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Education

PhD	2001	The University of Iowa	Educational Measurement and Statistics
MS	1997	The University of Iowa	Educational Measurement and Statistics
BS	1994	Bemidji State University	Applied Psychology
BA	1994	Bemidji State University	Psychology

Professional Experience

2016-present	Professor of Education (Educational Psychology), Penn State, University Park, PA.
2008-16	Associate Professor of Education (Educational Psychology), Penn State, University Park, PA.
2002-08	Assistant Professor of Education (Educational Psychology), Penn State, University Park, PA.
2001-02	Postdoctoral Research Scholar, Iowa Testing Programs, University of Iowa, Iowa City, IA.
2000	Intern, American College Testing, Inc., Iowa City, IA.
1997-01	Research Assistant, Iowa Testing Programs, University of Iowa, Iowa City, IA.
1996-97	Teaching Assistant, University of Iowa, Iowa City, IA.

Honors/Awards

Fulbright Scholar Grantee, Fulbright Foreign Scholarship Board and the U.S. Department of State, 2009-2010 Honorary Associate Professor, Faculty of Education, The University of Hong Kong, 01/2010-05/10 Blommers-Hieronymus-Feldt Fellowship, College of Education, University of Iowa, 1998-00 Scholarship from Macau Foundation, 1995-00 Scholarship from Bemidji State University and Macau Education Department, 1991-94

Outstanding Senior in Applied Psychology, Bemidji State University, 1994

Professional Activities

Editorial Boards:

Editorial Board member, Contemporary Educational Psychology, 2023 – present Editorial Board member, Journal of Educational Psychology, 2016 – present Associate Editor, Journal of Educational Psychology, 2014 – 2015 Advisory Editor, Journal of Educational Measurement, 2008 – 2010 Contributing Editor, American Journal of Education, 2004 – 2012

Grant reviews:

Member, Collaborative Research Fund Selection Panel (Humanities and Social Sciences), Research Grants Council of Hong Kong, 2/2023-2/2026

- Deputy Panel Chair, Humanities and Social Sciences Panel (Joint Research Schemes), Research Grants Council of Hong Kong, 2022-2024
- Member, Humanities and Social Sciences Panel (Joint Research Schemes), Research Grants Council of Hong Kong, 2018-2022

Member, Monitoring and Assessment Panel of Theme-based Research Scheme, Research Grants Council of Hong Kong, 2016-present

Member, Humanities and Social Sciences Panel, Research Grants Council of Hong Kong, 2011-2017 Guest reviewer, Research Grant Council of Hong Kong, 2011 – 2014, 2016

Journal reviews:

Reviewer, Contemporary Educational Psychology, 2022 Reviewer, Journal of Educational Psychology, 2005 – 2013 Reviewer, Journal of General Internal Medicine, 2005 – present Updated: April 2024 Graduate Faculty Member

- Reviewer, Journal of Educational Measurement, 2004 2008, 2013 2015
- Reviewer, Applied Psychological Measurement, 2008-2009, 2011 2016
- Guest reviewer, Language Assessment Quarterly: An International Journal, 2019-2020
- Guest reviewer, British Journal of Educational Psychology, 2018
- Guest reviewer, Psychological Methods, 2004, 2014-2015
- Guest reviewer, Methodology, 2013-2014
- Guest reviewer, International Journal of Quantitative Research in Education, 2012-2013, 2018
- Guest reviewer, Journal of Experimental Education, 2003, 2005-2006, 2012-2013, 2020
- Guest reviewer, Educational and Psychological Measurement, 2007-2008, 2012
- Guest reviewer, Behavior Research Methods, 2006-2008, 2011
- Guest reviewer, Journal of American Statistical Association, 2009-2010
- Guest reviewer, The American Journal of Distance Education, 2009
- Guest reviewer, Science Education, 2006, 2009
- Guest reviewer, Journal for Research in Mathematics Education, 2008
- Guest reviewer, Statistics in Medicine, 2007
- Guest reviewer, the Spanish Journal of Psychology, 2006, 2008
- Guest reviewer, The KEDI Journal of Educational Policy (Special Issue on Consequences of high-stakes testing: An international perspective), 2006
- Guest reviewer, Contemporary Educational Psychology (the Special Issue on Applications of Advanced Latent Variable Modeling in Educational Psychology Research), 2005
- Guest reviewer, Advances in Health Sciences Education, 2005
- Guest reviewer, Neural Networks, 2004

Service to Professional Societies:

Co-organizer, AERA small conference on Setting an Agenda for an Anti-Racist Program of Research in Educational Psychology, 2021-2022

- Member, AERA Division C Early Career Award Committee, 2017-2018
- Program co-chair, APA Division 15, 2016-2017
- Member, APA Division 15 Graduate Student Poster Award Committee, 2016
- Treasurer, AERA SEM SIG, 2011-2013

Member, AERA Division D Early Career Award Committee, 2011-2012

- Member, AERA Division D Dissertation Award Committee, 2008-2010
- Member, Membership committee, National Council on Measurement in Education, 2008-2010
- Discussant, the Annual Meeting of the National Council on Measurement in Education, 2015
- Moderator, the Annual Meeting of the National Council on Measurement in Education, 2015
- Reviewer, AERA Division D In-Progress Graduate Research Gala, 2010-2011
- Reviewer, the Annual Meeting of the American Educational Research Association (Division D1), 2006-2008
- Reviewer, the Annual Meeting of the American Educational Research Association (SEM SIG), 2005-2008, 2011-12
- Session chair, the Annual Meeting of the American Educational Research Association (SEM SIG), 2005, 2007
- Reviewer, the Annual Meeting of the National Council on Measurement in Education, 2005, 2007, 2008
- Reviewer, the Annual Meeting of the American Educational Research Association (Division D2), 2002, 2005, 2006

Service to Public Organizations:

- External Examiner, Doctor of Education (EdD) Programme, The Education University of Hong Kong, 2023-2025 External Examiner, Research Postgraduate and Doctor of Education Programmes, The Education University of Hong Kong, 2020-2022
- External referee for promotion, College of Education and Human Sciences, University of New Mexico, 2023
- External referee for promotion, Education & Human Development, Texas A&M, 2023
- External referee for promotion, Education & Human Development, Texas A&M, 2021
- External referee for promotion, School of Education, Virginia Tech, 2020
- External Case Reviewer, Appeal Board of the Disciplinary Committee, Research Grants Council of Hong Kong, 2017
- External Examiner, Assessment of Student's Thesis in the Doctor of Philosophy Programme, The Education University of Hong Kong, 2017
- External referee for promotion, School of Medicine, University of Pittsburgh, 2015
- Research Advisor, the UCLID Center of the University of Pittsburgh at the Children's Hospital of Pittsburgh Child Development Unit, 2004 2010

3

Invited presentation:

- Multilevel Modeling Data Analysis Workshop. Invited presentation at the Center for Urban School Partnerships (CUSP), Texas A&M, College Station, TX. February, 2018.
- Moderation and Mediation in Regression. Invited presentation at the CTSI BERD Recent Topics in Research Methods Seminar, Penn State, University Park, PA. April, 2017.
- Introducing the development of the CEPS cognitive ability scores. Invited presentation at the China Education Panel Study (CEPS) working and user group meeting, Renmin University, Beijing, China. July, 2015.
- Effects of Medium of Instruction: Findings from the Hong Kong TIMSS Grade 8 Mathematics data. Invited presentation as part of the Fulbright experience to the Faculty of Education, The University of Hong Kong, Hong Kong. May, 2010.
- Effects of Vertical Scaling Methods on Linear Growth Estimation. Invited presentation at the Hong Kong Institute of Education, Hong Kong. May, 2010.
- Innovations in Web-Based Learning Technologies Intelligent Tutoring and Multi-Media Games to Improve Reading Comprehension and Motivation (with Kausalai Wijekumar). Invited presentation at the University of Hong Kong, Hong Kong. May, 2010.
- American Education Studying in the U.S.: Campus Life and Beyond. Invited lecture as part of the Fulbright lecture series in American Identities, United International College, Zhuhai, China. April, 2010.
- Community-based research: Statistical tools and results (with Hoi K. Suen). Invited presentation as part of the Dialogue Series of the UCLID Center at the University of Pittsburgh, Pittsburgh, PA. April & September, 2004.
- Structural Equation Modeling: An Introduction for the School Psychologists. Invited presentation at the 38th annual Pennsylvania school psychologists conference and professional development workshops. October, 2004.

