

Chelsea A. Kaihoi

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Research Interests and Skills

- Student social, emotional, and behavioral development; relations with academics
- Context of poverty, racial/ethnic minority status, and parent and teacher well-being
- Program Evaluation and Quantitative Methods: mixed-method evaluation, multi-level modeling, structural equation modeling, quasi-experimental methods, item response theory, social network analysis; threats to causal inference in RCTs – noncompliance and missing data; reproducible research practices – code-based data management, analysis, and reporting

Education

University of Virginia, Charlottesville, VA

Ph.D., Education, Educational Psychology – Applied Developmental Science; School of Education and Human Development, 2018

Dissertation Title: *Foundational Skills among Black and Latino Children in Poverty: Predicting School-Related Outcomes and Exploring Family Stress Processes as Correlates of Development*

Committee: David Grissmer (chair), Jessica Whittaker, Daphna Bassok, Erik Ruzek

Iowa State University, Ames, IA

B.S., Mathematics, Psychology; College of Liberal Arts and Sciences, 2007

Honors and Awards

2019-2020: Prevention Science Early Career Reviewer Program. Society for Prevention Research

2013-2018: Virginia Education Science Training (VEST) Pre-doctoral Fellowship.

University of Virginia and U.S. Department of Education, Institute for Educational Sciences

2013-2018: Education, Leadership, Foundation Fellowship. University of Virginia

2013-2014: Vice President for Research and Graduate Studies Fellowship, University of Virginia

2011: Impact Award, RAND Corporation

2007: Phi Beta Kappa, Iowa State University College of Liberal Arts and Sciences

2007: Gertrude Herr Adamson Scholarship, Iowa State University, Mathematics Department

2006: Dio Lewis Holl Scholarship, Iowa State University, Mathematics Department

2005: Pi Mu Epsilon Honor Society (for Mathematics), Iowa State University

2004, 2006: Marion Daniels Award, Iowa State University Mathematics Department

2003-2007: Award for Competitive Excellence, Iowa State University

2003, 2004, 2006, 2007: Dean's List, Iowa State University

Research Experience

- **Research Associate** (August 2021 – Present)
Center for Applied Research and Educational Improvement
University of Minnesota
- **Postdoctoral Research Associate** (Sept 2018 – July 2021)
Youth-nex: The UVA Center to Promote Effective Youth Development
University of Virginia School of Education and Human Development
 - Mentor: Catherine Bradshaw, Ph.D., M.Ed. (Professor; Associate Dean for Research and Faculty Development)
 - Conducting impact analyses for multiple school-based intervention studies, collectively focused on positive behavior supports in the context of multi-tiered systems of supports (MTSS), classroom management, and cultural responsiveness
 - Collaborating on multiple universal (classroom-based) adaptations of the “Coping Power” program – originally implemented in small group clinical settings
 - Collaborating on papers focused on teacher well-being and classroom management
- **Graduate Research Assistant** (2013-2018)
Foundations of Cognition and Learning (FOCAL) lab,
Center for Advanced Study of Teaching and Learning (CASTL)
University of Virginia School of Education and Human Development
 - Adviser: David W. Grissmer, Ph.D.
 - Program evaluation: led data management and analysis efforts for longitudinal, multi-cohort, multi-school, randomized control trial (RCT) evaluation of WINGS for Kids: an after-school, social-emotional learning program in urban elementary schools
 - Developed code-based software (R, R markdown) enabling reproducible data management, multiple imputation, and impact analyses and reporting
 - Presented analytic considerations to WINGS program stakeholders (WINGS CEO and staff, WINGS evaluation and advisory committee, foundation officers)
 - Contributed to theoretical and conceptual development for project combining interventions for improving skills supporting mathematics and science learning
- **Research Assistant** (2010-2013)
RAND Corporation, Arlington, VA
 - Collaborated within multi-disciplinary teams to analyze and develop effective solutions for public policy challenges
 - Applied analytic and creative problem-solving strategies to maximize utility of limited data sources through the use of Microsoft products (e.g., Excel, Access) and other software (e.g., R, Python)
 - Presented and discussed research in formal and informal settings with senior policy-makers and stakeholders in the public sector
 - Awarded a RAND Impact Award for effective work throughout fiscal year 2011
- **Research Experience for Undergraduates in Mathematics** (Summer 2006)
Sponsored by National Science Foundation; Hosted by Texas A&M University

