

# Sijia Huang

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## Education

- 6/2021 Ph.D., Education, University of California, Los Angeles.  
*Dissertation:* Estimation of Cross-classified Multilevel Item Response Theory Models with Metropolis-Hastings Robbins-Monro Algorithm.  
*Committee chair:* Prof. Li Cai.
- 6/2021 M.S., Statistics, University of California, Los Angeles.
- 6/2015 M.A., Education, University of California, Los Angeles.
- 6/2014 B.S., Psychology, Beijing Normal University.  
*Thesis:* Revision of Chinese Version of the General Procrastination Scale.

## Professional Experience

- 3/2019 - **Managing Editor** (*Chinese/English Journal of Educational Measurement and Evaluation; CEJEME*)
- CEJEME is a peer-review journal sponsored by National Council on Measurement in Education (NCME), a professional organization for assessment, evaluation, testing, and other aspects of educational measurement, and Beijing Normal University.
  - The mission of this bilingual journal is to share advances in scholarship and practice between the assessment and evaluation communities in the US and China.
  - My responsibilities include budgeting for the journal, inviting editorial board members and authors, managing submissions, leading manuscript translation, and typesetting.
- 8/2017 – 7/2019 **Editorial Assistant** (*Journal of Educational and Behavioral Statistics; JEBS*)
- JEBS is a top-tier journal for original quantitative approaches that address issues in educational or behavioral research.
  - My responsibilities include managing over 200 submissions per year, organizing weekly meetings with the editorial team, and corresponding with authors, reviewers, and the SAGE publishing team in a regular basis.
- 9/2016 – 11/2019 **Graduate Student Researcher** (*National Center for Research on Evaluation, Standards, and Student Testing; CRESST*)
- I took on a leading role in researching data from Michigan Student Test of Educational Progress (M-STEP) and Michigan's alternate assessment

system (MI-Access), including data management, verifying item properties, conducting test equating and data analyzing.

- I led the summative scoring evaluation of Smarter Balanced Assessment Consortium (SBAC), a multi-state educational assessment program.
- I participated in the English Language Proficiency Assessment for the 21st Century (ELPA21), conducting quantitative analysis.

8/2015 – 8/2016 **Research Associate (CRESST)**

- I participated in the Smarter Balanced Assessment Consortium (SBAC), a multi-state educational assessment program.
- My responsibilities include conducting quantitative analysis (e.g., item analysis, score reliability analysis) and preparing technical reports.

## Publications & Working Papers

**Huang, S., & Cai, L.** (2021). Lord-Wingsky Algorithm Version 2.5 with Applications. *Psychometrika*.

**Huang, S., & Cai, L.** (2019). Improving Standard Error Estimates in Multistage Estimation: A Multiple Imputation (MI) Based Approach (Abstract). *Multivariate Behavioral Research*, 54, 154-154.

Sun, X., Zhao, L., & **Huang, S.** (2014). Interventions on The Psychological Trauma Caused by Sports Injury. *Suyuan*, 13, 4-5. (In Chinese)

**Huang, S., & Cai, L.** (in press). Multidimensional Item Response Theory. In Tierney, R., Rizvi, F., Ercikan, K., & Smith, G (Eds.), *International Encyclopedia of Education 4th Edition*.

Sturm, A., **Huang, S., & Kuhfeld, M.** (in press). Advancing methodologies to improve outcome measures in autism research: Evaluation of the Restricted Behavior Scale-Revised. *Psychological Assessment*

**Huang, S., & Jeon, M.** (working paper). Modern applications of cross-classified multilevel models in social and behavioral research: Illustrations with R package PLmixed. To be submitted to *Psychological Methods*.

## Conference Presentations

Sturm, A., **Huang, S., & Suh, Y.** (May 2019) Development of a Brief Screening Tool for Repetitive Behaviors and Restricted Interests. Poster presentation at International Society of Autism Research 2019 Annual Meeting, Montreal, Canada.

**Huang, S., & Cai, L.** (April 2019). Acquisition of ELPA 21 BLV Form Item Parameters and Optimal Design. Individual presentation at the annual meeting of the National Council on Measurement in Education, Toronto, Canada.

Cai, L., Chung, S., Hansen, M., **Huang, S.,** McCoy, M., Taube, K., Winter, P., & Shin, N. (April 2019). Utilizing Expert Judgments to Facilitate Scaling of Tests Adapted for Small

Populations. Coordinated session at the annual meeting of the National Council on Measurement in Education, Toronto, Canada.

**Huang, S., & Cai, L.** (October 2018). Improve Standard Errors Estimates in Multistage Estimation: A Multiple Imputation (MI) Based Approach. Poster presentation at 58<sup>th</sup> Annual Meeting of Society of Multivariate Experimental Psychology, Albuquerque, U.S.

**Huang, S., & Cai, L.** (October 2018). Improving the Data Collection Design of ELPA21 Braille/Low-vision Form Scaling Event. Oral presentation at CRESSTCON 2018, Los Angeles, U.S.

## Teaching Experience

Winter 2020 **Teaching Assistant**

- Course title: Advanced Item Response Theory.
- Instructor: Prof. Li Cai.
- My responsibilities include leading software (flexMIRT) sessions, holding office hours, and grading homework.

Fall 2019 **Teaching Assistant**

- Course title: Statistical Modeling with Latent Variables.
- Instructor: Prof. Minjeong Jeon.
- My responsibilities include leading software (SAS) sessions, holding office hours, and grading homework.

10/2013 – 11/2013 **Apprentice Psychology Lecturer**

- Beijing Gucheng Foreign Language School.
- My responsibilities are giving lectures and organizing class meetings.

## Honors and Awards

6/2020 **Dissertation Year Fellowship (DYF)**

*University of California, Los Angeles*

- The DYF at UCLA is a \$20,000 (plus tuition and fees) fellowship intended to support doctoral students who are advanced to candidacy with the department nomination.
- It is highly-competitive evidenced by that only one or at most two students can receive it in my program yearly.

9/2019 **Lee Memorial Fund Scholarship**

*University of California, Los Angeles*

This \$4750 scholarship is intended to award the most outstanding international student selected by the award committee at the Graduate School of Education & Information Studies at UCLA.

10/2018 **Society of Multivariate Experimental Psychology (SMEP) Travel Award**

*16th Annual SMEP Graduate Student Conference*

- SMEP is a small elective society of quantitative methods researchers with 65 regular active members. The SMEP graduate student conference happens in conjunction with the SMEP conference, with up to 16 presentations.
- Applicants have to be endorsed by an active SMEP member and submit a research proposal.
- Selected presenters are awarded a travel fund of \$1,500.

4/2017 **Graduate School of Education & Information Studies Travel Grant**

- This department grant is awarded to graduate students who attended a professional conference.

9/2016 **Louise Tyler fellowship**

*University of California, Los Angeles*

- A select few students at the Graduate School of Education & Information Studies at UCLA are awarded this \$4,000 fellowship yearly.

## Technical Skills

R	Advanced knowledge; use it for data management, various quantitative analyses, and research studies.
flexMIRT	Advanced knowledge; use it for various IRT analyses and teaching.
Latex	Advanced knowledge; use it for document preparation and professional presentation.
SAS	Advanced knowledge; use it for teaching.
SPSS	Advanced knowledge; use it for data analysis and teaching.

## References

Prof. Li Cai	UCLA Graduate School of Education & Information Studies cai@cresst.org
Prof. Minjeong Jeon	UCLA Graduate School of Education & Information Studies mjjeon@ucla.edu
Prof. Han Du	UCLA Department of Psychology hdu@psych.ucla.edu