Consulting

Knowledge Acquisition and Transformation Expansion (KATE), Texas A&M, 1/2023-12/2024

- Promoting Reading Comprehension and Learning with Multimodal Science Texts (PRISM), Texas A&M, 7/2022-6/2026
- Turning the TIDE: Building Teacher Capacity to Accelerate Text-Based Writing Performance of Students with and At-Risk for Disabilities, Texas State University, 7/2022-6/2026
- Development of a cognitive ability test for junior high school students in China, Johns Hopkins University, Spring 2014 2017

The Legacy Together strengthening afterschool programs, Penn State, Fall 2013-Spring 2014

The Utah STEM Action Center Pilot Evaluation, the Active Learning Lab, Utah State University, 12/2013-4/2014

Connected Math 2 for the Mid-Atlantic Regional Educational Lab at Penn State, Fall 2009 - Fall 2011

The STEM project for the Mid-Atlantic Regional Educational Lab at Penn State, Summer 2009

The Rural Distance Learning and Technology Project for the National Research Center on Rural Education Support (NRCRES, funded project), Fall 2006 – Summer 2011

Odyssey Math for the Mid-Atlantic Regional Educational Lab at Penn State (funded project), Fall 2006 – Fall 2010 Evaluation project (funded) for Lancaster Lebanon Intermediate Unit 13, Community Education, Fall 2006 – Fall 2008

Cognitive Tutor (Moore, OK) HLM analysis for Carnegie Learning, Inc., Summer 2006

County uninsured rate estimation for the PROBE Lab in Tennessee. Summer 2005

Post-Traumatic Stress Clinical Team, Veterans Affairs Medical Center, Iowa City, IA, 2001-02

Developmental Psychology, Department of Psychology, University of Iowa, 2001-02

University of Iowa and other institutions, dissertation designs, data analyses and result interpretation, 1996-02

Professional Associations

American Psychological Association (APA) Division 15, 2016-2017

American Psychological Association (APA) Division 5, 2007-2008

Northeastern Educational Research Association (NERA), 2006-2007

National Council on Measurement in Education (NCME), 2000-2016

American Educational Research Association (AERA), 2000-present SIG: Structural Equation Modeling, 2004-present

Publications

Refereed Journals

- Wijekumar, K., Lei, P.-W., Rice, M., Beerwinkle, A., Zhang, S., & Meyer, B.J.F. (in press). A Web-Based Intelligent Tutoring System for Reading Comprehension Delivered to Fifth-Grade Students Attending High Poverty Schools: Results from a Replication Efficacy Study. *Journal of Educational Psychology*.
- Hart, S. C., DiPerna, J. C., Husmann, K., Zhao, H., & Lei, P.-W. (in press). Social Validity and Cultural Relevance of the SSIS SEL Classwide Intervention Program in Context: Insights From First- and Second-Grade Teachers. *School Psychology Review*. DOI: 10.1080/2372966X.2023.2243239
- Wu, Q., Sun, Y., & Lei, P.-W. (2024). Evaluating a brief big five personality test in a diverse Chinese sample: the role of midpoint designs and reversely-worded items. *Journal of Personality Assessment*, 106(3), 301-313. DOI: 10.1080/00223891.2023.2258978
- DiPerna, J., Hart, S., Lei, P.-W., Sun, T., Zhao, H., Husmann, K., & Li, X. (07 Dec 2023). Does Universal SEL Work Under Typical Implementation Practices? Outcomes of a First Grade Effectiveness Trial. *Journal of Research on Educational Effectiveness*. DOI: 10.1080/19345747.2023.2279124
- Anthony, C. J., Elliott, S., DiPerna, J. C., & Lei, P.-W. (2023). To Be Fair: Development and Illustration of the Comprehensive Appraisal of Fairness Evidence (CAFE) Model to Advance SEL Assessment Practices. Social and Emotional Learning: Research, Practice, and Policy, 1, 100006. DOI:10.1016/j.sel.2023.100006
- McKeown, D., Wijekumar, K., Owens, J., Harris, K., Graham, S., Lei, P.-W., & FitzPatrick, E. (2023). Professional development for evidence-based writing instruction: Elevating fourth grade outcomes. *Contemporary Educational Psychology*, 73, DOI: 10.1016/j.cedpsych.2023.102152
- Shen, Y., Lei, P.-W., & Crosson, A. (2023). Measuring derivational awareness for Chinese-speaking adolescents. *Research Methods in Applied Linguistics, 2* (1), . https://doi.org/10.1016/j.rmal.2022.100039
- Anthony, C.J., Lei, P.-W., Elliott, S.N., Cefai, C., DiPerna, J.C., Camilleri, L., Bartolo, P., Grazzani, I., Ornaghi, V., Cavioni, V., Conte, E., Vorkapic, S. T., Poulou, M., Martinsone, M., Simoes, C., & Colomeischi, A. A. (31 Jan 2023). Measurement Invariance of Children's SEL Competencies: An Examination of the SSIS SEL Brief Scales with a Multi-Informant Sample from Six Countries. *European Journal of Psychological Assessment*, 1-19. DOI: 10.1027/1015-5759/a000753
- Lei, P.-W., Zhao, H., Hart, S. C., Li, X., & DiPerna, J. C. (2023). Examination of psychometric evidence for criterion-referenced scores from the SSIS SEL Brief scales. *Journal of Psychoeducational Assessment*, 41(3), 311-327. DOI: 10.1177/07342829221144717
- Cheng, W., Lei, P.-W., & DiPerna, J. C. (2023). Using a person-centered approach to examine outcomes of a universal SEL program. *School Psychology*, *38*(4), 225-237. DOI: 10.1037/spq0000539
- Zhao, H., Lei, P.-W., Hart, S. C., DiPerna, J. C., & Li, X. (2023). When Is Universal SEL Effective under Authentic Conditions? Using LPA to Examine Program Implementation in Elementary Classrooms. *Frontiers in Education*, 8:1031516. DOI: 10.3389/feduc.2023.1031516.
- Sandilos, L.E., Neugebauer, S.R, DiPerna, J.C., Hart, S.C., & Lei, P.-W. (2023). Social-emotional learning for whom? Implications of a universal SEL program and teacher well-being for teachers' interactions with students. *School Mental Health*, 15, 190-201. DOI: 10.1007/s12310-022-09543-0
- Elliott, S.N., Lei, P.-W., Anthony, C.J., & DiPerna, J.C. (2023). Screening the whole social-emotional child: Expanding a brief SEL assessment to include emotional behavior concerns. *School Psychology Review*, 52(1), 15-29. DOI: 10.1080/2372966X.2020.1857659

- Wijekumar, K., Harris, K.R., Graham, S., & Lei, P.-W. (2022). A Teacher Technology Tango Shows Strong Results on 5th Graders Persuasive Writing. *Educational Technology Research and Development*, 70, 1415-1439. DOI: 10.1007/s11423-022-10117-9
- Anthony, C.J., Elliott, S.N., Yost, M., Lei, P.-W., DiPerna, J.C., Cefai, C., Camilleri, L., Bartolo, P., Grazzani, I., Ornaghi, V., Cavioni, V., Conte, E., Vorkapic, S. T., Poulou, M., Martinsone, M., Simoes, C., & Colomeischi, A. A. (2022). Multi-Informant Validity Evidence for the SSIS SEL Brief Scales across Six European Countries. *Frontiers in Psychology* (section Quantitative Psychology and Measurement, vol.13). DOI: /10.3389/fpsyg.2022.928189.
- Hunter, L., DiPerna, J. C., Hart, S., Neugebauger, S., & Lei, P.-W. (2022). Examining Teacher Approaches to Implementation of a Classwide SEL Program. *School Psychology*, 37(4), 285–297. <u>https://doi.org/10.1037/spq0000502</u>
- Elliott, S.N., Anthony, C.J., Lei, P-W., & DiPerna, J.C. (2022). Parents' Assessment of Students' Social Emotional Learning Competencies: The SSIS SEL Brief Scales. *Family Relations*, 71(3), 1102-1121. https://doi.org/10.1111/fare.12615
- Gustaf, B. S., Lei, P-W., Graham, S., Aasen, A. J., Johansen, M. B., & Kvistad, A. H. (2022). Handwriting Fluency and the Quality of Primary Grade Students' Writing. *Reading and Writing*, 35(2), 509-538. https://doi.org/10.1007/s11145-021-10185-y
- Lee, J., Chow, S. M., Lei, P.-W., Wijekumar, K. K., & Molenaar, P. (2021). Dynamics of learning: time-varying feedback effects within the intelligent tutoring system of structure strategy (ITSS). *Educational Technology Research and Development*, 69, 2963-2984. https://doi.org/10.1007/s11423-021-10049-w
- Smith, E. P., Witherspoon, D. P., & Lei, P.-W. (2021). The "Haves, Have Some, and Have Nots:" A Latent Profile Analysis of Capacity, Quality, and Prevention Implementation in Community Afterschool Programs. *Prevention Science*, 22, 971-985. https://doi.org/10.1007/s11121-021-01258-z
- Elliott, S., Anthony, C. J., Lei, P.-W., & DiPerna, J. C. (2021). Efficient assessment of the whole social-emotional child: Using parents to rate SEL competencies and concurrent emotional behavior concerns. *School Mental Health*, 13(2), 392-405. DOI: 10.1007/s12310-021-09429-7
- Hunter, L., DiPerna, J. C., Cheng, W., Lei, P.-W., & Hart, S. (2021). Twice as Nice? Sustained Exposure to a Universal Social-Emotional Learning Program across Multiple Grades. *School Mental Health*, 13(1), 84-100. DOI: 10.1007/s12310-020-09392-9
- Anthony, C. J., Elliott, S., DiPerna, J. C., & Lei, P.-W. (2021). Initial Development and Validation of the SSIS SEL Brief Scales - Teacher Form. *Journal of Psychoeducational Assessment*, 39(2), 166-181. DOI: 10.1177/0734282920953240
- Crosson, A.C., McKeown, M.G., Lei, P.-W., Zhao, H., Li, X., Patrick, K., Brown, K. & Shen, Y. (2021). Morphological analysis skill and word knowledge are malleable through intervention and may contribute to reading comprehension for multilingual adolescents. *Journal of Research in Reading*, 44(1), 154-174. DOI: 10.1111/1467-9817.12323
- Guo, X. & Lei, P.-W. (2020). Effect of Quality Characteristics of Peer Rater on Reliability and Validity of Peer Assessment. *International Journal of Testing*, 20(3), 206-230. DOI:10.1080/15305058.2020.1720216
- Crosson, A. C., Lei, P.-W., Cheng, W., & Mckeown, M. G. (2020). The Curious Role of Morphological Family Size in Language Minority Learners' Problem Solving of Unfamiliar Words. *Scientific Studies of Reading*, 24(6), 445-461. DOI: 10.1080/10888438.2019.1701475
- Anthony, C. J., Elliot, S., DiPerna, J. C., & Lei, P.-W. (2020). The SSIS SEL Brief Scales Student Form: Initial Development and Validation. School Psychology, 35, 277-283. DOI: 10.1037/spq0000390

