

**Seang-Hwane (Sean) Joo**

Associate Research Scientist  
Division of Research and Development  
Educational Testing Service  
E221 McBride Hall, 660 Rosedale Road,  
Princeton, NJ 08541  
Email: sjoosaran@

2017 – 2018

**Statistical Consultant**

Dragow Consulting Group

- Evaluate personality assessment using multidimensional

## **PUBLICATIONS**

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### **Journal Articles**

**Joo, S. H.,** Lee, P., & Stark, S. (in press). Adaptive testing with the GGUMRANK 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., ~~Wu, 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-



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- 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). Design 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 G-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 error structures. Poster presentation at the American Educational Research Association annual meeting, Washington, DC.







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

**PROFESSIONAL ORGANIZATIONS**

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