KWANG HEE JUNG, PH.D

APRIL 24, 2019

Assistant Professor

Department of Educational Psychology and Leadership

Research, Evaluation, Measurement, and Statistics (REMS) Program

Texas Tech University

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https://scholar.google.com/citations?user=7DLgH9kAAAAJ&hl=en&oi=ao

EDUCATION

INSTITUTION AND LOCATION	DEGREE	YEAR(S)	FIELD OF STUDY
University of British Columbia	Post-doctorate	2011-2012	Quantitative and Computational Neuroscience
McGill University	Ph.D.	2007-2011	Quantitative Psychology
Sungkyunkwan University	None	2004-2007 (Ph.D. Coursework completion)	Psychometrics and Industrial/Organizational Psychology
Sungkyunkwan University	M.A.	2002-2004	Cognitive Psychology
Sungkyunkwan University	B.B.A.	1995-2002	Business Administration (I/O Psychology)

RESEARCH INTERESTS

(1) Multivariate Statistics and Functional Data Analysis (2) Measurement and Testing Theory (3) Big Data Analytics (4) Learning Sciences and Performance Management (5) Human Brain and Mental Health Research (6) Bio-medical Data and Patient-Reported Outcomes Research (7) Bayesian Statistical Modeling (8) Statistical Software Development (9) Information Technology and Institutional Research (10) Development and Evaluation of Virtual/Augmented Reality Applications (11) Computer Science and Engineering Education

POSITIONS

Assistant Professor, Department of Educational Psychology and Leadership (Quantitative Methods Concentration), Texas Tech University	2017-Present
Affiliated Researcher, Center of Excellence for Integrative Health, Texas Tech University Health Sciences Center	2019-Present
Affiliated Researcher, Institute for Measurement, Methodology, Analysis, and Policy (IMMAP), Texas Tech University	2017- 2019
Research Scientist, Advanced Psychometrics Group, ACTNext, ACT, Inc.	2016-2017
Assistant Professor, Department of Pediatrics, McGovern Medical School, University of Texas Health Science Center at Houston, Texas, USA	2013-2016
Post-Doctoral Fellow, BC Mental Health & Addictions Research Institute, Department of Psychiatry, University of British Columbia, Vancouver, Canada	2011-2012
Teaching/Research Assistant, McGill University, Montreal, Canada	2007-2011
Lecturer, Sungkyunkwan University, Seoul, South Korea	2006-2007
Research Assistant, Sungkyunkwan University, Seoul, South Korea	2006-2007
Researcher, Educational Development Center, Sungkyunkwan University, Seoul, South Korea	2004
Research Assistant, Sungkyunkwan University, Seoul, South Korea	2002-2003

HONORS

International Research and Development Seed Grants, Texas Tech University	2019
Open Access Publication Initiative Awards, Texas Tech University	2018/2019
Texas Tech College of Education Competitive Edge Research Grant Awards	2018
XLSTAT Best Paper Award, The 8th International Conference on Partial Least Squares and its Related Methods, Paris, France	2014
Strategic Fellowship, Mitacs Elevate, Canada	2012-2013
Post-Doctoral Fellowship, The MIND Foundation of British Columbia, Canada	2011-2012
McGill Graduate Studies Fellowship (MGSF), McGill University, Canada	2007-2011
Research Fellowship, Brain Korea 21 Project, The Ministry of Education and Human Resources Development, South Korea	2005

TEACHING

Texas Tech University

> EPSY 6303, Educational Measurement (Spring 2020)
>
> EPSY 8000, Doctor's Dissertation (Spring 2020, Spring 2019)
>
> EPSY 6349, Cognitive Diagnostic Modeling (Fall 2019, Fall 2017)
>
> EPSY 6100, Professional Seminar in Educational Psychology (Fall 2019, Summer 2019)
>
> EPSY 5093, Internship in Education: Institutional Research Methods (Summer 2019)
>
> EPSY 7000, Research: Constrained Principal Component Analysis (Summer 2019)
>
> EPSY 6349, Bayesian Statistical Modeling (Spring 2019)
>
> EPSY 6349, Psychometric Modeling (Fall 2018)
>
> EPSY 7000, Research: Generalized Structured Component Analysis (Summer 2018)
>
> EPSY 6349, Bayesian Networks and Decision Making (Spring 2018)

