Sooyong Lee, Ph.D.

Post-Doc Fellow

The University of Texas at Austin

PROFESSIONAL SUMMARY

As a psychometrician, I specialize in applying contemporary statistical theories and techniques to my work. My research interests center around developing and utilizing statistical models, including structural equation modeling (SEM), multilevel modeling (MLM), item response theory (IRT), and mixture modeling. In my recent work, I have placed particular emphasis on Bayesian estimation as a means of modeling the relationships between variables.

EDUCATION

Graduate and Postdoctoral Education

2017-2023	Ph.D., Major in Quantitative Methods in Educational Psychology, The University of Texas at Austin	Austin, Texas
2014-2017	M.A., Major in Educational Statistics and Measurement, Korea University	Seoul, Republic of Korea

PUBLICATIONS

2023

- Jonghwan Lee, Christina Schneider, Garron Gianopulos, Luping Niu, **Sooyong Lee**, Sangdon Lim, & Seung W Choi (2023). The Impact of Item Bank Transition Rules on Student Ability Estimates and Achievement Level Classifications. *Journal of Computerized Adaptive Testing*. In print.

- **Sooyong Lee**, Suhwa Han, & Seung W. Choi (2023). Bayesian Moderated Non-linear Factor Analysis for DIF Detection under Violation of Equal Variance Assumption. *Educational and Psychological Measurement*. Under review.

- **Sooyong Lee**, Adam Sales, Hyeon-Ah Kang, & Tiffany A. Whittaker (2023). Fully Latent Principal Stratification With Measurement Models. *Journal of Educational and Behavioral Statistics*. Under review.

- Rene M. Dailey, ..., & **Sooyong Lee** (2023). Testing A Comprehensive Model of Post-Dissolution Distress: Predicting Initial and Over Time Changes in Distress Following Romantic Dissolution among U.S. Adults. *Journal of Personality and Social Psychology*. Under review.

- Kahyun Lee, **Sooyong Lee**, & Allison Master (2023). From Fixed to Growth: An Intensive Longitudinal Study of the Interplay Between Growth Mindset, Emotions, Sense of Belonging, and Experiences in Daily Life Among College Students. In preparation.

- Kahyun Lee, **Sooyong Lee**, & Allison Master (2023). Exploring the Dynamics of Daily Experiences, Emotions, and Depression among Asian American Students: The Moderating Role of Growth Mindsets. In preparation.

- **Sooyong Lee**, Adam Sales, Hyeon-Ah Kang, & Tiffany A. Whittaker (2023). Bayesian and Maximum Likelihood Estimation in Fully Latent Principal Stratification. In preparation.

- **Sooyong Lee**, Adam Sales, Hyeon-Ah Kang, & Tiffany A. Whittaker (2023). Multidimensional Fully-latent Principal Stratification. In preparation.

- **Sooyong Lee**, Suyoung Kim, & Jiwon Kim (2023). Investigating Latent Interaction Effects in Multiple-Group Analysis in the Structural Equation Modeling Framework. In preparation.

- Tiffany A. Whittaker, Laura Stapleton & **Sooyong Lee** (2023). A Tutorial for Obtaining Item Response Theory Results from Structural Equation Modeling in Mplus Software with Rating Scales. In preparation.

- **Sooyong Lee** & Tiffany A. Whittaker (2023). Parallel Process Latent Growth Modeling with Multivariate Confounders/Suppressors. *Structural Equation Modeling: A Multidisciplinary Journal*. 30(2), 284-295.

- **Sooyong Lee**, Kahyun Lee, & Tiffany A. Whittaker (2023). Application of Associative Discrete-Time Survival Analysis Using Latent Transition Specification. *Structural Equation Modeling: A Multidisciplinary Journal*. 1-12.

- **Sooyong Lee**, Adam Sales, Hyeon-Ah Kang, & Tiffany A. Whittaker (2023). Fully Latent Principal Stratification: Combining PS with Model-Based Measurement Models.. *The Annual Meeting of the Psychometric Society*. pp. 287-298.

2022
- Seung Choi, Sangdon Lim, Luping Niu, **Sooyong Lee**, Christina M. Schneider, Jay Lee, & Garron J. (2022). maat: An R Package for Multiple Administrations Adaptive Testing. *Applied Psychological Measurement*. 46-1, 73-74.

- **Sooyong Lee**, Suhwa Han, & Seung W. Choi (2022). DIF Detection With Zero-Inflation Under the Factor Mixture Modeling Framework. *Educational and Psychological Measurement*. 82-4, 678-704.

- **Sooyong Lee** & Tiffany A. Whittaker (2022). Comparison of Three Approaches to Class Enumeration in Growth Mixture Modeling when Time Structures are Variant Across Latent Classes. *Structural Equation Modeling: A Multidisciplinary Journal*. 29, 23-35.

2021
- Cory L. Cobb, Charles R. Martínez, Jr., **Sooyong Lee**, Tae Kyoung Lee, & Elma I. Lorenzo-Blanco (2021). Acculturation trajectories differ by youth age at arrival and time in residency among Latino immigrant families in a US emerging immigrant context. *International Journal of Intercultural Relations*. 81, 79-93.

