QIZHOU DUAN

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Departmental of Psychology, University of Notre Dame ⋄ Notre Dame, IN 46556

EDUCATION

University of Notre Dame *Expected 2025*
Ph.D. in Quantitative Psychology

University of Notre Dame *May 2023*
M.S. in Applied and Computational Mathematics and Statistics

The College of William & Mary *May 2020*
B.S. in Mathematics
B.S. in Psychology
Minor in Philosophy

RESEARCH INTERESTS

**Item Response Theory, Response Time Models, Differential Item Functioning,
Non-parametric Statistics, Survival Analysis, Meta-Analysis**

EXPERIENCE

Learning Analytics and Measurement in Behavioral Sciences Lab 2020 - Present
Graduate Researcher *Notre Dame, IN*

· Presented ongoing research projects to the lab.
· Updated information about lab members and added new pages to the lab website periodically.
· Mentored undergraduate researchers by providing feedback on their research projects, and helping them through various obstacles in the research process.
· Devised plans taking into consideration of budget, time, and number of personnel for the lab to attend national conferences.

Psychological Methods Spring 2023, Spring 2024
Peer Reviewer *American Psychological Association*

· Peer-reviewed an article related to Differential Item Functioning.
· Peer-reviewed an article related to Data Integrity.
· Participated in both initial reviews and revision reviews, by proofreading and providing feedback.

The College of William and Mary, Department of Psychology Spring 2019 - Spring 2020
Research Assistant; Undergraduate Researcher *Williamsburg, VA*

· Predicting Religiosity Project: Worked with Large Dataset, executed multiple regression analysis.
· Benefit Valuation and Gratitude Project: Data collection and cleaning, ran multilevel models in R.
· Lying and Memory Project: Data collection and cleaning, python programming, performed ANOVA.

State Key Laboratory of Cognitive Neuroscience and Learning Summer 2018
Research Assistant *Beijing, China*

· Translated literature in cognitive neuroscience from English to Chinese.

· Proof-read pre-publication manuscripts for doctoral students.

PUBLICATIONS

1. Duan, Q. & Cheng, Y., (under review) Detecting Differential Item Functioning Using Response Time. Educational and Psychological Measurement.

2. Ober, T., Duan, Q., Kane, E., Blacklock, C., & Cheng, Y., (ready to submit) Student Engagement during COVID-19: A Systematic Review and Meta-analysis. Educational Research Review.

3. Ai. L. A, Duan, Q., Rwil, & Carrett., (under review) Association of Posttraumatic Growth with Covid-19 and Posttraumatic Stress: A Meta-analytic Review. American Journal of Public Health.

4. Duan, Q., (2015) Listen to the Sound of Time: Poems and Prose Anthology of Qizhou Duan. CreateSpace Independent Publishing Platform.

WORKING PAPERS

1. Duan, Q., Le, Ann, & Cheng, Y., A Machine Learning Approach to Assess Differential Item Functioning in Response Time.

2. Duan, Q. & Cheng, Y., Non-parametric Response Time Estimation for Assessing Model Fit.

3. Duan, Q. & Cheng, Y., Truncated lognormal distribution and its application to number sense data.

4. Hong, M., Ju, D., Duan, Q. & Cheng, Y., Reliability in Response Time.

5. Duan, Q., Xu, C., & Kirkpatrick, L., Benefit Valuation and Gratitude.

PRESENTATIONS

1. Duan, Q., Chen, L., Ye, I., & Kirkpatrick, L., (2024, April) Gratitude and Benefit Valuation. Poster Presentation at 2024 Midwestern Psychological Association Annual Meeting, Chicago, IL.

2. Duan, Q., Le, A., & Cheng, Y., (2023, December) A Machine Learning Approach to Assess Differential Item Functioning in Educational Testing. Research Lightning Talk at 2023 Trustworthy AI Lab for Education Summit, Notre Dame, IN.

3. Duan, Q., Cheng, Y. (2023, November) Nonparametric Response Time Estimation for Evaluating Model Fit. Paper Presentation at 2023 Ideas In Testing Research Seminar, Chicago, IL.

4. Kane, E., Blacklock, C., Duan, Q., Ober, T., & Cheng, Y., (2023, May) Student Engagement During COVID-19: A Systematic Review and Meta-Analysis. Poster Presentation at 2023 Association for Psychological Science Annual Convention, Washington DC.

5. Duan, Q., Cheng, Y. (2023, April) Detecting DIF in Response Time Using Bootstrap Percentile Method. Paper Presentation at 2023 Annual National Council on Measurement and Education, Chicago, IL.

6. Duan, Q., Cheng, Y. (2022, April) Detecting Differential Item Functioning Using Response Time. Paper Presented at Response Time Symposium in 2022 Annual National Council on Measurement and Education, San Diego, CA.

7. Duan, Q., Cheng, Y. (2021, August) Detecting Differential Item Functioning Using Response Time. Notre Dame Psychology First Year Project Poster Session, Notre Dame, IN.

8. Duan, Q., Yang, T. (2019, November) Great Discoveries in Sciences. Poster presented at William and Mary COLL-300 Undergraduate Poster Session, Williamsburg, VA.

TEACHING

- University of Notre Dame:

  - Spring 2022, Teaching Assistant.

    * <u>Statistics for Behavioral Sciences</u> (PSY 30100)

    * Students rating (4.7/5.0)

  - Fall 2023, Teaching Assistant.

    * <u>Methods for Behavioral Sciences</u> (PSY 30160)

    * Students rating (4.9/5.0)

LEADERSHIP AND SERVICE

Graduate Advisory Committee Representative, Department of Psychology
Faculty Meeting Student Representative, Department of Psychology
Statistical Consultant, Department of Psychology

HONORS AND AWARDS

Notre Dame Program for Interdisciplinary Educational Research Burns Fellow (2020-Present)
Notre Dame Summer Tuition Scholarship (Summer 2021, Summer 2022, Summer 2023)
Modern Meta Analysis Research Institute Funded Student (Summer 2022)
The College of William and Mary Institutional Honor: *magna cumme laude* **(Spring 2020)**
The College of William and Mary Dean's List (2016, 2018, 2019)

TECHNICAL STRENGTHS

Programming Languages	R, Python, SQL, SPSS
Markup Languages	LaTeX, Rmarkdown, HTML
System Administration	Debian GNU/Linux
Large Datasets	PISA, GSS
Languages	English (Fluent), Chinese (Native)

PROFESSIONAL MEMBERSHIPS

National Council on Measurement in Education
American Educational Research Association
Midwestern Psychological Association
Psi Chi International Honors Society in Psychology
Modern Meta Analysis Research Institute
The Erdős Institute