paper presented at the Cooper Institute Conference, Dallas, Texas.

Cho, S.-J., & Cohen, A.S. (November, 2007). *A multilevel mixture model for DIF analysis*. Paper presented at the 6th Annual Fellowship Award Meeting, The College Board, New York, N.Y.

Recesso, A., Templin, S., Ekici, C., & Cohen, A. (2007, November). *Evidential reasoning in teacher assessment*. Poster presented at the 2007 annual meeting of the Society for Judgment and Decision Making in Long Beach, California.

Cohen, A.S. (December, 2007). *Hidden information in answers to test questions*. Paper presented at HumRRO, Louisville, KY.

Wang, A., & Cohen, A.S. (March, 2008). *Evaluation of three test speededness models*. Graduate Student Interdisciplinary Conference, University of Georgia, Athens, GA.

Li, F., Templin, J. & Cohen, A.S. (March, 2008). *A relaxed higher-order DINA model for attribute-level DIF*. Paper presented at the annual meeting of the National Council on Measurement in Education, New York, NY.

Templin, J., Cohen, A.S., & Henson, R. (March, 2008). *Constructing tests for optimal classification in standard setting*. Paper presented at the annual meeting of the National Council on Measurement in Education, New York, NY.

Cho, S.-J., Cohen, A.S., & Templin, J. (March, 2008). *A Multidimensional mixture IRT model for DIF analysis*. Paper presented at the annual meeting of the National Council on Measurement in Education, New York, NY.

Wells, C.S., Cohen, A.S., & Patton, J. (March, 2008). *A range-null hypothesis approach for testing DIF under the Rasch model*. Paper presented at the annual meeting of the National Council on Measurement in Education, New York, NY.

Choi, H.-J., & Cohen, A.S. (March, 2008). *A Bayesian approach to estimation of person-fit in the testlet model*. Paper presented at the annual meeting of the National Council on Measurement in Education, New York, NY.

Cohen, A.S. (March, 2008). *Analyzing tests with mixture IRT models*. Presented at Center for Educational Assessment, the University of Massachusetts, Amherst, MA.

Wang, A., & Cohen, A.S. (July, 2008). *Evaluation of three test speededness models*. Paper presented at the International Meeting of the Psychometric Society, Durham, NH.

Choi, H.-J., Templin, J.L., Henson, R.A., & Cohen, A.S. (April, 2009). *A mixture Rasch diagnostic model for mediating attributes and ability*. Paper at the annual meeting of the National Council on Measurement in Education, San Diego, CA.

Cohen, A.S., Templin, J.L., & Bradshaw, L. (April, 2009). *Beyond unidimensionality: Measuring all of achievement*. Paper presented at the annual meeting of the National Council on Measurement in Education, San Diego, CA.

Cho, S.-J., Bottge, B.A., Cohen, A.S., & Kim, S.-H. (April, 2009). *Effects of Enhanced Anchored Instruction: A latent transition analysis with a mixture item response theory measurement model*. Paper presented at the annual convention of the American Educational Research Association, San Diego, CA.

Wang, A., & Cohen, A.S. (April, 2009). *A mixture nominal response model for test speededness*. Paper presented at the annual meeting of the National Council on Measurement in Education, San Diego, CA.

Choi, Y.-J., & Cohen, A.S. (April, 2009). *A mixture model analysis of DIF on TIMSS 2003*. Graduate Student poster presented at the annual meeting of the National Council on Measurement in Education, San Diego, CA.

Alexeev, N., & Cohen, A. S. (June, 2009). *Factors contributing to latent class membership on a high school mathematics test*. Poster presented at the annual Institute of Education Sciences Research Conference, Washington, DC.

Choi, H-J., Templin, J.L., Cohen, A.S., & Henson, R.A. (2009, July). *A diagnostic classification mixture IRT model*. Paper presented at the International Meeting Psychometric Society, Cambridge, UK.

Orrill, C., & Cohen, A. S. (April, 2010). Does it Work? Building Methods for Studying the Effects of Professional Development. In Izsák, A., & Lobato, J. *Using Psychometrics to Advance Assessment in Mathematics Education*. Pre-session presented at the annual conference of the National Council of Teachers of Mathematics, San Diego, CA.

Li, F., & Cohen, A.S. (May, 2010). *A random-effects Rasch model and a random-effects response time model for detecting item location effects*. Paper presented at the annual meeting of the American Educational Research Association, Denver, CO.

Bradshaw, L.P., Templin, J.L., & Cohen, A.S. (May, 2010). *Accuracy of multidimensional item response model parameters estimated under small sample size*. Paper presented at the annual meeting of the American Educational Research Association meeting, Denver, CO.

Wang, A., & Cohen, A.S. (2010, May). *A cross-classified model for test speededness*. Paper presented at the annual meeting of the National Council on Measurement in Education, Denver, CO.

Choi, Y.-J., Alexeev, N., & Cohen, A.S. (2010, May). *A mixture 3PL model analysis of DIF on the TIMSS 2007 mathematics test*. Paper presented at the annual meeting of the National Council on Measurement in Education, Denver, CO.