Teaching Experience

- **Instructor** (Fall 2018: EDLF 3000 – Research Design for Youth Development)
University of Virginia School of Education and Human Development
- **Graduate Teaching Assistant** (Fall 2015: EDLF 3150 – Child Growth and Development)
University of Virginia School of Education and Human Development
 - Supervising Instructor: Beverly Sweeney, Ph.D.
- **Upper School Mathematics Teacher** (2007-2010)
The Collegiate School, Richmond, VA
 - Courses taught: Algebra II, Precalculus, Calculus
- **Teaching Mentor – Mathematics** (Summer 2008)
Learning Bridge Summer Learning Program; Collegiate School, Richmond, VA
- **Supplemental Instruction Leader** (2004-2007)
Academic Success Center, Iowa State University

Publications

- Duran, C. A. K.,** Bottiani, J. H., & Bradshaw, C. P. (Under Review) Teachers supporting teachers: A social network perspective on collegial stress support and emotional wellbeing among elementary and middle school educators. *School Mental Health*
- Duran, C. A. K.,** Braun, S., Bottiani, J. H., McDaniel, H, & Bradshaw, C. P. (Under Review). Contextual factors contributing to variability within middle school teachers' observed classroom management and student behavior and engagement. *Journal of School Psychology*
- Braun, S., **Duran, C. A. K.,** Bottiani, J. H., & Bradshaw, C. P. (Under Review). Profiles of Teachers' Occupational Health: Associations with Classroom Management Practices, Gender, and Race. *Teacher and Teacher Education*
- Pas, E. T., **Duran, C. A. K.,** Debnam, K. J., Bradshaw, C. P., and colleagues (In Press). The sustainability of effects of teacher coaching: comparing an individual and paired approach. *Journal of School Psychology*
- Duran, C. A. K.,** & Grissmer, D. W. (2020). Choosing immediate over delayed gratification correlates with better school-related outcomes in a sample of children of color from low-income families. *Developmental Psychology*, 56(6), 1107–1120.
<https://doi.org/10.1037/dev0000920>
- Duran, C. A. K.,** Cottone, E., Ruzek, E., Mashburn, A., Grissmer, D. W. (2020). Family stress processes and children's self-regulation. *Child Development* 91(2) 577-595. doi: 10.1111/cdev.13202

- Bottiani, J.H., **Duran, C.A.K.**, Pas, E.T., & Bradshaw, C.P. (2019). Teacher stress and burnout in urban middle schools: Associations with job demands, resources, and effective classroom practices. *Journal of School Psychology*.
- Grissmer, D., Brock, L., **Duran, C.**, Mashburn, A., Cottone, E., Kim, H., Murrah, W., Cameron, C., Deutsch, N., Blodgett, J., Cordier A., Dormal, J., Walker K. (2018). *Final Report: The Evaluation of the WINGS After-School Socio-Emotional Program for At-Risk Urban Children*. Social Innovation Fund, Corporation for National and Community Service, <https://www.nationalservice.gov/impact-our-nation/evidence-exchange/>
- Duran, C. A. K.**, Byers, A., Cameron, C. E., Grissmer, D. W. (2018). Unique and Compensatory Associations of Executive Functioning and Visuomotor Integration with Mathematics Performance in Early Elementary School. *Early Childhood Research Quarterly*, 42, 21-30. doi: 10.1016/j.ecresq.2017.08.005
- Kim, H., **Duran, C. K.**, Cameron, C. E., & Grissmer, D. (2018). Developmental relations among motor and cognitive processes and mathematics skills. *Child Development* 89(2), 476-494. doi:10.1111/cdev.12752
- Riposo, J., McKernan, M. & **Kaihoi, C.** (2014). Prolonged Cycle Times and Schedule Growth in Defense Acquisition: A Literature Review. Santa Monica, CA: *RAND Corporation*. https://www.rand.org/pubs/research_reports/RR455.html.
- Riposo, J., Weichenberg, G., **Kaihoi, C.**, Fox, B., Shelton, W., & Thorsen, A. (2013) Improving Air Force Enterprise Resource Planning-Enabled Business Transformation. Santa Monica, CA: *RAND Corporation*. https://www.rand.org/pubs/research_reports/RR250.html
- Tripp, R. S., Lynch, K., Romano, D. M., Shelton, W., Ausink J. A., **Duran, C. K.**, DeFeo R. G., George D. W., Conley, R., Fox, B., & Sollinger, J. (2012). Air Force Materiel Command Reorganization Analysis: Final Report. Santa Monica, CA: *RAND Corporation*. <https://www.rand.org/pubs/monographs/MG1219.html>

