

Jing Li

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jl46730@uga.edu<https://jingli1230.github.io/>**EDUCATION****University of Georgia**

Athens, Georgia

Doctor of Philosophy (PhD) in Educational Psychology

Dissertation: Using Explanatory Rasch Models to Evaluate Surveys of Food Insecurity

(Committees: George Engelhard Jr. (Chair); Seock-Ho Kim; Zhenqiu (Laura) Lu; Stacey M Neuharth-Pritchett)

Expected Date: May 2026

Master of Science in Statistics

Expected Date: May 2026

Miami University (Ohio)

Oxford, Ohio

Master of Education in Educational Psychology

May 2021

Thesis: A Rasch Analysis of Teaching and Learning International Survey 2013

(Advisor: William Boone)

GPA:3.95/4.00

Michigan State University

East Lansing, Michigan

Bachelor of Art (BA) in Psychology

May 2018

Minor in *Leadership Organization*

GPA:3.54/4.00

RESEARCH INTERESTS

Psychometric analysis (Educational/psychological measurement)

Rasch measurement theory (RMT)

Explanatory item response modeling (EIRM)

LLM-driven assessment development

Applied statistical analysis

PEER-REVIEWED PUBLICATIONS ([Google Scholar](#))

Li, J. & Engelhard, G., Jr. (Under review, 2025). Development of an Eleven-Item Scale for Measuring Food Insecurity. *Proceedings of the Pacific-Rim Objective Measurement Symposium (PROMS 2025)*.

Li, J., Tang, C., Lu, C. A., Madison, M. J., & Engelhard, G., Jr. (Under review, 2025). Exploring human, empirical, and AI-derived item classifications to predict item difficulty in educational assessments. *Applied Measurement in Education*.

Shen, Z., Kelcey, B., Lu, Z., Li, J., & **Li, J.** (Under review, 2025). Statistical power and jointly optimal sample allocation for randomized controlled trials investigating main and moderation effects. *Psychological Methods*.

Hylick, K., **Li, J.**, Gilliam, S., Sheffield Abdullah, K., & Engelhard, G. (Revised & Resubmitting, 2025). Examining the psychometric properties of the Perceived Stress Scale in Black women during the perinatal period using Explanatory Item Response Models. *Measurement and Evaluation in Counseling and Development*.

Lu, C., & **Li, J.** (Revised & Resubmitting, 2025). The Dynamics of Academic Capitalism and Interdisciplinarity: Insights from Three John M. Olin Institutions. *International Journal of Educational Development*.

Zhu, M., **Li, J.**, & Yang, X. (2025). A Hybrid SAO and RIME Optimizer for Global Optimization and Cloud Task Scheduling. *Biomimetics*, 10(10), 690. <https://doi.org/10.3390/biomimetics10100690>

Li, J., Kim, S. H., & Engelhard, G. (2024). Validation of the Household Food Security Survey Module (HFSSM) using factor analysis and Rasch measurement theory. In H. Hwang, H. Wu, & T. Sweet (Eds.), *Quantitative psychology: IMPS 2023* (Springer Proceedings in Mathematics & Statistics, Vol. 452). Springer. https://doi.org/10.1007/978-3-031-55548-0_22

Li, W., Zhang, X., **Li, J.**, Yang, X., Li, D., & Liu, Y. (2024). An explanatory study of factors influencing engagement in AI education at the K-12 Level: an extension of the classic TAM model. *Scientific Reports*, 14(1), 13922. <https://doi.org/10.1038/s41598-024-64363-3>

Li, J., & Engelhard, G. (2023). Using explanatory item response models to evaluate surveys. *Journal of Applied Measurement*, 24(3/4), 88–101.

STATISTICAL SOFTWARE

Li, J., Shen, Z., & Kelcey, B. (in progress). SPODE: SPODE: Statistical power and optimal design of experiments detecting main, mediation, and moderation effects [Shiny app]. <https://odrshiny.shinyapps.io/odrshiny/>.

PRESENTATIONS

Li, J., Lu, C., & Chen, F. (2026). *Examining the influence of serious educational games on mindset*. Paper accepted to present at the Comparative and International Education Society (CIES) Annual Meeting, San Francisco, CA.

Lu, C., **Li, J.**, & Chen, F. (2026). *Machine learning evaluation of teacher training effectiveness in preventing school bullying*. Paper accepted to present at the Comparative and International Education Society (CIES) Annual Meeting, San Francisco, CA.

