Curriculum Vitae Connie Barroso Garcia, Ph.D.

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Professional Appointments

September 2022 – Present Assistant Professor

Developmental Sciences

Department of Educational Psychology School of Education & Human Development

Texas A&M University

August 2020 – September 2022 ACES Assistant Professor and Fellow

Accountability, Climate, Equity, and Scholarship (ACES)

Texas A&M ADVANCE Scholar, 2021-2022 Department of Educational Psychology School of Education & Human Development

Texas A&M University

Education

Ph.D. 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

M.S. 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

B.S. Psychology, Florida State University

2008-2013

Family and Child Sciences, Biology, and Communications Minors

Research Awards

AERA-Spencer Minority Meta-analysis Fellowship (\$700)

2020-2021

American Educational Research Association and Spencer Foundation

**indicates projects funded by this award

AERA Minority Dissertation Fellowship (\$20,000)

2019-2020

American Educational Research Association

*indicates projects funded by this award

Peer-Reviewed Publications

8. Geer, E. A., **Barroso, C.**, Conlon, R., Dasher, J., & Ganley, C.M. (2023). A meta-analysis of the relation between spatial anxiety and spatial skills. *Psychological Bulletin*.

- 7. Chan, E.S.M., **Barroso, C.**, Groves, N.B., Marsh, C.L., Black, K., Jaisle, E. & Kofler, M.J. (2023). A Preliminary 'Shortlist' of Individual, Family, and Social-Community Assets to Promote Resilience in Pediatric ADHD. *Research in Developmental Disabilities*.
- *Barroso, C., Ganley, C.M., Schoen, R., & Schatschneider, C. (2023). Investigating the Conceptualization of Children's Intelligence Mindset: A Closer Look in the Domain of Mathematics. Contemporary Educational Psychology.
- 5. Conlon, R., **Barroso, C.**, & Ganley, C.M. (2023). Young Children's Career Aspirations: Gender Differences, STEM Ambitions, and Expected Skill Use. *The Career Development Quarterly*.

- 4. **Barroso, C.,** Ganley, C. M., McGraw, A. L., Geer, E. A., Hart, S. A., & Daucourt, M. C. (2021). A metaanalysis of the relation between math anxiety and math achievement. *Psychological Bulletin*, *147*(2), 134.
- 3. 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.
- 2. 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.*

1. **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.

Book Chapters

1. Little, C.W., **Barroso, C.,** & Hart, S.A. (2017). The Precision Education Initiative: The Possibility of 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.

Media Coverage

Cited Barroso et al. (2021) and Barroso et al. (2023): Weir, K. (2023, October 1). How to solve for math anxiety? Studying the causes, consequences, and prevention methods needed. *Monitor on Psychology*, *54*(7). https://www.apa.org/monitor/2023/10/preventing-math-anxiety

National and International Conference Presentations

graduate students; *funded by AERA Minority Dissertation Fellowship

25. Yi, X., Barroso, C., & Matthews, P. (2024, June). Investigating the link between Chinese students' ratio processing system and symbolic fraction comparison. Presented in poster presentation at the 2024 MCLS Meeting, Washington, D.C.

- 24. **Barroso, C.**, Sangwan, R., & Chaudhary, A. (2024, June). Investigating the unique relation between children's math interpretation biases and math anxiety. Presented in symposium presentation at the 2024 MCLS Meeting, Washington, D.C.
- 23. Wang, Z., Chaudhary, A., Wang, M., & Barroso, C. (2024, June). Failure attributions and the development of math anxiety. Presented in symposium presentation at the 2024 MCLS Meeting, Washington, D.C.
- 22. **Barroso, C**. (2024, April). Investigating the effectiveness of a math interpretation bias intervention to reduce math anxiety. Presented in symposium presentation at the 2024 AERA Meeting, Philadelphia, PA.
- 21. Ganley, C., Sharif, Z.M., Burrell, N., Conlon, R., Geer, E., & **Barroso, C**. (2023, June). Measuring and Correlating Math Anxiety, Interest, and Confidence in Primary School Children. Presented in symposium presentation at the 2023 MCLS Meeting, Loughborough, UK.
- 20. Hart, S., Ganley, C., Barroso, C., Conlon, R., & Burrell, N. (2023, May). Identifying, understanding, and addressing elementary students' negative STEM emotions and beliefs. Presented in symposium presentation at the 2023 AERA Virtual Meeting.
- 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. Presented in symposium 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

15. Nguyen, K., Chu, J., & Barroso, C., (2024, March). Investigating intelligence mindset measurement as a moderator of the association between intelligence mindset and achievement. Presented in poster at the 2024 Texas A&M University Student Research Week, College Station, TX.

- 14. **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.
- 13. *Delgado, E., Kincaid, M.H.,* & **Barroso, C.**, (2022, March). Investigating the Role of Interpretation Biases on Anxiety in a Math-Specific Context. Presented in poster at the 2022 Texas A&M University Student Research Week, College Station, TX.
- 12. **Barroso, C.** (2022, February). Believing in the Ability to Change. Presented at the Voices of Impact Event, Bryan, TX.
- 11. Casanova, A., De Armas, C., †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.
- 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.
- 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.
- 1. **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.