RESEARCH SUPPORTS

Principal Investigator, Development of a New Machine Learning-based Predictive Model for ADHD Diagnosis Using ADHD-200 Brain Imaging Datasets, International Research and Development Seed Grants, Texas Tech University. 08/2019–08/2020

Co-Investigator, Panhandle pipeline (P2): Assessing the impact of mandatory vs. self-selected structured activities on STEM undergraduate student success, NSF 1644179 (PI: Biggers) 09/2017–08/2022

Co-Investigator, Engaging students: The path to STEM success, DOE P031C160219 (PI: Capps) 09/2016–08/2021

Co-Investigator, Engaging in STEM, DOE P031C160244 (PI: Biggers) 09/2016–08/2021

Co-Investigator, The Impact of Sources of Strength, a Primary Prevention Youth Suicide Program, on Sexual Violence Perpetration among Colorado High School Students, DHHS-Centers for Disease Control and Prevention NCT03014271 (PI: Espelage) 09/2017- 09/2020

Co-Principal Investigator, Comprehensive Preservation Planning for Palmito Ranch Battlefield. U.S. Department of the Interior-National Park Service A17-0245 (PI: Dr. Currie) 08/2017- 08/2020

Co-Investigator, Exposure to Violence and Subsequent Weapons Use: Mediating 09/2017- 08/2020

and Moderating Processes, National Institutes of Health, R01HD084652 (PI: Dubow)

Principal Investigator, Development of Institutional Research Analytics Tools and Platform. Competitive Edge Seed Grant, College of Education, Texas Tech University.
09/2018-08/2020

Co-Investigator, Dana Center Program Evaluation, University of Texas at Austin, 22B098 (PI: A. Wiggins)
02/2017-01/2019

Co-Investigator, Texas Kindergarten Entry Assessment System, US Department of Education/Texas Education Agency (PI: Landry)
10/2013-08/2016

Co-Investigator, Enhancing Early Learning for Infants with Disabilities: A Responsive Parenting Intervention, IES R324A120363 (PI: Taylor)
09/2012-08/2016

Co-Investigator, Testing an Integrated Pre-School Curriculum for English Learners, IES R324A110079 (PI: Landry)
03/2011-02/2015

Co-Investigator, Development of an Empirically Based Intervention for Childcare Teachers to Promote Language Skills in At-Risk Toddlers, IES R324A110104 (PI: Guttentag)
06/2011-05/2014

Co-Investigator, Believe to Become (B2B) Baby Scholar Project, Douglas & Maria DeVous Foundation (PI: Landry)
08/2011-12/2013

Co-Investigator, Beginning Education: Early Childcare at Home (BEECH) ARRA-Texas State Advisory Council on Early Childhood, DHHS 90SC0041 (PI: Landry)
09/2011-08/2013

Grant submitted (2017-2020)

Principal Investigator, Instilling Computational Thinking through making an Augmented Reality application, Competitive Edge Seed Grant, College of Education, Texas Tech University.

Co-Principal Investigator, Developing a Web-Based Virtual Reality and Augmented Reality for Increasing Cultural Awareness and Community Engagement in Lubbock, The CH Foundation.

Co-Investigator, Neuroprotection in acute MCA stroke by somatosensory-induced collateral blood flow, National Institute of Health.

Co-Investigator, The effects of skeletal muscle adiposity on insulin resistance and physical performance in children, National Institute of Health.

Principal Investigator, Developing an Interactive Web-Based Statistical Software Program for Brain Connectivity Research. Ralph E. Powe Junior Faculty Enhancement Awards, Oak Ridge Associated Universities (ORAU).

Principal Investigator, Development of A Web-Based Interactive Institutional Research Analytics Program, Helen Jones Foundation, Inc.

