EunHee Keum

UCLA CRESST
520 Portola Plaza, RM 8328   614-323-9376
Los Angeles, CA 90095   keum@cresst.org

Education

2016   PhD, Quantitative Psychology

The Ohio State University

Advisor: Michael C. Edwards, Ph.D.

Dissertation: *Applying Longitudinal IRT Models to Small Samples for Scale Evaluation*

2009   MA, Psychology

Sungkyunkwan University, Seoul, Korea

Advisor: Soon-Mook Lee, Ph.D.

Thesis: *Testing Scalar Invariance Using Multi-group Analysis in Structural Equation Modeling*

2007   BA, Psychology with a dual major in English Language and Literature

Sungkyunkwan University

Advisor: Soon-Mook Lee, Ph.D.

Thesis: *Validation Study of the Korean Version of JTCI (Junior Temperament and Character Inventory)*

Professional Experience

2016 (July) – Present   Senior Public Administration Analyst, Graduate School of Education and Information Studies, Center for the Study of Evaluation and National Center for Research on Evaluation, Standards, and Student Testing, University of California, Los Angeles

2015 – 2016 (May)   Graduate Research Associate, Department of Psychology, The Ohio

State University

2013 – 2014	Research Assistant, The College Board Research Project – Exploring simpler alternatives to the three-parameter logistic model for operational use, Department of Psychology, The Ohio State University
2007 – 2008	Research Assistant, Development of assessment tools for LG Philips LCD's HRD program, Brain Korea 21 Human Resource Development lab, Sungkyunkwan University
2007	Research Assistant, Development of Korean internet addiction inventory, Quantitative Psychology lab, Sungkyunkwan University

Teaching Experience

2010 – 2012, 2014 – 2015	Teaching Assistant: Analysis of Repeated Measures and Longitudinal Data (Grad), Covariance Structure Models (Grad), Fundamental of Factor Analysis (Grad), Psychometrics (Grad), Introductory Statistics for Social Sciences (Undergrad)
2015 (Jan 22)	Guest lecture, Fundamental of Factor Analysis, Department of Psychology, The Ohio State University
2014 (May 28)	Guest lecture, Introduction to flexMIRT, Department of Psychology, The Ohio State University
2005	Completion of TESOL (Teacher of English to Speakers of Other Languages), Greystone College of Business and Technology, Toronto, Canada
2005	Completion in TYC (Teaching Young Children) program, Western Town College, Toronto, Canada

2003 – 2004	Elementary math teacher, Choikang institute, Yongin, Korea

Awards and Appointments

2017 (June)	Staff Appreciation and Recognition Award, University of California, Los Angeles
2014	Graduate Student Conference Travel Award, The Ohio State University
2013 – 2014	The College Board Research Fellowship Award, The College Board
2013 (June)	Visiting Scholar, University of Leuven, Belgium
2010 (Summer)	Social and Behavioral Science fellowship, The Ohio State University
2009 – 2010	University Fellowship, The Ohio State University
2006, 2007, 2008 (Fall)	Academic Excellence Scholarship, Sungkyunkwan University
2002, 2003 (Spring)	Academic Commitment Scholarship, Sungkyunkwan University

Publications

2010	Lee, S.M., Keum, E., & Lee, C. A Problem in Multi-Group Analysis: Is the Test of Scalar Invariance Needed or Not? (*Korean) Educational Evaluation Research, 23(2),* 391-416

Work in Progress

2014 – 2017	Keum, E., & Edwards, M.C. *Applying Longitudinal IRT Models to Small Samples.* Manuscript in preparation.
	Keum, E., &. Jeon, M. *Applying IRT models to figural analogy testing data.* Manuscript in preparation.
	Keum, E., & Paulus De Boeck. *A new model free mediation approach: Unit-By-Unit (UBU) method*. Manuscript in preparation.
	Edwards, M.C., & Keum, E. *Comparing the 2-Parameter Logistic Model and the 3-Parameter Logistic Model for use with*

Multiple Choice Question. Unpublished technical report.

Keum, E., & Edwards, M.C. *Minimum detectable change in an item response theory framework.* Unpublished manuscript.

Presentations

2015 (March)   Keum, E., & Edwards, M.C. *Applying Longitudinal IRT Models to Small Samples for Scale Evaluation.* Presentation for the Quantitative Psychology Brownbag Seminar at The Ohio State University, Columbus, OH.

2014 (July)   Keum, E., & Edwards, M.C. *Exploring simpler alternatives to the 3-parameter logistic model for operational use.* Poster presented at the International Meeting of the Psychometric Society, Madison, WI.

2013 (October)   Keum, E., & Paulus De Boeck, *A new model free mediation test Unit-By-Unit (UBU) method.* Presentation for the Quantitative Psychology Brownbag Seminar at The Ohio State University, Columbus, OH.

2012 (December)   Keum, E., & Edwards, M.C. *Minimum detectable change in an item response theory framework II.* Presentation for the Quantitative Psychology Brownbag Seminar at The Ohio State University, Columbus, OH.

2012 (October)   Edwards, M.C., & Keum, E. *Rethinking reliability: Minimum detectable change in item response models.* Presentation made at the joint ACIPA/CB/LSAC research series. Newtown, PA.

2012 (April)   Keum, E., & Edwards, M.C. *Minimum detectable change in an item response theory framework.* Presentation for the

Quantitative Psychology Brownbag Seminar at The Ohio State University, Columbus, OH.

2011 (May)   Keum, E. *Conditions when mean structure analysis is required for multi-group comparison in relation with scalar invariance.* Presentation for the Quantitative Psychology Brownbag Seminar at The Ohio State University, Columbus, OH.

2010 (May)   Bodine, A., & Keum, E. *Reconceptualization of SF-36.* Presentation for the Quantitative Psychology Brownbag Seminar at The Ohio State University, Columbus, OH.

Reviewing

2015   Ad-hoc Reviewer – Structural Equation Modeling

Technical Skills

Proficiency with the following software packages:

AMOS	BILOG-MG	CEFA	flexMIRT
IRTLRDIF	LISREL	Microsoft Office (with certificate of master)	
Mplus	Multilog	PARSCALE	R
SAS	SPSS	STATA	

Proficiency with the following statistical techniques:

Analysis of Variance	Classical Test Theory
Discrete Data Analysis	Descriptive Statistics
Factor Analysis	Item Response Theory
Non-Parametric Methods	Regression
Structural Equation Modeling	