- Anthony, C. J., Elliot, S., DiPerna, J. C., & Lei, P.-W. (2020). Multirater Assessment of Young Children's Social and Emotional Learning via the SSIS SEL Brief Scales - Preschool Forms. *Early Childhood Research Quarterly*, 53, 625-637. DOI: 10.1016/j.ecresq.2020.07.006
- Lei, P.-W., & Shiverdecker, L. (2020). Performance of estimators for confirmatory factor analysis of ordinal variables with missing data. *Structural Equation Modeling: A Multidisciplinary Journal*, 27(4), 584-601. DOI: 10.1080/10705511.2019.1680292
- Wijekumar, K., Meyer, B.J.F., Lei, P.-W., Beerwinkle, A., & Joshi, M. (2020). Supplementing teacher knowledge using web-based intelligent tutoring system to improve content area reading comprehension with 4th and 5th grade struggling readers. *Dyslexia*, 26, 120-136. DOI: 10.1002/dys.1634
- Hart, S., DiPerna, J.C., Lei, P.-W., & Cheng, W. (2020). Nothing lost, something gained? Impact of a universal social-emotional learning program on future state test performance. *Educational Researcher*, 49(1), 5-19. DOI: 10.3102/0013189X19898721
- Wijekumar, K., Graham, S., Harris, K.R., Lei, P.-W., Barkel, A., Aitken, A., Ray, A., & Houston, J. (2019). The roles of writing knowledge, motivation, strategic behaviors, and skills in predicting elementary students' persuasive writing from source material. *Journal of Reading and Writing*, 32, 1431-1457. DOI: 10.1007/s11145-018-9836-7
- Graham, S., Wijekumar, K., Harris, K., Lei, P.-W., Fishman, E., Ray, A., & Houston, J. (2019). Writing Skills, Knowledge, Motivation, and Strategic Behavior Predict Students' Persuasive Writing Performance in the Context of Robust Writing Instruction. *Elementary School Journal*, 119(3), 487-510. DOI: 10.1086/701720
- Herbert, J. T., Schultz, J. C., Lei, P.-W. & Aydemir-Döke, D. (2018). Effectiveness of a training program to enhance clinical supervision of state vocational rehabilitation personnel. *Rehabilitation Counseling Bulletin*, 62(1), 3-17. <u>https://doi.org/10.1177/0034355217725721</u>
- Ji, X. R., Beerwinkle, A., Wijekumar, K., Lei, P.-W., Joshi, R. M., & Zhang, S. (2018). Using latent transition analysis to identify effects of an intelligent tutoring system on reading comprehension of seventh-grade students. *Journal of Reading and Writing*, 31(9), 2095-2113. https://doi.org/10.1007/s11145-018-9888-8
- Meyer, B. J. F., Wijekumar, K. & Lei, P.-W. (2018). Comparative Signaling Generated for Expository Texts by 4th - 8th Graders: Variations by Text Structure Strategy Instruction, Comprehension Skill, and Signal Word. *Journal of Reading and Writing*, 31(9)1937-1968. https://doi.org/10.1007/s11145-018-9871-4
- Wijekumar, K., Meyer, B.J.F., & Lei, P.-W., Hernandez, A. C., & August, D. L. (2018). Improving Content Area Reading Comprehension of Spanish Speaking English Learners in Grades 4 and 5 Using Web-based Text Structure Instruction. *Journal of Reading and Writing*, 31(9), 1969-1996. Doi: 10.1007/s11145-017-9802-9
- DiPerna, J. C., Lei, P.-W., Cheng, W., Hart, S. C., & Bellinger, J. (2018). A cluster randomized trial of the Social Skills Improvement System-Classwide Intervention Program (SSIS-CIP) in first grade. *Journal of Educational Psychology*, 110(1), 1-16. <u>http://dx.doi.org/10.1037/edu0000191</u>
- Shervey, S. W., Sandilos, L. E., DiPerna, J. C., & Lei, P.-W. (2017). Social validity of the Social Skills Improvement System- Classwide Intervention Program (SSIS-CIP) in the primary grades. *School Psychology Quarterly*, 32(3), 414-421. doi: 10.1037/spq0000203
- Wijekumar, K., Meyer, B.J.F., Lei, P.-W., Cheng, W., Ji, X., & Joshi, R.M. (2017). Evidence of an intelligent tutoring system as a mindtool to promote strategic memory of expository texts and comprehension with children in grades 4 and 5. *Journal of Educational Computing Research*, 55(7), 1022-1048. <u>https://dx.doi.org/10.1177/0735633117696909</u>
- Wijekumar, K., Meyer, B.J.F., & Lei, P.-W. (2017). Web-based text structure strategy instruction improves seventh graders' content area reading comprehension. *Journal of Educational Psychology*, 109(6), 741-760. http://dx.doi.org/10.1037/edu0000168

- Sandilos, L. E., Shervey, S. W., DiPerna, J. C., Lei, P.-W., & Cheng, W. (2017). Structural validity of CLASS K-3 in primary grades: Testing alternative models. *School Psychology Quarterly*, 32(2), 226-239. doi: 10.1037/spq0000155
- Winnick, J. B., Berg, C. A., Wiebe, D. J., Schaefer, B. A., Lei, P.-W., & Butner, J. E. (2017). Metabolic control and academic achievement over time among adolescents with type 1 diabetes. *School Psychology Quarterly*, 32(1), 105-117. doi: 10.1037/spq0000190
- Li, H., Qin, Q., & Lei, P.-W. (2017). An examination of the instructional sensitivity of the TIMSS math items: A hierarchical differential item functioning approach. *Educational Assessment*, 22(1), 1-17. doi: 10.1080/10627197.2016.1271702
- Pasamehmetoglu, A., Guchait, P., Tracey, J. B., Cunningham, C.J.L., & Lei, P.-W. (2017). The moderating effect of supervisor and coworker support for error management on service recovery performance and helping behaviors. *Journal of Service Theory and Practice*, 27(1), 2-22. doi: http://dx.doi.org/10.1108/JSTP-06-2015-0130
- Cheng, W., Lei, P.-W., & DiPerna, J. C. (2017). An examination of construct validity for the EARLI numeracy skill measures. *Journal of Experimental Education*, 85(1), 54-72. DOI:10.1080/00220973.2015.1101532
- Lei, P.-W. & Li, H. (2016). Performance of fit indices in choosing correct cognitive diagnostic models and Qmatrices. *Applied Psychological Measurement*, 40(6), 405-417. doi: 10.1177/0146621616647954
- Li, H., Hunter, C.V., & Lei, P.-W. (2016). The selection of cognitive diagnostic models for a reading comprehension test. *Language Testing*, 33(3), 391-409. doi: 10.1177/0265532215590848
- Anthony, C. J., DiPerna, J. C., & Lei, P.-W. (2016). Maximizing measurement efficiency of behavior rating scales using Item Response Theory: An example with the Social Sills Improvement System - Teacher Rating Scale. *Journal of School Psychology*, 55, 57-69. doi: 10.1016/j.jsp.2015.12.005
- DiPerna, J. C., Lei, P.-W., Bellinger, J., & Cheng, W. (2016). Effects of a universal positive classroom behavior program on student learning. *Psychology in the Schools*, 53(2), 189-203. doi:10.1002/pits.21891
- Guchait, P., Lei, P.-W., & Tews, M. (2016). Making teamwork work: Team knowledge for team effectiveness. *The Journal of Psychology: Interdisciplinary and Applied, 150*(3), 300-317. doi: 10.1080/00223980.2015.1024596
- Wu, Q., Lei, P.-W., DiPerna, J. C., Morgan, P. L., & Reid, E. E. (2015). Identifying differences in early numeracy skills among children in Head Start. *International Journal of Science and Mathematics Education*, 13(6), 1403-1423. doi: 10.1007/s10763-014-9552-y
- DiPerna, J. C., Lei, P.-W., Bellinger, J., & Cheng, W. (2015). Efficacy of the Social Skills Improvement System Classwide Intervention Program (SSIS-CIP) primary version. School Psychology Quarterly, 30(1), 123-141. <u>http://dx.doi.org/10.1037/spq0000079</u>
- Norwalk, K. E., DiPerna, J. C., & Lei, P.-W. (2014). Confirmatory factor analysis of the Early Arithmetic, Reading, and Learning Indicators (EARLI). *Journal of School Psychology*, 52(1), 83-96. http://dx.doi.org/10.1016/j.jsp.2013.11.006
- Chen, S.-Y., Lei, P.-W., Chen, J.-H., & Liu T.-C. (2014). General test overlap control: Improved algorithm for CAT and CCT. *Applied Psychological Measurement*, 33(3), 229-244. doi: 10.1177/0146621613513494
- Wijekumar, K., Meyer, B.J.F., Lei, P.-W., Lin, Y., Johnson, L.A., Spielvogel, J., Shurmatz, K., Ray, M., & Cook, M. (2014). Multisite randomized controlled trial examining intelligent tutoring of structure strategy for 5thgrade readers. *Journal of Research on Educational Effectiveness*,7(4), 331-357. doi:10.1080/19345747.2013.853333
- Namasivayam, K., Guchait, P., & Lei, P.-W. (2014). The influence of leader empowering behaviors and employee psychological empowerment on customer satisfaction. *International Journal of Contemporary Hospitality Management*, 26 (1), 69-84. doi: 10.1108/IJCHM-11-2012-0218

