Curriculum Vitae Connie Barroso Garcia, Ph.D.

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Professional Experiences and Education

Professional Appointments

August 2020 – present Visiting Assistant Professor

Accountability, Climate, Equity, and Scholarship (ACES) Fellow

Texas A&M ADVANCE Scholar, 2021-2022 Department of Educational Psychology

Texas A&M University

Education

*funded by AERA Minority Dissertation Fellowship

PhD Developmental Psychology, Florida State University

2016-2020

Advisor: Dr. Colleen Ganley

*Dissertation Title: Growth, Fixed, and Maybe More? Investigating the Conceptualization of Intelligence Mindsets in Math

MS Learning and Cognition, Florida State University

2013-2016

Advisor: Dr. Jeannine Turner

Thesis Title: Intelligence Mindset Across a Semester: Examining Engineering Students' Implicit Theories of Intelligence as Related Across Time and as a Function of Exam Grades

BS Psychology, Florida State University

2008-2013

Family and Child Sciences, Biology, and Communications Minors

Research Awards

AERA-Spencer Minority Meta-analysis Fellowship (\$700)
American Educational Research Association and Spencer Foundation

2020-2021

AERA Minority Dissertation Fellowship (\$20,000)
American Educational Research Association

2019-2020

Peer-Reviewed Publications

- 5. **Barroso, C.,** Ganley, C. M., McGraw, A. L., Geer, E. A., Hart, S. A., Daucourt, M. C. (2021; available online in 2020). A meta-analysis of the relation between math anxiety and math achievement. *Psychological Bulletin*, *147*(2), 134-168.
- 4. Ganley, C. M., Conlon, R., McGraw, A., **Barroso, C.**, & Geer, E. (2021). The effectiveness of brief anxiety interventions on math test performance. *Journal of Numerical Cognition*, 7(1), 4-19.
- 3. Conlon, R., Hicks, A., **Barroso, C.,** & Ganley, C. M. (2021). The effect of the timing of math anxiety measurement on math outcomes. *Learning and Individual Differences, 86.*

- 2. **Barroso, C.,** Ganley, C. M., Hart, S., Rogers, N., & Clendinning, J. P. (2019). The relative importance of math- and music-related cognitive and affective factors in predicting undergraduate music majors' music theory achievement. *Applied Cognitive Psychology*, 33, 771-783.
- Little, C.W., Barroso, C., & Hart, S.A. (2017). The Precision Education Initiative: Personalized Education. In S. Bouregy, E. Grigorenko, S. Latham & M. Tan (Eds.). Current Perspectives in Psychology: Education, Ethics, and Genetics. Cambridge. UK: Cambridge University Press.

Under Review

- *funded by AERA Minority Dissertation Fellowship
- *Barroso, C., Ganley, C.M., Schoen, R., & Schatschneider, C. (*under review*). Investigating the Conceptualization of Children's Intelligence Mindset: A Closer Look in the Domain of Mathematics.
- Conlon, R., **Barroso, C.**, & Ganley, C.M. (*revised and resubmitted*). Exploring gender differences in early elementary school children's STEM and non-STEM career aspirations.
- Daucourt, M., Shero, J.A., Little, C.W., Petscher, Y., Haughbrook, R., **Barroso, C.**, Schatschneider, C., & Hart, S.A. (*under review*). The role of schools and districts in the black-white achievement gap in reading: a linear quantile mixed modeling approach.

In Preparation

undergraduate students; *funded by AERA Minority Dissertation Fellowship

- *Barroso, C., Schoen, R., Schatschneider, C., & Ganley, C.M. (in prep). Math intelligence mindset as a predictor of math achievement.
- **Barroso, C.**, Conlon, R., <u>Cunnien</u>, B., & Ganley, C.M. (in prep). Predictors of elementary school children's STEM career aspirations.
- Shorter, C., Barroso, C., & Ganley, C. M. (in prep). Effects of ability and effort feedback on emotions toward math and math performance.
- Geer, E. A., **Barroso, C.**, Conlon, R., Dasher, J., & Ganley, C.M. (in prep). A meta-analysis of the relation between spatial anxiety and spatial skills.