NATIONAL AND INTERNATIONAL PRESENTATIONS

Presentations

1. **Sooyong Lee**, Adam Sales, Hyeon-Ah Kang, & Tiffany A. Whittaker (2024-04). Multidimensional Fully Latent Principal Stratification. American Educational Research Association (AERA),, Philadelphia, USA.

2. Tiffany Whittaker, Hyeon-Ah Kang, **Sooyong Lee**, Adam Sales (2023-04). Bayesian and Maximum Likelihood Estimation in Fully Latent Principal Stratification. National Council on Measurement in Education (NCME), Chicago, USA.

3. **Sooyong Lee**, Adam Sales, Hyeon-Ah Kang, & Tiffany A. Whittaker (2022-07). Fully-Latent Principal Stratification. International Meeting of the Psychometric Society (IMPS), Bologna, Italy.

4. Garron Gianopulos, Jay Lee, Sangdon Lim, Luping Niu, **Sooyong Lee**, & Seung W. Choi (2022-04). The Impact of Item Pool Size and Item Pool Distribution on Student Ability Estimates for a Hybrid Interim-Summative CAT. National Council on Measurement in Education (NCME), San Diego, USA.

5. Jay Lee, M. Christina Schneider, Garron Gia, Luping Niu, **Sooyong Lee**, Sangdon Lim, & Seung W. Choi (2022-04). The Impact of item bank transition rules on student ability estimates and achievement level classifications. National Council on Measurement in Education (NCME), San Diego, USA.

6. Daniel Lewis & **Sooyong Lee** (2021-04). A Comparison of Two ESS Cut Score Estimation Algorithms. National Council on Measurement in Education (NCME), Baltimore, MD, USA.

Posters

1. **Sooyong Lee**, Kahyun Lee, & Allison Master (2024-04). Exploring the dynamics of daily experiences, emotions, and depression among Asian American students: The moderating role of growth mindsets.. American Educational Research Association (AERA),, Philadelphia, USA.

2. **Sooyong Lee**, Suhwa Han, & Seung W. Choi (2021-04). DIF Detection with Zero-Inflation under the Mixture Modeling Framework. American Educational Research Association (AERA), Virtual.

3. **Sooyong Lee** & Suhwa Han (2020-07). Item selection and trait estimation methods in CAT with item leakage. International Meeting of the Psychometric Society (IMPS), Maryland, USA.

4. **Sooyong Lee** & Tiffany A. Whittaker (2020-04). Comparison of Three Approaches to Class Enumeration in Growth Mixture Modeling when Time Structures are Variant Across Latent Classes. American Educational Research Association (AERA), Virtual.

5. **Sooyong Lee** & Sehee Hong (2018-07). Exploration of LCA conditions in Latent Class with Low Proportion. International Meeting of the Psychometric Society (IMPS), New York, USA.

6. Kejin Lee, **Sooyong Lee**, & Youngri Lee (2018-05). An Alternative Approach to Discrete-Time Survival Analysis for Meaningful Interpretation. Modern Modeling Methods conference (MMM), Connecticut, USA.

RESEARCH

Post-doc fellow	FLPS project - Development of FLPS package for Fully-latent Principal Stratification	2023/9-present
Graduate Research Assistant	FLPS project - Development of FLPS package for Fully-latent Principal Stratification	2021/9-2023/8
Intern	Embedded Standard Setting (ESS) - Internship for developing ESS package for Embeded Standard Setting	2021/6-2021/8
Intern	Embedded Standard Setting (ESS) - Internship for developing Shiny app for Embeded Standard Setting	2020/6-2020/8
Graduate Research Assistant	maat package development project - Development of MAAT package for Computerized Adaptive Testing for Northwest Evaluation Association (NWEA)	2019/9-2020/5
Graduate Research Assistant	COE Full-Time Tenured and Tenure-Track Faculty - Data analysis for surveys of graduate programs of education at the Univerisity of Texas at Austin	2019/9-2019/12
Graduate Research Assistant	President's Award for Global Learning (PAGL) - Designing a culturally appropriate mobile application to increase mental health literacy and self-care habits among South Korean young adults	2019/1-2019/8

Graduate Research Assistant	CGS PhD Career Pathways project	2018/9-2019/5
	- Data analysis for surveys to collect data on the career pathways of past and present STEM and humanities PhD students.	

TEACHING

PROGRAMS

R package	GRshiny package https://sooyongl.github.io/GRShiny/	2023
	https://sooyongl.github.io/GRShiny/	
R package	clavaan package https://github.com/sooyongl/clavaan	2023
	https://github.com/sooyongl/clavaan	
Shiny application	GRshiny: Graded response model https://sooyonglee.shinyapps.io/GRShiny/	2022
	https://sooyonglee.shinyapps.io/GRShiny/	
R package	Embeded Standard Setting https://sooyongl.github.io/EmStanS/	2022
	https://sooyongl.github.io/EmStanS/	
R package	maat package https://choi-phd.github.io/maat/	2022
	https://choi-phd.github.io/maat/	
R package	flps package https://cran.r-project.org/web/packages/flps/index.html	2022
	https://cran.r-project.org/web/packages/flps/index.html	
Shiny application	Embeded Standard Setting https://sooyonglee.shinyapps.io/ESS_shiny/	2021
	https://sooyonglee.shinyapps.io/ESS_shiny/	