Manuscripts in Preparation

- Bottiani, J. H., Elreda, L. M., Pas, E. T., **Kaihoi, C. A.**, & Bradshaw, C. P. Educators as Key Opinion Leaders in Building Equitable and Inclusive Schools for Students of Color: A Social Network Analysis
- Pas, E. T., Debnam, K. J., **Kaihoi, C. A.**, Bradshaw, C. P., and colleagues. Impact Evaluation for the Maryland Safe and Supportive Schools Project: Teacher Practice
- Lindstrom-Johnson, S., Pas, E. T., Debnam, K. J., **Kaihoi, C. A.**, Bradshaw, C. P., and colleagues. Impact Evaluation for the Maryland Safe and Supportive Schools Project: School Climate
- Bradshaw, C. P., and colleagues. Impact evaluation for an efficacy trial of Double Check: a teacher coaching intervention for culturally responsive behavior management

Presentations

Powers, M. D., Simmons, S. C., Sadikova, E., Hernandez, B. E., & **Duran, C. A. K.** (2021, June). Exploring the Value of Parent-Led Cultural Socialization for Social Development of Young Children Living in Low-Income Rural Communities. In N. Riggs & K. J. Debnam (Chairs) *Sixteenth Annual SPR Sloboda and Bukoski Cup* [Research competition]. The Society for Prevention Research 29th Annual Meeting. Virtual Conference.

Duran, C. A. K., Braun, S., Bottiani, J. H., & Bradshaw, C. P. (presenter role; April 2021). *Contextual Factors Associated with Variability in Middle School Teachers' Support of Student Engagement and Behavior*. Paper session to be presented at the Annual Meeting of the American Educational Research Association, to be held virtually April 8-12, 2021.

Pas, E. T., **Duran, C. A. K.**, Debnam, K. J., Bradshaw, C. P., and colleagues (presenter role; March 2020 – CONFERENCE CANCELLED). *Contrasting traditional, one-on-one teacher coaching versus coaching teacher pairs: An RCT testing impacts and sustainability*. Paper session accepted for presentation at the Society for Research in Educational Effectiveness annual meeting, March 2020 in Arlington, VA

Duran, C. A. K., & Grissmer, D. W. (faculty presenter role; February 2020). Reconsidering Interpretations of Immediate and Delayed Gratification Choices in Black and Latinx Children from Low-income Families. Paper session presented at the Diversifying Scholarship Research Conference, February 2020 at University of Virginia, Charlottesville, VA

Bottiani, J. H., **Duran, C. A. K.**, Pas, E.T., Bradshaw, C.P. (presenter role; May 2019). *Understanding the Role of Job Demands and Resources in Teacher Stress and Burnout: Implications for Use of Effective Classroom Practices in Urban Middle Schools*. Paper session presented at the Society for Prevention Research annual meeting, May 2019 in San Francisco, CA

Duran, C. A. K. & Grissmer, D. W. (presenter role; May 2019). *Evaluating an After-School Social and Emotional Learning Program Serving High-Risk Communities*. Paper session presented at the Society for Prevention Research annual meeting, May 2019 in San Francisco, CA

Duran, C. A. K. & Grissmer, D. W. (March 2019). *Validation of a Choice Delay of Gratification Measure among Children of Color from Low-Income Families*. Poster presentation at the Society for Research in Child Development Biennial Meeting, March 2019, in Baltimore, MD

Grissmer, D. W. & **Duran, C. A. K.** (March 2019). *Methodological Lessons Learned While Evaluating an After-School Social and Emotional Learning Program Serving High-Risk Communities*. Paper session proposed for the Society for Research in Educational Effectiveness Spring 2019 Conference, *Tensions and Tradeoffs: Responding to Diverse Demands for Evidence*, to take place in March 2019 in Washington, D.C.

Duran, C. A. K., Brock, L. L., & Grissmer, D. W. (April 2018). *Repeated Observations of Delay of Gratification in an Urban Sample: Within- and Between-Child Variability*,

