JIMENA COSSO

The Pennsylvania State University
Department of Educational Psychology, Counseling, and Special Education
230 CEDAR Building
University Park, PA 16802
(814) 863-2415

https://www.holastemlab.com jcosso@psu.edu

EDUCATION

2022	Ph.D., Educational Psychology and Research Methodology Purdue University
	Dissertation Title: Building a Bridge between Measurement and
	Latine Families: The Home Mathematics Environment
	Committee: Drs. Yukiko Maeda, Laura Bofferding, David Purpura,
	and Hirokazu Yoshikawa
2016	M.A., International Development Education New York University
2010	B.A., Sociology National University of La Plata, Argentina
2008	Student Exchange University of Santiago de Chile, Chile

ACADEMIC POSITIONS

2022 - present **Assistant Professor.** Educational Psychology

The Pennsylvania State University

PEER-REVIEWED PUBLICATIONS

*denotes graduate student co-author

- 1. Ellis, A., **Cosso, J.**, Duncan, R., Susperreguy, M. I., Simms, V., & Purpura, D. (2023). International Comparisons of the Home Mathematics Environment and Relations with Children's Mathematical Achievement. *British Journal of Educational Psychology*. [Preregistration] https://doi.org/10.1111/bjep.12625
- 2. **Cosso, J.,** Finders, J. K., Duncan, R. J., Schmitt, S. A., & Purpura, D. J. (2023). The Home Numeracy Environment and Children's Early Math Skills: The Moderating Role of Parents' Math Anxiety. *Journal of Experimental Child Psychology*, 227, 105578. https://doi.org/pii/S0022096522002077
- 3. Purpura, D. K., O'Real, C., Ellis A., Logan, J. A. R., King Y., Westerberg, L., **Cosso, J.,** Zippert E., Napoli, A. R., Hornburg, C. B., Schmitt, S. A., Dobbs-Oates, J. (in press). Unique and Combined Effects of Mathematical Language and Numeracy

- Instruction: A Picture Book Intervention. *Journal of Educational Psychology*. [Preregistration]
- 4. **Cosso, J.**, Purpura, D. J., Maeda, Y., & Bofferding, L. (2022). The Home Mathematics Environment of Dual-Language Learning Children and their Early Mathematics Skills. *Journal of Applied Developmental Psychology*, 81, 101434. https://doi.org/article/pii/S0193397322000466
- 5. **Cosso, J.,** von Suchodoletz, A., & Yoshikawa, H. (2022). Effects of Parental Involvement Programs on Young Children's Academic and Social-Emotional Outcomes: A Meta-Analysis. *Journal of Family Psychology*, *36*(8),1329-1339. https://psycnet.apa.org/record/2022-68974-001
- Cosso, J., Russo de Vivo, A.R., Hein, S., Reales-Silvera, L. P., Ramirez-Verela, L.*, Ponguta, L. A. (2022). Impact of a Psycho-Emotional Skills-Building Program on Children's Social-Emotional Development in Colombia. *International Journal of Educational Research*, 111, 101898. https://doi.org/10.1016/j.ijer.2021.101898
- 7. **Cosso, J.**, Ellis, A., O'Real, C., Zippert E., Schmitt S., Purpura D.D. (2022). Conceptualizing the Factor Structure of Parents' Math Anxiety and Associations with Children's Mathematics Skills. *ANNALS of the New York Academy of Sciences*, 1511(1), 119-132. [Preregistration] https://doi.org/10.1111/nyas.14736
- 8. Li, Q., Cho, H., Cosso, J., & Maeda, Y. (2021). Li, Q., Cho, H., Cosso, J., & Maeda, Y. (2021). Relations between Students' Mathematics Anxiety and Motivation to Learn Mathematics: A Meta-Analysis. *Educational Psychology Review*, *33*(3), 1017-1049. https://psycnet.apa.org/record/2021-05833-001
- Hornburg, C. B., Borriello, G.A., Kung, M., Lin, J., Litkowski, E., Cosso, J., Ellis, A., King, Y., Zippert, E., Cabrera, N., Davis-Kean, P., Eason, S. H., Hart, S. A., Iruka, I., LeFevre, J.-A., Simms, V., Susperreguy, M. I., Cahoon, A., Chan, W. W. L., Cheung, S. K., Coppola, M., De Smedt, B., Elliot, L., Estévez-Pérez, N., Gallagher-Mitchell, T., Gardner-Neblett, N., Gilmore, C., Leyva, D., Maloney, E. A., Manolitsis, G., Melzi, G., Mutaf-Yıldız, B., Nelson, G., Niklas, G., Pan, Y., Ramani, G. B., Skwarchuk, S.-L., Sonnenschein, S., & Purpura, D. J. (2021). Next Directions in Measurement of the Home Mathematics Environment: An International and Interdisciplinary Perspective. *Journal of Numerical Cognition*, 7(2), 195. https://doi.org/10.5964/jnc.6143