Choi, H. J., Templin, J. L., Cohen, A. S., & Atwood, C. H. (2010, May). *The impact of model misspecification on estimation accuracy in diagnostic classification models*. Paper presented at the meeting of the National Council on Measurement in Education, Denver, CO.

Alexeev, N., Templin, J.L., & Cohen, A.S. (2010, May). *Factors influencing the formation of latent classes*. Paper presented at the annual meeting of the National Council on Measurement in Education, Denver, CO.

Paek, I., Cho, S.-J., & Cohen, A.S. (2010, May). *A comment on scale linking in mixture IRT modeling*. Paper presented at the annual meeting of the National Council on Measurement in Education, Denver, Co.

Choi, Y.-J., Cohen, A. S., & Bandalos, D. L. (2010, July). *Structural modeling of TIMSS mathematics test data*. Paper presented at the 7th Conference of the International Test Commission, Hong Kong, China.

Alexeev, N., Cohen, A. S., & Templin, J. (2010, July). *Applying mixture IRT models to TIMSS data*. Paper presented at the 7th Conference of the International Test Commission, Hong Kong, China.

Choi, H.-J., & Cohen, A. S. (2010, July). *Can assessment help enhance reading literacy? Lessons from PIRLS*. Paper presented at the 7th Conference of the International Test Commission, Hong Kong, China.

Wang, A., & Cohen, A. S. (July, 2010). *A cross-classified IRT model for differential item and testlet functioning*. Paper presented at the 7th Conference of the International Test Commission, Hong Kong, China.

Choi, Y.-J., Kim, S.-H., & Cohen, A. S. (2011, April). *Detection of differential item functioning in multiple groups*. Paper presented to the annual meeting of the National Council on Measurement in Education, New Orleans, LA.

Bottge, B.A., Toland, M. D., Cohen, A.S., Cho, S.-J., & Ma, X. (April, 2011). *Evaluating the Efficacy of Enhanced Anchored Instruction for Middle School Students with Learning Disabilities in Math*. Paper presented at the annual meeting of the American Educational Research Association. New Orleans, LA.

Wang, A., & Cohen, A.S. (April, 2011). *A multidimensional cross-classified IRT model*. Paper presented to the annual meeting of the National Council on Measurement in Education, New Orleans, LA.

Iszák, A., Wang, A., Cohen, A.S., Orrill, C.H. (April, 2011). *Effects of middle grades teachers' understandings of rational numbers on student achievement*. Paper presented at the annual convention of the American Educational Research Association, New Orleans, LA.

Alexeev, N., Cohen, A.S., Templin, J. L., Gregg, N., & Jenkins, C.L. (April, 2011). *Factors Affecting the Formation of Latent Classes in Mixture IRT Models*. Paper presented at the annual meeting of the National Council on Measurement in Education, New Orleans, LA.

Bottge, B.A., Cohen, A.S., Cho, S.-J., & Gassaway, L. (April, 2011). *Using Assessment Tools to Develop Students' Understanding of Mathematics Problems*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.

Kim, S.-H, Cohen, A. S., Choi, Y.-J., Cho, S.-J, & Kim, S. (July, 2011). *Detection of differential item functioning in multiple groups using item response theory models*. Paper presented at the International Meeting of the Psychometric Society, Hong Kong, China.

Choi, Y.-J., Cohen, A. S., & Kim, S.-H. (July, 2011). *Detection of differential item functioning in MULTILOG and IRTLRDIF*. Paper presented at the International Meeting of the Psychometric Society, Hong Kong, China.

Buxton, C. A., Allexaht-Snider, M., Suriel, R., Gabbitas, B., Cohen, A. S., & Choi, Y.-J. (April, 2012). *Educative assessments for English language learners: The values of increased student writing in science*. Paper presented at the annual meeting of the American Educational Research Association, Vancouver, British Columbia.

Jenkins, C. L., Templin, J. L., & Cohen, A. S. (April, 2012). *Comparing the two- and three-parameter logistic models via likelihood ratio tests: A commonly misunderstood problem*. Paper presented at the annual meeting of the National Council on Measurement in Education, Vancouver, British Columbia, CA.

Wells, C. S., Cohen, A. S., Serlin, R. C., & Bahry, L. (April, 2012). *Detecting consequential item parameter drift using the range-null hypothesis*. Paper presented at the annual meeting of the National Council on Measurement in Education, Vancouver, British Columbia, CA.

Lu, Z., Zhang, Z., & Cohen, A. S. (April, 2012). *Latent Growth Curve Models with Non-ignorable Missing Data*. Paper presented at the annual meeting of the National Council on Measurement in Education, Vancouver, British Columbia, CA.

Sen, S., Cohen, A. S., & Kim, S.-H. (July, 2012). *Dimensionality check using several programs*. Paper presented at the International Meeting of the Psychometric Society, Lincoln, NE.

