

## Testing measurement invariance in empirical educational research



**Dr. Meihua Qian**  
Associate Professor  
Educational Psychology

**Education and Human Development**

Dr. Meihua Qian is Associate Professor of Educational Psychology and Co-Director of the CLEaR Lab. She received her Ph.D. in Educational Psychology and Inquiry Methodology (dual majors) from Indiana University at Bloomington in 2014. She teaches courses on educational psychology, measurement, and statistics. Her current research focuses on creativity assessment, game-based learning, test bias, item response theory models, and machine learning. Her work has been published in several highly ranked journals, including *Computers in Human Behavior*, *Creativity Research Journal*, *Elementary School Journal*, *Psychology of Aesthetics, Creativity and the Arts*, *Journal of Creative Behavior*, *Journal of Psychoeducational Assessment*, and *Psychology & Marketing*.

Dr. Qian will share research proposed to IES. She aims to investigate the effectiveness of multiple-group confirmatory factor analysis (MGCFA) and multilevel explanatory item response theory (MEIRT) models in testing measurement invariance, which cannot be achieved when differential item functioning (DIF) occurs. Dr. Qian received an ADR award to help prepare for her IES grant submission.