MANUSCRIPTS UNDER REVIEW

*denotes graduate student co-author

1. **Cosso, J.,** Campos Oaxaca, G.*, & Purpura, D. J. (conditionally accepted). Shifting our Understanding of the Home Numeracy Environment by Looking at Latine Families. *Infant and Child Development*.

- 2. **Cosso**, J., Purpura, D., & Yoshikawa, H. (revise and resubmit). The Home Numeracy Environment of Latine Families: A Mixed-Methods Measurement Development Study. *Journal of Educational Psychology*.
- 3. Cosso, J., Ellis, A., Caramargo, S.*, & Susperreguy, M. I. (under review). Variation in Mathematical Performance: A Multilevel Analysis Exploring Student and School's Characteristics. *Learning and Instruction*.
- 4. **Cosso**, J., & Melzi, G. (under review). Numeracy Engagement Patterns of US Latine Families. *Early Childhood Research Quarterly*.

MANUSCRIPT IN PROGRESS

*denotes graduate student co-author

- 1. Ellis, A., O'Rear, C., Cosso, J., & Purpura, D. Examining the Factor Structure of the General Home Learning Environment. [Preregistration]
- 2. **Cosso, J.**, Montufar Soria, P.*, Melzi, G., & Purpura, D. Latine Home Math Environment and Dual Language Learners' Early Math Skills: The Moderating Role of Parents' Math Anxiety.
- 3. **Cosso, J.** Validating a Culture-Contextualized Measure of the Home Mathematics Environment for Latine Families. [Preregistration]
- 4. **Cosso, J.**, Ellis, A., Visconti, G., & Purpura, D. Language Matter: The Effect of the Language Pathway Test in Latine Dual Language Learners' School Readiness Skills. [Preregistration]
- 5. Westerburg, L.*, Ehrman, P.*, Herrera, F.*, Varnell, S.*, King, Y., Closser, A., Clark, E.*, Carkoglu, C.*, McElveen, T., Ellis, A., Cosso, J., Beltrán-Grimm, S., & Purpura, D. Beyond Quantity and Number Symbols: Spontaneous Focusing on Early Mathematical Domains. [Preregistration]
- 6. Caramargo, S.*, Cosso, J., The Debilitating Role of Math Anxiety on Math Learning: A Multilevel Model Explaining Variance by Student and School Characteristics.
- 7. Pyres Lynn, M.*, McCrudden, M., & Cosso, J. Wolastoqiyik Students' Sense of Belonging in School: An Exploratory Sequential Mixed Methods Study.

RESEARCH BRIEFS AND REPORTS

- 1. **Cosso, J.,** & Yoshikawa, H. (2019). Systematization of International Experiences in Educational Care Programs Aimed at Girls and Boys from 3 to 5 Years Old. *United Nations Educational, Scientific and Cultural Organization (UNESCO)*. In Spanish.
- 2. Yoshikawa, H., & Cosso, J. (2017). International Experiences in Preprimary Education Curriculum and Coaching. Ministry of Education, Peru.

3. Valiente, M., Castro, C., & Cosso, J. (2012). For a Better Early Childhood Education in Chile: Role, Relevance, and Challenges of the National Board of Kindergartens. *Serie Sistemas Públicos n 7. Centro de Sistemas Públicos, Ingeniería Industrial, Universidad de Chile (CSP)*. In Spanish.