Bradshaw, L., Brown, C., Cohen, A., Madison, M., & Templin, J. (2012, December). *Evaluating the statistical properties of epistemic network analysis*. Poster presented at the 4th Annual Discovery Research K-12 Meeting in Madison, Wisconsin.

Buxton, C., Allexsaht-Snider, M.A., & Cohen, A. (2012, December). *Classroom tools for supporting science inquiry practices and academic language development for ELLs*. Feedback session at the annual meeting of National Science Foundation Principal Investigators for Discovery Research K-12 Projects. Washington, D.C.

Buxton, C., Allexsaht-Snider, M.A., & Cohen, A. (2013, February). *Language-rich inquiry science with English language learners*. Poster presented at the University of Georgia College of Education Faculty Research Conference. Athens, GA.

Wollack, J. A., Cohen, A. S., Eckerly, C. (April, 2013). *Detecting test tampering using item response theory*. Paper presented at the annual meeting of the National Council on Measurement in Education, San Francisco, CA.

Lu, Z., Zhang, Z., & Cohen, A. S. (April, 2013). *Bayesian model selection criteria for latent growth models*. Paper presented at the annual meeting of the National Council on Measurement in Education, San Francisco, CA.

Choi, Y.-J., & Cohen, A. S. (April, 2013). *Metric identification in the mixture IRT model*. Paper presented at the annual meeting of the National Council on Measurement in Education, San Francisco, CA.

Alagoz, C., Kim, S.-H., & Cohen, A. S. (April, 2013). *Item fit evaluation for higher-order DINA model under Q-matrix misspecification with a Bayesian estimation approach*. Paper presented at the annual meeting of the National Council on Measurement in Education, San Francisco, CA.

Cohen, A.S. (April, 2013). *Some thoughts on measuring more of what students know*. Paper presented at the annual meeting of the National Council on Measurement in Education. San Francisco, CA.

Huang, H.-Y., & Cohen, A. S. (April, 2013). *A multilevel mixture 2PL-IRT model for detection of DIF*. Paper presented at the annual meeting of the National Council on Measurement in Education. San Francisco, CA.

Jang, Y., Lu, Z., & Cohen, A. S. (July, 2013). *Comparison of nested models for multiply imputed data*. Paper presented at the 2013 International Meeting of the Psychometric Society. Arnhem, The Netherlands.

Sen, S., Cohen, A. S., & Lu, Z. (July, 2013). *Sensitivity of mixture IRT models to distributional assumptions*. Paper presented at the 2013 International Meeting of the Psychometric Society. Arnhem, The Netherlands.

Ong, M. L., Lu, Z., Lee, S., & Cohen, A. S. (July, 2013). *A comparison of multilevel modeling, structural equation modeling, and the likelihood ratio test for detecting differential item functioning (DIF)*. Paper presented at the International Meeting of Psychometric Society (IMPS), Arnhem, The Netherlands.

Qin, S., & Cohen, A. S. (July, 2013). *Multilevel detection of possible test tampering: An empirical example*. Paper presented at the 2013 International Meeting of the Psychometric Society. Arnhem, The Netherlands.

Sen, S., Cohen, A. S., & Kim, S.-H. (2013, July). *Robustness of MCMC estimation to latent nonnormality in the mixture IRT models*. Paper presented at the annual International Meeting of the Psychometric Society. Arnhem, The Netherlands.

Raczynski, K., Cohen, A., & Lu, Z. (2013, August). *Modeling the effects of training and trainers on rater accuracy*. Paper presented at the Annual Convention of the American Psychology Association 2013, Honolulu, HI.

Qin, S., & Cohen, A. S. (November, 2013). *Multilevel detection of possible test tampering: A simulation study*. Paper presented at the Test Fraud Conference, Madison, WI.

Lu, Z., & Cohen, A. S. (February, 2014). *Bayesian model selection for latent growth models*. Poster presented at the annual College of Education Faculty Research Conference. University of Georgia: Athens, GA.

Oliver, J. S., Jang, Y., Hodges, G.W., Cohen, A.S., & Robertson, T.P. (March, 2014). *Models and methods in science education*. Paper presented at the annual meeting of the National Association for Research in Science Education, Pittsburgh, PA.

Oliver, J. S., Hodges, G. W., Kwon, K.-A., Raven, S. P., Rogers, W., Jurkiewicz, M., Cohen, A. S., Jang, Y., Moore, J. N., & Robertson, T.P. (April, 2014). *High school student accomplishment of cellular biology content using 3-D computer based modules*. Paper presented at the annual meeting of the National Association for Research in Science Education, Pittsburgh, PA.

Choi, Y.-J., Cohen, A. S., & Lu, Z. (April, 2014). *The impact of equating on detection of treatment effects*. Paper presented at the annual meeting of the National Council on Measurement in Education, Philadelphia, PA.

Jang, Y., Lu, Z., & Cohen, A.S. (April, 2014). *A comparison of likelihood functions of multiple imputation for nested models*. Paper presented at the annual meeting of the National Council on Measurement in Education, Philadelphia, PA.