National and International Conference Presentations

- *funded by AERA Minority Dissertation Fellowship
- **19. Barroso, C.**, Conlon, R., & Ganley, C.M. (2022, April). Using quantile regression to examine the relation between math achievement and math self-concept in childhood. Accepted for symposium presentation at the 2022 AERA Meeting, San Diego, CA.
- 18. *Barroso, C. & Schoen, R., Schatschneider, C., & Ganley, C.M. (2021, April). Investigating a novel conceptualization of intelligence mindset in Math. Presented in symposium presentation at the 2021 AERA Virtual Meeting.
- 17. Geer, E. A., **Barroso, C.**, Conlon, R., Dasher, J., & Ganley, C.M. (2021, April). A meta-analysis of the relation between spatial anxiety and spatial skills. Presented in virtual poster presentation at the 2021 Society for Research in Child Development (SRCD) Virtual Meeting.

- 16. **Barroso, C**. & Ganley, C. M. (2020, June). Investigating the Development of math interest during middle childhood. Accepted for poster session at the 2020 Math Cognition and Learning Society (MCLS) Conference, Dublin, Ireland. [cancelled due to COVID-19 pandemic].
- 15. *Barroso, C. (2020, April). Growth, fixed, and maybe more? Investigating the conceptualization of intelligence mindsets in math. Invited to present at poster session at the 2020 AERA Meeting, San Francisco, CA. [cancelled due to COVID-19 pandemic].
- 14. Ganley, C. M., **Barroso, C.,** Geer, E. A., Conlon, R. A., Schoen, R., & Schatschneider, C. (2020, April). Teacher math knowledge, anxiety, and mindsets as predictors of instructional practices and student math learning. Accepted for presentation in symposium session at the 2020 AERA Meeting, San Francisco, CA. [cancelled due to COVID-19 pandemic].
- 13. Conlon, R.A., **Barroso, C.** & Ganley, C. M. (2020, April). Exploring gender differences in early elementary school children's STEM and non-STEM career aspirations. Accepted for presentation in poster session at the 2020 AERA Meeting, San Francisco, CA. [cancelled due to COVID-19 pandemic].
- 12. **Barroso, C.,** Ganley, C. M., McGraw, A.L., Geer, E.A., Hart, S.A., & Daucourt, M. (2019, March). A metaanalysis investigating the relation between math anxiety and math achievement. Presented in poster session at the 2019 SRCD Conference, Baltimore, MD.
- 11. Ganley, C. M., **Barroso, C.,** Geer, E. A., Conlon, R., McGraw, A. L., Schoen, R., & Schatschneider, C. (2019, March). Mathematics anxiety in kindergarten students concurrent and longitudinal relations with mathematics performance. Presented in symposium at the 2019 SRCD Conference, Baltimore, MD.
- 10. Geer, E. A., Ganley, C. M., **Barroso, C.,** Schoen, R., & Schatschneider, C. (2019, March). The relation between mathematics and spatial reasoning: examining anxiety and performance in young children. Presented in poster session at the 2019 SRCD Conference, Baltimore, MD.
- 9. **Barroso, C.,** Ganley, C. M., & Cunnien, B. (2018, April). The role of gender, spatial ability, and math-related factors in children's STEM career aspirations. Presented in paper symposium at the 2018 AERA Meeting, New York, NY.
- 8. Ganley, C. M., McGraw, A. L., **Barroso, C.**, & Geer, E. A. (2018, April). Examining potential bidirectional relations between math anxiety and performance in elementary school. Presented in paper symposium at the 2018 MCLS, Oxford, UK.
- 7. **Barroso, C.** & Ganley, C. M. (2017, May). Examining the factor structure of math and science mindset scales with engineering students. Presented in poster session at the 2017 Association for Psychological Science (APS) Conference, Boston, MA.
- 6. **Barroso, C.,** Ganley, C. M., & Hart, S. A., Clendinning, J. P., Rogers, N. (2017, May). Predictors of music theory performance: identifying important cognitive and affective factors. Presented in poster session at the 2017 APS Conference, Boston, MA.
- 5. **Barroso, C.,** Ganley, C. M., & <u>Cunnien</u>, B. (2017, April). Stability, gender differences, and predictors of elementary school children's stem and non-stem career aspirations. Presented in poster session at the 2017 SRCD Conference, Austin, TX.
- 4. Ganley, C. M., McGraw, A. L, **Barroso, C.**, & Geer, E. A. (2017, April). Testing for bidirectional relations between math anxiety and math performance in elementary school. Presented in poster session at the 2017 SRCD Conference, Austin, TX.