Awarded Research Grants/Contract Proposals

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

September 2023-July 2025

Towards a Better Understanding of the Cognitive Mechanisms of Math Anxiety

Submitted but Not Awarded Research Grants

EDU Core Research Grant, National Science Foundation Catapult Research Grant, Texas A&M University

October 2023 October 2023

Teaching Experiences

EPSY 673 Learning Theories

Fall 2022, Fall 2023, Fall 2024

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

EPSY 602 Current Topics in Educational Psychology Theories and Application

Fall 2020, Fall 2021, Fall 2022, Fall 2023, Spring 2024, Fall 2024

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

DEP 3103 Child Psychology

Fall 2018

Course Instructor, Department of Psychology, Florida State University

EXP 3203L Sensation and Perception

Fall 2017, Spring 2018

Lab Instructor, Department of Psychology, Florida State University

EDF 4210 Educational Psychology

Fall 2014, Summer 2015

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

Faculty Mentoring

Department Mentor for ACES Assistant Professor (Dr. Ananya Tiwari; Fall 2023-Spring 2024)

Graduate Student Advising

Dissertation Committee Member

Samantha Aguilar (Educational Psychology; May 2023) Anjali Chaudhary (Educational Psychology; February 2023)

Ed.D. Committee Member

Seneca Hart (Teaching Learning and Culture; January 2024)

Undergraduate Student Advising

Student Research Week

Spring 2022

Advised poster development and presentation by Eugenia Delgado and Heath Kincaid Texas A&M University

Undergraduate Student Research Initiative (\$2625)

Fall 2021 - Spring 2022

Eugenia Delgado

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

Aggie Research Scholars Program

Spring 2021 - Present

Texas A&M University

Undergraduate Student Mentees: Lev Chadha, Sloka Chandrasekaran, Jae Chu, Eugenia Delgado, Wenxuan Dou, Tibian Elsheikh, Kaylee Garner, Hannah Jensen, Heath Kincaid, Kimberlin Kubo, Cameron Little, Genesis Lopez Castro, Kathleen Nguyen, Kate Miller, Julia Moore, Molly Patel, Anthony Pham, Arik Rahman, Aditi Ranganathan, Lillian Revland, Nickzad Rafieha, Miko Rutledge, Arushi Sadam, Joshua Schultz, Anika Sikka, Earlene Sun, Catherine Wismar, Yahan Xu

Undergraduate Research Opportunity Program

Fall 2018 - Spring 2019

Florida State University

Undergraduate Student Mentees: Amy Casanova, Camila De Armas

Division and Department Committees and Service

Child & Adolescent Research Registry Initiative

Spring 2023 – Present

Member of ad hoc committee with mission to improve website information for applicants

Digital Presence Committee

Fall 2022 – Spring 2023

Member of ad hoc committee with mission to improve website information for applicants

Learning Sciences Conference Debate

October 2022

Volunteered as Panel Member for Debate at the Inaugural Learning Sciences Conference Topic: The rise of online learning in education is a negative trend and must be slowed down or even reversed.

ACES Fellow Search Committee

Spring 2022

Diversity and Inclusion Committee

Fall 2020 – Spring 2022

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

Cognitive Development

Consciousness and Cognition

Contemporary Educational Psychology

Current Directions in Psychological Science

Current Psychology

Development and Psychopathology

Developmental Science

Educational Researcher

European Journal of Psychology of Education

International Journal of Science and Mathematics Education

International Journal of STEM Education

Journal of Applied Developmental Psychology

Journal of Cross-Cultural Psychology

Journal of Educational Psychology

Journal of Experimental Child Psychology

Journal of Numerical Cognition
Learning and Individual Differences
npj Science of Learning
Personality Science
Plos One
Social Behavior and Personality
Social Psychology of Education
The Journal of Psychology: Interdisciplinary and Applied

Reviewer for Fellowships, Awards, Conference Presentations, and Grants

AERA 2024 Conference Reviewer Spring 2023

National Science Foundation Merit Review Panelist Spring 2023

Avilés-Johnson Fellowship Program Spring 2021

University-wide program, Texas A&M University

Heather Bradley Scholarship Spring 2021

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

Math Cognition and Learning Society Fall 2020 - Present

Other Service

SCOPE Program Breakout Group Leader

Scholars Committed to Opportunities in Psychological Education June 2024

Professional Development and Training

Faculty Engagement Workshop November 2022

Dr. Angela Seaworth & Tyson Voelkel, Texas A&M Foundation

Write Winning NIH Grant Proposals Seminar October 2022

Dr. John D. Robertson, Grant Writers' Seminars and Workshops, LLC

Meta-Analysis Training Institute Workshop 2022

July 2022

Dr. Terri Pigott (Georgia State University), Institute of Education Sciences

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

Florida State University Psychology Department Workshop Series

Bayesian Statistics Workshop with Dr. David Kaplan September 2019

AERA Division E (Counseling & Human Development)

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

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

Jane M. West Fellowship (\$3,500) **Spring 2016-Fall 2018**

Department of Psychology, Florida State University

Congress of Graduate Students Presentation Grant (\$400) **Spring 2017, Spring 2018**

Florida State University

Council on Research in Education Travel Award (\$250) Spring 2015

College of Education, Florida State University

Graduate and Undergraduate 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

January 2011 – April 2011

Information Processing Lab Professor: Dr. Ralph Radach

Volunteer Experience

MathPals Mentor Brain Fair Volunteer Physiological Psychology Lab Student Assistant Helpline 2-1-1 Telephone Counselor January 2017 – May 2019 April 2018 Fall 2012, Fall 2013 May 2010 – May 2011