Co-Principal Investigator, Data Science Workshops for Graduate/Undergraduate Assistants, The CH Foundation.

Co-Principal Investigator, Online Interactive FAFSA and College Information Tool, The CH Foundation.

Principal Investigator, Developing A User-friendly Statistical Software Program for Quantitative Modeling and Analysis of Functionally Integrated Brain Connectivity. Global Faculty Research Awards – Google Inc.

Co-Principal Investigator, Helen Jones Foundation Summer Data Science Workshop. Helen Jones Foundation, Inc.

Co-Investigator, The National Rural Education Research Center on Professional Development: A Research-Practitioner Partnership. Institute of Education Sciences.

Co-Investigator, BullyDown: An Innovative Approach to Reducing Bullying Among Middle School Youth. National Institute of Health.

Co-Investigator, Evaluation of the K-5 Second Step Social-Emotional Learning Program & Bully Prevention Teacher training for Youth with and At-Risk for Disability: Impact on Teacher Effectiveness & Student Outcomes. Institute of Education Sciences.

Co-Investigator, Teamwork, Observation, Problem-solving and Exploration - Training Users Realistically in Virtual Environments. National Science Foundation.

PEER-REVIEWED PUBLICATIONS AND SUBMISSIONS

1. Hwang, H., Cho, G., **Jung, K.**, Falk, C., Flake, J., Jin, M & Lee, S. (submitted). An approach to structural equation modeling with both factors and components: Integrated generalized structured component analysis.

2. Yoo, S. & **Jung, K.** (submitted). A study on the future growth strategies for digital signage Media in Korea.

3. Lee, J., **Jung, K.**, & Park, J. (submitted). Detecting conditional dependence using flexible Bayesian latent class analysis.

4. Yoo, S., **Jung, K.**, & Ryu, J. (submitted). University's project-based learning for urban regeneration.

5. **Jung, K.**, Cho, S., Lee, J., Kim, S., & Ryoo, J. (2020). An illustrative application of generalized structured component analysis for brain connectivity research, *Behaviormetrika, 47*, 273-289.

6. **Jung, K.**, Nguyen, V., Yoo, S., Kim, S., Park., S., Currie, M. (2020). *PalmitoAR*: The last battle of the U.S. Civil War reenacted using Augmented Reality. *ISPRS International Journal of Geo-Information*, 9, 75.

7. Tabei, F., Gresham, J., Askarian, B., **Jung, K.**, & Chong J. (2020). Cuff-less blood pressure

monitoring system using smartphones. *IEEE Access,* 8, 11534 - 11545.

8. Nguyen V.T., Zhang Y., **Jung K.**, Xing W., Dang T. (2020) VRASP: A Virtual Reality Environment for Learning Answer Set Programming. In: Komendantskaya E., Liu Y. (eds) Practical Aspects of Declarative Languages. PADL 2020. *Lecture Notes in Computer Science, vol 12007*. Springer, Cham.

9. Blinch, J., Flindall, J., Smaga, L., **Jung, K.,** Gonzalez, C. (2019). The left cerebral hemisphere may be dominant for the control of bimanual symmetric reach-to-grasp movements. *Experimental Brain Research, 237,* 3297–3311.

10. Nguyen, V. T., **Jung, K.**, & Dang, T. (2019). Creating Virtual Reality and Augmented Reality development in classroom: Is it a hype?. In 2019 IEEE International Conference on Artificial Intelligence and Virtual Reality (AIVR) (pp. 212-2125). *IEEE.*

11. Nguyen, V. T., **Jung, K.**, & Dang, T. (2019). VRescuer: A Virtual Reality Application for Disaster Response Training. In 2019 IEEE International Conference on Artificial Intelligence and Virtual Reality (AIVR) (pp. 199-1993). *IEEE.*

12. Nguyen, V. T., **Jung, K.**, & Dang, T. (2019). DroneVR: A Web Virtual Reality Simulator for Drone Operator. In 2019 IEEE International Conference on Artificial Intelligence and Virtual Reality (AIVR) (pp. 257-2575). IEEE.