Jang, Y., Bradshaw, L., Oliver, J. S., Hodges, G. W., Cohen, A. S., Rogers, W., Kwon, K.-A., Raven, S., Jurkiewicz, M., Moore, J.N., & Robertson, T.P. (April, 2014). *Diagnosing students' mastery of concepts in biology: An examination of mastery states before and after instruction based on 3-D animations*. Paper presented at the annual meeting of the American Educational Research Association, Special Interest Group on Cognition and Assessment, Philadelphia, PA.

Alagoz, C., & Cohen, A. S. (July, 2014). *A SAS/IML macro for DINA (Deterministic Input, Noisy "And" Gate) Model*. Paper presented at the annual meeting of the International Test Commission, San Sebastian, Spain.

Wang, J., Lu, Z., & Cohen, A. S. (July, 2014). *The sensitivity of hierarchical linear models to outliers*. Paper presented at the International Meeting of the Psychometric Society, Madison, WI.

Ong, M. L., Kim, S.-H., Cramer, S., & Cohen, A. S. (July, 2014). *A comparison of differential item functioning (DIF) detection for dichotomously scored items by using IRTPRO, BILOG-MG 3, and IRTLRDIF*. Paper presented at the International Meeting of the Psychometric Society, Madison, WI.

Raczynski, K., Cohen, A. S., Lu, Z., & Engelhard, G. (July, 2014). *Comparing the effectiveness of rater training methods using generalized linear mixed models*. Paper presented at the International Meeting of the Psychometric Society, Madison, WI.

Choi, Y.-J., & Cohen, A. S. (July, 2014). *A simulation study for metric identification in mixture IRT models*. Paper presented at the International Meeting of the Psychometric Society, Madison, WI.

Sen, S., Kim, S.-H., & Cohen, A. S. (July, 2014). *Model selection for multilevel mixture Rasch models*. Paper presented at the International Meeting of the Psychometric Society, Madison, WI.

Kim, M., Choi, H.-Y., Choi, Y.-J., & Cohen, A. S. (July, 2014). *Model selection for random item mixture IRT models*. Paper presented at the International Meeting of the Psychometric Society, Madison, WI.

Kim, S.-H., Bao, Y., Horan, E., Kim, M., & Cohen, A. S. (July, 2014). *Gauss-Hermite quadrature in marginal maximum likelihood estimation of item parameters*. Paper presented at the International Meeting of the Psychometric Society, Madison, WI.

Choi, H.-J., Cohen, A. S., & Bottge, B. A. (February, 2015). *Intervention effects on fractions computation error patterns of middle school students with and without math disabilities*. Poster presented at the annual College of Education Research Conference, Athens, GA.

Kim, S., Lu, Z., & Cohen, A. S. (April, 2015). *Investigating responses and missingness using item response tree models: Illustration with empirical data*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.

Hodges, G. W., Oliver, J.S., Jeong, S., Cohen, A. S., Jang, Y., Robertson, T., & Ducrest, D. (April, 2015). *Leveraging technology to measure student learning during inquiry based virtual case studies in introductory biology*. Paper presented at the annual conference of the National Association of Research in Science Teaching, Chicago, IL.

Choi, H.-J., Cohen, A. S. & Bottge, B., (April, 2015). *A random item mixture nominal response model*. Paper presented at the annual meeting of the National Council for Measurement in Education, Chicago, IL.

Karadavut, T., Cohen, A. S., & Kim, S.-H. (April, 2015). *Continuous latent variables as covariates in a mixture Rasch model*. Paper presented at the annual meeting of the National Council for Measurement in Education, Chicago, IL.

Jang, Y., Cohen, A. S., & Stanger-Hall, K. F. (2015, July). *Learning biological processes with animated case studies*. Poster presented at the annual meeting of the Society for the Advancement of Biology Education Research, Minneapolis, MN.

Kim, S., Lu, Z. & Cohen, A. (2015, July). *Investigating omission tendency on a test using a tree-based item response model: Illustration with empirical data*. Paper presented at the International Meeting of the Psychometric Society (IMPS) 2015 Annual Meeting, Beijing, China.

Kim, M., Lu, Z. & Cohen, A. (2015, July). *Comparison of random effects and fixed effects item response models on detection of a multilevel treatment effect*. Paper presented at the International Meeting of the Psychometric Society (IMPS) 2015 Annual Meeting, Beijing, China.

Kim, S., Lu, Z. & Cohen, A. (2015, July). *A structural equation modeling approach to the estimation of reliability for a test with items of different numbers of ordered categories*. Paper presented at the International Meeting of the Psychometric Society (IMPS) 2015 Annual Meeting, Beijing, China.

Kim, M., Choi, H.-J., Choi, Y.-J., & Cohen, A. S. (2015, July). *Model selection in random item mixture IRT models*. Paper presented at the International Meeting of the Psychometric Society Annual Meeting, Beijing, China.