8

- Wijekumar, K., Meyer, B.J.F., Lei, P.-W. (2013). High-fidelity implementation of web-based intelligent tutoring system improves fourth and fifth graders content area reading comprehension. *Computers & Education*, 68, 366-379. http://dx.doi.org/10.1016/j.compedu.2013.05.021
- Li, H., Lei, P.-W., & Pace, C. L. (2013). Reading subskill differences between students in Shanghai-China and the U.S.: Evidence from PISA 2009. *Educational Research and Evaluation*, 19(6), 490-509. http://dx.doi.org/10.1080/13803611.2013.803439
- Lei, P.-W., & Li, H. (2013). Small Sample DIF Estimation Using SIBTEST, Cochran's Z, and Log-Linear Smoothing. *Applied Psychological Measurement*, 37(5), 397-416. doi:10.1177/0146621613478150
- Locke, B. D., McAleavey, A. A., Zhao, Y., Lei, P.-W., Hayes, J. A., Castonguay, L. G., Li, H., Tate, R., & Lin, Y.-C. (2012). Development and initial validation of the Counseling Center Assessment of Psychological Symptoms-34. *Measurement and Evaluation in Counseling and Development*, 45(3), 151-169. doi: 10.1177/0748175611432642.
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Learners (SWELL). U.S. Department of Education Institute of Education Sciences (R3058120593), 2012-2015, \$1,497,191. (Subcontract from Texas A&M through Johnson, L. (PI) PSU Beaver; \$273,446; 7/1/14-6/30/16).

- DiPerna, J. C., Lei, P.-W. Revised: The Social Skills Improvement System Classwide Intervention Program: Social, Behavioral, and Academic Outcomes in the Primary Grades, Institute of Education Sciences (R305A090438), 7/1/09-6/30/15, \$2,412,860.
- Wijekumar, K. J., Meyer, B. J., & Lei, P.-W. Efficacy and Replication Research on the Intelligent Tutoring System for the Structure Strategy -- Rural and Suburban Schools Grades 4,5,7 and 8, Institute of Education Sciences (R305A080133), 7/08-7/12, \$2,999,929.
- DiPerna, J. C., Morgan, P., & Lei, P.-W. Development of Early Arithmetic, Reading, and Learning Indicators for Head Start Populations (The EARLI Project), Department of Health and Human Services (90YF0047/01), 10/04-10/09, \$597,819.
- DiPerna, J. C., Morgan, P. L., & Lei, P.-W. Development of early arithmetic, reading, and learning indicators for preschoolers. Children, Youth, and Families Consortium Level II Grant, The Pennsylvania State University, 9/05-9/06, \$20,000.
- Van Meter, P. N., Lei, P.-W., & Stevens, B. J. Modeling influences of reading ability constructs on comprehension. Children Youth and Families Consortium, The Pennsylvania State University, 5/04-5/05, \$11,282.
- Meyer, B. J., Wijekumar, K. J., Middlemiss, W., Sperling, R. A., Lei, P.-W., Popp, J. D., Van Horn, B. Intelligent Tutoring Using the Structure Strategy to Improve Reading Comprehension of Middle School Students. U.S. Department of Education, 8/03-8/07, \$1,179,618.

Presentations

International/National

- Zhao, H., Lei, P.-W., DiPerna, J. C., Hart, S., & Sun, T. (2024, August). *Effects of SSIS SEL CIP on Developmental Trajectories of Academic Outcomes* [Poster presentation]. Annual meeting of the APA, Seatle, WA.
- Sun, T., Lei, P.-W., DiPerna, J. C., & Hart, S. (2024, August). Analysis of Primary Grade Students' Friendship Network: Impact of a SEL Intervention Program [Poster presentation]. Annual meeting of the APA, Seatle, WA.
- Sun, T., Lei, P.-W., DiPerna, J. C., Hart, S., Zhao, H., & Sandilos, L. (2024, April 11-14). Disentangling collective student behavior, teacher-student interactions, and teacher wellbeing: An exploratory study [Paper presentation]. Annual meeting of the AERA, Philadelphia, PA.
- Liebel, S. W., Vadlamani, S., Kennedy, E., Read, E. N., Lei, P.-W., Lindsey, H. M., Tate, D. F., Dams-O'Connor, K., Hillary, F. G., Dennis, E. L., & Wilde, E. A. (2024, February 14-17). *Comparing measurement of verbal fluency abilities on the COWAT and D-KEFS VF* [Poster presentation]. Annual meeting of the International Neuropsychological Society, New York City, NY, USA.
- Lei, P.-W. (2023, September). Improving Elementary Spanish Speaking English Learners' Reading Comprehension with Web-Based Tools. Symposium Session on Overcoming Systemic Systems Failures Contributing to Student Literacy Outcomes at the SREE 2023 Conference, Arlington, VA.
- Wijekumar, K., Lei, P.-W., & Beerwinkle, A. (2023, July). Impact of web-based tutoring on reading comprehension for fifth grade students attending high poverty schools. Paper presented at the Society for the Scientific Study of Reading Conference 2023, Port Douglas, Queensland, Australia.
- Turner, H. & Lei, P.-W. (2023, July). Designing scientifically research of technology-based reading interventions to identify what works for teachers and students. Paper presented at the Society for the Scientific Study of Reading Conference 2023, Port Douglas, Queensland, Australia.