13. **Jung, K.**, Lee, J., Gupta, V., & Cho, G. (2019). Comparison of bootstrap confidence interval methods for GSCA using Monte Carlo simulations. *Frontiers in Psychology–Quantitative Psychology and Measurement*, 10:2215.

14. Askarian, B., **Jung, K.**, & Chong, J. (2019). Monitoring of heart rate from photoplethysmography signals using a Samsung Galaxy Note8 in underwater environments, *Sensors*, 19, 2846.

15. Cho, G., **Jung, K.**, & Hwang, H. (2019). Out-of-bag prediction error: a cross validation index for generalized structured component analysis. *Multivariate Behavioral Research,* 54, 1-9.

16. **Jung, K.**, Panko, P., Lee, J., & Hwang, H. (2018). A comparative study on the performance of GSCA and CSA in parameter recovery for structural equation models with ordinal observed variables. *Frontiers in Psychology–Quantitative Psychology and Measurement,* 9:2461.

17. Hwang, H., Takane, Y., & **Jung, K.** (2017). Generalized structured component analysis with uniqueness terms for accommodating measurement error. *Frontiers in Psychology – Quantitative Psychology and Measurement*, 8:2137.

18. Choi J. Y., Hwang, H., Yamamoto, M., **Jung, K.** & Woodward, T. S. (2017). A unified approach to functional principal component analysis and functional multiple-set canonical correlation, *Psychometrika*. 82, 427-441.

19. **Jung, K.**, Takane, Y., Hwang, H., & Woodward, T. S. (2016). Multilevel dynamic generalized structured component analysis for brain connectivity analysis in functional neuroimaging data.

Psychometrika, 81, 565-581.

20. Merz, E. C., Landry, S. H., Johnson, U. Y., Williams, J. M. & **Jung, K.** (2016). Effects of a responsiveness-focused intervention in family child care homes on children's executive function, *Early Childhood Research Quarterly*, 34, 128-139.

21. **Jung, K.** & Takane, Y. (2015). Multidimensional Scaling I. In: James D. Wright (editor-in-chief), *International Encyclopedia of the Social & Behavioral Sciences*, 2nd edition, Vol 16. Oxford: Elsevier. pp. 34–39.

22. Lavigne, K. M., Rapin, L. A., Metzak, P. D., Whitman, J. C., **Jung, K.**, Dohen, M., Loevenbruck, H., & Woodward, T. S. (2015). Left-dominant temporal-frontal hypercoupling is associated with hallucinations during low cognitive control. *Schizophrenia Bulletin*, 41, 259-267.

23. Woodward, T. S., **Jung, K.**, Smith, G. N., Hwang, H., Barr, A. M., Procyshyn, R. M., Flynn, S. W., van der Gaag, M., & Honer, W. G. (2014). Symptom changes in five dimensions of the positive and negative syndrome scales in refractory psychosis. *European Archives of Psychiatry and Clinical Neuroscience, 264*, 673–682.

24. Woodward, T. S., **Jung, K.**, Hwang, H., Yin, J., Taylor, L. Menon, M., Peters, E., Kuipers, E., Waters, F., Lecomte, T., Sommer, I., Daalman, K., van Lutterveld, R., Hubl, D., Kindler, J., Homan, P., Badcock, J. E., Chhabra, S., Cella, M, Keedy, S., Allen, P., Mechlli, A., Preti, A., Siddi, S., & Erickson, D. (2014). Symptom dimensions of the Psychotic Symptom Rating Scales (PSYRATS) in psychosis: A multi-site study. *Schizophrenia Bulletin, 40,* S265-S274.

25. Hwang, H., **Jung, K.**, Takane, Y., & Woodward, T. S. (2013). A unified approach to multiple-set canonical correlation analysis and principal component analysis: an application to functional neuroimaging data. *British Journal of Mathematical and Statistical Psychology, 66*, 308-321.

