

CURRICULUM VITAE

Eunkyeng Baek, Ph. D.

Department of Educational Psychology
Texas A&M University
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EDUCATION

- 2015 Ph.D. Curriculum and Instruction
Concentration: Educational Measurement & Research
University of South Florida
- 2006 M.A. Industrial and Organizational Psychology
Concentration: Psychometrics
Korea University [Seoul, Korea]
- 2003 B.A. Psychology
Sungshin Women's University [Seoul, Korea]

ACADEMIC POSTIONS

- 2017-present **Assistant Professor**
Texas A&M University
Department of Educational Psychology
- 2016-2017 **Visiting Assistant Professor**
Texas A&M University
Department of Educational Psychology
- 2011-2015 **Methodological Consultant**
University of South Florida
Consulting Office for Research in Education (CORE)
- 2010-2015 **Graduate Research Assistant**
University of South Florida
Department of Educational Measurement & Research

PROFESSOINAL EXPERIENCES

- 2015-2016 **Senior Coordinator for Student Learning Evaluation:**
Developing predicted models for evaluation policy
School Board of Polk County
- 2006-2007 **Senior Researcher:**
Working as psychometrician to develop an aptitude test for army official
Korea Institute for Defense Analyses (KIDA)
- 2005-2006 **Graduate Research Assistant:**
Working as a psychometrician to develop a pre-employment test
Dusan Group
- 2004-2005 **Graduate Research Assistant:**
Working as a psychometrician to develop achievement tests
Korean Psychological Testing Institute
- 2004 **Graduate Research Assistant:**
Working as a psychometrician to develop a pre-employment test
Korean Airlines

RESEARCH INTEREST

Single-Case data analysis

- Statistical methods to synthesize single-case data
- Methodological issues of single-case data analysis

Multilevel modeling/Longitudinal modeling

- Consequences of misspecification of the model
- Consequences of using different estimation methods

Contemporary quantitative research methodologies

- Structural equation modeling
- Bayesian estimation method

Large-scale longitudinal data analysis

- Long term effect of educational policy
- Analyzing student academic achievement

GRANT ACTIVITIES

Submitted/ Under review

1. Institute of Longitudinal Research Methods For STEM Education Scholars (2023-2025).
 - **Source:** National Science Foundation (NSF).
 - **Investigators:** Wen Luo (PI), **Eunkyeng Baek (Co-PI)**, Christopher Thompson (Co-PI), Oi-Man Kwok (Co-PI), Myeongsun Yoon (Co-PI), Paul Hernandez, and Karen

Rambo-Hernandez (Co-PI).

- **Amount:** \$918,177.
- **Roles and Responsibilities:** Co-PI, plan/consult/develop modules, supervise project progress along with PI, workshop organizer, co-author of proposal, and co-author on associated peer-reviewed presentations, and publications.

2. Exploring the Effects of Technology-Mediated Mathematics Interventions for Students With Disabilities: A Multilevel Meta-Analysis of Single-Case Experimental Designs (2023-2025).

- **Source:** Institute of Education Sciences (IES), Special Education Research Grants Program.
- **Investigators:** Mikyung Shin (PI), **Eunhyeng Baek (Co-PI)**, Gahangir Hossain (Co-PI), Samuel Choo (Co-PI) & Mariola Moeyaert (consultant).
- **Amount:** \$800,000.
- **Roles and Responsibilities:** Co-PI, co-author of proposal, conduct core analyses and studies, plan and monitor the project along with PI, and co-author on associated peer-reviewed presentations, and publications.

Funded

1. Track One: Web-Based Effect Size Toolkit for the Meta-Analysis of SCED Studies (2023-2024).

- **Source:** School of Education Human Development (SEHD) Catapult Research Seed Grant, Texas A&M university.
- **Investigators:** **Eunhyeng Baek (PI)**, Wen Luo (Co-PI), Lisa Bowman-Perrott (Co-PI)
- **Amount:** \$30,000.
- **Roles and Responsibilities:** PI, plan/consult/conduct statistical analysis, supervise project progress, author of proposal, and author on associated peer-reviewed presentations, and publications.

2. Multilevel-Modeling for Single-Case Studies with Count and Proportion Data (2022-2023).

- **Source:** College of Education Human Development (CEHD) Renew, Reinvest, & Resubmit (R3) grant, Texas A&M university.
- **Investigators:** Wen Luo (PI), **Eunhyeng Baek (Co-PI)**.
- **Amount:** \$22,000.
- **Roles and Responsibilities:** Co-PI, plan/consult/conduct statistical analysis, supervise project progress along with PI, co-author of proposal, and co-author on associated peer-reviewed presentations, and publications.

