Sunbeom Kwon

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EDUCATION

University of Illinois Urbana-Champaign, Champaign, IL   2021 - Present
Ph.D. in Quantitative Psychology

University of Illinois Urbana-Champaign, Champaign, IL   2024
M.S. in Statistics

Sungkyunkwan University, Seoul   2020
M.A. in Psychology

Sungkyunkwan University, Seoul   2015
B.A. in Psychology and Statistics

EMPLOYMENT

ETS
Ida Lawrence Research Summer Intern   June 2024 - July 2024

BSCHR, Seoul
Psychometric Researcher   August 2020 - February 2021

TEACHING

University of Illinois Urbana-Champaign
Lab Instructor and Teaching Assistant
Courses:
- PSYC 490: Measurement and Test Development Lab   Fall 2022, 2023
- PSYC 301: Psychological Statistics   Spring 2025, 2024, 2023
- PSYC 235: Introduction to Statistics   Fall 2024

Sungkyunkwan University
Teaching Assistant
Courses:
- Psychological Testing and Measurement   Spring 2018
- Statistical Analysis in Psychology   Fall 2018
- Introduction to Psychology   Spring 2019

PUBLICATIONS

1. **Kwon, S.**, McCaffrey, D., Jewsbury, P., & Casabianca, J. (Under Review). An Empirical Bayesian Approach for Testing the Fairness of Automated Scoring. *Journal of Educational and Behavioral Statistics.*

2. **Kwon, S.**, Zhang, S. (In Revision). Explaining Performance Gaps with Problem-Solving Process Data via Latent Class Mediation Analysis. *Psychometrika.*

3. **Kwon, S.**, Zhang, S., Koehn, H. F., & Zhang, B. (2025). MCMC Stopping Rules in Latent Variable Modeling. *British Journal of Mathematical and Statistical Society.*

4. Choi, J., **Kwon, S.,** & Zhang, B. (2025). A Structural After Measurement Approach to Bifactor Predictive Models. *Structural Equation Modeling: A Multidisciplinary Journal.*

PRESENTATIONS

Leading Conference Presentations:

1. **Kwon, S.**, Zhang, S. (2025, April). Explaining Performance Gaps with Problem-Solving Process Data via Latent Class Mediation Analysis. *Poster presented at the National Council on Measurement in Education Annual Meeting, Denver, CO.*

2. **Kwon, S.**, McCaffrey, D., Jewsbury, P., & Casabianca, J. (2025, April). An Empirical Bayesian Approach for Testing the Fairness of Automated Scoring. *Paper presented at the National Council on Measurement in Education Annual Meeting, Denver, CO.*

3. **Kwon, S.**, Zhang, S. (2024, July). Explaining Performance Gaps with Problem-Solving Process Data via Latent Class Mediation Analysis. *Paper presented at the International Meeting of the Psychometric Society 2024, Prague, Czech.*

4. **Kwon, S.**, Zhang, S. (2023, November). Explaining Performance Gaps with Problem-Solving Process Data via Latent Class Mediation Analysis. *Paper presented at the Ideas in Testing Research Seminar, Chicago, IL.*

5. **Kwon, S.**, Zhang, S., & Köhn, F. (2023, March). MCMC Convergence Diagnostics in DINA Model and Bifactor IRT Model. *Poster presented at the National Council on Measurement in Education Annual Meeting, Chicago, IL.*

6. **Kwon, S.**, Jahng, S. (2020, October). Effects of Factor Scaling Constraints on Model Estimation in Bayesian Confirmatory Factor Analysis. *Paper presented at the Meeting of the Korean Society of Psychological Measurement and Assessment, Seoul, Korea.*

7. **Kwon, S.**, Jahng, S. (2019, March). Autoregressive Cross-lagged Model with Phantom Variables for Panel Data with a Missing Time Point. *Poster presented at the International Convention of Psychological Science, Paris, France.*

8. **Kwon, S.** (2017, November). Testing Autoregressive Cross-lagged Effects between Academic Achievement and Achievement Values Using Phantom Variables. *Poster presented at the Meeting of the Korean Society of Psychological Measurement and Assessment, Seoul, Korea.*

Contributed Conference Presentations:

1. Choi, J., **Kwon, S.,** & Zhang, B. (2024, April). An Investigation of the Structural After Measurement Approach for Bifactor Models. *Poster presented at the Society for Industrial and Organizational Psychology Annual Conference, Chicago, IL.*

SOFTWARE

The **hmcdm** R package   Creator / Maintainer
- A package for fitting hidden Markov cognitive diagnosis models on longitudinal data for learning.
- https://github.com/tmsalab/hmcdm

SERVICE

Professional Committee:
- National Council on Measurement in Education
  Dissertation Award Committee   2023

Ad-hoc Manuscript Reviewer:
- *Behavioral Research Methods*
- *Educational Measurement: Issues and Practice*
- *Behaviormetrika*
- *Statistics and Its Interface*

AWARDS & HONORS

University of Illinois Urbana-Champaign:
- Hobson Fellowship, Department of Psychology, 2021-2025.
- List of Teachers Ranked as Excellent by Students, Center for Innovation in Teaching & Learning, 2023.