Kim, M., Cohen, A. S., Lu, Z., Kim, S., Buxton, C., & Allexsaht-Snider, M.A. (2016, April). *Speededness in testlet-based constructed response tests*. Paper presented at the 2016 annual meeting of the National Council on Measurement in Education, Washington, D.C.

Jang, Y., Kim, S.-H., & Cohen, A. S. (2016, April). *Sensitivity to multidimensionality of mixture IRT models*. Paper at the 2016 annual meeting of the National Council on Measurement in Education, Washington, D.C.

Choi, H.-J., Cohen, A. S., & Bottge, B. A. (2016, April). *A multilevel mixture random item nominal response IRT model for error analysis*. Paper presented at the 2016 annual meeting of the National Council on Measurement in Education, Washington, D.C.

Karadavut, T., & Cohen, A. S. (2016, April). *Effects of a skewed t distribution on estimation of mixture IRT parameters in non-normal distributions*. Paper presented at the 2016 annual meeting of the National Council on Measurement in Education, Washington, D.C.

Kim, S., Kwak, M., & Cohen, A.S. (2016, April). *A mixture generalized partial credit model analysis using language-based covariates*. Poster presented at the 2016 annual meeting of the American Educational Research Association, Research in Progress section, Washington, DC.

Olmez, I. B., & Cohen, A. S. (2016, April). *Mixture Rasch modeling of math anxiety*. Poster presented at the annual College of Education Research Conference, Athens, GA: University of Georgia.

Kim, S., Cohen, A. S., & Kwak, M. (2016, July). *A mixture partial credit model analysis using language-based covariates*. Paper presented at the 2016 International meeting of the Psychometric Society, Asheville, NC.

Kim, S., Kwak, M., Cardozo-Gaibisso, L., Buxton, C.B., & Cohen, A.S. (2017, January). *Statistical and qualitative analyses of students' answers to a constructed response test of science inquiry knowledge*. Paper presented at the 4th annual Writing Analytics Conference, St. Petersburg, FL.

Kwak, M., Kim, S., & Cohen, A.S. (2017, January). *Latent Dirichlet analysis of text constructed response answers*. Paper presented at the 4th annual Writing Analytics Conference, St. Petersburg, FL.

Wang, L., Hodges, G., Cohen, A.S., & Jang, Y. (2017, April). *The impact of a blended learning environment on students' understanding: The case of redox reaction*. Paper presented at the annual conference of the National Association of Science Teachers. San Antonio, TX.

Bottge, B. A., Gassaway, L., Cohen, A. S., & Choi, H.-J. (2017, April). *Comparing effects of a math intervention delivered in resource and inclusive classrooms*. Paper presented at the annual meeting of the Council on Exceptional Children, Boston, MA.

Sen, S., & Cohen, A.S. (2017, April). *Analysis of TIMSS 2011 data using a multilevel mixture Rasch model*. Paper presented at the 11th Annual Meeting of the International Multilevel Conference, University of Utrecht, Netherlands.

Lee, J., & Cohen, A.S. (2017, April). *The impact of DIF methodology on metric identification in mixture IRT models*. Paper presented at the annual meeting of the National Council on Measurement in Education, San Antonio, TX.

Kim, M., & Cohen, A.S. (2017, April). *A random item testlet model for speededness in constructed response items*. Paper presented at the annual meeting of the National Council on Measurement in Education, San Antonio, TX.

Choi, Y.-J., & Cohen, A.S. (2017, April). *The effects of recoding on mixture IRT models*. Paper presented at the annual meeting of the National Council on Measurement in Education, San Antonio, TX.

Wang, A., Cohen, A.S., Zhang, Y., & Mueller, L. (2017, April). *Examining the performance of l_2 for test security under speededness conditions*. Paper presented at the annual meeting of the National Council on Measurement in Education, San Antonio, TX.

Choi, H.-J., Kwak, M., Kim, S., Xiong, J., Cohen, A. S., Bottge, B. A. (2017, April). An application of a topic model to two educational assessments. The Annual Meeting of the Psychometric Society, 449–459.

Karadavut, T., & Cohen, A.S. (2017, April). *Linking in mixIRT models*. Paper presented at the annual meeting of the National Council on Measurement in Education, San Antonio, TX.

Choi, H.-J., Cohen, A.S., Clark, C., & Espy, K. (2017, April). *A mixture IRT model with a response time covariate*. Paper presented at the annual meeting of the National Council on Measurement in Education, San Antonio, TX.

Zheng, G., Choi, H.-J., Bottge, B.A., & Cohen, A.S. (2017, April). *A preliminary study on mixed membership with the Rasch model*. Paper presented at the annual meeting of the National Council on Measurement in Education, San Antonio, TX.

Kwak, M., Kim, S., & Cohen, A.S. (2017, April). *Mining students' constructed response answers*. Paper presented at the annual meeting of the National Council on Measurement in Education, San Antonio, TX.

Jang, Y., & Cohen, A.S. (2017, April). *The impact of Markov chain convergence on estimation of mixture IRT models*. Paper presented at the annual meeting of the National Council on Measurement in Education, San Antonio, TX.