- Shen, Y., Lei, P., & Crosson, A. C. (2023, March). Measuring derivational awareness for Chinese-speaking adolescents. Paper presented at the 2023 American Association for Applied Linguistics Annual Conference, Portland, OR.
- McKeown, D., Camping, A., FitzPatrick, E., Owens, J., Wijekumar, K., Harris, K., Graham, S., & Lei, P.-W. (2023, Feb. 18-22). Large scale writing research Outcomes of two large scale writing intervention studies with elementary students. Paper presented at the Writing Research Across Borders 2023 meeting, Trondheim, Norway.
- Sun, T., Lei, P.-W., DiPerna, J. C., & Ellner, S. (2022, August). Analyze profile, predictor, and consequences of students' social skills and behavior. Poster presented at the American Psychological Association 2022 Convention, Minnesota, MN.
- Zhao, H., Lei, P.-W., DiPerna, J. C., & Hart, S. C. (2022, August). Effects of SSIS SEL CIP on Academic Achievement: A Mediation Analysis. Poster presented at the American Psychological Association 2022 Convention, Minnesota, MN.
- McKeown, D., Owens, J., Wijekumar, K., Lei, P.-W., Harris, K. R., & Graham, S. (2022, July 13-16). Integrated writing instruction using teacher-led and computer instruction: A randomized controlled efficacy trial. In M. Quinn (Chair), Examining writing assessment and intervention across ages and contexts [Symposium]. Society for the Scientific Study of Reading (SSSR), Newport Beach, CA.
- Lei, P.-W., Li, X., Zhao, H., DiPerna, J. C., & Hart, S. C. (2022, April). *Utility of Criterion-Referenced Interpretation Approach in SEL Assessments* [Virtual roundtable session]. American Education Research Association annual meeting, San Diego, CA.
- Zhao, H., Lei, P.-W., DiPerna, J. C., Li, X., & Hart, S. C. (2022, April). Latent Profile Analysis of the SSIS-CIP Implementation [Virtual roundtable session]. American Education Research Association annual meeting, San Diego, CA.
- Lei, P.-W., Wijekumar, K., Beerwinkle, A.L., Meyer, B.J.F. (2021, September). Overcoming the Pandemic of Poverty Using a Web-based Intelligent Tutoring System to Improve Fifth Grade Students' Reading Comprehension [Virtual symposium]. Society for Research on Educational Effectiveness annual meeting.
- DiPerna, J. C., Hunter, L. J., Neugebauer, S., Hart, S. C.*, Sandilos, L. E., & Lei, P.-W. (2021, September). *Forty teachers, Forty different ways?* [Virtual symposium]. Society for Research on Educational Effectiveness annual meeting.
- Hochstedt, K., & Lei, P.-W. (2021, April 9-12). Performance of DIMTEST and ATFIND under Some Commonly Encountered Suboptimal Conditions Including Nonnormal Latent Trait Distributions [Virtual paper session]. American Education Research Association annual meeting.
- Hart, S. C., DiPerna, J. C., Hunter, L. J., & Lei, P.-W. (2021, February). Made for you and me: Cultural validity of the SSIS-SEL-CIP. [Poster session]. National Association of School Psychologists 2021 annual meeting, Salt Lake City.
- Hunter, L. J., Hart, S. C., DiPerna, J. C., & Lei, P.-W. (2020, October). Studying universal SEL in the Real World: Outcomes & Lessons Learned from the PEAK Project [Poster session]. CASEL Social & Emotional Learning Exchange 2020, Schaumburg, IL, United States. (Conference cancelled)
- Zhao, H., Lei, P.-W., Meyer, B.J.F, & Wijekumar, K. (2020, August 6-9). Effect of structure strategy instruction on academic self-efficacy [Virtual poster session]. American Psychological Association 2020 Convention, Washington, D.C. United States. <u>https://irpcdn.multiscreensite.com/a5ea5d51/files/uploaded/APA_2020_Program.pdf</u>

- Li, X., Lei, P.-W., Meyer, B.J.F, & Wijekumar, K. (2020, April 16-20). *Dealing with Bifactor-Structured Data: Effect of Sample Size on IRT Model Selection* [Poster session]. National Council on Measurement in Education annual meeting, San Francisco, CA, United States. (Conference cancelled)
- Li, X., Lei, P.-W., DiPerna, J. C. (2020, April 16-20). The Effects of Rater Severity and Rating Design on Ability Estimation [Poster session]. National Council on Measurement in Education annual meeting, San Francisco, CA, United States. (Conference cancelled)
- Zhang, S., Lei, P.-W., & Wijekumar, K. (2020, April 17-21). Roles of Student Reading Comprehension and Item Linguistic Complexity in Math Word Problem Solving [Roundtable session]. American Education Research Association annual meeting, San Francisco, CA, United States. (Conference cancelled)
- Lee, J., Chow, S-M., Lei, P.-W., Wijekumar, K., & Molenaar, P. (2020, April 17-21). A Dynamic Analysis of Lesson Progression Within the Intelligent Tutoring System of Structure Strategy (ITSS) [Poster session]. American Education Research Association annual meeting, San Francisco, CA, United States. (Conference cancelled)
- Hart, S. C., DiPerna, J. C., Hunter, L. J., Lei, P.-W., Li, X., & Zhao, H. (2020, March). Positive, Engaged, Achieving Kids (PEAK): An ongoing national effectiveness trial of a universal social-emotional learning program in the primary grades [Poster session]. Society for Research on Educational Effectiveness annual meeting, Arlington, VA. (Conference cancelled)
- Anthony, C. J., Elliott, S. N., DiPerna, J. C., & Lei, P.-W. (2020, February 18-21). Development and Initial Validation of the SSIS SELb Scales. Paper presented at the National Association of School Psychologists (NASP) 2020 annual convention, Baltimore, MD.
- Crosson, A. C., Mckeown, M. G., Lei, P.-W., Robbins, K. P., & Brown, K. J. (2020, January 8-9). Intervention Effects of an Academic Vocabulary and Morphology Intervention for Adolescent English Learners. Paper presented at the Institute for Education Sciences (IES) annual Principal Investigators Meeting, Washington D.C.
- Anthony, C. J., DiPerna, J. C., Lei, P.-W., & Elliott, S. N. (2019, October). Self-Awareness: Examining the Meaning and Measurement of an Elusive Construct. Poster presented at the 2019 SEL Exchange conference, Chicago, IL.
- Crosson, A. C., Zhao, H., Lei, P.-W., Li, X., & Mckeown, M. G. (2019, July). Intervention effects on comprehension are the Holy Grail: Investigating effects of an academic vocabulary and morphology intervention on reading comprehension with multilingual adolescents. Paper presented at the 2019 Society for the Scientific Study of Reading (SSSR) conference, Toronto, Canada.
- Crosson, A. C., Mckeown, M. G., Lei, P.-W., Li, X., Robbins, K. P., & Brown, K. J. (2019, April). *Identifying Leverage Points Beyond Cognates for Spanish-English Bilingual Adolescents: Effects of an Academic Vocabulary and Morphology Intervention*. Paper presented as part of the Vocabulary SIG symposium at the annual meeting of the American Education Research Association, Toronto, Canada.
- Shiverdecker, L.K. & Lei, P.-W. (2019, April). *Performance of Robust Estimators for Confirmatory Factor Analysis of Ordinal Variables with Missing Data.* Poster presented at the annual meeting of the American Education Research Association, Toronto, Canada.
- Chow, S-M., You, D., Pearl, D., Voyack, R., Molenaar, P., Lee, J., Lei, P.-W., Beckman, M., Nord, E., Ram, N., et al. (2018, Oct.). *Individualized Pathways and Resources to Adaptive Control Theory-Inspired Scientific Education (iPRACTISE)*. Talk presented at the Annual Meeting of the Society of Multivariate Experimental Psychology (SMEP), Albuquerque, NM.
- Jiang, X., Lei, P.-W., Meyer, B. J. F., & Wijekumar, K. (2018, August). *Evaluating effect of the structure strategy* on reading in a cognitive diagnostic modeling framework. Poster presented at the annual convention of the American Psychological Association, San Francisco, CA.
- Crosson, A. C., Mckeown, M. G., Robbins, K. P., Brown, K. J., Lei, P.-W., & Li, X. (2018, July). Effects of an academic vocabulary intervention using Latin roots with adolescent English learners. Paper presented as part of

the Vocabulary Interventions symposium at the 2018 Society for the Scientific Study of Reading (SSSR) conference, London, Britain.

- Hart, S. C., DiPerna, J. C., Lei, P.-W., & Cheng, W. (2018, August). *What can school psychologists learn from an efficacy trial of a universal social skills program?* Poster presentation at the annual meeting of the American Psychological Association, San Francisco.
- Hart, S. C., DiPerna, J. C., Lei, P.-W., & Cheng, W. (2018, June). Implementation of a Universal Social Skills Program in the Early Grades: Findings from an Efficacy Trial. Poster presented at the National Research Conference on Early Childhood (NRCEC) annual meeting, Arlington, VA.
- Crosson, A. C., Mckeown, M. G., Lei, P.-W., Cheng, W., Robbins, K. P., & Brown, K. J. (2018, April). Interactive Development of a Morphology Intervention to Enhance Literacy Outcomes for Adolescent English Learners. Paper presented at the annual meeting of the American Education Research Association, New York, NY.
- Sandilos, L. E., DiPerna, J. C., Lei, P.-W. (2018, February). Engagement, Motivation, and Achievement: Investigating that Moderating Influence of Teacher-Child interactions. Poster presented at the National Association for School Psychologists (NASP) conference, Chicago, Illinois.
- Jiang, X., Lei, P.-W., Meyer, B. J. F., & Wijekumar, K. (2017, October). Exploring the diagnostic capacity of a standardized reading comprehension test. Poster presented at the annual meeting of the Northeastern Educational Research Association, Trumbull, CT.
- Crosson, A., Lei, P.-W., Mckeown, M. G., Cheng, W., & Newhouse, R. (2017, July). What makes it hard for adolescents to use bound roots for morphological problem-solving? Paper presented at the 2017 Society for the Scientific Study of Reading (SSSR) conference, Halifax, Nova Scotia.
- Cheng, W., Lei, P.-W., DiPerna, J. C., & Hart, S. C. (2017, April). *Intervention Effect on Social Skill Improvement Using a Latent Transition Analysis*. Paper presented at the annual meeting of the American Education Research Association, San Antonio, TX.
- Li, X., Lei, P.-W., Meyer, B.J.F, & Wijekumar,K. (2017, April). Comparison of Bi-factor and Unidimensional IRT Model for Reading Comprehension Test. Poster presented at the annual meeting of the National Council on Measurement in Education, San Antonio, TX.
- Ji, X. R., Wijekumar, K., Meyer, B. J. F., Lei, P.-W., & Joshi, R. M. (2017, April). Using Latent Transition Model to Identify Effects of an Intelligent Tutoring System on Reading Comprehension. Poster presented at the annual meeting of the American Education Research Association, San Antonio, TX.
- Akgun, M., Sharma, P., & Lei, P.-W. (2017, April). The Role of Self-Regulation and Personal Epistemological Beliefs in Predicting Students' Performance in Idea Improvement. Poster presented at the annual meeting of the American Education Research Association, San Antonio, TX.
- Wijekumar, K., Meyer, B. J. F., Lei, P.-W., Hernandez, A. C., & Beerwinkle, A. (2017, April). Elementary Spanish-Speaking English Learners Improve in Comprehension With Text Structure Instruction on the Web. Paper presented at the annual meeting of the American Education Research Association, San Antonio, TX.
- Hart, S. C., DiPerna, J. C., Hunter, L. J., Lei, P.-W., & Cheng, W. (2017, February). State Exam Performance of Students Exposed to the SSIS-CIP. Poster presented at the National Association of School Psychologists (NASP) annual meeting, San Antonio, TX.
- Jiang, X., Lei, P.-W., Wijekumar, K., & Meyer, B. J. F. (2016, October). Assessing Dimensionality of Gray Silent Reading Test Data: an Item Response Theory Approach. Poster presented at the annual meeting of the Northeastern Educational Research Association (NERA), Trumbull, CT.
- Wijekumar, K., Harris, K.R., Graham, S., Lei, P.-W., & Meyer, B.J.F. (2016, July). *Reading comprehension and persuasive writing with sources*. Presentation at the SIG-Writing Conference, Liverpool, UK.