26. **Jung, K.**, Takane, Y., Hwang, H., & Woodward, T. S. (2012). Dynamic GSCA (Generalized Structured Component Analysis) with applications to the analysis of effective connectivity in functional neuroimaging data. *Psychometrika, 77*, 827-848.

27. Hwang, H., **Jung, K.**, Takane, Y., & Woodward, T. S. (2012). Functional multiple-set canonical correlation analysis, *Psychometrika, 77*, 48-64.

28. Takane, Y., **Jung, K.**, & Hwang, H. (2011). Regularized reduced rank growth curve models. *Computational Statistics and Data Analysis, 55*, 1041-1052.

29. Takane, Y., **Jung, K.**, & Hwang, H. (2010). An acceleration method for ten Berge et al.'s algorithm for orthogonal INDSCAL. *Computational Statistics, 25*, 409-428.

30. Lee, S. M., Kim, J. W., & **Jung, K.** (2006). Potential of a self-report measure for intelligence. *The Korean Journal of Educational Psychology, 20*, 931-951.

31. **Jung, K.** & Lee, J. M. (2005). The effects of types of knowledge and cognitive styles on summarizing

and understanding text. *The Korean Journal of Cognitive Science, 16*, 271-285.

CONFERENCES (ORAL AND POSTER PRESENTATIONS)

1. Hwang, H., Cho, G., **Jung, K.**, Falk, C., Flake, J., Jin, M & Lee, S. Integrated generalized structured component analysis: An approach to structural equation modeling with both factors and components, **The International Psychometric Society Meeting**, July 2020, Washington, D.C., USA

2. **Jung, K.**, Suh H., Lee, J., Park, J., & Kim, K. Analysis of a Statewide Standardized Assessment Data using Multilevel Redundancy Analysis, **The NCME Annual Meeting**, April 2020, San Francisco, USA.

3. Kim, M., Suh, Hong., & **Jung, K.** Introduction to a longitudinal IRT model for measuring growth using accumulated test items. **The NCME Annual Meeting**, April 2020, San Francisco, USA.

4. Park, J., Jung, K, & Lee, J. The robustness of Latent class analysis to violations of local independence assumption. **The NCME Annual Meeting**, April 2020, San Francisco, USA.

5. Park, S., Zhang, P., Ross, M., Ross, O., Currie, M., & **Jung, K.** Landscape Architectural Approach and Battlefield Landscape Preservation. **2020 CELA Annual Conference**, March 2020, Louisville, USA.

6. Jung., J., **Jung, K.**, & Lee, J. Developing Power BI Dashboard with Predictive Models for Student Persistence and Success. **2020 TAIR Annual Conference**, March 2020, San Antonio, USA,

7. Nguyen, V., Zhang, Y., **Jung, K.**, Xing, W., & Dang T. VRASP: A Virtual Reality Environment for Learning Answer Set Programming. **22nd Symposium on Practical Aspects of Declarative Languages (PADL)**, January 2020, New Orleans, USA.

8. Nguyen, V., **Jung. K.**, & Dang, T. DRONEVR: A virtual reality simulator for Drone Operator, **IEEE International Conference on Artificial Intelligence & Virtual Reality (AIVR)**, December 2019, San Diego, USA

9. Nguyen, V., **Jung, K.**, Yoo, S., Kim, S., Park., S., & Currie, M. Civil War Battlefield Experience: Historical event simulation using Augmented Reality Technology, **IEEE-AIVR Modeling and Animating Realistic Crowds and Humans (MARCH) Workshop**, December 2019, San Diego, USA.

10. Nguyen, V., **Jung. K.**, & Dang, T. VRescuer: A Virtual Reality Application for Disaster Response Training, **IEEE International Conference on Artificial Intelligence & Virtual Reality (AIVR)**, December 2019, San Diego, USA

11. Nguyen, V., **Jung. K.**, & Dang, T. Creating Virtual Reality and Augmented Reality development in classroom: Is it a hype? **IEEE International Conference on Artificial Intelligence & Virtual Reality (AIVR)**, December 2019, San Diego, USA

12. **Jung, K.**, Suh H., Lee, J., Kim, K., & Park, J. Application of multilevel redundancy analysis to hierarchically structured large-scale educational data, **The International Psychometric Society Meeting**, July 2019, Santiago, Chile.

