Seang-Hwane (Sean) Joo

Associate Research Scientist
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Educational Testing Service
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2017 – 2018   **Statistical Consultant**
                          Drasgow Consulting Group
                     -    Evaluated personality assessment using multidimensional

PUBLICATIONS

Journal Articles

Joo, S. H., Lee, P., & Stark, S. (in press). Adaptive testing with the GGUM-RANK multidimensional forced choice model: Comparison of pair, triplet, and tetrad scoring. Behavior Research Methods.

Nye, C., **Joo, S. H.,** Stark, S., & Zhang, B. (in press). Advancing and evaluating IRT model data fit indices in o

Pliakos, K., **Joo, S. H.**, Park, J. Y., Cornillie, F., Vens, C., & Van den Noortgate, W. (2019).
Integrating machine learning into item response theory for addressing the cold start problem
in adaptive learning systems, Computers & Education, 137, 91-

Lee, P., **Joo, S. H.**, Stark, S., & Chernyshenko, O.S. (2017). Validity evidence for multidimensional forced choice measures across different scoring approaches. Paper presentation at the European Conference on Psychological Assessment, Lisbon, Portugal.

Hicks, T., Kim, E. S., **Joo, S. H.**, Choi, H., Ferron, J., & Kromrey, J (2017). Designing comparable effect sizes for single-case research: A Bayesian approach. Paper presentation at the Modern Modeling Method annual meeting, Storrs, CT.

Joo, S. H., Wang, Y., & Ferron, J. M. (2017). Bias and precision of within- and between-series effect estimates in the meta-analysis of multiple baseline studies. Poster presentation at the American Educational Research Association annual meeting, San Antonio, TX.

Ferron, J. M. & **Joo, S. H.** (2017). Waiting for baselines to stabilize: Consequences of response guided experimentation on meta-analyses of single-case studies. Poster presentation at the American Educational Research Association annual meeting, San Antonio, TX.

Marn, T., Mahoney, E., & **Joo, S. H.** (2017). Comparing black, white, and biracial students' math achievement using propensity score matching: Data from HSLS. Roundtable presentation at the American Educational Research Association annual meeting, San Antonio, TX.

Nye, C., **Joo, S. H.**, & Stark, S. (2017). Advancing and evaluating IRT model data fit indices. Symposium presentation at the Society of Industrial and Organizational Psychology annual meeting, Orlando, FL.

Stark, S., **Joo, S. H.**, & Lee, P. (2017). Information functions for the GGUM-RANK multidimensional forced-choice model: Comparison of pair, triplet, and tetrad measures. Symposium presentation at the Society of Industrial and Organizational Psychology annual meeting, Orlando, FL

Joo, S. H., Wang, Y., & Ferron, J. M. (2016). Comparison of within- and between-series meta-analysis for multiple baseline studies. Paper presentation at the Florida Educational Research Association annual meeting, Lakeland, FL.

Joo, S. H., Wang, Y., Montgomery, J., de Gil. P. R., Kim, E. S., Kromrey, J. (2016). Evaluating multiple-imputation techniques for treating missing data in propensity score analysis. Paper presentation at the Modern Modeling Method annual meeting, Storrs, CT.

Joo, S. H., Lee, P & Stark, S. (2016). Information functions of multidimensional forced-choice IRT models, Paper presentation at the National Council on Measurement in Education annual meeting, Washington, DC.

Joo, S. H., & Ferron, J. M. (2016). Synthesizing single-case data with multilevel models: How best to handle complex level-1 error structures, Poster presentation at the American Educational Research Association annual meeting, Washington, DC.

Joo, S. H. (2018). Parameter estimation and information function for the general hyperbolic cosine ideal point IRT model. Invited presentation at the Division of Research and Development, Educational Testing Service, Princeton, NJ.

Joo, S. H. (2018). Robustness of the within- and between-series estimators to non-normal multiple baseline studies: A Monte Carlo study. Invited presentation at the Methodology of Educational Sciences Research Group (CMPO), KU Leuven, Belgium.

Joo, S. H. (2017). The overview of single-case research design studies and statistical analysis methods. Invited presentation at the Department of Psychology, Florida International University, Miami, FL.

Thompson, C., Ferron, J. M., & **Joo, S. H.** (2016). Meta-analysis of group and single-case studies. Workshop presentation at the Florida Educational Research Association annual meeting, Lakeland, FL.

RESEARCH GRANT

2019 – 2020   Measurement Frontier Research Funding
Division of Research and Development
Educational Testing Service
Research Title: Psychometric Advances in Large-Scale Assessment

PROFESSIONAL SERVICES

Journal Reviewer: Applied Psychological Measurement
Assessment
Behavior Research Methods
Journal of Educational Measurement
Journal of Psychoeducational Assessment
Statistical Analysis and Data Mining

TECHNICAL SKILLS

Statistical Packages: R, SAS, Mplus, SPSS, HLM, Minitab
Programming: Ox, C++, Matlab, Maple

ACADEMIC HONORS/AWARDS

2019   SPOT Award
Division of Research and Development
Educational Testing Service

2016 – 2017	Student Government Scholarship
	Office of Graduate Studies
	University of South Florida
2010	Tharp Scholarship
	Department of Mathematics and Statistics
	University of South Florida
2008 – 2009	International Advocate Scholarship
	International Student Association
	Pittsburg State University
2008 – 2009	Department Scholarship
	Department of Mathematics
	Pittsburg State University

PROFESSIONAL ORGANIZATIONS

American Educational Research Association (AERA)
National Council on Measurement in Education (NCME)
Florida Educational Research Association (FERA)
International Meeting of Psychometric Society (IMPS)
Society of Industrial and Organizational Psychology (SIOP)