3. A Bridge Between Contemporary Meta-analysis and Applied Research: Explorations and Extensions of Bayesian Meta-analysis for Educational and Social Science Researchers (2021-2023).

- **Source:** College of Education Human Development (CEHD) Catapult grant Early career, Texas A&M university.
- **Investigators:** Christopher Thompson (PI), **Eunkyeng Baek (Co-PI)**.
- **Amount:** \$30,000.
- **Roles and Responsibilities:** Co-PI, plan and lead workshops with PI, train graduate students, co-author of proposal, and co-author on associated peer-reviewed presentations, and publications.

4. The importance of play behavior on the development of self-regulation across cultural and socioeconomic contexts (2021-2023).

- **Source:** College of Education Human Development (CEHD) Catapult grant Next level, Texas A&M university
- **Investigators:** Steven Woltering (PI), **Eunkyeng Baek (Co-PI)**, & Leann Smith (Co-PI).
- **Amount:** \$10,000.
- **Roles and Responsibilities:** Co-PI, Co-author of proposal, consult/conduct statistical analysis, and co-author on associated peer-reviewed presentations, and publications.

5. Innovative K-12 School Design For Active And Healthy Students (2019-2022).

- **Source:** Triads for Transformation (T3) Multidisciplinary Seed-Grant. Awarded by the Office of the Provost and Executive Vice President, Texas A&M University
- **Investigators:** Xuemei Zhu (PI), **Eunkyeng Baek (Co-PI)**, & Chanam Lee (Co-PI).
- **Amount:** \$30,000.
- **Roles and Responsibilities:** Co-PI, plan and conduct statistical analysis and survey analysis, co-author of proposal, and co-author on associated peer-reviewed presentations, and publications.

6. Understanding Online Learners: The Development of the Online-Learning Readiness Scale (ORES) (2018-2019).

- **Source:** Triads for Transformation (T3) Multidisciplinary Seed-Grant. Awarded by the Office of the Provost and Executive Vice President, Texas A&M University
- **Investigators:** Oi-Man Kwok (PI), **Eunkyeng Baek (Co-PI)**, Noelle Wall Sweany (Co-PI), & Alex McIntosh (Co-PI).
- **Amount:** \$30,000.
- **Roles and Responsibilities:** Co-PI, co-author of proposal, and co-author on associated

peer-reviewed presentations, and publications.

Not-funded/Under revision

1. Multilevel modeling for single-case studies with count and proportion data (2022-2024).

- **Source:** **Institute of Education Sciences (IES)**, Statistical and Research Methodology in Education Core Grant.
- **Investigators:** Wen Luo (PI), **Eunkyeng Baek (Co-PI)**, & Jay Ganz (collaborator).
- **Amount:** \$300,000.
- **Roles and Responsibilities:** Co-PI, co-author of proposal, conduct core analyses and studies, plan and monitor the project along with PI, and co-author on associated peer-reviewed presentations, and publications.

2. Disability DCL: A Meta-Analysis Tool to Examine the Effects of Technology-Mediated Mathematics Interventions for Students With Disabilities (2022-2024).

- **Source:** **National Science Foundation (NSF)**, Education and Human Resources (EHR) Core Research
- **Investigators:** Mikyung Shin (PI), **Eunkyeng Baek (Co-PI)**, Gahangir Hossain (Co-PI), Samuel Choo (Co-PI) & Min Wook Ok (collaborator) & Mariola Moeyaert (consultant).
- **Amount:** \$1,500,000.
- **Roles and Responsibilities:** Co-PI, co-author of proposal, conduct core analyses and studies, plan and monitor the project along with PI, and co-author on associated peer-reviewed presentations, and publications.

PUBLICATIONS

*Former/current students are identified with *, impact factors (IF) were retrieved from Web of Science (WS), and citation counts were taken from Google Scholar (GS).*

Refereed Publications (n=16)

- 16. Baek, E., & Luo, W.** (in press). Modeling multiple dependent variables in meta-analysis of single-case experimental design using multilevel modeling. *Behavior Research Methods*. Advance online publication. [WS 5yr IF: 7.867]
- 15. Baek, E., * Lam, K., & Luo, W.** (in press). Meta-analysis of single-case experimental design using multilevel modeling approach. *Behavior Modification*. [WS 5yr IF: 3.319]