Lu, C., & **Li, J.** (2026). *From prompts to policy: Advancing fairness in educational LLM evaluation through difference-aware design*. Paper accepted to Roundtable presentation at the Comparative and International Education Society (CIES) Annual Meeting, San Francisco, CA.

Shen, Z., Kelcey, B., Lu, Z., Li, J., & **Li, J.** (2026). *Jointly optimal design for experiments investigating main and moderation effects*. Paper submitted to present at the American Education Research Association Conference (AERA2026), Los Angeles, CA.

Li, J., Tang, C., Lu, C., Madison, M. J., & Engelhard, G. (2026). *Exploring Human, Empirical, and AI-Derived Item Classifications to Predict Item Difficulty in Educational Assessments*. Paper submitted to present at the American Education Research Association Conference (AERA2026), Los Angeles, CA.

Tang, C., **Li, J.**, Xiong, J., & Engelhard, G., Jr. (2026). *Judging the judges: A Rasch analysis of human and large language model raters*. Paper submitted to present at the American Education Research Association Conference (AERA2026), Los Angeles, CA.

Hylick, K., **Li, J.**, Engelhard, Jr., G. (2025). *Using Rasch Models to Evaluate the Perceived Stress Scale among Black Perinatal Women*. Paper presented at American Education Research Association Conference (AERA2025), Denver, CO.

Li, J., Lee, E., Engelhard, G., Jr., & Wang, S. (2025, April). *Using explanatory item response modeling (EIRM) to investigate factors that influence item generating*. Paper presented at the International Objective Measurement Workshop (IOMW) 2025, Boulder, CO.

Li, J., Madison, M. J. (2025). *Using a Longitudinal Diagnostic Classification Model to Analyze Growth: An Applied Study*. Paper presented at The International Objective Measurement Workshop (IOMW) 2025 Conference, Boulder, CO.

Li, J., Engelhard, Jr. G. (2024). *Using Latent Regression Rasch Model to Evaluate Surveys*. Presented at American Education Research Association Conference (AERA2024), Philadelphia, PA.

Li, J., & Engelhard, G., Jr. (2023, July). *Development of an eleven-item scale for measuring food insecurity*. Paper presented at the International Meeting of the Psychometric Society (IMPS), Maryland, MD.

Li, J., Seock-Ho Kim, Engelhard, Jr., G. (2023). *Validation of the household food security survey module using Confirmatory Factor Analysis and Rasch modeling*. Paper presented at International Meeting of the Psychometric Society 2023 (IMPS), Maryland, MD.

Li, J., Engelhard, Jr., G. (2023). *Using Explanatory Item Response Models to Evaluate a Household Food Insecurity Survey*. Paper presented at The International Objective Measurement Workshop (IOMW) 2023 Conference, Chicago, IL.

Li, J., Engelhard, Jr., G. (2023). *Using Person Fit to Explore Misreporting in Surveys*. Paper accepted to be presented at the American Education Research Association Conference (AERA), Chicago, IL.

Lu, C., & **Li, J.** (2023, Nov). *Interdisciplinarity developing trend in higher education: policy orientation and universities' action - A comparison between America and mainland China*. Oral Presentation at the Association for the Study of Higher Education (ASHE), Minneapolis, MN.

Chen, X., **Li, J.**, Wang, Z. (2019, October). *A Rasch Analysis of Experiences in Close Relationship Scale*. Proposal submitted to the 32nd Association for Psychological Science Annual Convention, Chicago, IL.

Zhong, Y., **Li, J.** (2018, October). *Does Location of Colleges Matter? A Comparison of Perceptions Between Students from China and U.S.* Poster presentation at the 2018 Mid-Western Educational Research Association, Cincinnati, OH.

RESEARCH EXPERIENCE

Department of Educational Psychology, University of Georgia	Athens, Georgia
<i>Graduate Research Assistant- R Shiny App development project</i>	Aug 2025-now
<ul style="list-style-type: none"> • Acquired and applied R Shiny skills to develop and deploy interactive web applications. • Converted the <i>odr</i> R package into a user-friendly and dynamic Shiny application, making the tool more accessible and intuitive for other researchers. 	

Department of Educational Psychology, University of Georgia	Athens, Georgia
<i>Graduate Research Assistant- Instrument validation project</i>	Aug 2024-May 2025
<ul style="list-style-type: none"> • Validated and refined the Regulating Emotions in Parenting Scale (REPS), a novel, concise self-report measure for assessing parent emotion regulation. • Conducted confirmatory factor analysis (CFA) to investigate the latent factor structure, ensuring the construct validity and dimensionality of the REPS. • Established the measurement invariance of the REPS across demographic variables (e.g., gender, race, ethnicity, and age) under structural equation modeling (SEM) framework, demonstrating its broad applicability and fairness across diverse parent populations. 	