- Growth, and Relations with Family Instability*. Poster presented at the American Educational Research Association Annual Meeting, April 2018, New York City, N.Y.
- Melo, C., Pianta, R. C., LoCasale-Crouch, J., & **Duran, C. A. K.** (presenter/non-author role; April 2018). *Contributions of Early Childhood Education Dosage to Children's Development of Self-Regulation: Does Quality Moderate?* Roundtable discussion presented at the American Educational Research Association Annual Meeting, April 2018, New York City, NY.
- Duran, C. A. K.**, Cottone, E., & Grissmer, D. W. (July 2016). *Influence of Family Stress Processes on Development of Young Children's Self-Regulation*. Poster presented at the National Research Conference on Early Childhood, The Administration for Children and Families, Washington D. C.
- Duran, C. A. K.**, Cottone, E., & Grissmer, D. W. (May 2016). *The Family Stress Model and Children's Cognitive Self-Regulation*. Poster presented at the Education and Inequality in 21st Century America hosted by Stanford Center for Education Policy Analysis, Stanford, CA
- Duran, C. A. K.**, Byers, A., Cameron, C. E., Grissmer, D. W. (April 2016). *Joint Contributions of Executive Functioning and Visuospatial Processing to School Readiness*. Roundtable presented at American Educational Research Association Annual Meeting, Washington D. C.
- Kim, H., **Duran, C. A. K.**, Cameron, C. E., & Grissmer, D. (April 2016). *Developmental relations among three cognitive processes and mathematics achievement in young children*. Roundtable presented at American Educational Research Association Annual Meeting, Washington D. C.
- Kim, H., **Duran, C. A. K.**, Cameron, C. E., & Grissmer, D. (April 2016). *Longitudinal associations among three cognitive processes and children's mathematical ability in early elementary school*. Poster presented at the 5th Annual Joint Conference of the Upstate Chapters of the American Statistical Association (UP-STAT), Buffalo, NY.
- Duran, C. A. K.** (February 2016). *Extending the Family Stress Model: Stressful Life Events, Family Stress Processes, and Development of Self-Regulation*. Paper presented at Curry Research Conference, University of Virginia, Charlottesville, VA.
- Kim, H., **Duran, C. A. K.**, Cameron, C. E., & Grissmer, D. (May 2015). *Longitudinal relations among sensorimotor coordination, visual attention and perception, visuo-motor integration, and mathematics achievement in young children*. Poster presented at 2015 American Psychological Association Annual Conference, New York, NY.
- Duran, C. A. K.**, Kim, H., & Grissmer, D. (October 2014). *Dissecting Achievement Gaps Over Time in the NAEP Mathematics Assessment*. Paper presentation at Northeastern Education Research Association Annual Meeting, Trumbull, CT.

Academic Service

Proposal Reviewer, Society for Research in Educational Effectiveness, 2021

Journal Manuscript Reviewer, *Prevention Science*, 2021

Journal Manuscript Reviewer, *Developmental Psychology*, 2021

Journal Manuscript Reviewer, *Psychology and Education*, 2020

Journal Manuscript Reviewer, *Educational Research Review*, 2020, 2021

Journal Manuscript Reviewer, *Journal of Racial and Ethnic Health Disparities*, 2020

Faculty Judge, University of Virginia Diversifying Scholarship Research Conference, February 2020

Early Career Reviewer Program, Society for Prevention Research, 2019, 2020, 2021
(Reviewer for several submissions to *Prevention Science*)

Proposal Reviewer, American Educational Research Association Annual Meeting, 2020:

- Division E, Section 2 – Human Development
- Special Interest Group – Stress, Coping, and Resilience

Journal Manuscript Reviewer, *Development and Psychopathology*, 2019, 2020

Journal Manuscript Reviewer, *Journal of Experimental Child Psychology*, 2019, 2020

Journal Manuscript Reviewer, *Child Development*, 2018, 2019

Provided Workshop: Duran, C. A. K. & LeBlanc, K. A. (June 2018). *Posters and Presentations*. Workshop presented to undergraduates in Summer Undergraduate Research Program, University of Virginia, Charlottesville, VA

Journal Manuscript Reviewer, *Early Education and Development*, 2017

Journal Manuscript Reviewer, *Journal of Psychoeducational Assessment*, 2017

Journal Manuscript Reviewer, *Journal of Research in Mathematics Education*, 2015

Journal Manuscript Reviewer, *Journal of Children and Poverty*, 2015

Paper Session Moderator, Curry Research Conference (UVA School of Education and Human Development), 2015

Presentation Proposal Reviewer, Curry Research Conference (UVA School of Education and Human Development), 2015

Provided Workshop: Bird, K. & Duran, C. A. K. (June 2014). *Introduction to Research Methods*. Workshop presented to undergraduates in Summer Undergraduate Research Program, University of Virginia, Charlottesville, VA

Grants (Funding)

U.S. Department of Education – Institute of Education Sciences. Bradshaw, C. P., Cook, C. R., & Duran, C. A. K. (Co-PI) (In preparation for 2021 submission). *A Mixed-Method, Integrative Inquiry into Factors Affecting Teachers' Implementation of Evidence Based Practices to Support Student Social, Emotional, and Behavioral Development*.