14. *Li, H, Luo, W., **Baek, E.**, Thompson, C. & *Lam, K. (2022). Estimation and statistical inferences of variance components in the analysis of single-case experimental design using multilevel modeling. *Behavior Research Methods*, 54, 1559–1579. **[WS 5yr IF: 7.867; times cited (GS): 2]**
13. *Wattanawongwan, S., Ganz, J. B., Hong, E. R., Dunn, C., Yllades, V., Pierson, L. M., **Baek, E.**, & Foster, M. (2022). Interventions on improving social-communication skills for adolescents and adults with ASD: A Meta-analysis review. *Review Journal of Autism and Developmental Disorders*. Advance online publication. **[WS 5yr IF: 3.795; times cited (GS): 1]**
12. **Baek, E.**, & Ferron, J. M. (2021). Bayesian analysis for multiple-baseline studies where the variance differs across cases in OpenBUGS. *Developmental Neurorehabilitation*, 24(2), 130-143. **[WS 5yr IF: 2.308; times cited (GS): 2]**
11. Luo, W., *Li, H., **Baek, E.**, *Lam, K., *Chen, S., & *Semma, B. (2021). Reporting Practice in Multilevel Modeling: A Revisit After 10 Years. *Review of Educational Research*. Advance online publication. **[WS 5yr IF: 20.558; times cited (GS): 13]**
10. **Baek, E.**, Luo, W. & *Henri, M. (2020). Issues and solutions in meta-analysis of single-case design with multiple dependent variables using multilevel modeling. *Journal of Experimental Education*, 90(4), 934-961. **[WS 5yr IF: 2.755; times cited (GS): 3]**
9. *Yeh, Y., Kwok, O., *Chien, H., Sweany, N. W., **Baek, E.**, & McIntosh, W. (2020). Identifying at-risk online learners by psychological variables using machine learning techniques. *Online Learning*, 24(4), 131-146. <https://doi.org/10.24059/olj.v24i4.2320> **[WS (ESCI) 2020 IF 2.46; times cited (GS): 3]**
8. **Baek, E.**, & Ferron, J. M. (2020). Modeling heterogeneity of the level-1 error covariance matrix in multilevel models for single-case data using Bayesian estimation. *Methodology*, 16, 166-185. **[WS 5yr IF: 2.163; times cited (GS): 7]**
7. **Baek, E.**, W., Beretvas, T., Van den Noortgate, & Ferron, J. (2020). Brief research report: REML versus Bayesian estimation with noninformative priors in multilevel models of multiple-baseline data. *Journal of Experimental Education*, 88, 698-710. **[WS 5yr IF: 2.755; times cited (GS): 17]**
6. *Yeh, Y., Kwok, O., *Chien, H., Sweany, N. W., **Baek, E.**, & McIntosh, W. (2019). How college students' achievement goal orientations predict their expected online learning outcome: The mediation roles of self-regulated learning strategies and supportive online learning behaviors. *Online Learning*, 23, 23-41. **[WS (ESCI) 2020 IF 2.46; times cited (GS): 68]**
5. Petit-Bois, M., **Baek, E.**, Van den Noortgate, W., Beretvas, T., & Ferron, J. (2016). The consequences of modeling autocorrelation when synthesizing single-case studies using a three level model. *Behavior Research Methods*, 48, 803-812. **[WS 5yr IF:**

7.867; times cited (GS): 26]

4. **Baek, E.**, Petit-Bois, M., Van den Noortgate, W., Beretvas, T., & Ferron, J. (2016). Using visual analysis to evaluate and refine multilevel models of single-case studies. *Journal of Special Education, 50*, 18-26. **[WS 5yr IF: 2.967; times cited (GS): 20]**
3. **Baek, E.**, Moeyaert, M., Petit-Bois, M., Beretvas, T., Van den Noortgate, W., & Ferron, J. (2014). The use of multilevel analysis for integrating single-case experimental design results within a study and across studies. *Neuropsychological Rehabilitation, 24*, 590-606. **[WS 5yr IF: 2.926; times cited (GS): 43]**
2. **Baek, E.**, & Ferron, J. M. (2013). Multilevel Models for Multiple-Baseline Data: Modeling Across Participant Variation in Autocorrelation and Residual Variance. *Behavior Research Methods. 45*, 65-74. **[WS 5yr IF: 7.867; times cited (GS): 54]**
1. Chatters, S., **Baek, E.**, & Rodríguez-Campos, L. (2010). Program management in secondary schools: A collaborative metaevaluation. *The International Journal of Knowledge, Culture, and Change Management, 10*, 22-35. **[WS IF not available, SJR: 0.105]**

Book chapters and conference proceedings (n=3)