Department of Educational Psychology, University of Georgia	Athens, Georgia
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Graduate Research Assistant- Student learning growth report project Aug 2023-Aug 2024

- Conducted comprehensive psychometric analysis on Student Learning Objectives (SLO) assessments, utilizing both classical item statistics and advanced Item Response Theory (IRT) models.
- Analyzed and supported the interpretation of student growth percentiles through the use of simulated data.
- Generated and shared detailed student growth reports at the individual, class, and school levels, providing actionable insights.

Department of Educational Psychology, University of Georgia

Athens, Georgia

Graduate Research Assistant- Explore children readiness related factors project May 2022-Jan 2023

- Organized and conducted descriptive analysis on diverse datasets using R and SPSS. (topics including Pre-Kindergarten school readiness, classroom environment, perceived competence, social acceptance, and coping resources inventory for educational enhancement).
- Built and applied advanced statistical models for analysis including nested design analysis, multinomial logistic regression, and longitudinal analysis.
- Prepared comprehensive reports that translated statistical findings into clear, actionable insights.

Department of Educational Psychology, Miami University

Oxford, Ohio

Student Assistant- College town project

2019-2021

- Designed and implemented surveys using Qualtrics and collected data from participants.
- Conducted and documented online interviews with research participants.
- Conducted qualitative and quantitative analysis on primary data using SPSS.
- Contributed to the preparation of progress reports and summaries of project findings.

TEACHING EXPERIENCE

Department of Educational Psychology, University of Georgia

Athens, Georgia

Graduate Teaching Assistant

Nov 2021- May 2023

TA Classes: Applied Correlation and Regression Methods in Education, Applied Analysis of Variance Methods in Education, Applied Statistical Methods in Education, Theories of Educational Measurement, Applied Quantitative Analysis in R, Rasch Measurement Theory

- Assisted with in-class laboratory activities, graded assignments, and held office hours to provide direct support to students. I also reviewed and provided feedback on students' final project research papers
- Delivered 1-2 lectures per course and presented my own research to the class.

TEACHING RELATED ACTIVITIES

Department of Educational Psychology, University of Georgia

Athens, Georgia

Expert Panel Reviewer

July 2024

The impact of mindfulness, verbal persuasion, and mastery experiences on the self-efficacy beliefs of students with dyslexia (Emily Aldridge, 2024)

- Provided expert review and feedback for M.Ed. student Applied Projects, specializing in evaluating mixed-methods research designs and affective assessment development.
- Served on an expert panel, offering constructive feedback on student papers and research methods, contributing to the quality and rigor of graduate-level projects.

ORGANIZATIONAL LEADERSHIP AND SERVICE

- **Session chair:** Modern Psychometrics Methodologies and Applications. AERA Division D: Measurement and Research Methodologies. AERA 2024 Annual Meeting.
- **Session chair:** Regression Modeling for Educational Research. AERA SIG- Multiple Linear Regression: The General Linear Model. AERA 2024 Annual Meeting.
- **Session chair:** Exploring Equity and Fairness in Educational Measurement. AERA Division D: Measurement and Research Methodologies. AERA 2024 Annual Meeting.
- **Student reviewer** of AERA 2025 proposals.
- **Student reviewer** of NCME 2025 proposals.

PROFESSIONAL AFFILIATIONS

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| • <i>American Educational Research Association (AERA)</i> | 2021-now |
| • <i>The International Objective Measurement Workshop (IOMW)</i> | 2021-now |
| • <i>International Meeting of the Psychometric Society (IMPS)</i> | 2021-now |

SKILLS

Winsteps; Facets; R; Mplus; SPSS; SAS; Microsoft office

LANGUAGES

Mandarin (Native) | English (Fluent)

CERTIFICATIONS

Assessment and Evaluation, Miami University	2021
Applied Statistics and Data Analysis in Social Science, Miami University	2021

AWARDS

Outstanding Scholarship Quantitative Methodology Awards, University of Georgia	2023
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Jing Li's Biography

Jing Li is currently a 5th year PhD student in the Quantitative Methodology program at the University of Georgia. Her research interests center on educational measurement, Rasch measurement theory, explanatory item response modeling (EIRM) and applied psychometrics, with a particular focus on evaluating surveys and educational assessments. Jing's research aims to promote the fairness of measurement and to apply appropriate methodologies to analyze data. Her objective is to ensure that data interpretations are both accurate and meaningful and allow the data to tell a story.