- 3. Coventry, W., **Barroso, C.,** & Hart, S. A. (2016, June). Getting around the limited-availability of nuclear-twin-family data: a meta-analysis of the genetic architecture of educational attainment with the nuclear-twin-family design. Presented in poster session at the 2016 Behavioral Genetics Association (BGA) Conference, Sydney, Australia.
- 2. **Barroso, C.,** Hart, S. A., Ganley, C. M., Clendinning, J. P., & Rogers, N. (2016, May). Cognitive and affective predictors of music theory performance. Presented in poster session at the 2016 APS Conference, Chicago, IL.
- 1. **Barroso, C.,** Peruche, B., & Turner, J. (2015, May). Investigating the relationships between implicit theories of intelligence, emotions, and self-efficacy in college engineering students. Presented in poster session at the annual conference for the Society for Study of Motivation, New York, NY.

Local Conference and Colloquium Participation

undergraduate students; †served as mentor

- 13. **Barroso, C.** (2022, February). Investigating the Role of Interpretation Biases on Anxiety in a Math-Specific Context. Presented in Glasscock Center for Humanities Research ACES Colloquium Series, College Station, TX.
- 12. **Barroso, C.** (2022, February). Believing in the Ability to Change. Presented at the Voices of Impact Event, Bryan, TX.
- 11. <u>Casanova, A., De Armas, C.</u>, †**Barroso, C.**, & Ganley, C. M. (2020, April). Investigating the relationship between interpretation bias in math and math anxiety. Presented in virtual Undergraduate Research Opportunity Program poster session, Tallahassee, FL.
- 10. **Barroso, C.,** Ganley, C. M., McGraw, A.L., Geer, E.A., Hart, S.A., & Daucourt, M. (2019, April). A metaanalysis investigating the relation between math anxiety and math achievement. Presented in poster session at FSU Department of Psychology Graduate Research Day 2019, Tallahassee, FL
- 9. Conlon, R., Ganley, C. M., **Barroso, C.**, Kowalsky, A. L., & Geer, E. A. (2019, April). Exploring gender differences in early elementary school children's STEM and non-STEM career aspirations. Presented in poster session at FSU Department of Psychology Graduate Research Day 2019, Tallahassee, FL.
- 8. Geer, E. A., Ganley, C. M., **Barroso, C.,** Schoen, R., & Schatschneider, C. (2019, April). The relation between mathematics and spatial reasoning: examining anxiety and performance in young children. Presented in poster session FSU Department of Psychology Graduate Research Day 2019, Tallahassee, FL.
- 7. **Barroso, C.** (2018, November). A meta-analysis of the relation between math anxiety and math achievement. Cognitive Psychology Brown Bag, Tallahassee, FL.
- 6. **Barroso, C.,** Ganley, C. M., & <u>Cunnien</u>, B. (2018, April). The role of gender, spatial ability, and math-related factors in children's stem career aspirations. Presented research talk at FSU Department of Psychology Graduate Research Day 2018, Tallahassee, FL.
- 5. **Barroso, C.** (2017, April). Math and science mindset scales: factor structure & relation to achievement in engineering students. Presented research talk at the Learning and Cognition Colloquium, Tallahassee, FL.
- 4. **Barroso, C.** & Ganley, C. M. (2017, April). Math and science mindset: examining the factor structure and relation to achievement in engineering students. Presented in poster session at the Graduate Research Day, Tallahassee, FL.

- 3. Peruche, B. M. & **Barroso, C.** (2016, March). Improving student retention and diversity in engineering. Presented research talk at the Electrical & Computer Engineering Graduate Seminar Engineering Colloquium, Tallahassee, FL.
- 2. Peruche, B. M. & **Barroso, C.** (2016, March). Improving minority student retention in engineering. Presented research talk at the Learning and Cognition Colloquium, Tallahassee, FL.
- Barroso, C., Peruche, B., & Turner, J. (2015, April). Investigating the relationships between implicit theories
 of intelligence, emotions, and self-efficacy in college engineering students. Presented in poster session
 at the Council on Research in Education (CORE) Conference, Tallahassee, FL.

Research Grants/Contract Proposals

Under review - Applied for 2022 cycle

Mentored Researcher for National Institute of Health Pediatric Research Loan Repayment Program Mentored by Dr. Steven Woltering

Towards a Better Understanding of the Cognitive Mechanisms of Math Anxiety

Expected Funding Date Range: August 2022-July 2024

Total amount of potential funding: \$28,313.12

Research Experience

Graduate Research Assistant, Florida State University

August 2017 – July 2020

Research on Experiences, Attitudes, and Learning in Mathematics (REALM) Project, funded by the Institute of Education Sciences

Principal Investigator: Dr. Colleen Ganley

Graduate Research Assistant, Florida State University

January 2018 – April 2018

National Project on Achievement in Twins (NatPAT), funded by the National Institutes of Health Principal Investigator: Dr. Sara Hart