Kim, S., Lu, Z., & Cohen, A.S. (2017, July). *Topic modeling for longitudinal text data*. Paper presented at the annual International Meeting of the Psychometric Society, Switzerland.

Sensibaugh, C.A., Choi, H.-J., Cohen, A.S., & Lemons, P.P. (2017, July). *The SAVI survey: Self-appraisal, values and intentions*. Poster presented at the annual meeting of the Society for the Advancement of Biology Education Research, Minneapolis, MN.

Olmez, I. Burak & Cohen, A.S. (2017, October). *Detecting math anxiety with a mixture partial credit model*. Research Report presented at the annual meeting of the 2017 Annual Conference of the North American Chapter of the International Group for the Psychology of Mathematics Education, Indianapolis, IN.

Raczynski, K., Wang, J., Engelhard, G., & Cohen, A.S. (2018, April). *Addressing scoring challenges in a new era of integrated writing (IW) assessments*. Paper presented at the annual meeting of the International Objective Measurement Workshop, New York, NY.

Kim, S.-H, Cohen, A.S., Kwak, M., & Lee, J. (2018, April). *Specification of priors in Bayesian estimation under the Rasch model*. Paper presented at the annual meeting of the American Educational Research Association, New York, NY.

Kwak, M., Kim, S., Choi, H.-J., Xiong, J., & Cohen, A.S. (2018, April). *Topic model analysis of constructed response items on a formative test*. Paper presented at the annual meeting of the National Council on Measurement in Education, New York, NY.

Choi, H.-J. & Cohen, A.S. (2018, April). *Impact of misspecification on a nonlinear reliability for internal consistency for categorical data*. Paper presented at the annual meeting of the National Council on Measurement in Education, New York, NY.

Kim, M. & Cohen, A.S. (2018, April). *Exploring characteristics of speeded examinees using LDA*. Paper presented at the annual meeting of the National Council on Measurement in Education, New York, NY.

Kim, S.-H., Cohen, A.S., Cho, S.-J., & Eom, H.-J. (2018, April). *Use of information criteria in the study of group differences in trace lines*. Paper presented at the annual meeting of the National Council on Measurement in Education, New York, NY.

Kim, S., Lu, Z., & Cohen, A.S. (2018, April). *Supervised text analysis for mixture groups*. Paper presented at the annual meeting of the National Council on Measurement in Education, New York, NY.

Choi, H.-J., Kwak, M., Xiong, J., Kim, S., & Cohen, A.S. (2018, July). *An application of a topic model to constructed responses in formative assessments*. Paper presented at the International Meeting of the Psychometric Society, New York.

Kwak, M., Xiong, J., Kim, S., Choi, H.-J., & Cohen, A.S. (2018, July). *Dirichlet Priors for Latent Dirichlet Analysis of Constructed Response Items*. Paper presented at the annual International Meeting Psychometric Society, New York, NY.

Zheng, G., Choi, H.-J., Cohen, A.S. & Bottge, B. (2018, July). *A mixed membership Rasch model*. Paper presented at the annual meeting of the International Meeting Psychometric Society, New York, NY.

Lee, J., & Cohen, A.S. (2018, July). *A threshold for detecting inattentive response behavior using mixture IRT*. Paper presented at the annual meeting of the International Psychometric Society, New York, NY.

Xiong, J., Wang, J., Engelhard, G., & Cohen, A.S. (2018, July) *The calibrations of multiple-choice and constructed response items in English Language Arts*. Paper presented at the Pacific Rim Objective Measurement Workshop, Shanghai, China.

Duong, E.V., Mellom, P., Weber, J., Gokee, R., & Cohen, A.S. (2019, April). *Examining the impact of instructional conversation on students' writing through topic model analysis*. Paper presented at the annual meeting of the American Educational Research Association. Toronto, CA.

Kim, S., Lu, Z., & Cohen, A.S. (2019, April). *Longitudinal data analysis for text data*. Paper presented at the annual meeting of the American Educational Research Association. Toronto, CA.

Hodges, G.L., Pritchard, K., Krishnan, S., Cohen, A.S., & Lee, J. (2019, April). *Leveraging technology to create ambitious science learning environments for elementary learners: Convergent mixed methods study*. Paper presented at the annual meeting of the American Educational Research Association. Toronto, CA.

Raczynski, K.R., Garner, H., Choi, H.-J., & Cohen, A.S. (2019, April). *Toward improving the machine scorability of assessment items*. Paper presented at the annual meeting of the National Council on Measurement in Education. Toronto, CA.

Wang, J., Lu, Z., Engelhard, G., & Cohen, A.S. (2019, April). *Examining rating designs with cross-classification multilevel Rasch models*. Paper presented at the annual meeting of the National Council on Measurement in Education. Toronto, CA.

Kwak, M., Kim, S., Choi, H.-J., Xiong, J., & Cohen, A.S. (2019, April). *Stopword selection for latent Dirichlet Allocation analysis of constructed response items*. Paper presented at the annual meeting of the National Council on Measurement in Education. Toronto, CA.

