# Sammy F. Ahmed, Ph.D.

Human Development & Family Science College of Health Sciences, University of Rhode Island 2 Lower College Rd, Kingston, RI 02881

#### **EDUCATION**

Doctor of Philosophy in Psychology University of Michigan	2019
Master of Science in Psychology, University of Michigan	2016
Bachelor of Science in Applied Psychology, New York University	2012

#### ACADEMIC APPOINTMENTS

Assistant Professor, University of Rhode Island	2022-Present
Postdoctoral Research Fellow, Michigan State University	2020-2022
Research Fellow, Institute for Social Research, University of Michigan	2019-2020

#### **GRANT FUNDING**

### **National Institutes of Health**

2023-Present

Extramural Loan Repayment Program for Pediatric Research (L40HD113090-01) *Using public school records to evaluate the impact of a randomized preschool self-regulation intervention.* Role: Principal Investigator, Award \$93,000

#### **National Institutes of Health**

2016-2018

National Institute of Child Health and Human Development (T32 HD007109-36) The effects of schooling on children's executive function development Role: Principal Investigator, Award \$176,000

## PEER REVIEWED PUBLICATIONS

\*Graduate trainees; \*\*Undergraduate trainees

- Ahmed, S. F., Montroy, J. J., Skibbe, L. E., Bowles, R., & Morrison, F. J. (2023). The timing of executive function development is associated with growth in math achievement from preschool through second grade. *Learning and Instruction 83*, 101713. https://doi.org/10.1016/j.learninstruc.2022.101713
- Ahmed, S. F., Chaku, N., Waters, N. E., Ellis, A., & Davis-Kean, P. E. (2023). Developmental cascades and educational attainment. *Advances in Child Development and Behavior*. https://doi.org/10.1016/bs.acdb.2022.10.006
- Grammer, J. K., & Ahmed, S. F. (2023). Informing the development of school-based strategies to promote children's executive function skills: Considerations, challenges, and future directions. *Mind, Brain, and Education*. https://doi.org/10.1111/mbe.12368

- Koepp\*, A. E., Watts, T. W., Gershoff, E. T., Ahmed, S. F., Davis-Kean, P., Duncan, G. J., Kuhfeld, M., & Vandell, D. L. (2023). Behavioral regulation problems during childhood prospectively predict adult outcomes: Conceptual replication and extension of Moffitt et al. (2011) using cohorts from the U.S. and the U.K. *Developmental Psychology* https://doi.org/10.1037/dev0001533
- Ribner, A., Ahmed, S. F., Miller-Cotto, D., & Ellis, A. (2023). The role of executive function in shaping the longitudinal stability of math achievement during early elementary grades. *Early Childhood Research Quarterly*. *64*(3), 84–93. https://doi.org/10.1016/j.ecresq.2023.02.004
- Ahmed, S. F., Ellis, A., Ward\*, K., Chaku, N., & Davis-Kean, P. (2022). Working memory development from early childhood to adolescence using two nationally representative samples. *Developmental Psychology*. 58(10), 1962–1973. https://doi.org/10.1037/dev0001396
- Ahmed, S. F., Skibbe, L. E., McRoy\*, K., Tatar\*, B. H., & Scharphorn, L. (2022). Strategies, recommendations, and validation of remote executive function tasks for use with young children. *Early Childhood Research Quarterly 60*(3), 336–347. https://doi.org/10.1016/j.ecresq.2022.03.002
- Ahmed, S. F., Kuhfeld, M., Watts, T.W., Davis-Kean, P., & Vandell, D. L. (2021). Preschool executive function and adult outcomes: A developmental cascade model. *Developmental Psychology*, 57(12), 2234–2249. https://doi.org/10.1037/dev0001270
- Kim., M, Bousselot, T., & Ahmed, S. F. (2021). Executive functions and science achievement during the five-to-seven-year shift. *Developmental Psychology*, *57*(12), 2119–2133. https://doi.org/10.1037/dev0001261
- Ellis, A., Ahmed, S. F., Zeytinoglu, S., Isbell, A., Calkins S. D., Leerkes E. M, Grammer, J. K., Gehring, W., Morrison, F. J. & Davis-Kean, P. (2021). Reciprocal associations between executive function and math achievement: A conceptual replication of Schmitt et al., 2017. *Journal of Numerical* Cognition 7(3), 453–472. https://doi.org/10.5964/jnc.7047
- Ahmed, S. F., Grammer, J. K., & Morrison, F. J. (2021). Cognition in context: Validating group-based executive function assessments in young children. *Journal of Experimental Child Psychology*, 208:105131. https://doi.org/10.1016/j.jecp.2021.105131
- Kim, M., Ahmed, S. F., & Morrison, F. J. (2021). Kindergarten and first grade schooling effects on executive function and academic skill development: Evidence from a school cutoff design. *Frontiers in Psychology*, 11:607973. https://doi.org/10.3389/fpsyg.2020.607973
- Waters\*, N. E., Ahmed, S. F., Tang, S., Morrison, F. J., & Davis-Kean, P. (2021). Pathways from socioeconomic status to early academic achievement: The role of specific executive functions. *Early Childhood Research Quarterly* 54(1), 321–331. https://doi.org/10.1016/j.ecresq.2020.09.008

