

# DANIELLA REBOUÇAS

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## EDUCATION

<b>Ph.D., Quantitative Psychology</b> University of Notre Dame, Notre Dame, IN Advisor: Dr. Ying “Alison” Cheng	May 2021 (expected)
<b>M.S., Applied and Computational Mathematics and Statistics</b> University of Notre Dame, Notre Dame, IN	2015
<b>B.S./B.Ed., Mathematics</b> Universidade de São Paulo, São Carlos, SP, Brazil	2013

## PROFESSIONAL EXPERIENCE

<b>Statistical Consultant</b> Department of Psychology, University of Notre Dame, Notre Dame, IN. Supervisor: Dr. Ke-Hai Yuan. <i>Worked as consultant to faculty and graduate students projects on statistical modeling and computational techniques.</i>	2020 SPRING/SUMMER
<b>Intern, Research &amp; Development</b> Educational Testing Service (ETS), Princeton, NJ. Mentors: Dr. Qiwei He and Dr. Xiang Liu. Project: <i>Exploring Group Differences with Process Data from the PIAAC.</i>	2019 SUMMER

## PUBLICATIONS

- Hong, M., **Rebouças, D. A.**, Cheng, Y. (in press). Robust estimation of working speed using the log-normal model for response time data. *Journal of Educational Measurement*.
- Rebouças, D. A.**, Cheng, Y. (2019). Relationship between item characteristics and detection of differential item functioning under the MIMIC Model. *Psychological Test and Assessment Modeling*, 61(2), 227-257.
- Cheng, Y., Brodersen, A., **Rebouças, D. A.**, (2016). Item type, dimensionality and missing data. Whitepaper submitted to the *JRC, National Council of State Boards of Nursing* (NCSBN).

## MANUSCRIPTS UNDER REVIEW

- Rebouças, D. A.**, Cheng, Y. (under review). Bayesian estimation of the log-normal model for response time data.
- Ober, M. T., Hong, M., **Rebouças, D., A.**, Carter, M. F., Liu, C., Cheng, Y. (under review) Linking self-report and process data to performance across different assessment types.
- Ober, M. T., Brodersen, A. S., **Rebouças, D., A.**, Hong, M. R., Carter, M. F., Liu, C., Cheng, Y. (under review) Math anxiety, engagement, and performance in high and low-stakes tests in AP statistics.
- Ober, M. T., Coggins, M. R., **Rebouças, D., A.**, Suzuki, H., Y. (under review) Effect of teacher support on students' math attitudes: measurement and moderation of students' background characteristics.
- Hong, M., Carter, M., Ober, T., **Rebouças, D., A.**, Liu, C., Cheng, Y. (under review). Machine learning approaches to predict student attrition in AP statistics.

## PRESENTATIONS

- Rebouças, D. A.**, Cheng, Y. (Aug. 2020). Modelo exploratório para tempos de resposta: aplicações

para avaliações psicológicas online [*Exploratory models for response time modeling: an application to psychological assessment*]. Invited talk. Seminars Series (PPGE-UFPE). Department of Statistics. Universidade Federal de Pernambuco. Virtual.

**Rebouças, D. A.**, Cheng, Y. (Jul. 2020). *Careless responses using response time data*. Oral presentation. International Meeting of the Psychometric Society (IMPS). Virtual.

**Rebouças, D. A.**, Cheng, Y. (Apr. 2020). *Change-point analysis with joint modeling of response times and item response data*. Symposium presentation. National Council on Measurement in Education Annual Meeting (NCME). San Francisco, CA. (cancelled)

**Rebouças, D. A.**, He, Q., Liu, X. (Apr. 2020). *Exploring group differences in large-scale assessments using latent class analysis on process data*. Symposium presentation. National Council on Measurement in Education Annual Meeting (NCME). San Francisco, CA. (cancelled)

**Rebouças, D. A.**, Cheng, Y. (Jul. 2019). *Bivariate change-point analysis of speeded respondents using response time and response accuracy*. Oral presentation. International Meeting of the Psychometric Society (IMPS). New York, NY.

**Rebouças, D. A.**, Cheng, Y. (Jul. 2018). *DIF effect size measures: review and implications for power of DIF detection*. Oral presentation. International Meeting of the Psychometric Society (IMPS). New York, NY.

**Rebouças, D. A.**, Cheng, Y. (Oct. 2017). *Relationship between item characteristics and DIF detection under the MIMIC model*. Oral presentation. Ideas in Testing Research Seminar. Department of Psychology at the Illinois Institute of Technology (IIT) and Pearson VUE. Chicago, IL.

**Rebouças, D. A.**, Cheng, Y. (Apr. 2016). *Handling missing data on DIF detection under the MIMIC model*. Oral presentation. National Council on Measurement in Education Annual Meeting (NCME). Washington, DC.