- Luo, W., **Baek, E.**, & *Li, H. (2022). Transparency and replicability of multilevel modeling applications: A guideline for improved reporting practices. In Khine, M. S. (Eds), *Methodology for Multilevel Modeling in Educational Research: Concepts and Applications*, [p p. 161–183]. Springer Nature, Singapore.
- Kwok, O., *Yeh, Y., *Chien, H., Sweany, N. W., **Baek, E.**, & McIntosh, W. (March, 2019). *Finding the At-Risk Online Learners: Development of the Online REadiness Screener (ORES)*. The Companion Proceedings of the 9th International Conference on Learning Analytics and Knowledge (LAK19) (pp.159-160). New York, NY: ACM. https://www.solaresearch.org/wp-content/uploads/2019/08/LAK19_Companion_Proceedings.pdf **[2019 Google H5-index for International Conference on Learning Analytics and Knowledge: 36; Ranked 6th in “Educational Technology” based on Google Scholar Metrics]**
- Baek, E.**, & Chatter, S. (2015). Using a Collaborative Approach in the Evaluation of a graduate Program. In Rodríguez-Campos, L. (Eds.), *Collaborative Evaluation in Practice: Insights from Business, Education and Nonprofit*. Scottsdale, AZ: Information Age Publishing.

Evaluative and Technical Reports

- Rodríguez-Campos, L., **Baek, E.**, Owens, C., & Walker, C. (2011). *Recognizing*

Extraordinary Accomplishments of Children (REACH): Quarterly Performance Report_May 2011. Florida, USA: University of South Florida, Grant's Principal Investigator.

Rodríguez-Campos, L., **Baek, E.**, Owens, C., & Walker, C. (2010). *Recognizing Extraordinary Accomplishments of Children (REACH): Quarterly Performance Report_November 2010*. Florida, USA: University of South Florida, Grant's Principal Investigator.

Rodríguez-Campos, L., **Baek, E.**, Owens, C., & Walker, C. (2010). *Recognizing Extraordinary Accomplishments of Children (REACH): Quarterly Performance Report_May 2010*. Florida, USA: University of South Florida, Grant's Principal Investigator.

Rodríguez-Campos, L., **Baek, E.**, Bradshaw, W., Chatters, S. Lake, J., Lewis, J. Mahowski, J., Pham, T., & Sibley, C. (2010). *Metaevaluation of Commissioned Reports*. Florida, USA: Metaevaluation client (client requested confidentiality).

Non-Refereed Publications

Baek, E., & Chatters, S. (June, 2011). AEA365: Improving the dynamics of metaevaluation teams. *American Evaluation Association Website*, 6, 20. Retrieved from <http://aea365.org/blog/?p=3769>.

Baek, E., & Chatters, S. (May, 2011). AEA365: Risks in Internal Evaluation. *American Evaluation Association Website*, 5, 24. Retrieved from <http://aea365.org/blog/?p=3518>.

Manuscripts Under Peer-Review

*Li, H., **Baek, E.**, Luo, W., *Du, W., & *Lam, K. (under review). Reanalysis of prelinguistic milieu teaching for school-aged children with autism: An application of generalized linear mixed models. *Frontiers in Psychology*.

*Li, H., Luo, W., **Baek, E.**, Thompson, C. G., & *Lam, K. (under revision). Multilevel modeling in single case studies with count and proportion data: A demonstration and evaluation. *Psychological Methods*.

*Klein, M., Thompson, J., Luo, W., & **Baek, E.** (under review). Parental Perceptions of Home Literacy Environments, Social Anxiety and Social Relationships of Children with Autism During the COVID-19 Pandemic. *Journal of Developmental and Physical Disabilities*.

*Xuan, Z., Padron, Y., Waxman, H., **Baek, E.**, & Acosta, S. (under review). How Do School Climate and Professional Development in Multicultural Education Impact Job

Satisfaction and Self-Efficacy for STEM Teachers of English Learners? A Path-Analysis. *International Journal of Science Education*.

- *Campbell, A., Burk, M., Thompson, J., *Semma, B., & **Baek, E.** (under review). Social-Emotional and Behavior Support for Disadvantaged African-American Learners Grades 1-2 At-Risk for Emotional and Behavioral Problems. *School Psychology*.
- *Yllades, V., Ganz, J. B., *Wattanawongwan, S., Dunn, C., **Baek, E.** & Foster, M. (under review). Using Telepractice to Improve Communication and Behavioral Skills for Individuals with ASD and ID: A Meta-Analytic Review. *Journal of Autism and Developmental Disorders*.