OPEN SOURCES AND PUBLISHED DATA

Ellis, A., King, Y. A., Westerberg, L., O'Rear, C. D., Hornburg, C. B., McElveen, T. L., Zippert, E. L., Cosso, J., Grimm, S. B., Ehrman, P. C., & Purpura, D. J. (2022). *Early Home Learning Environment*. LDbase. https://doi.org/10.33009/ldbase.1644347317.4c34

CONFERENCE PRESENTATIONS (selection)

- 1. **Cosso, J.,** & Purpura, D. (2023, June). *The role of parents' math anxiety in the home numeracy environment of Latine families* [Paper presentation]. Mathematical Cognition and Learning Society (MCLS-virtual) annual meeting. Loughborough, U.K.
- 2. Purpura, D., O'Rear, C., Ellis A., Logan, J., Westerberh, L., King, Y., Vander Tuin, Ehrman, P., Nordgren, Anderson, K., Cosso, J., Zippert, E., Napoli, Hornburg, C., Schmitt, S., Dobbs-Oates, J. (2023, June). *Unique and combined effects of quantitative language and numeracy instruction: Findings and reflections on a registered report* [Paper presentation]. Mathematical Cognition and Learning Society (MCLS) annual meeting. Loughborough, U.K.
- 3. Ellis, A., O' Rear, C., Cosso, J., Purpura D. (2023, June). *Parents engage in home mathematics activities the least! Examining the frequency of four home learning environment subdomains* [Paper presentation]. Mathematical Cognition and Learning Society (MCLS) annual meeting. Loughborough, U.K.
- 4. **Cosso, J.,** Purpura, D., & Yoshikawa, H. (2023, April). *Latine families' interactions in numeracy* [Paper presentation]. American Educational Research Association (AERA) annual meeting. Chicago, USA.
- 5. **Cosso, J.,** Purpura, D., & Yoshikawa, H. (2023, March). *Building a bridge between measurement and Latine families: The case of the home numeracy environment* [Paper presentation]. Society for Research in Child Development (SRCD) biennial meeting. Utah, USA.
- 6. Ellis, A., O'Real, C., **Cosso, J.**, & Purpura, D. (2023, March). *A preregistered study examining the factor structure of the home learning environment* [Paper presentation]. Society for Research in Child Development (SRCD) biennial meeting. Utah, USA.
- 7. Purpura, D., O'Rear, C., Ellis, A., Logan, J., Westerberg, L., King, Y., Tuin, M., Ehrman, P., Nordgren, I., Anderson, K., Cosso, J., Zippert, E., Napoli, A., Hornburg, C., Schmitt, S., & Dobbs-Oates, J. (2023, March). *Quantitative language and*

- numeracy instruction: Contrasting picture book interventions in preschool [Paper presentation]. Society for Research in Child Development (SRCD) biennial meeting. Utah, USA.
- 8. **Cosso, J.,** Ellis, A., & Susperreguy, M. I. (2023, January). *Variance in mathematics skills: A multilevel model exploring schools' and students' characteristics* [Paper presentation]. MeMat, Chile.
- 9. Cosso, J., Purpura, D. (2022, June). *The home mathematics environment of latine families* [Paper presentation]. Mathematical Cognition and Learning Society (MCLS-virtual) annual meeting. Antwerp, Belgium.
- 10. Purpura D. J., **Cosso, J**., Beltran Grimm S., Ellis A., & Schmitt S. (2022, May). *Exploring the association of home math environment item and math performance in preschool-aged dual language learners* [Poster presentation]. Society for Research in Child Development (SRCD) constructing the other.
- 11. **Cosso, J.**, Finders, J. K., Duncan, R. J., Schmitt, S. A., Purpura, D. J. (2021, April). *The home numeracy environment and children's early math skills: The moderating role of parents' math anxiety* [Paper presentation]. Society for Research in Child Development (SRCD-virtual) biennial meeting.
- 12. **Cosso, J.,** von Suchodoletz, A., & Yoshikaw, H. (2021, April). *Effects of parental involvement programs on young children's academic and social-emotional outcomes: A meta-analysis* [Paper presentation]. Society for Research in Child Development (SRCD-virtual) biennial meeting.
- 13. Purpura D., Schmitt S., Napoli A., Dobbs-Oates J., King Y., Anaya L., Kung M., Hornburg C., Westerberg L., **Cosso** J., Borriello G., Bryant L., Litkowski E., Lin J, Rolan E. (2021, April). *A parent-implemented mathematical language picture book intervention with dual language learners* [Paper presentation]. Society for Research in Child Development (SRCD-virtual) biennial meeting.
- 14. Westerberg, L., Zippert, E., Ellis, A., Cosso, J., King, Y., O'Rear, & Connor, Purpura, D. (2021, April). *Talk spatial to me: Developing a broad measure of receptive spatial vocabulary* [Poster presentation]. Society for Research in Child Development (SRCD-virtual) biennial meeting.
- 15. **Cosso, J.,** Purpura, D., Maeda, Y., Bofferding, L. (2021, April). *The home mathematics environment of dual-language learner children and their early mathematics skills* [Paper presentation]. American Educational Research Association (AERA-virtual) annual meeting.
- 16. **Cosso, J.,** Finders, J. K., Duncan, R. J., Schmitt, S. A., Purpura, D. J. (2021, June). *The role of parents' math anxiety in the home environment.* Paper accepted by the