Lee, J., & Cohen, A.S. (2019, April). *Bayesian model selection for IRTree & MixIRT Models*. Poster presented at the annual meeting of the National Council on Measurement in Education, Toronto, CA.

Kim, S.-H., Cohen, A.S., & Eom, H.J. (2019, April). *Three methods of item analysis*. Paper presented at the annual meeting of the National Council on Measurement in Education, Toronto, CA.

Hodges, G.L., Pritchard, K.F., Lee, J., & Cohen, A.S. (2019, April). *A mixed methods study that compares learning gains associated with serious gameplay and hands-on science*. Paper presented at the NARST Annual International Conference, Baltimore, MD.

Xiong, J., Choi, H.-J., Kwak, M., Kim, S., & Cohen, A.S. (2019, July) *Topic modeling of constructed-response answers on social studies assessments*. Paper presented at the 2019 International Meeting of the Psychometric Society, Santiago, Chile.

Cardozo Gaibisso, L.A., Kim, S., Buxton, C., & Cohen, A.S. (2019, July). *Thinking beyond the score with SFL and text analysis: Multidimensional analysis of student assessment performance*. Paper presented at the 46th International Systemic Functional Congress, Santiago, Chile.

Choi, H.-J., Lai, S., Xiong, J., Raczynski, K.R., Wheeler, J.M., Lee, J., & Cohen, A.S. (2019, October). *A new method for analyzing students' answers to constructed response items in formative assessments*. Paper presented at the annual meeting of the Georgia Educational Research Association, Macon, GA.

Cardozo-Gaibisso, L., Kim, S., Buxton, C.A., & Cohen, A.S. (2020, April). *Multidimensional score analysis: Exploring the complexity of bilingual science constructed response assessments through mixed methods*. [Poster Session] Annual conference of the American Educational Research Association, San Francisco, CA <http://tinyurl.com/tqf6n3g> (Meeting cancelled because of Covid 19 pandemic).

Cardozo-Gaibisso, L., Kim, S., Buxton, C.A., & Cohen, A.S. (2020, April). *Multidimensional score analysis: Exploring the complexity of bilingual science constructed response assessments through mixed methods*. [Poster Session] Annual conference of the American Educational Research Association, San Francisco, CA <http://tinyurl.com/tqf6n3g> (Meeting cancelled because of Covid 19 pandemic).

Choi, H.J., Kim, S., Templin, J., & Cohen, A.S. (2020, April). *A supervised topic model for analyzing answers in constructed response tests*. Paper presented at the virtual annual meeting of the National Council on Measurement in Education, San Francisco, CA (Meeting virtual because of Covid 19 pandemic).

Wheeler, J.M., & Cohen, A.S. (2020, April). *A comparison of latent semantic analysis and latent Dirichlet allocation*. Paper presented at the virtual annual meeting of the National Council on Measurement in Education, San Francisco, CA (Meeting virtual because of Covid 19 pandemic).

Hong, M., & Cohen, A.S. (2020, April). *Impact of missing documents on latent Dirichlet allocation*. Paper presented at the virtual annual meeting of the National Council on Measurement in Education, San Francisco, CA (Meeting virtual because of Covid 19 pandemic).

Lee, J., & Cohen, A.S. (2020, April). *Application of a Bayesian nonparametric IRT using a beta-mixture in addressing atypical ICCs*. Paper accepted for presentation at the annual meeting of the National Council on Measurement in Education, San Francisco, CA (Paper withdrawn because of Covid 19 pandemic).

Lee, J., & Cohen, A.S. (2020, April). *A Dirichlet process mixture IRT model with response time for aberrant response behavior*. Paper accepted for presentation at the annual meeting of the National Council on Measurement in Education, San Francisco, CA (Paper withdrawn because of Covid 19 pandemic).

Zheng, G., Mardones, C., Choi, H.-J., Hong, M., Copur-Gencturk, Y., & Cohen, A.S. (2020, April). *Mathematical equations and topic modeling: A comparison of two tokenization methods*. Poster accepted for presentation at the annual meeting of the American Educational Research Association, Graduate Student Gala, San Francisco, CA (Meeting cancelled because of Covid 19 pandemic).

Mellom, P.J., Duong, E.V., Hixon, R., Weber, J., & Cohen, A.S. (2020, June). *Using corpus and discourse analysis to analyze the impact of a collaborative conversation-based pedagogy on English language learners' writing*. Paper accepted for presentation at the annual conference of Corpora & Discourse International, University of Sussex, UK. (Conference cancelled because of Covid 19 pandemic.)

Zheng, G., Mardones, C., Hong, M., Copur-Gencturk, Y., Choi, H.-J., & Cohen, A.S. (2020, July). *Using latent Dirichlet allocation to analyze mathematics constructed-response data*.

Paper presented at the International Meeting of the Psychometric Society, College Park, MD. (Meeting virtual because of Covid 19 pandemic.)