Manuscripts in Progress

- Baek, E.,** *Lam, K., *Li, H., Luo, W., & Thompson, C. (In progress). Meta-analysis of single-case data using hyper prior distribution.
- *Li, H., Luo, W., **Baek, E.,** *Du, W., & *Lam, K. (In progress). Multilevel modeling in single-case studies with zero-inflated count data.
- Baek, E.,** *Semma, B., *Altinsoy, F., *Ji, Y., *Lam, K., Luo, W., & Thompson, C. (In progress). A systematic review of meta-analyzing single-case data using multilevel modeling.
- Thompson, C., *Semma, B., & **Baek, E.** (In progress). A data-driven prior distribution for between-studies heterogeneity in meta-analysis.

CONFERENCE PRESENTATIONS (Former/current students are marked with *)

- *Li, H., Luo, W., **Baek, E.,** *Lam, K., *Du, W., & Koehler, N. (June, 2023). *GLMMs for Overdispersed Count Data in SCED Studies: Does Autocorrelation Matter?* Paper presented at the Annual Meeting of the Modern Modeling Methods, Storrs, CT.
- *Xuan, Z., Padron, Y., Waxman, H., **Baek, E.,** & Acosta, S. (April, 2023). *How Do School Climate and Professional Development in Multicultural Education Impact Job Satisfaction and Self-Efficacy for STEM Teachers of English Learners? A Path-Analysis.* Paper presented the annual meeting of the American Educational Research Association, Chicago, IL.
- Thompson, C., & **Baek, E.** (April, 2023). *A data-driven prior distribution for between-studies heterogeneity in meta-analysis.* Paper presented the annual meeting of the American Educational Research Association, Chicago, IL.
- Zhu, X., Lee, H., Hegde, M., * Lam, K., **Beak, E.,** & Lee, C. (March, 2023). *Impacts of K-12 School Environments on Students' Physical Activity, Physical Fitness, and Academic Outcomes: A State-wide Study in Texas.* Paper presented at the Active Living

Conference (ALC), Bethesda, MD.

Zhu, X., Lee, H., Hegde, M., * Lam, K., **Baek, E.**, & Lee, C. (October, 2022). *DESIGN FOR LEARNING AND HEALTH: State of Elementary School Facilities in Texas and How They Affect Learning and Fitness*. Paper presented at the Learning SCAPES conference, San Antonio, TX.

*Li, H., Luo, W., **Baek, E.**, Thompson, C., & *Lam, K. (April, 2022). *Multilevel Modeling in Single-Case Studies with Zero-Inflated Count Data*. Poster presented at the Annual Meeting of the American Educational Research Association, San Diego, CA.

*Li, H., Luo, W., **Baek, E.**, Thompson, C., & *Lam, K. (April, 2022). *Generalized Linear Mixed Modeling in Single-Case Studies With Count and Proportion Data*. Graduate Student Research Galla Poster presented at the Annual Meeting of the American Educational Research Association, San Diego, CA.

Thompson, C., *Semma, B., & **Baek, E.** (Nov, 2021). *A data-driven prior distribution for between-studies heterogeneity in meta-analysis*. Paper presented at the annual meeting of the Florida Educational Research Association, Tampa, FL.

*Li, H., Luo, W., *Lam, K., **Baek, E.**, & Thompson, C. (April, 2021). *Multilevel modeling in single case studies with count data*. Poster presented at the Annual Meeting of the American Educational Research Association (Virtual).

*Li, H., *Lam, K., Luo, W., **Baek, E.**, & Thompson, C. (June, 2020). *Innovated Methods to Improving Performance of Multilevel Modeling for Variance Components in the Analysis of SCED*. Paper presented at the Annual Meeting of the Modern Modeling Methods, Storrs, CT (Conference Canceled due to Covid-19).

*Li, H., *Lam, K., Luo, W., **Baek, E.**, & Thompson, C., & *Majzun, A. (April, 2020). *Performance of Multilevel Modeling and Power of Tests for Variance Components in the Analysis of Single-Case Experimental Designs*. Poster presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA. <http://tinyurl.com/y29c9tl3> (Conference Canceled due to Covid-19)

*Yeh, Y., Kwok, O., *Chien, H., Sweany, N. W., **Baek, E.**, & McIntosh, A. (April, 2020). *Achievement Goals Predict Online Academic Expectations Through Self-Regulated Learning Strategies and Supportive Online Learning Behaviors*. Roundtable session at the Annual Meeting of the American Educational Research Association, San Francisco, CA <http://tinyurl.com/ruw93hx> (Conference Canceled due to Covid-19)

Ganz, J., Machalicek, W., Maggin, D., Vannest, K., & **Baek, E.** (Feb, 2020). *Establishing evidence-based practices in single-case research via the use of meta-analysis*. Panel at the Council for Exceptional Children (CEC), Portland, OR.