## MENTORSHIP EXPERIENCE

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Coggins, M. R., Ober, T. M., **Rebouças, D. A.**, Suzuki, H., & Cheng, Y. (2020, May). *Teacher support and math attitudes: Split sample confirmatory factor analyses and structural equation model*. Poster presentation. Annual Meeting of the Association for Psychological Science. Chicago, IL. (cancelled)

Johnston, A., **Rebouças, D. A.**, Cheng, Y. (2018, Jul.). *Are all Personality Inventories Equal? Assessing the Applicability of the BFI-2 to Adolescent Boys and Girls*. Poster presentation. Computational Social Science Research Experience for Undergraduates (REU) Site at the Center for Research Computing. Funded by the National Science Foundation. Notre Dame, IN.

Qu, H., **Rebouças, D. A.**, Cheng, Y. (2018, Apr). *To Take or Not To Take: Factors of Participation in the AP Statistics Exam*. Senior thesis defense. Glynn Family Honors Program. Notre Dame, IN.

## AWARDS

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JUL. 2019    **Graduate Professional Development Award - \$1,000**  
Notebaert Professional Development Fund, University of Notre Dame.  
Support for conference travel.

AUG. 2019    **Professional Development Funds - \$400**  
Department of Psychology, College of Arts & Letters, University of Notre Dame.

AUG. 2016    **Professional Development Funds - \$1,500**  
Office of the Dean, College of Arts & Letters, University of Notre Dame.

AUG. 2014    **Fellow of the Science Without Borders Scholarship Program**  
Agency for Support and Evaluation of Graduate Education of Brazil (CAPES).  
Masters program tuition and stipend.  $\approx$  \$60,000

JAN. 2014    **Highest GPA of the Graduating Class**  
Department of Teaching in Mathematics, University of São Paulo.

## TEACHING EXPERIENCE

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<b>Teaching Assistant / Lab Instructor: Experimental Psychology I</b> Undergraduate-level class lead by Dr. Bradley Gibson. University of Notre Dame.	2019 FALL
<b>Teaching Assistant / Lab Instructor: Experimental Psychology I</b> Undergraduate-level class lead by Dr. Ross Jacobucci. University of Notre Dame.	2018 FALL
<b>Visiting Lecturer: Item Response Theory with R</b> Graduate-level class lead by Dr. Ying Cheng. University of Notre Dame.	2017 FALL
<b>Item Response Theory with R - Training Sessions</b> For undergraduate students of the NSF Psychometric Summer Fellowship program. Supervisor: Dr. Ying Cheng. University of Notre Dame.	2015 SUMMER
<b>Volunteer Educator at <i>Projeto Ancora</i></b> For elementary and middle school students from inner-city São Paulo, SP, Brazil.	2014 SPRING
<b>Undergraduate Teaching Assistant: Stochastic Processes</b> Supervisor: Dr. Pablo M. Rodriguez. University of São Paulo.	2013 FALL
<b>Undergraduate Teaching Assistant: Calculus I</b> Supervisor: Dr. Fernando Manfio. University of São Paulo.	2013 SPRING

## SERVICE

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2020–2021	Graduate Peer Mentor of the Diversity, Equity and Inclusion (DEI) Committee. Department of Psychology, University of Notre Dame.
2019–2021	Co-instructor of the Quantitative Study Group weekly seminars. Department of Psychology, University of Notre Dame.
2019–2020	Quantitative Area Representative for the Graduate Advisory Committee (GAC). Department of Psychology, University of Notre Dame.
2019–2020	Treasurer for the Expanding Your Horizons Conference Committee.
2019–2020	Graduate Student Liaison for the AERA Division D International Committee.
SPRING 2019	Mentor for the Expanding Your Horizons Conference.
FALL 2018	Facilitator of the Psychology Graduate Students Writing Accountability Group Department of Psychology, University of Notre Dame.
2017–2018	Quantitative Area Representative of the Diversity, Equity and Inclusion (DEI) Committee Department of Psychology, University of Notre Dame. Brazil.

## MEMBERSHIPS AND ACTIVITIES

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2018–2020	Psychometric Society National Council on Measurement in Education (NCME) American Educational Research Association (AERA)
2018–2019	Volunteer at the South Bend Roller Girls, a nonprofit roller derby league and member of the Women's Flat Track Derby Association. South Bend, IN.
2016–2018	Soprano at <i>Chorale</i> , the official concert choir for the University of Notre Dame. Department of Music, University of Notre Dame.
2010–2012	Student member of the planning committee of the <i>XV Symposium of Mathematics for Undergraduates</i> . Department of Mathematics. University of São Paulo.
2009–2010	Secretary for the Young Adults Group for the First Presbyterian Church of São Carlos, SP,

## TECHNICAL SKILLS

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Statistical Modeling:	Item Response Theory, Linear Models, Mixture Models, Machine Learning, and Data Mining
Statistical Software:	R (advanced), Mplus (intermediate), SPSS (intermediate), SAS (beginner)
Other:	L <sup>A</sup> T <sub>E</sub> X(advanced), Microsoft Office Suite (intermediate), Emacs (intermediate), GitHub (intermediate), Python (beginner)

## RELEVANT COURSEWORK

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<i>Psychological Measurement and Test Development</i>	<i>Item Response Theory</i>
<i>Structural Equation Modeling</i>	<i>Longitudinal Data Analysis</i>
<i>Multivariate Statistics</i>	<i>Data Mining</i>