- Zhao, Y. & Lei, P.-W. (2016, April). Factors Affecting the Robust Weighted Least Squares Model Fit Measures in Confirmatory Factor Analysis. Paper presented at the annual meeting of the American Education Research Association, Washington, D.C.
- Wijekumar, K., Meyer, B. J. F., & Lei, P.-W., Hernandez, A. C., & Montelongo, J. A. (2016, April). *Improving Content Area Reading Comprehension of 4th and 5th Grade Spanish Speaking English Language Learners*. In the "Content Area Reading Comprehension and Writing in European and American Schools" symposium presented at the World Educational Research Association (WERA) Focal Meeting, Washington, D.C.
- Graham, S., Wijekumar, K., Harris, K. R., Lei, P.-W., & Meyer, B. J. F. (2016, April). Factors Contributing to Writing Skills of 5th Grade Learners. In the "Content Area Reading Comprehension and Writing in European and American Schools" symposium presented at the World Educational Research Association (WERA) Focal Meeting, Washington, D.C.
- Sandilos, L. E., Shervey, S. W., DiPerna, J. C., Cheng, W., & Lei, P.-W. (2016, April). Validity of Teacher-Child Interactions in Primary Grades: Testing Alternative CLASS K-3 Models. Roundtable session presented at the annual meeting of the American Education Research Association, Washington, D.C.
- Hao, L., Lei, P.-W., Yu, X., & Cheng, W. (2016, April). Rural-urban Migration and Cognitive Skills among Middle Schoolers in China. Paper presented at the 2016 Annual Meetings of Population Association of America. Washington, D.C.
- Kavanagh, C., Graham, S., Wijekumar, K., Harris, K. R., Lei, P.-W., Barkel, A., Aitken, A., Cunningham, J., & Ray, A. (2016, February). A test of the domain model of learning with writing. Poster presented at Pacific Coast Research Conference, San Diego, CA.
- Aitken, A, Barkel, A., Graham, S., Wijekumar, K., Lei, P.-W., Harris, K.R., Kavanaugh, C., Ray, A., & Cuningham, J. (2016, February). *Does the quality of structural elements predict overall writing quality*. Poster presented at Pacific Coast Research Conference, San Diego, CA.
- Shervey, S. W., DiPerna, J. C., Sandilos, L. E., Silvestri, J., & Lei, P.-W. (2015, August). Implementation Fidelity of the Social Skills Improvement System Classwide Intervention Program. Poster presented at the annual convention of the American Psychological Association. Toronto, Canada.
- Sandilos, L. E., Cheng, W., Shervey, S. W., DiPerna, J. C., & Lei, P.-W. (2015, August). Factor Structure of the Classroom Assessment Scoring System (CLASS K-3) in a Primary Grade Sample. Poster presented at the annual convention of the American Psychological Association. Toronto, Canada.
- Winnick, J. B., Berg, C. A., Wiebe, D. J., Schaefer, B. A., Lei, P.-W., & Butner, J. E. (2015, August). Relation between Metabolic Control and Achievement over Time in Adolescents with Type 1 Diabetes. Poster presented at the annual convention of the American Psychological Association. Toronto, Canada.
- Wijekumar, K., Meyer, B. J.F., Lei, P.-W., Hernandez, A., Montelongo, J. (2015, July). Improving content area reading comprehension with Spanish speaking English Language Learners in grades 4-6 using web-based tutoring for the structure strategy. Twenty-Second annual meeting of the Society for the Scientific Study of Reading, Kamuela, HI.
- Marino, K. & Lei, P.-W. (2015, April). *Classroom Level Influence in Multilevel IRT School Effectiveness Research*. Paper presented at the annual meeting of the National Council on Measurement in Education, Chicago, IL.
- Wijekumar, K., Meyer, B. J. F., & Lei, P.-W. (2015, April). Efficacy of the web-based intelligent tutoring system for the structure strategy with 4th and 5th-grade students in high poverty schools. Paper presentation at the annual meeting of the American Education Research Association, Chicago, IL.
- Meyer, B. J. F., Wijekumar, K. & Lei, P.-W. (2015, March). Use of Comparative Text Signals: Variations across Grades, Comprehension Abilities, and Instruction. In K. Wijekumar, J. Williams, B.J.F., K. Harris, & E. Albro, Panel Session entitled, "The Many Facets and Applications of Text Structure in Supporting Educational Trajectories of Elementary and Middle Grade Children in Content Area Reading Comprehension and Writing,"

annual convention of the Society for Research on Educational Effectiveness, Learning Curves: Creating and Sustaining Gains from Early Childhood through Adulthood. Washington, D.C.

- Wijekumar, K., Meyer, B.J.F., & Lei, P.-W. (2015, March). *The Power of Text Structure*. In K. Wijekumar, J. Williams, B.J.F., K. Harris, & E. Albro, Panel Session entitled, "The Many Facets and Applications of Text Structure in Supporting Educational Trajectories of Elementary and Middle Grade Children in Content Area Reading Comprehension and Writing," annual convention of the Society for Research on Educational Effectiveness, Learning Curves: Creating and Sustaining Gains from Early Childhood through Adulthood. Washington, D.C.
- Wijekumar, K., Meyer, B. J. F., & Lei, P.-W. (2014, October). Improving Content Area Reading Comprehension with 4-6th Grade Spanish Ells using Web-based Structure Strategy Instruction. Proceedings of the 11th International Conference on Cognition and Exploratory Learning in the Digital Age (CELDA, pp.158-164), Porto, Portugal: IADIS Press. ISBN: 978-989-8533-23-4.
- Marino, K. & Lei, P.-W. (2014, October). *Consequences of Disregarding Nesting in Education Research*. Paper presented at the annual meeting of the Northeastern Educational Research Association, Trumbull, CT.
- Li, H., Hunter, C.V., & Lei, P.-W. (2014, October). *The Selection of Cognitive Diagnostic Models for a Reading Comprehension Test*. Paper presented at the annual meeting of the Northeastern Educational Research Association, Trumbull, CT.
- Li, H., Qi, Q., & Lei, P.-W. (2014, October). An Examination of Instructional Sensitivity of TIMSS Math Items: A Hierarchical Differential Item Functioning Approach. Paper presented at the annual meeting of the Northeastern Educational Research Association, Trumbull, CT.
- Cheng, W., Lei, P.-W., DiPerna, J. C., & Bellinger, J. (2014, August). *A Short-term Longitudinal Relationship between Academic Motivation and Achievement in the Primary Grades*. Poster presentation at the annual convention of the American Psychological Association. Washington, DC.
- Anthony, C. J., DiPerna, J. C., & Lei, P.-W. (2014, April). Developing short forms of the Social Skills Improvement System – Teacher Rating Scale. Paper presentation at the annual meeting of the American Education Research Association, Philadelphia, PA.
- Lei, P.-W. & Li, H. (2014, April). Fit Indices' performance in choosing cognitive diagnostic models and Q-matrices. Paper presented at the annual meeting of the National Council on Measurement in Education, Philadelphia, PA.
- Marino, K. & Lei, P.-W. (2014, April). Effects of Ignoring Hierarchical Data Structure in Factor Analyses. Paper presented at the annual meeting of the American Educational Research Association, Philadelphia, PA.
- Wijekumar, K., Meyer, B. J. F., & Lei, P.-W. (2014, April). Small Steps to Big Gains in Reading Comprehension with 4-6th Grade Spanish ELLs. Paper presented at the annual meeting of the American Educational Research Association, Philadelphia, PA.
- Smith, E., Lei, P.-W., Witherspoon, D., & Osgood, D. W. (2014, March). Exploring the Moderators of Effective Implementation of PaxGBG in Afterschool Settings. Paper presented at the biennial meeting of the Society for Research on Adolescence, Austin, TX.
- DiPerna, J. C. Lei, P.-W., Bellinger, J. M., & Cheng, W. (2014, March). *Efficacy of the Social Skills Improvement System-Classwide Intervention Program in the Primary Grades*. Paper presentation at the annual convention of the Society for Research on Educational Effectiveness. Washington, DC.
- DiPerna, J. C., Lei, P.-W., Bellinger, J., & Cheng, W. (2014, February). *Efficacy of the Social Skills Improvement System Classwide Intervention Program.* Paper presentation at the annual meeting of the National Association of School Psychologists, Washington, DC.