Baek, E., *Henri, M., & Luo, W. (April, 2019). *Meta-analysis of Single-Case Design using Multilevel modeling: Modeling Between-outcomes Variation in Autocorrelation*. Poster presented at the Annual Meeting of the American Educational Research

Association, Toronto, Canada.

- Baek, E.,** *Semma, B., *Altinsoy, F., *Ji, Y., *Lam, K., Luo, W., & Thompson, C. (April, 2019). *A systematic review of meta-analyzing single-case data using multilevel modeling*. Poster presented at the Annual Meeting of the American Educational Research Association, Toronto, Canada.
- Kwok, O., *Yeh, Y., *Chien, H., Sweany, N. W., **Baek, E.,** & McIntosh, A. (April, 2019). *Understanding online learners: The development of the Online-Learning REadiness Scale (ORES)*. Paper presented at the 1st President's Excellence Fund Symposium, College Station, TX.
- Baek, E.,** Cao, & Chunhua (May, 2016). *Using multi-membership multilevel VAM*. Paper presented at the Annual Meeting of the Modern Modeling Methods, Storrs, CT.
- Baek, E.,** Cao, Chunhua, & Wright, Heather. (November, 2015). *Using PROC GLIMMIX to improve a school district's Early Warning System by identifying students at risk of dropping out*. Paper presented at the Annual Meeting of the Florida Educational Research Association, Cocoa Beach, FL.
- Baek, E.,** & Ferron, J. M. (April, 2015). *The impact of modeling and not modeling between-case variation in the level-1 error structure on the multilevel modeling in single-case studies: A Monte Carlo study*. Poster presented at the Annual Meeting of the American Educational Research Association, Chicago, IL.
- Baek, E.,** Petit-Bois, M., & Ferron, J. M. (November, 2014). *The Interplay Between Visual Analysis and Multilevel Models in the Synthesis of Single-Case Data*. Paper presented at the Annual Meeting of the Florida Educational Research Association, Cocoa Beach, FL.
- Baek, E.,** Petit-Bois, M., & Ferron, J. M. (April, 2014). *A comparison of Bayesian restricted maximum likelihood approach in multilevel models for single-case data*. Poster presented at the Annual Meeting of the American Educational Research Association. Philadelphia, PA.
- Petit-Bois, M., **Baek, E.,** Nguyen, D., & Ferron, J. M. (April, 2014). *The robustness of multilevel models in single-case studies: Non-normal errors and misspecification of the error covariance structure*. Poster presented at the Annual Meeting of the American Educational Research Association. Philadelphia, PA.
- Baek, E.,** Petit-Bois, M., & Ferron, J. M. (April, 2013). *A feasible way to vary level-1 error structure across participants in multilevel models for single-case data*. Poster presented at the Annual Meeting of the American Educational Research Association. San Francisco, CA.
- Petit-Bois, M., **Baek, E.,** & Ferron, J. M. (April, 2013). *The effect of error structure specification on the meta-analysis of single-case studies: A Monte Carlo study*. Poster presented at the Annual Meeting of the American Educational Research Association.

San Francisco, CA.

