Sunbeom Kwon

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EDUCATION

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

2021 - Present

University of Illinois, Urbana-Champaign, Champaign, IL

2024

M.S. in Statistics

Sungkyunkwan University, Seoul

2020

M.A. in Psychology

2015

Sungkyunkwan University, Seoul 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
PSYC 301: Psychological Statistics

 $Fall\ 2022,\ 2023$

Spring 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. (In Prep). An Empirical Bayesian Approach for Testing the Fairness of Automated Scoring.
- 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. (2024). MCMC Stopping Rules in Latent Variable Modeling. British Journal of Mathematical and Statistical Society.
- 4. Choi, J., **Kwon**, S., & Zhang, B. (2024). A Structural After Measurement Approach to Bifactor Predictive Models. Structural Equation Modeling: A Multidisciplinary Journal.
- 5. **Kwon, S.** (2020). Effects of factor scaling constraints on model estimation in Bayesian confirmatory factor analysis. *Sungkyunkwan University*.

PRESENTATIONS

Leading Conference Presentations:

- 1. 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.
- 2. 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.
- 3. 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.
- 4. 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.
- 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.
- 6. **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

- 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 Statistics and Its Interface
- Behaviormetrika

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.