- Mathematical Cognition and Learning Society Meeting (MCLS) annual meeting (Conference canceled).
- 17. Cosso, J., Ellis, A., O'Real, C., Zippert E., Schmitt S., Purpura D.D. (2021, June). Conceptualizing the factor structure of parents' math anxiety and associations with children's mathematics skills [Paper presentation]. Mathematical Cognition and Learning Society (MCLS-virtual) annual meeting.
- 18. Cosso, J. (2020, April). Parents' involvement in children's emerging literacy outcomes. Paper accepted by the American Educational Research Association (AERA) annual meeting (Conference canceled).
- 19. Cosso, J. (2019, October). Parents' involvement and children's outcomes [Paper presentation]. Mid-Western Educational Research Association. Cincinnati, USA.
- 20. Cosso, J. (2019, August) Parents' involvement in children's emerging literacy outcomes. The case of Bolivia [Poster presentation]. American Psychological Association (APA).
- 21. Cosso, J. (2019, May). Experiences with parental engagement, language, and literacy [Paper presentation]. Latin American Studies Association (LASA). Puerto Rico, USA.
- 22. Cosso, J., & Yoshikawa, H. (2017, November). Description and analysis of successful pre-k and kindergarten international programs [Paper presentationvirtual]. European Association for Research on Learning and Instruction.
- 23. Cosso, J. & Visconti, G. (2016, April). Congruence between education reforms and social protests: Evidence from 2011 Chilean student movement [Poster presentation]. Comparative and International Education Society (CIES). Vancouver, Canada.

GRANTS

2023-2024 **Social Science Research Institute** Project Title: A Culturally Contextualized Measure of the Home Mathematics Environment for Latine Families Role: Principal Investigator Total Costs: \$15,000

2023-2024 **Social Science Research Institute**

Project Title: Listening to Latine Families: Designing Family Math Resources Role: Principal Investigator

Total Costs: \$12,500

2023-2024 The Pennsylvania State University, College of Education Project Title: Tackling Inequalities by Understanding and Promoting Latine

Families Math Experiences
Role: Principal Investigator

Total Costs: \$10,000

2021 **Purdue University**

Project Title: Building a Bridge between Measurement and Latine Families:

The Home Mathematics Environment

Role: Principal Investigator

Total Costs: \$500

FELLOWSHIPS & AWARDS

2023-2024 National Science Foundation Quantitative Research Methods for STEM

Education Scholars Program. Fellowship

NSF & University of Maryland

Institute on Mixture Modeling for Equity-Oriented Researchers,

Scholars & Educators (IMMERSE). Fellowship Institute of Education Science & U.C. Santa Barbara

2018-2022 Frederick N. Andrews. Fellowship (stipend and full tuition)

Purdue University

2020 Institute in Statistical Analysis: Development of Mathematics

Competencies in Early Childhood. Fellowship

NSF-AERA

2018-2020 Graduate Student Travel Award

Purdue University, Graduate School

2016 Scholarship. Award

New York University

2016 UREAG. Award

Comparative and International Education Society (CIES)

2015-2016 Becas Chile. Fellowship (stipend and full tuition)

Conicyt Chile

2007-2009 Academic Excellence Scholarship. Fellowship (stipend)

