

XUEYING GAO

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EDUCATION

University of Central Florida Orlando, FL *Ph.D. in Methodology, Measurement, and Analysis (2022)*
College of Community Innovation and Education,
Department of Learning Science and Education Research

Research interest: Statistical procedures, quantitative methods in Human research

Dissertation: A simulation study to compare the sensitivity of fit indices of testing measurement invariance

University of Connecticut Storrs, CT *Master of Arts in Research Method Measurement and Evaluation (2019)*
Neag School of Education

Concentration: Quantitative Methods in Educational Research

Thesis research: [The comparison of six DIF detection methods](#)

Shandong University Jinan, China *Bachelor of Science in Electrical Engineering (2017)*
College of Electrical Engineering

Concentration: New Energy Development

Thesis research: Optimize the Efficiency of a Social Cell Model using MATLAB Simulation

TECHNICAL SKILLS

- Data analysis: SPSS, SAS, R, Mplus, MS Excel
 - Data visualization: Tableau, MS Excel, R
 - Database management: SQL (SQLite), MS Excel, MS Access
 - Data simulation: SAS, Mplus
 - Social network analysis: R
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LANGUAGE FLUENCY

- English: Fluent (TOEFL: 105)
 - Mandarin: Native
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RESEARCH EXPERIENCE

The University of Iowa Iowa City, IA *Research Associate May, 2022-present*
College of Liberal Arts and Sciences, School of Social Work,
National Resource Center for Family Centered Practice/Consortium on Substance Abuse Research and Evaluation.
Conduct community-based research and evaluation on variety of applied studies of intervention outcomes serving as
lead Research Associate for methods, measures, and statistical analysis.

University of Central Florida Orlando, FL *Research Assistant Aug, 2019-May, 2022*
Project 1: Reading Assessment Validity, Program Fidelity and Teacher Effectiveness. Funded by Imagination Station DBA (2019-2021).

- Analyze the relationship between K-12 students' reading efficiency and learning engagement, time, beliefs, motivation, and teacher activities using EFA, CFA, and SEM
- In-class observations of K-12 students using educational technologies, teacher interviews
- Generate annual report including the efficiency, feedback, and implications for Istation reading program

Project 2: The study of learning motivation in K-12 Reading and STEM education.

- Create an instrument that measures college students' learning motivation
- Contact school principals and collect quantitative data using surveys
- Validate the survey using EFA and CFA (SPSS, SAS, and R)
- Provide implications for educators and researchers to promote students' learning motivation in class

Project 3: 100 Women Strong - The Efficacy of a Student-Centered Classroom Environment on Students' Academic Achievement, School-Based Behavior, and Social-Emotional Functionality

- Class observations focusing on the physical design of the classroom to promote student-centered learning
- Synchronized literature review about social-emotional learning
- Data cleaning and management using SQL

- Quantitative data analysis including EFA, SEM, and Logistic Regression analysis using SPSS and R
- Provide implications of classroom physical designs to K-12 educators to promote students' learning

Project 4: Predictability of Children of Military Families' Level of Resilience, Help-seeking Attitudes, and Caregiver Relationships to Their Suicidality Scores

- Data cleaning and structural equation modeling using R
- Provide conclusions and theoretical/practical implications to the field of counseling education and military organizations

Project 5: Academic incivility/bullying issues in Higher Education

- Design an instrument that measures graduate assistants' experience and perceptions about bullying
- Conduct factor analysis to explore the relationship between bullying experience and perception
- Provide implications to educators and policymakers of higher education institutions to protect graduate assistants
- Provide theoretical implications to researchers in the area of school incivility/harassment/bullying

Project 6: Projecting the impact of remote instruction during COVID-19 pandemic on the academic outcome: a meta-analysis.

- Synthesize literature reviews of research articles that measured K-12 and higher ed students' learning motivation, engagement, and academic achievement before and after/during the COVID-19 school closure
- Generate and analyze the effect size of each study
- Visualize and explain the impact of students' learning outcomes under the COVID-19 pandemic
- Provide implications to educators and policymakers of K-12 and higher education institutions to reduce the impact of school closure on students' learning motivation, engagement, and academic achievement

Project 7: A meta-analysis on pre-service teachers' STEM professional development

- Synthesize literature reviews of research articles that measured the efficacy of STEM professional development projects on pre-service teachers
- Conclude and explain the general effect of STEM professional development projects
- Provide implications and suggestions to schools and institutions about making decisions on pre-service teachers' professional training