13. Kim, S., **Jung, K.**, & Hwang, H. WEB GESCA: Web-based software for generalized structured component analysis, **The International Psychometric Society Meeting**, July 2019, Santiago, Chile.

14. Cho, G., **Jung, K.**, & Hwang, H. A cross validation index for generalized structured component analysis. **The International Meeting of the Psychometric Society**, July 2019, Santiago, Chile.

15. Shoushan, M., Foysal, K., Reyes, B., Rodriguez, A., **Jung, K.** & Chong, J. Performance of Non-Contact Heart Rate Monitoring Methods using Smartphones/Webcam Camera, **2019 IEEE International Conference on Biomedical and Health Informatics (BHI)**, May 2019, Chicago, USA.

16. **Jung, K.**, Lee, J., Gupta, V., Kim, S., & Hwang, H. Simulation Based Investigation of Optimal Modeling Approaches for SEMs with Ordinal Variables, **The NCME Annual Meeting**, April 2019, Toronto, Canada.

17. Lee, J., **Jung, K.**, Park, J., & Park, H. Bayesian Latent Class Analysis for Person-Centered Research: Simulation Study on Conditional Dependence and Prior Choice, **2019 AERA Annual Meeting**, April 2019, Toronto, Canada

18. **Jung, K.**, Lee, J., Jung, J., Kim, S., Stickley, J., & Hwang, H. An Advanced Predictive Statistical Model of College Persistence in Higher Education, **2019 TAIR Conference**, February 2019, Horseshoe Bay, USA.

19. Jung, J., **Jung, K.**, & Lee, J. Creating advanced analytics and visualizations to understand student persistence using R scripts in Power BI, **2019 TAIR Conference**, February 2019, Horseshoe Bay, USA.

20. Jung, J., & **Jung, K**. Creating visualizations with advanced statistical analysis results using R scripts in Power BI, **2019 GCAIR meeting**, February 2019, Conroe, USA.

21. **Jung, K.**, Lee, J., Gupta, V., Kim, S., & Hwang, H. Application of Generalized Structured Component Analysis for Brain Connectivity Research, **2018 KSEA West Gulf Coast Regional Conference**, October 2018, Houston, USA.

22. Park, J., **Jung, K.** & Lee, J. Evaluation of three types of DIF in multilevel mixture IRT models, **The NCME Annual Meeting**, April 2018, New York, USA.

23. **Jung, K.**, Oh, H., Lee, J., & Barlow, S. M. An efficient modeling approach for brain connectivity analysis of saltatory pneumotactile velocity stimulus, **Society for Neuroscience**, November 2017, Washington, D.C., USA.

24. C-H, Li & **Jung, K.** Identifying One Credible Referent Variable for Measurement Invariance Testing:

A MIMIC-Interaction Modeling, **The International Psychometric Society Meeting**, July 2017, Zurich, Switzerland.

25. **Jung, K.**, Takane, Y., Hwang, H., & Woodward, S. T. Dynamic Generalized Structured Component Analysis, **The 31st International Congress of Psychology**, July 2016, Yokohama, Japan.

26. Johnson, U. Y. & **Jung, K.** Identifying Distinct Subgroups and Predictors of Change of Family Child Care Providers in a Web-based Training Intervention, **The Society for Research in Human Development (SRHD) Biennial Meeting**, March 2016, Denver, USA.

27. Landry, S.H., Assel, M.A., Carlo, M.S., **Jung, K.**, Li, C.H, Rodriguez, L., & Caldwell, C. Evaluation of a Small-Group Intervention on Young English Language Learners' Cognitive & Social Skills. **The Principal Investigators Meeting of the Institute of Education Sciences**, December 2015, Washington, DC.

28. **Jung, K.** & Borich, M. Path-analytic Structural Equation Modeling to evaluate connections between primary sensorimotor cortical regions in chronic stroke. **Society for Neuroscience**, October 2015, Chicago, USA.