Argentina Senate

2008 Student Exchange Scholarship. Fellowship (stipend and full tuition)

SCALA

TEACHING		
2023-2024	Analysis and Interpretation of Statistical Data in Education. (Undergraduate; Fall term). The Pennsylvania State University	
2022-2023	Principles of Measurement (Graduate; Spring term). The Pennsylvania State University	
	Analysis and Interpretation of Statistical Data in Education. (Undergraduate; Fall and Spring terms). The Pennsylvania State University	
2020- 2021	Introduction to Quantitative Data Analysis Method in Education II (Graduate; Summer term. Teaching Assistant). Purdue University Classroom Assessment (Undergraduate; Fall term. Teaching Assistant). Purdue University	
2018-2019	Introduction to Quantitative Data Analysis Method in Education I (Graduate; Spring term. Teaching Assistant). Purdue University	
2016-2017	Social Development (Graduate; Spring term). Universidad del Desarrollo, Chile	
	International Activism and Human Rights (Undergraduate; Fall term). New York University	
2014- 2015	Teacher Assistant (pre-K and K; Fall and Spring terms. Teacher Helper). Public School 10, NYC	
	Human Rights (High School Course; Fall and Spring terms). Wings Academy School, NYC	
2008-2009	Sociology and Education (Undergraduate; Fall term. Teaching Assistant). Universidad Nacional de La Plata	
METHODOLOGICAL TRAINING		
2023	-Quantitative Research Methods. Program directors: Drs. Laura M. Stapleton, Tracy M. Sweet, Gregory R. Hancock. University of Maryland, MD.	
	-Mixture Modeling. Program directors: Drs. Karen Nylund-Gibson,	
2020	Katherine Masyn, and Marsha Ing. Santa Barbara, CAInstitute on Statistical Analysis, AERA-NSF. Program directors: Drs.	
	Doug Clements, Nancy Jordan, and Barbara Schneider. Laguna Beach, CA.	
2020	-Structural Equation Modeling. Curran-Bauer Analytics: Drs. Daniel Bauer and Patrick J. Curran. Virtual.	
2019	-Classroom Assessment Scoring System (CLASS) K-3 Certification. Los Angeles, CA.	

PROFESSIONAL SERVICE

TO THE FIELD

2022-present **Membership Committee Member**. Providing Opportunities for

Women in Educational Research (POWER)

Editorial Board Member at Contemporary Educational Psychology Editorial Board Member at Journal of Applied Developmental

Psychology

Collaborator MeMat. Pontificia Universidad Católica de Chile **Symposium Organizer**. Mathematical Cognition and Learning Society

Society Ad-Hor

Ad-Hoc Reviewer: Contemporary Educational Psychology; Journal of Applied Developmental Psychology; British Journal of Educational Psychology; Early Childhood Research Quarterly; Journal of Child and Family Studies; Learning, Culture, and Social Interaction; Journal of Cognitive and Development; Educational Science; School Science and Mathematics; American Educational Research Association; Society for Research in Child Development; National Science Foundation (NSF)

TO THE PENNSYLVANIA STATE UNIVERSITY

University Level

2022-present **Affiliated,** Child Study Center

Affiliated, Parents And Child Together (PACT) **Speaker**, College of Education Research Symposium

Program Level

2022-present Member, Program Language Proficiency Committee

Member, Admission Committee

Member, Program Assessment Committee

Chair, Graduate Student Recruitment & Development Committee

MENTORSHIP EXPERIENCE

Graduate Students, The Pennsylvania State University

2023-present Almendra Mendizábal Zepeda. Adviser

Paola del Campo. Adviser

2022-present *Macy Lynn Pyres*. Committee Member

Anna Yingi Zhang. Committee Member

Undergraduate Students, The Pennsylvania State University

2023-present Annalise Chang. Mentor

PROFESSIONAL EXPERIENCE

2017-2018	Inter-American Development Bank & Fundación Chile, Chile
	Director of Research in Educational Policy Division
2016	Inter-American Development Bank, DC
	Researcher, Department of Education
2014	Committee for Hispanic Children and Families, NYC
	Researcher, Early Care and Education Program
2012-2013	Center for Implementation Public Policy Promoting Equity and
	Growth, Argentina

Researcher

2010-2012 Education 2020, Chile

Director of the Educational Policy Division

PROFESSIONAL AFFILIATIONS

American Educational Research Association (AERA)

Division C: Learning and Instruction

Division D: Measurement and Research Methodologies

Research in Mathematics Education SIG

Early Education and Child Development SIG

Society for Research in Child Development (SRCD)

Latino Caucus

American Psychological Association (APA)

Division 7: Developmental Psychology

Division 15: Educational Psychology

Mathematical Cognition and Learning Society (MCLS)