- Pham, T., Petit-Bois, M., **Baek, E.**, & Kromrey, J. D. (April, 2013). *A simulation study of accuracy and precision in estimation of effect size for mediation analysis*. Paper presented at the Annual Meeting of the American Educational Research Association. San Francisco, CA.
- Shaunessy, E., Evans, L., Homan, S., Ferron, J., Lindo, M., Cao, C., & **Baek, E.** (April, 2013). *Gains in reading comprehension and attitudes toward reading among gifted and general education students in title I schools*. Paper presented at the Annual Meeting of the American Educational Research Association. San Francisco, CA.
- Ferron, J., Van den Noortgate, W., Beretvas, T., Moeyaert, M., Ugille, M., Petit-Bois, M., & **Baek, E.** (March, 2013). *Synthesis of single-case experimental data: A comparison of alternative multilevel approaches*. Society for Research on Educational Effectiveness, Washington, D.C.
- Baek, E.**, Petit-Bois, M., & Ferron, J. M. (April, 2012). *Effects of error structure specification on the meta-analysis of single-case studies of reading fluency interventions*. Paper presented at the annual meeting of the American Educational Research Association, Vancouver, Canada.
- Petit-Bois, M., **Baek, E.**, & Ferron, J. M. (April, 2012). *Consequences of misspecification of growth trajectories when meta-analyzing single-case data using a three-level model*. Paper presented at the annual meeting of the American Educational Research Association, Vancouver, Canada.
- Baek, E.**, Petit-Bois, M., Pham, T., & Kromrey, J. D. (February, 2012). *Estimates of Effect Size Confidence Intervals for Mediation Analysis: An Empirical Investigation of Accuracy and Precision*. Paper presented at the annual meeting of the Eastern Educational Research Association, Hilton Head, SC.
- Petit-Bois, M., & Pham, T., **Baek, E.**, & Kromrey, J. D. (April, 2012). *A SAS® macro for computing point estimates and confidence Intervals of effect sizes associated with mediation Analysis*. Paper presented at the SAS global forum 2012, Orlando, FL.
- Pham, T., & **Baek, E.** (November, 2011). *The effect of LID on measurement implications, an empirical examination*. Paper presented at the annual meeting of the Florida Educational Research Association, Orlando, FL.
- Pham, T., **Baek, E.**, Petit-Bois, M., & Kromrey, J. D. (October, 2011). *CI_MEDIATE: A SAS® macro for computing point and interval estimates of effect Sizes associated with mediation analysis*. Paper presented at the annual meeting of the Southeast SAS Users Group, Alexandria, VA.
- Baek, E.**, & Chatters, S. (November, 2011). *Developing and sharpening the tools in your toolbox: Strategies for creating tools to be used in a collaborative evaluation*. Paper

- presented at the annual conference of the American Evaluation Association, Anaheim, CA.
- Chatters, S. & **Baek, E.** (November, 2011). *There is no 'I' in team: Understanding roles and dynamics in metaevaluation team.* Paper presented at the annual conference of the American Evaluation Association, Anaheim, CA.
- Ferron, J. M., & **Baek, E.** (April, 2011). *Multilevel models for multiple-baseline data: Modeling between-case variation in autocorrelation.* Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Dennis, D.V., Kroeger, D.C., Welsh, J., Brummer, R.C., & **Baek, E.** (April, 2011). *Retaining failed policies: A longitudinal study of Florida's mandatory third-grade retention.* Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Shaunessy, E., Dedrick, R., Bellara, A., Walker, C., **Baek, E.**, & Stewart, S. (April, 2011). *Review of instruments for student evaluations of distance education instruction.* Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Dennis, D.V., Kroeger, D.C., Welsh, J., Brummer, R.C., & **Baek, E.** (November, 2010). *Pre and Post: A view of florida's third grade retention policy.* Paper in symposium presented at the annual meeting of the Florida Educational Research Association, Orlando, FL.
- Shaunessy, E., Dedrick, R., Bellara, A., Walker, C., **Baek, E.**, & Stewart, S. (November, 2010). *A psychometric review of instruments for student evaluations of distance education instruction.* Paper presented at the annual meeting of the Florida Educational Research Association, Orlando, FL.
- Chatters, S., **Baek, E.**, Pham, T., & Hunter, Y. (November, 2010). *Evaluation goes to college: The collaborative evaluation of a graduate program.* Paper presented at the annual conference of the American Evaluation Association, San Antonio, TX.
- Baek, E.**, Rodríguez-Campos, L. & Chatters, S. (July, 2010). *Program management in secondary schools: A collaborative metaevaluation.* Paper presented at the International Conference on Knowledge, Culture and Change in Organizations. Toronto, Canada.

TEACHING EXPERIENCE

College Teaching

Texas A&M University (6 graduate courses : 3 face to face, 3 online)

- Statistical Analysis in Educational Research I (EPSY640: Graduate, *face to face*)
 - Semesters: Fall 2016, Fall 2017, Fall 2018, Fall 2019, Spring 2023
- Statistical Analysis in Educational Research II (EPSY641: Graduate, *face to face*)
 - Semesters: Spring 2017, Spring 2018, Spring 2019, Spring 2020, Fall 2020, Spring 2021, Fall 2021, Spring 2022, Fall 2022, Spring 2023
- Data Analysis for Single-Case Experimental Design in Educational Research (EPSY661: Graduate, *face to face*)
 - Semesters: Spring 2022
- Survey Instrument Development (EPSY656: Graduate, *online*)
 - Semesters: Fall 2016, Spring 2017, Fall 2017, Spring 2021
- Measurement & Evaluation in Education (EPSY622: Graduate, *online*)
 - Semesters: Fall 2016, Spring 2017
- Survey Research Methods (EPSY690: Graduate, *online*)
 - Semesters: Fall 2016

