# **Kyung Yong Kim**

CONTACT Information Department of Educational Research Methodology

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MATION School of Education

University of North Carolina at Greensboro

Greensboro, NC 27412

**EDUCATION** 

University of Iowa, Iowa City, Iowa

Ph.D., Educational Measurement and Statistics

Aug 2017

- Dissertaion: IRT linking methods for the bifactor model: A special case of the two-tier item factor analysis model
- Minor: Computer Science
- Academic Advisor: Won-Chan Lee, Ph.D.

M.S., Statistics

May 2012

Korea University, Seoul, South Korea

B.S., Statistics

Aug 2003

EMPLOYMENT HISTORY SK Telecom, Seoul, South Korea

Manager, Portal Service Team

Jan 2004 - Jul 2008

### Publications Peer-Reviewed Journals

- 1. **Kim, K.**, & Lee, W. (2017). Impact of three factors on the recovery of item parameters for the three-parameter logistic model. *Applied Measurement in Education*, 30, 228-242.
- 2. **Kim, K.**, & Lee, W. (under review). Interval estimation procedures for weighted composite scores.
- 3. **Kim, K.**, Lim, E., & Lee, W. (under review). Equating passage-based tests: The impact of four IRT models.

## Research Reports

1. Lee, W., Malatesta, J., Brennan, L. R., Kim, H., **Kim, K.**, & Jing, S. (2016). Review of current psychometric procedures for the Multistate Bar Examination. Report submitted to the National Conference of Bar Examiners.

- 2. Malatesta, J., **Kim, K.**, Jing, S., Lee, W., & Brennan, L. R. (2016). Replication of the February and July 2016 Multistate Bar Examination Equating. Report submitted to the National Conference of Bar Examiners.
- 3. Lee, W., Brennan, L. R., **Kim, K.**, Lim, E., & Malatesta, J. (2015). Replication of the February and July 2015 Multistate Bar Examination Equating. Report submitted to the National Conference of Bar Examiners.
- 4. Lee, W., Brennan, L. R., **Kim, K.**, & Lim, E. (2015). Replication of the July 2014 Multistate Bar Examination Equating. Report submitted to the National Conference of Bar Examiners.

## **Externally Funded Research Projects**

1. **Kim, K.**, & Lee, W. (2016). *Multiple-group concurrent calibration under the three-parameter logistic model* (2016 Covington Award). Madison, WI: National Conference of Bar Examiners.

#### PRESENTATIONS

- 1. **Kim, K.**, & Lee, W. (2017). A general procedure for constructing intervals for various psychometric indices using MCMC. National Council on Measurement in Education, San Antonio, TX.
- 2. **Kim, K.**, Park, S., Choi, J., & Seo, H. (2017). *Multiple-group calibration in SAS: The IRT procedure and SAS/IML*. SAS Global Forum 2017, Orlando, FL.
- 3. **Kim, K.**, & Lee, W. (2016). *Interval estimation procedures for polytomously-scored items*. Paper presented at the annual meeting of the International Meeting of the Psychometric Society, Asheville, NC.
- 4. **Kim, K.**, & Lee, W. (2015). *Interval estimation procedures under the compound binomial error model*. Paper presented at the annual meeting of the International Meeting of the Psychometric Society, Beijing, China.
- 5. **Kim, K.**, Lim, E., & Lee, W. (2015). *MIRT observed and true score equating for passage-based tests*. Paper presented at the annual meeting of the National Council on Measurement in Education, Chicago, IL.
- 6. Zhang, M., Kim, H., **Kim, K.**, Lee, W., Lim, E., & Brennan, R. L. (2015). *Investigating three IRT perspectives on equating testlet-based tests*. Paper presented at the annual meeting of the National Council on Measurement in Education, Chicago, IL.

- 7. Lim, E., **Kim, K.**, & Lee, W. (2015). *Model selection methods for passage based tests*. Presented at the Annual Meeting of the National Council on Measurement in Education, Chicago, IL.
- 8. **Kim, K.**, & Lee, W. (2014). Recovery of item parameters under various IRT item calibration methods. Paper presented at the annual meeting of the International Meeting of the Psychometric Society, Madison, WI.

# RESEARCH EXPERIENCE

## CASMA, University of Iowa

## Redesigned SAT Equating

Oct 2015 - July 2017

- Supervisors: Dr. Robert L. Brennan, Dr. Won-Chan Lee
- Conducted equating replication for multiple administrations

## Redesigned PSAT Equating

Oct 2015 - July 2017

- Supervisors: Dr. Robert L. Brennan, Dr. Won-Chan Lee
- Conducted equating replication for multiple administrations

## Multistate Bar Examination Equating Mar 2015 - Oct 2016

- Supervisors: Dr. Won-Chan Lee, Dr. Robert L. Brennan
- Conducted replication of IRT calibration, linking, and equating based on data from multiple administrations
- Co-wrote the final report

#### Multistate Bar Examination Psychometric Procedures

Sep 2015 - Aug 2016

- Supervisor: Dr. Won-Chan Lee
- Reviewed the current psychometric properties and various other aspects of the Multistate Bar Examination
- Made recommendations concerning how to potentially refine and improve the psychometric procedures
- Wrote the psychometric procedures section for the final report

#### **SAT** Equating

- Supervisors: Dr. Robert L. Brennan, Dr. Won-Chan Lee
- Conducted equating replication for multiple administrations
- Co-wrote the final report

#### Department of Statistics, University of Iowa

### Consulting for the National Advanced Driving Simulator

Jan 2012 - May 2012

- Supervisor: Dr. Rhonda DeCook
- Investigated factors that affect the ability of vehicle drivers to see oncoming motorcycles

## TEACHING EXPERIENCE

## Department of Statistics, University of Iowa

## Teaching Assistant

Summer 2012

Course: Statistics for BusinessInstructor: Dr. Osnat Stramer

# Teaching Assistant

Spring 2012, Spring 2013

- Course: Probability and Statistics for Engineering and Physical Sciences
- Instructor: Dr. Matthew Bognar

# Teaching Assistant

Spring 2011, Fall 2011

- Course: Probability and Statistics for Engineering and Physical Sciences
- Instructor: Dr. Osnat Stramer

# Teaching Assistant

Fall 2010, Fall 2012

- Course: Probability and Statistics for Engineering and Physical Sciences
- Instructor: Dr. Rhonda DeCook

#### AWARDS National Cor

# National Conference of Bar Examiners

Joe E. Covington Award

2016

## College of Education, University of Iowa

Blommers/Hieronymus/Feldt Fellowship 2015, 2016

Audrey Qualls Travel Award 2014, 2016

The Office of the Dean Travel Award 2014, 2016

## Department of Statistics, University of Iowa

Allen T. Craig Award (Best teaching assistant of the year) 2012

# PROFESSIONAL Affiliations

#### ACTIVITIES

American Educational Research Association

National Council on Measurement in Education

Psychometric Society

Korean-American Educational Researchers Association

### Reviewer

Graduate session at the 2017 annual meeting of National Council on Measurement in Education  $\,$ 

### Student Committee Member

Jason Millman Award Committee, National Council on Measurement in Education Apr 2016 - April 2017

# Computer Skills

## Programming Language

R, SAS IML, C, Python

## Software Package

BILOG-MG, PARSCALE, flexMIRT, IRT Command Language (ICL)

### Others

LaTeX, Visual Basic for Applications (VBA)