- Wu, Q., Lei, P.-W. (2013, September). Psychometric properties of the literacy test from China Family Panel Studies
 Comparing Different Approaches to Estimating Reliabilities and Scoring. Paper presented at the 2013 International Conference on Survey Research Methodology, Taipei, Taiwan.
- Lei, P.-W., DiPerna, J. C., Cheng, W., & Bellinger, J. (2013, August). The Social Skills Improvement System-Teacher Rating Scale: An Independent Study of Factor Structure. Poster presented at the annual convention of the American Psychological Association, Honolulu, Hi.
- DiPerna, J. C., Lei, P.-W., Bellinger, J., & Cheng, W. (2013, August). The Social Skills Improvement System Classwide Intervention Program: Student Outcomes in the Primary Grades. Poster presented at the annual convention of the American Psychological Association, Honolulu, HI.
- Wijekumar, K., Meyer, B. J. F., Pirnay-Dummer, P. & Lei, P.-W. (2013, August). Assessment of Comprehension and Writing in Intelligent Tutoring Systems. Poster presented at the annual convention of the American Psychological Association, Honolulu, HI.
- Cheng, W., Lei, P.-W., & DiPerna, J. (2013, May). Efficacy of the Social Skills Improvement System Classwide Intervention Program in the Primary Grades. Roundtable session presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
- Wijekumar, K., Meyer, B. J. F., & Lei, P.-W. (2013, May). Is Learning Road-Kill on the Information Highway? Roundtable session presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
- Perlman, E. H., DiPerna, J. C., Lei, P.-W., & Cheng, W. (2013, February). Effects of social skills intervention for students with disabilities. Poster Presentation at the annual meeting of the National Association of School Psychologists, Seattle, WA.
- Lei, P.-W. & Li, H. (2012, April). Small Sample DIF Estimation Using Log-Linear Smoothing with SIBTEST and Cochran's Z. Paper presented at the annual meeting of the American Educational Research Association, Vancouver, Canada.
- Li, H. & Lei, P.-W. (2012, April). *Reading Subskill Differences between Students in China and the US: Evidence from PISA 2009*. Paper presented at the annual meeting of the American Educational Research Association, Vancouver, Canada.
- Cheng, W.-Y. & Lei, P.-W. (2012, April). *Examining the Dimensionality of EARLI Numeracy Skill Scores*. Paper presented at the annual meeting of the National Council on Measurement in Education, Vancouver, Canada.
- Wijekumar, K., Meyer, B. J. F., & Lei, P.-W. (2012, April). The Efficacy of a Web-based Intelligent Tutoring System Designed to Teach the Structure Strategy to 5th Grade Students. Paper presented at the annual meeting of the American Educational Research Association, Vancouver, Canada.
- Shih, S.-I., Lei, P.-W., & Mohammed, S. (2012, April). Developing a Short Form of the Decision Style Scale. Poster presented at the 27th annual conference of the Society for Industrial and Organizational Psychology, San Diego, CA.
- Zhao, Y. & Lei, P.-W. (2011, April). The Performance of Model Fit Indices in Robust Weighted Least Squares Estimations in Structural Equation Modeling. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Wijekumar, K., Meyer, B. J. F., & Lei, P.-W. (2010, June). Improving Reading Comprehension in grade 4-8 using a web-based tutoring system. Poster presented at the fifth annual Institute of Education Sciences Research Conference, National Harbor, MD.
- Meyer, B. J. F., Wijekumar, K., Lei, P.-W., Lin, Y.-C. & Ray, M. (2010, May). The Structure Strategy: A Program of Intervention-based Research in Reading Comprehension of Expository Text in Symposium of Reading for

Understanding: Where We Were, Where We Are, Where We Need To Be. Paper presented at the annual meeting of the American Educational Research Association, Denver, CO.

- Lei, P.-W., & Zhao, Y. (2010, May). A comparison of concurrent and separate calibration in estimating growth rate. Paper presented at the annual meeting of the National Council on Measurement in Education, Denver, CO.
- Zhao, Y., Lei, P.-W., Li, H., Tate, R., & Lin, Y. (2010, May). Developing short forms of a psychological screening measure using classical and item response theory approaches. Poster presented at the annual meeting of the American Educational Research Association, Denver, CO.
- Hochstedt, K. S., Lei, P.-W., DiPerna, J. C., & Morgan, P. L. (2009, August). A Dimensionality Study of the EARLI Literacy Probes. Poster presented at the annual convention of the American Psychological Association, Toronto, Canada.
- Wu, Q., & Lei, P.-W. (2009, April). Covariates in Latent Class Analysis to Add or not to Add? Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Wu, Q., & Lei, P.-W. (2009, April). Using Multi-group Mean and Covariance Structure Analysis to Detect DIF when Tests are Multidimensional. Paper presented at the annual meeting of the National Council on Measurement in Education, San Diego, CA.
- Lei, P.-W., DiPerna, J. C., Morgan, P. L., Wu, Q., & Hochstedt, K. S. (2008, August). Scaling Adaptive Forms for Growth Tracking in Early Academic Skills. Poster presented at the annual convention of the American Psychological Association, Boston, MA.
- McGinnis, A., DiPerna, J. C., Morgan, P. L., Lei, P.-W., Reid, E. E., & Wu, Q. (2008, August). Sex Differences in Progress-Monitoring Performance in Preschool Students. Poster presented at the annual convention of the American Psychological Association, Boston, MA.
- DiPerna, J. C., Morgan, P. L., Lei, P.-W., Reid, E. E., & Wu, Q. (2008, June). Development of Early Arithmetic, Reading, and Learning Indicators for Head Start. Poster presented at the Head Start's Tenth National Research Conference, Washington, DC.
- DiPerna, J. C., Morgan, P. L., Lei, P.-W., Reid, E. E., & Wu, Q. (2008, June). The EARLI Numeracy Probes: Early Academic Measures for Children in Head Start. Poster presented at the Head Start's Tenth National Research Conference, Washington, DC.
- Wu, Q., & Lei, P.-W. (2008, March). An Investigation of Model Fit Indices for Non-nested Latent Class Models with Continuous Indicators. Paper presented at the annual meeting of the American Educational Research Association, New York, NY.
- Wu, Q., & Lei, P.-W. (2008, March). An Investigation of the Application of Mean and Covariance Structure Analysis to DIF with Dichotomous Items. Paper presented at the annual meeting of the National Council on Measurement in Education, New York, NY.
- Ritter, S., Kulikowich, J., Lei, P.-W., McGuire, C., & Morgan, P. (2007, November). *What Evidence Matters? Evaluating a Randomized Field Trial of Cognitive Tutor Algebra I.* Paper presented at the 15th International Conference on Computers in Education, Hiroshima, Japan.
- Lei, P.-W., Wu, Q., DiPerna, J. C., & Morgan, P. L. (2007, April). Composing Shorter Test Forms for Progress Monitoring of Head Start Children in Mathematics Skills. Paper presented at the annual meeting of the National Council on Measurement in Education, Chicago, IL.
- Wu. Q., & Lei, P.-W. (2007, April). Recovery of Parametric Item Characteristic Curves with Parametric and Nonparametric IRT models. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.