29. Townsend, A., Chevallier, J., Laufer, C., Abdullah, Maryann, **Jung, K.**, Williams, J. M., & Filipek, P. A Comparison of Live Versus Video Modalities for Measurement of Eye Contact in Infants at Age 6 Months As 'Red Flags' for ASD. **The International Meeting for Autism Research (IMFAR)**, May 2015, Salt Lake City, USA.

30. **Jung, K.**, Park, H., & Hwang, H. Latent variable structural equation modeling reveals the importance of MTL and parieto-occipital connections for successful encoding of source memory. **Society for Neuroscience**, November 2014, Washington, D.C., USA.

31. Cho, S., **Jung, K.**, Aminian, K., Abi-Jaoude, E., Hwang, H., & Strafella, A. P. Reorganization of Structural Brain Connectivity in Parkinson's disease Patients with Pathological Gambling: Generalized Structured Component Analysis. **Society for Neuroscience**, November 2014, Washington, D.C., USA.

32. **Jung, K.** Multilevel Dynamic Generalized Structured Component Analysis for brain connectivity analysis in functional neuroimaging data. **The International Psychometric Society Meeting**, July 2014, Madison, USA

33. **Jung, K.** Multilevel Dynamic Generalized Structured Component Analysis. **8th International Conference Partial Least Squares and Related Methods**, May 2014, Paris, France

34. **Jung, K.** Multilevel Dynamic GSCA for brain connectivity analysis in functional neuroimaging data. **Society for Neuroscience**, November 2013, San Diego, USA.

35. **Jung, K.** Dynamic GSCA for multiple-sample brain connectivity analysis. **Korean-American Bio-Medical Scientists Symposium**, November 2013, Houston, USA.

36. Landry, S. H., Assel, M. A., **Jung, K.**, Carlo, M., & Li. C. H. Evaluation of a small group literacy, language, and math curriculum for improving early academic skills of Spanish speaking Pre-K students. **2013 Inaugural Bilingual Research Conference**. May 2013, Houston, USA.

37. **Jung, K.** & Woodword, S. T. Functional connectivity using SEM with fMRI implicates the cerebellum in working memory inefficiency in schizophrenia. **Society for Neuroscience**, October 2012, New Orleans, USA.

38. **Jung, K.**, Woodward, T. S., Smith, G. N., Hwang, H., Barr, A. M., Procyshyn, R. M., Flynn, S. W., van der Gaag, M., & Honer, W. G. Symptom changes in five dimensions of the positive and negative syndrome scales (PANSS) pre- and post-treatment on a refractory psychosis ward. **27th Annual Department of Psychiatry Research Day**, May 2012, Vancouver, Canada.

39. **Jung, K.**, Takane, Y., Hwang, H., & Woodward, T. S. Dynamic GSCA (Generalized Structured Component Analysis): A Structural Equation Model for Analyzing Effective Connectivity in Functional Neuroimaging. **The International Psychometric Society Meeting**, July 2011, Hong Kong, China.

40. **Jung, K.**, Takane, Y., & Hwang, H. A naïve versus non-naïve bootstrap method for testing regression coefficients in multivariate data analysis. **The International Psychometric Society Meeting**, July, 2010, Athens, USA.

41. Takane, Y., **Jung, K.**, & Hwang, H. An acceleration technique for ten Berge et al.'s algorithm for orthogonal INDSCAL. **The International Psychometric Society Meeting**, July 2009, Cambridge, UK.

42. Takane, Y., **Jung, K.**, & Hwang, H. Generalized Reduced-rank Growth Curve Model. **The International Psychometric Society Meeting**, July 2008, Durham, USA.