Graduate Research Assistant, Florida State University

June 2013 – July 2016

Individual Differences in Response to Intervention (Project KIDS), funded by the National Institutes of Health Principal Investigator: Dr. Sara Hart

Researcher, Florida Center for Reading Research

January 2013 – June 2013

Reading for Understanding - Comparative Efficacy Grant, funded by the Institute of Education Sciences Project Manager: Dr. Jennifer Dombek

Undergraduate Directed Individual Study, Florida Center

January 2012 – April 2012

for Reading Research Professor: Dr. Beth Phillips

Undergraduate Directed Individual Study, Visual Information Processing Lab

January 2011 – April 2011

Professor: Dr. Ralph Radach

Teaching Experiences

Educational Psychology

Fall 2020, Fall 2021

Course Instructor (Online), Department of Educational Psychology, Texas A&M University

Child Psychology Fall 2018

Course Instructor, Department of Psychology, Florida State University

Sensation and Perception Fall 2017, Spring 2018

Lab Instructor, Department of Psychology, Florida State University

Introduction to Educational Psychology Fall 2014, Spring 2015, Summer 2015

Teaching Assistant, Educational Psychology and Learning Systems, Florida State University

Mentoring

Aggie Research Scholars Program

Spring 2021 - Present

Texas A&M University

Undergraduate Student Mentees:

Lev Chadha, Eugenia Delgado, Wenxuan Dou, Tibian Elsheikh, Heath Kincaid, Kimberlin Kubo, Cameron Little, Kate Miller, Julia Moore, Aditi Ranganathan, Yahan Xu

Undergraduate Research Opportunity Program

Fall 2018 - Spring 2019

Florida State University

Undergraduate Student Mentees: Amy Casanova, Camila De Armas

Department Committees

Diversity and Inclusion Committee

Fall 2020 - Present

Member of ad hoc committee with mission to provide indicators and initiatives to increase diversity of graduate students in Texas A&M University's Learning Sciences Program

Journal Manuscript Reviews

Ad-hoc Journal Reviewer

Cognition and Instruction
Journal of Experimental Child Psychology
Learning and Individual Differences
Journal of Numerical Cognition
Developmental Science
Development and Psychopathology
Consciousness and Cognition
Personality Science
Journal of Cross-Cultural Psychology

Reviewer for Fellowships, Awards, and Grants

2021-2022 Avilés-Johnson Fellowship Program

University-wide program, Texas A&M University

2021 Heather Bradley Scholarship

College of Education and Human Development, Texas A&M University

Society and Organization Membership

American Education Research Association
Society for Research in Child Development
Fall 2016 - Present
Fall 2016 - Present

Diverse Psychology Organization of Graduate Student Member Fall 2018 – Summer 2020

Volunteer Experience

MathPals Mentor

Brain Fair Volunteer

April 2018

Brain Fair Volunteer April 2018

Physiological Psychology Lab Student Assistant
Helpline 2-1-1 Telephone Counselor

Fall 2012, Fall 2013
May 2010 – May 2011

Professional Development and Training

*funded by AERA Minority Dissertation Fellowship; **funded by AERA-Spencer Minority Meta-analysis fellowship

AERA Virtual Learning Series

**Advanced Meta-analysis April 2021

AERA Virtual Learning Series

*Factor Analysis for Survey Design and Validation September 2020

AERA Virtual Learning Series

**Introduction to Systematic Review and Meta-analysis June 2020

Statistical Horizons Workshop

Multilevel modeling: A Second Course with Dr. Kristopher Preacher October 2019

Schotz Methods Workshop Series

Bayesian Statistics Workshop with Dr. David Kaplan

September 2019

AERA Division E (Counseling & Human Development)

College of Education and Human Development at Texas A&M University

Graduate Student Pre-conference Seminar April 2018

Quantile Regression Workshop Training with Dr. Jessica Logan

June 2016

Introduction to Behavioral Genetics Bootcamp with Dr. Sara Hart Oct-Nov 2015

Funded Non-Research Awards

Undergraduate Student Research Initiative (\$2625) Fall 2021 - Spring 2022

Ermine M. Owenby, Jr. Fund, (\$500) Spring 2019

Florida State University

Jane M. West Fellowship (\$3,500) Department of Psychology, Florida State University **Spring 2016-Fall 2018**

Congress of Graduate Students Presentation Grant (**\$400**) Florida State University

Spring 2017, Spring 2018

Council on Research in Education Travel Award (\$250) College of Education, Florida State University

Spring 2015