- DiPerna, J. C., Morgan, P. L., Lei, P.-W., Reid, E. E., & Wu, Q. (2007, March). *Development of Progress-Monitoring Measures to Assess Preschoolers' Pre-Literacy and Early Mathematical Skills*. Poster presented at biennial meeting of the Society for Research in Child Development, Boston, MA.
- DiPerna, J. C., Morgan, P. L., Lei, P.-W., Reid, E. E., & Wu, Q. (2006, November). *The EARLI Mathematics Probes: Initial Reliability and Validity Evidence for Children in Head Start.* Poster presented at annual meeting of the National Association for the Education of Young Children, Atlanta, GA.
- DiPerna, J. C., Morgan, P. L., Lei, P.-W., Reid, E. E., & Wu, Q. (2006, June). Development of Progress-Monitoring Measures to Assess Preschooler's Early Mathematical Skills. Poster presented at the Head Start's Eighth National Research Conference, Washington, DC.
- DiPerna, J. C., Morgan, P. L., Lei, P.-W., Reid, E. E., & Wu, Q. (2006, June). *Development of Early Arithmetic, Reading, and Learning Indicators for Head Start*. Poster presented at the Head Start's Eighth National Research Conference, Washington, DC.
- Yu, L., Lei, P.-W., & Suen, H. K. (2006, April). Examining the Feasibility of Using a DIF Method to Detect Differences in Opportunity-to-Learn. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
- Bishop, N. S., Sharairi, S., Swift, D., Lei, P.-W., & Domaleski, C. (2006, April). *Comparing growth and AYP results over multiple years using different IRT scale transformation and scoring procedures*. Paper presented at the annual meeting of the National Council on Measurement in Education, San Francisco, CA.
- Bishop, N. S., Swift, D., Sharairi, D., Lei, P.-W., & Domaleski, C. (2006, April). Alternative procedures for identifying non-reading test items with high reading loads. Paper presented at the annual meeting of the National Council on Measurement in Education, San Francisco, CA.
- DiPerna, J. C., & Lei, P.-W. (2005, August). *Children's behavioral and mathematics growth in the primary years*. Paper presented at the annual meeting of the American Psychological Association (Division 16). Washington, DC.
- Lei, P.-W. (2005, April). *Effect of Score Nonnormality and Categorization: A comparison of the Mplus and EQS Approaches to Robust Estimation.* Paper presented at the annual meeting of the American Educational Research Association, Montreal, Canada.
- Lei, P.-W. (2005, April). Effect of Score Nonnormality and Categorization on Bootstrapping and Satorra-Saris Power Estimation. Paper presented at the annual meeting of the American Educational Research Association, Montreal, Canada.
- Lei, P.-W., Chen, S. Y., & Yu, L. (2005, April). Comparing Methods of Assessing Differential Item Functioning in Computerized Adaptive Testing Environment. Paper presented at the annual meeting of the National Council on Measurement in Education, Montreal, Canada.
- Alharby, E. R., Suen, H. K., & Lei, P.-W. (2005, March). Gender Differences in Mathematics Standardized Tests in Saudi Arabia. Paper presented at the annual meeting of the Comparative International Education Society, Palo Alto, CA.
- Chen, S.-Y., & Lei, P.-W. (2004, April). *Controlling item exposure and test overlap in computerized adaptive testing*. Paper presented at the annual meeting of the National Council on Measurement in Education, San Diego, CA.
- Lei, P.-W., & Dunbar, S. B. (2002, April). *Power estimation methods in structural equation modeling*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Lei, P.-W., Basssiri, D., & Schulz, E. M. (2001, April). Alternatives to the grade point average as measures of academic achievement in college. Roundtable session presented at the annual meeting of the American Educational Research Association, Seattle, WA.

- Lei, P.-W., Dunbar, S. B., & Kolen, M. J. (2000, April). *A comparison of parametric and nonparametric approaches to item analysis for multiple-choice tests.* Paper presented at the annual meeting of the National Council on Measurement in Education, New Orleans, LA.
- Lei, P.-W., & Koehly, L. M. (2000, April). Discriminant analysis versus logistic regression: A comparison of classification errors. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Lei, P.-W., Kwan, V., & Rafferty, J. M. (1995, June). *Depth of processing related intrusions in a forced recall task*. Poster presented at the annual meeting of the American Psychological Society, NY.

State/Local

- Crosson, A., Lei, P.-W., Mckeown, M. G., Li, X., Robbins, K., Brown, K., & Madden, A. (2018, October). English Learners' Robust Academic Vocabulary Encounters (EL RAVE): Treatment Effects of an Academic Vocabulary & Morphology Intervention for Adolescent Multilingual Learners. Poster presented at the Multidisciplinary Approaches to Child and Adult and Language Acquisition Conference, Center for Language Science, Penn State, University Park, PA.
- Lei, P.-W. (1994, August). *Follow-up contacts with shelter clients*. Paper presented at the meeting of the Undergraduate Psychology Conference, Northfield, MN.

University Services

University level

Reviewer for Social Science Research Institute (SSRI) Level 2 proposal, 2020 University Graduate Council, 2016-2017 Graduate Exhibition Committee, 2016-2017 TIES faculty, Penn State, 2015-2020 Survey Research Center Advisory Committee, Penn State University, 2011-2014 TIES executive committee, Penn State, 2009-2014 Search Committee, Children, Youth, and Family Consortium Innovative Methods, Penn State University, Fall 2011 Judge for the Graduate Exhibition of Visual Arts and Research Posters, Penn State University, Spring 2005 – 2008, 2011, 2013, 2015 Judge for the Undergraduate Exhibition of Research Posters, 2014, 2023, 2024 Review committee for the Undergraduate Research Symposium, the Africana Research Center, Penn State University, Spring 2006 College Level Graduate studies committee, College of Education, Penn State University, Spring 2022 Sabbatical review committee, College of Education, Penn State University, Fall 2021 Humphrey Fellow Mentor, College of Education, Penn State University, 2013-2014 Faculty, Staff, and Student Awards Committee, College of Education, Penn State University, 2010 Department representative, College of Education Scholarship Committee, Penn State University, 2009 Diversity and Community Enhancement Committee, College of Education, Penn State University, Fall 04 - Spring 08 Cyclethon/Diversity and Community action team, College of Education, Penn State University, Fall 07 - Spring 08 Curriculum action team, College of Education, Penn State University, Fall 06 - Spring 07 Climate survey action team, College of Education, Penn State University, Fall 04 - Spring 06 Department Level

EPCSE Facility Committee, 2016-2017 EPCSE Department Climate Committee, 2014-2016 EPCSE Department Curricular Affairs Committee, Penn State, 2011-2012 Co-Chair of the ESPSE Department Climate Committee, Penn State University, Spring 2007- Spring 2009

Program Level

Search Committee Chair, NTL Quantitative Research Methods, Measurement, and Statistics; Educational Psychology, Penn State University, Spring 2024 - Summer 2024

Member, MS in Learning Analytics Committee, Educational Psychology, Penn State University, 2023-25

Member, Panel for English Proficiency, Educational Psychology, Penn State University, 2022-23, 2024-25

Search Committee, Quantitative Research Methods, Measurement, and Statistics; Educational Psychology, Penn State University, Fall 2021 - Spring 2022

Program Assessment Committee Chair, Educational Psychology, Penn State University, Fall 2021- Summer 2022 Professor-in-Charge, Educational Psychology, Penn State University, 2018 – 2021

Peer teaching evaluator, Educational Psychology, Penn State University, 2020, 2023

Coordinator, Educational Psychology Candidacy/Qualifying Examinations, Penn State University, Fall 08-Spring 09, Fall 11-12, 12-13, 13-14, 23-24

Graduate Program Task Force, Educational Psychology, Penn State University, Spring 2004 – 2008

Chair of Educational Psychology Graduate Admissions Committee, Penn State University, Spring 2007, 2008, 2011, 2016, 2017

Educational Psychology Graduate Admissions Committee, Penn State University, Spring 2004, 2006, 2012, 2015, 2020, 2021, 2022, 2023

Statistics Course and Curriculum Committee, Educational Psychology, Penn State University, 2004–05, 2021-22

Search Committee Chair, Educational Psychology and Institute for CyberScience, Penn State University, Fall 2018-Spring 2019

Search Committee, Educational Psychology, Penn State University, Fall 2002 - Spring 03

Search Committee, Measurement/Statistics, University of Iowa, Fall 2000 - Spring 01

Courses Taught in Resident Instruction

EDPSY 406 ~ Applied Statistics in Behavioral Sciences (3 credits)

EDPSY 506 ~ Advanced Techniques for Analyzing Educational Experiments (3 credits)

EDPSY 507 ~ Multivariate Procedures in Educational Research (3 credits)

EDPSY 550 ~ Design and Construction of Measurement Instruments (3 credits)

EDPSY 558 (597A/B) ~ Structural Equation Modeling (3 credits)

EDPSY 556 (597A) ~ Foundations and Applications of Item Response Theory (3 credits)

EDPSY 596 ~ Individual Studies (3-6 credits)

EDPSY 575 ~ Professional Seminar (1 credit)

EDPSY 600 ~ Thesis Research (1-3 credits)

EDPSY 601 ~ Doctoral Dissertation Research (12 credits)

Advising

Have served as advisor or dissertation advisor to 8 doctoral students, minor advisor to 7 doctoral students, advisor to 5 master's students, Co-Chair for 2 doctoral committees, and a member of 39 other doctoral and 9 master's committees at Penn State University. Currently serve as advisor to 5 doctoral students and a member of 7 other doctoral committees.