University of South Florida (co-teaching 4 graduate courses, face to face)

- Statistical Analysis for Educational Research III (Graduate)
 - Semesters: Fall 2013
- Statistical Analysis for Educational Research I (Graduate)
 - Semesters: Fall 2012
- Analysis for Single-Case Experiments (Graduate)
 - Semesters: Summer 2012
- Applied Multilevel Model in Education (Graduate)
 - Semesters: Spring 2012

Course Development (Texas A&M University)

- 2022 **Data Analysis for Single-Case Experimental Design in Educational Research**
(EPSY661: Graduate)
- Develop a new graduate level course
- 2016 **Survey Instrument Development (EPSY656: Online Graduate)**
- Develop as a graduate online-course

Major Revision (Texas A&M University)

- 2016 **Experimental Design in Education I (EPSY640: Graduate)**
- Revise contents of the course and utilize a software STATA

- 2017 **Experimental Design in Education II** (EPSY641: Graduate)
- Revise contents of the course and utilize a software STATA

Invited Speakers

- 2022 Guest Speaker for meta-analysis course, Florida State University (FSU)
2022 Invited Speaker, Research Talk EPSY colloquium, Texas A&M University

Doctoral Advisor and Dissertation Chair [* signifies my role as Co-Chair]

- Lam Hap Kwok, *in progress*
- Caroline M. Wied, *in progress*
- Fatma Altinsoy*, *in progress*
- Haoran Li*, *in progress*

Doctoral Committee Member (Serve as a methodological consultant)

- Wenyi Du, *in progress*
- Marianne Rice, *in progress*
- Renee A. Jones, *in progress*
- Eun Hye Ko, *in progress*
- Cynthia Lang, *in progress*
- Emily Jimenez, *in progress*
- Xuan Zhou, *in progress*
- Tyler Evans, *in progress*
- Megan Kresse, *in progress*
- Shweta Kailani, *in progress*
- Sanikan Wattanawongwan, *graduated*
- Aaron Campbell, *graduated*
- Yi-Fan Li, *graduated*
- Valeria Yllades, *graduated*
- Mary E. Lockhart, *graduated*

Master Committee Member

- Emily Daily, *in progress*
- Da Hwin Kim, *in progress*
- Eun Hye Ko, *in progress*

- Rana Hussein, *Graduate*
- Jian-Siang Wang, *Graduate*

Awards Received by Doctoral Advisees

- 2022 Lam Hap Kwok, **Department Educational Psychology Scholarship**, Texas A&M University.
- 2020 Lam Hap Kwok, **Lechner Scholarship**, Texas A&M University.

HONORS AND AWARDS

- 2010-11 • **University Graduate Student Enhancement (Top-up fund) Award**
University of South Florida, Graduate School
- 2009-10 • **University Graduate Fellowship (UGF) Award**
University of South Florida, Graduate School
- 2005 • **Scholarship for Outstanding Graduate Student**
Graduate School of Korea University, Seoul, Korea
- 2002 • **Scholarship for Outstanding Undergraduate Student**
Sungshin Women's University, Seoul, Korea

SERVICES

Texas A&M University

- 2022-present EPSY Climate Committee
- 2019-present Co-Director for Educational Research and Evaluation Laboratory (EREL)
- 2016-2017 Incoming advisor for MERIT students

University of South Florida

- 2011-2015 Consultant Consulting Office for Research in Education (CORE)
- 2011 Member Department Search Committee, Assistant Professor,
Measurement and Research
- 2009-2015 Member Center for Research, Evaluation, Assessment and Measurement
(CREAM)

Journal Editor

2020-present *Action Editor*, Behavior Research Methods

Manuscript Reviewer

2022-present Multivariate Behavioral Research
2021-present Evaluation & the Health Professions
2019-present Journal of Experimental Education
2018-present Behavior Research Methods
2018-present Behavior Modification
2010 Evaluation and Program Planning
2010 American Evaluation Association (AEA)

PROFESSIONAL AFFILIATIONS

American Educational Research Association (AERA) 2010-present
Council for Exceptional Children (CEC) 2019
Florida Educational Research Association (FERA) 2010-2014
American Evaluation Association (AEA) 2010-2012
Eastern Educational Research Association (EERA) 2011-2012

STATISTICAL PROGRAM SKILLS

SAS / SPSS / STATA / R / S-PLUS / M-PLUS/ WINBUGS/ BILOG-MG / MULTILOG /
DFIT / SIBTEST / CSIBTEST / ITERLINK