MEMBERSHIPS IN PROFESSIONAL SOCIETIES

Psychometric Society/Society for Neuroscience/American Educational Researchers Association/National Council on Measurement in Education/Korean-American Scientists and Engineers Association

EDITORIAL POSITIONS

Associate Editor, Frontiers in Psychology: The Quantitative Psychology and Measurement Section
Invited Reviewer, Psychometrika/ Journal of Multivariate Analysis/ Journal of Educational Measurement/Journal of Applied Statistics/Pharmacology, Biochemistry and Behavior/ Behaviormetrika

PROFESSIONAL CERTIFICATES & OTHER SKILLS

MATLAB, R, SAS, Mplus, Power BI, SQL, R Shiny, ACCESS, C\C++, Python, Software for IRT analyses, Software for Neuroimaging Data Analysis, Meta-analysis Software, SPSS, LISREL, AMOS

Grant Writing and Project Management Skills

STATISTICAL SOFTWARE DEVELOPMENT

GESCA (http://www.sem-gesca.com) – Free web-based software for generalized structured component analysis (Component-based structural equation modeling software)

Hwang, H., **Jung, K.**, & Kim, S. (2019). WEB GESCA (Version 1.5) [Software]. Available from http://sem-gesca.com/webgesca/

SERVICE TO THE COMMUNITY

Associate Editor, The Quantitative Psychology and Measurement section of Frontiers in Psychology	2020-Present
Member, Data and Safety Monitoring Board (DSMB), NIH-The National Institute on Aging	2019-Present
Chair/Member, REMS Dissertation Committee, College of Education, Texas Tech University (Desiree Walisky, Pavel Panko, Esteban Montenegro, Luke Waggenspack)	2017-Present
Member, External Dissertation Committee, Texas Tech University (Vibhuti Gupta, Department of Computer Science; Rhonda Harmond, Department of Curriculum and Instruction; Abu Siddik, Department of Nutritional Sciences)	2017-Present
Reviewer, The 2018 TTU Undergraduate Research Conference (URC)	2020, 2018
Review Panel, The NCME Annual Meeting, National Council on Measurement in Education	2019, 2018
Proctor, 2019 Test of Proficiency in Korean (TOPIK) – Lubbock	04/2019
Judge, 2019 South Plans Regional Science and Engineering Fair	02/2019
Graduate Dean Representative, Dissertation Review Committee, College of Education, Texas Tech University (Sheri Warren, Curriculum and Instruction)	09/2018
Review Panel, Division D - Measurement and Research Methodology & Division I - Education in the Professions, The 2019 AERA Annual Meeting of the American Educational Research Association (AERA)	08/2018
Member, Ad Hoc Standards of Academe Committee, College of Education, Texas	2017-2018

Tech University

Member, External Dissertation Review Committee, College of Education, Texas   2017-2018

Tech University

President/President-Elect, Korean-American Scientists and Engineers   07/2014-06/2016

Association- South Texas Chapter

Chair/Member, National Mathematics and Science Competition Committee   2014-2016

Member, Korean-American Bio-Medical Scientists Symposium Committee/ Young   2013-2015

Professional Forum Committee

<u>**REFERENCES**</u>

Yoshio Takane, Emeritus Professor at McGill University and Adjunct Professor of Psychology at University of Victoria, Canada
E-mail: yoshio.takane@mcgill.ca   Tel: 250-721-7530
https://www.researchgate.net/profile/Yoshio_Takane

Heungsun Hwang, Professor, Department of Psychology, McGill University, Canada
E-mail: heungsun.hwang@mcgill.ca   Tel: 514-398-8021
https://www.researchgate.net/profile/Heungsun_Hwang

Todd S. Woodward, Professor, Department of Psychiatry, University of British Columbia, Canada
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https://www.researchgate.net/profile/Todd_Woodward2

Todd D. Little, Professor, Department of Educational Psychology and Leadership, Texas Tech University, USA
E-mail: todd.d.little@ttu.edu   Tel: 406-858-0363
https://www.depts.ttu.edu/education/our-people/Faculty/todd_little.php

Jaehoon Lee, Assistant Professor, Department of Educational Psychology and Leadership, Texas Tech University, USA
E-mail: jaehoonlee@ttu.edu Tel: 806-834-5907
https://www.depts.ttu.edu/education/our-people/Faculty/jaehoon_lee.php