University of Virginia, Curry School of Education IDEAS grant program – Gest, S. D., Duran, C. A. K. (Co-PI), Serdiouk, M., & Bradshaw, C. P. (2020-2021). *Leveraging Popular, Prosocial Youths' Responses to Bullying and Discrimination to Inform Upstander Focused Programming*.

National Institute on Minority Health and Health Disparities – Bradshaw, C. P. & Bottiani, J. H. (2019-2023). *R-CITY: Reducing Racism and Violence through Collaborative Intervention with Teachers and Youth*. (Clinical Trial - 1R01MD013808-01).

Spencer Foundation – Bradshaw, C. P. & Pas, E. (2014-2019). *Increasing Teachers' Use of Classroom-Based Behavior Supports through Coaching*.

Edna McConnell Clark Foundation/Social Innovation Fund – Grissmer, D. W., & Mashburn, A. J. (2013-16). *Evaluation of the impacts and implementation of the WINGS for Kids social and emotional learning after-school program*.

National Science Foundation – Grissmer, D. W., & Hulleman, C. (2013-2018). *Developmental skills linked to math and science achievement: An interdisciplinary data-intensive approach to identification and improvement through experimental intervention*. (Grant #1252463)

Graduate Coursework

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| ▪ Foundations of Educational Research | ▪ Analysis of Regression |
| ▪ Community Psychology | ▪ Multivariate Statistics |
| ▪ Executive Function | ▪ Qualitative Analysis |
| ▪ Cognitive Development | ▪ Structural Equation Modeling |
| ▪ Issues in Applied Developmental Sciences and Education Policy | ▪ Fundamentals of Item Response Theory |
| ▪ Neurobiology Perspectives of Education | ▪ Causal Inference (Quasi-Experiments) |
| ▪ Education Policy | ▪ Field Experiments |

Attended Conferences, Workshops, Certifications and Other Educational Experiences

- Diversifying Scholarship Research Conference, February 2020, Charlottesville, VA
- Society for Prevention Research Annual Meeting, May 2019, San Francisco, CA
- Society for Research in Child Development Biennial Meeting, March 2019, Baltimore, MD
- American Educational Research Association Annual Meeting, April 2018, New York City, NY
- National Research Conference on Early Childhood, by the Administration for Children and Families, July 2016, Washington D.C.
- Education and Inequality in 21st Century America conference, by Stanford Center for Education Policy Analysis, May 2016, Stanford, CA
- American Educational Research Association Annual Meeting, April 2016, Washington D.C.
- Curry Research Conference, University of Virginia, February 2016, Charlottesville, VA.
- Society for Research in Child Development Special Topic Meeting: Parenting at Risk, November 2014, San Diego, CA.
- Northeastern Education Research Association Annual Meeting, October 2014, Trumbull, CT.
- National Center for Educational Statistics STATS-DC 2014 Data Conference, July-August 2014, Washington D.C.

- American Educational Research Association Annual Meeting, April 2014, Philadelphia, PA

Workshops (held at University of Virginia, unless otherwise specified):

- Missing Data on Demand, Paul Allison, Ph.D. (online - Statistical Horizons), January 2021
- Missing Data, Craig Enders, Ph.D. (University of California, Los Angeles), June 2018
- Communicating Your Science, Audrey Breen (University of Virginia), June 2018
- Value-Added Measures, Susannah Loeb, Ph.D. (Stanford University), June 2016
- Application of Hierarchical Linear Models in Behavioral and Social Research, Allison Atteberry, Ph.D. (University of Colorado at Boulder), June 2016
- Designing and Implementing Randomized Control Trials in Education Research, Kelli Bird, Ph.D. (University of Virginia), January 2016
- Using Data to Create Common Ground and Inform Decision-Making in Schools & School Districts, James P. Connell, Ph.D. (President of Institute for Research and Reform in Education), August 2015
- Statistical Mediation, Moderation, and Conditional Process Analysis, Andrew Hayes, Ph.D. (the Ohio State University), June 2015
- Navigating the Measures of Effective Teaching Data Set, Julie Cohen, Ph.D., and Lia Sandillos, June 2015

George Mason University, Fairfax, VA

Graduate level coursework: stochastic modeling, statistical programming (R, SAS)

Budapest Semester in Mathematics, Budapest, Hungary

Study abroad experience; August – December 2006