Xiong, J., Wheeler, J., Lee, J., Choi, H.-J., & Cohen, A.S. (2020, July). *An empirical study of developing an automated scoring engine using supervised latent Dirichlet allocation*. Paper presented at the International Meeting of the Psychometric Society, College Park, MD. (Meeting virtual because of Covid 19 pandemic.)

Wheeler, J.M., Cohen, A.S., Xiong, J., Lee, J., & Choi, H.-J. (2020, July). *A simulation guide for topic models of constructed-response items*. Paper presented at the International Meeting of the Psychometric Society, College Park, MD. (Meeting virtual because of Covid 19 pandemic.)

Choi, H.-J., Bolinger, H., Copur-Gencturk, Y., & Cohen, A.S. (July, 2020). *Probabilistic topic modeling for identifying students' misconceptions or alternative concepts in mathematics*. Paper presented at the International Meeting of the Psychometric Society, College Park, MD, (Meeting virtual because of Covid 19 pandemic.)

Hodges, G. L. W., Cohen, A.S., Lee, J., Flanagan, K.C., Eldridge, S.S., & Schneider, S.G. (April, 2021). *Using mixed methods to identify and test game design heuristics that support elementary science learning*. Paper presented at the Annual Conference of the American Educational Research Association, virtual conference.

Zor, S., Cohen, A.S. Bottge, B.A., & Gassaway, L. (April, 2021). *Investigating latent class characteristics with covariates by using the mixture Rasch model*. Paper presented at the Annual Conference of the American Educational Research Association, virtual conference.

Xiong, J., Cohen, A.S., & Xiong, X. (2021, April). *Bayesian estimation of ability in hybrid item response models on mixed-format items*. Paper presented at the Annual Meeting of the National Council on Measurement in Education, virtual conference.

Mardones Segovia, C.A., Wheeler, J.M., Choi, H.-J., & Cohen, A.S. (2021, April). *Model selection for latent Dirichlet allocation with small numbers of topics*. Paper presented at the Annual Meeting of the National Council on Measurement in Education, virtual conference.

Hong, M., Copur-Gencturk, Y., Choi, H.-J., & Cohen, A.S. (2021, April). *An application of topic modeling for investigating mathematics teachers' reasoning*. Paper presented at the Annual Meeting of the National Council on Measurement in Education, virtual conference.

Raczynski, K., Choi, H.-J., Wheeler, J.M., Shermis, M., Lottridge, S., Cohen, Y., & Cohen, A.S. (2021, April). *Using artificial intelligence for constructed-response scoring: Some practical considerations*. Symposium presented at the 2021 Annual Meeting of the National Council on Measurement in Education, virtual conference.

Wheeler, J.M., Cohen, A.S., Choi, H.-J., Xiong, J., & Lee, J. (2021, April). *A semi-confirmatory latent Dirichlet allocation topic model*. Paper presented at the Annual Meeting of the National Council on Measurement in Education, virtual conference.

Lee, J., Xiong, J., Wheeler, J.M., Choi, H.-J., & Cohen, A.S. (2021, April). *Application of a multidimensional mixture IRT model and a supervised LDA model for DIF in a mixed-format test*. Paper presented at the Annual Meeting of the National Council on Measurement in Education, virtual conference.

Choi, H.-J., Lee, J., Kim, S., Listyg, B., Bowers, B., Cohen, A.S., Dolan, E., Ramirez-Lugo, J.S., & Johnsen, K. (2021, April). *Multigroup sLDA for characterizing college students' experience during COVID-19*. Paper presented at the Annual Meeting of the National Council on Measurement in Education, virtual conference.

Mardones-Segovia, C.A., Hong, M., Wheeler, J.M., Choi, H.-J., & Cohen, A.S. (2021, July). *Comparison of estimation algorithms for latent Dirichlet allocation*. Paper presented at the annual International Meeting of the Psychometric Society, virtual conference.

Hong, M., Choi, H.-J., Mardones-Segovia, C.A., Copur-Gencturk, Y., & Cohen, A.S. (2021, July). *A two-step approach to topic modeling incorporating covariates and outcomes*. Paper presented at the annual International Meeting of the Psychometric Society, virtual conference.

Xiong, J., Xiong, X., & Cohen, A.S. (2021, July). *Process data analysis with the reservoir computing technique*. Paper presented at the annual International Meeting of the Psychometric Society, virtual conference.

Xiong, J., Wheeler, J.M., & Cohen, A.S. (2021, July). *Applications of machine learning in educational and psychological measurement*. Paper presented at the annual International Meeting of the Psychometric Society, virtual conference.

Xiong, J., Xiong, X., & Cohen, A.S. (2022, April). *Parameter estimation for mixed-format tests with No-U-Turn sampler Hamiltonian Monte Carlo method*. Paper presented at the annual meeting of the National Council on Measurement in Education, San Diego, CA.

Wheeler, J.M., Wang, S., Tan, Y., & Cohen, A.S. (2022, April). *Textual data as process data: A new scoring procedure for mixed-format assessments*. Paper presented at the annual meeting of the National Council on Measurement in Education, San Diego, CA.

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