TEACHING EXPERIENCE

University of Central Florida Orlando, FL

CASTLE Lab

Teaching Assistant Fall 2021 - present

- Provide instructional services to graduate students and faculty, which include research design development, demonstration of software packages, guidance for processing quantitative and qualitative data, and some statistical troubleshooting.
- Provide suggestions and instructions to graduate students with their data analysis in thesis and dissertations

EDF6401: Introduction to Statistics (Graduate)

Guest Lecturer Fall 2021

- Use R or SPSS in the class to teach statistical skills
- Lectures on t-tests, ANOVA, and regression analysis

Capstone Project

Teaching Assistant Fall 2021 – May 2022

Provides Ph.D. students the opportunity to partner with local counties and cities to develop applied planning projects based on the knowledge and skills developed in the program, held every semester.

INTERNSHIP

Operational Excellence and Assessment Support Orlando, FL

Graduate Assistant May, 2021 - August 2021

- Design and analyze enterprise-level UCF student surveys and assessments
- Support efforts to improve the quality of student learning outcomes
- Provide support to all academic programs and administrative units through integrated processes that include continuous quality improvement, analytical and survey studies, technology integration, and guidance in assessment
- Provide feedback to improve the effectiveness and efficiency of university operations
- Highlight the theoretical implications

JOURNAL PUBLICATIONS

Gao, X., Chen, Y., & Campbell, L. O. (Under Review, 2022). The Development of the Perceptions of Graduate Assistants and Faculty Professional Relationships Instrument. *Higher education research & development*.

Campbell, L.O., Howard, C., Lambie, G.W., & **Gao, X.** (2022). The efficacy of a computer-adaptive reading program on grade 5 students' reading achievement scores. *Education of Information Technology*.

<https://doi.org/10.1007/s10639-022-10953-5>

Howard, C. C., Campbell, L.O. Sutter, C.C., & **Gao, X.** (Under Review, 2020). Using Learning Analytics to Explore Teacher-Level Variations in Fidelity of Implementation of a Supplemental Reading Program. *Studies in Educational Evaluation*.

REPORTS AND WHITE PAPER

Campbell, L. O., Lambie, G.W., Howard, C., Sutter, C. C. & **Gao, X.** (2020). *A case study of teachers and the Istation reading program*. Research for Innovations in Education Group. The Morgridge International Reading Center. The University of Central Florida. [White paper].

Campbell, L.O., Howard, C., Lambie, G. W., ..., **Gao, X.** (2019). *Istation Fidelity of Use: For Grades K-8*. Research for Innovations in Education Research Group. The University of Central Florida

Campbell, L. O., Howard, C.C., Sutter, C. C., & Lambie, G. W., ..., **Gao, X.** (2020). *Fidelity of Implementation of Istation Reading*. Research for Innovations in Education Group. The University of Central Florida.

CONFERENCE PRESENTATIONS

Gao, X., Paul, M., Caines, L. K. & DeStefano, C. (2022). *Investigating the impact of instructional modality change on student learning motivation due to COVID-19* [Paper presentation]. American Evaluation Association [AEA] Annual Conference, New Orleans, LA, United States.

Gao, X. (2022). *What affects students' PISA test performance: A multiple linear regression analysis* [Paper presentation]. American Evaluation Association [AEA] Annual Conference, New Orleans, LA, United States.

Hilaire, B., Campbell, L. O., & **Gao, X.** (2022). *Promoting Social-Emotional Learning in Physical and Virtual Spaces* [Paper presentation]. Society for Information Technology and Teacher Education [SITE] 33rd International Annual Conference, San Diego, CA, United States.

DeStefano, C., **Gao, X.**, Paul, M., & Caines, L. K. (2022). *Projecting the impact of remote instruction during COVID-19 pandemic on academic outcome: a meta-analysis* [Paper presentation]. Eastern Educational Research Association [EERA] 45th Annual Conference, Clearwater, FL, United States.

Gao, X., Howard, C., & Campbell, L. O. (2021). *Computer-based supplemental reading instruction: Profiles of teachers' use*. [Poster presentation]. American Educational Research Association [AERA] Annual Conference, online.

Campbell, L.O., Hilaire, B., **Gao, X.**, Jones, J., Laguardia, E. & Heller, S. (2021). *Beyond the Mask: Examining Affect and Effects*. Society for Information Technology & Teacher Education [SITE] 32nd International Conference, online.

Gao, X. (2021). *A comparison of six DIF detection methods*. [Poster presentation] American Educational Research Association [AERA] Annual Conference, online.