- Woods, A., Ahmed, S. F., Katz, B., & Morrison, F. J. (2020). How stable is early academic performance? Using cluster analysis to classify low achievement and EF. *Journal of Learning Disabilities*. *52*(7). https://doi.org/10.1177/0022219419881632
- Ahmed\*, S. F., Tang, S., Waters\*, N. E., & Davis-Kean, P. (2019). Executive function and academic achievement: Longitudinal relations from early childhood to adolescence. *Journal of Educational Psychology.* 111(3), 446-458. https://doi.org/10.1037/edu0000296
- Sirin, S. R., Rogers-Sirin, L., Cressen\*, J., Gupta\*, T., Ahmed\*\*, S. F., & Novoa\*\*, A. D. (2015). Discrimination-related stress effects on the development of internalizing symptoms among Latino adolescents. *Child Development.* 86(3), 709-725. https://doi.org/10.1111/cdev.12343

## HONORS, FELLOWSHIPS, & AWARDS

Extramural Loan Repayment Program Award, National Institutes of Health	2023
Clyde H. Coombs Award in Mathematical Psychology; University of Michigan	2017
Cognitive Development Society Conference Award; National Science Foundation	2017
Ruth L. Kirschstein NRSA Predoctoral Fellowship; National Institutes of Health	2016
Institute for Social Science Genomics Fellowship; Russell Sage Foundation	2016
Rackham Graduate Student Research Award; University of Michigan	2016
Rackham International Research Award; University of Michigan	2015
Rackham Merit Fellowship; University of Michigan	2014
Summa Cum Laude with Honors in Applied Psychology; New York University	2012
Founder's Day Award; New York University	2012
Outstanding Research Contribution; New York University	2012
Dean's Grant for Student Research; New York University	2012
David & Clara Rothman Research Fellowship; New York University	2012
Steinhardt Scholars Fellowship; New York University	2010

## INVITED TALKS, GUEST LECTURES, & COLLOQUIA

- Ahmed, S. F. (2022, February). *Child development in early classroom contexts.* Invited talk at the department of Human Development and Family Sciences, University of Rhode Island
- Ahmed, S. F. (2022, February). *Cognitive development in early classroom contexts.* Invited talk at the department of Psychology, Fordham University
- Ahmed, S. F. (2021, November). *Child development in early classroom contexts.* Invited talk at the department of Family and Consumer Studies, University of Utah
- Ahmed, S. F. (2021, April). *Schooling and child development*. Invited talk at the department of Human Development and Family Sciences, Syracuse University

- Ahmed, S. F. (2020, November). *Missing data analysis for developmental scientists: Modern techniques and best practices.* Invited talk at the HDFS Quantitative Methods Group, Michigan State University
- Ahmed, S. F. (2020, September). *Introduction to secondary data analysis of archived data.* Invited talk at the HDFS Quantitative Methods Group, Michigan State University
- Kelly, D. P., & Ahmed, S. F., (2019, February). *Meta-Analyses in the replication crisis era: Steps, challenges and best practices.* Invited talk at the Department of Psychology Methods Hour, University of Michigan
- Ahmed, S. F. (2018, November). *Cognitive development in the school context.* Invited talk at the Developmental Psychology Area Brown Bag, University of Michigan
- Ahmed, S. F., (2018, October). Executive function during early childhood: Measurement, design and research methods. Invited guest lecture at an undergraduate seminar in Social Development. Department of Psychology, University of Michigan
- Ahmed, S. F. (2018, May). Preschool executive function skills predict high school GPA and college enrollment. Presented at the Interdisciplinary Collaborative on Development and Context (ICDC), University of Texas at Austin
- Tighe, L. A., & Ahmed, S. F., (2017, April). *Alternatives to regression discontinuity in national, longitudinal data sets.* Invited talk at the department of psychology Methods Hour, University of Michigan
- Ahmed, S. F. (2017, January). *Using regression discontinuity in education and developmental research.* Invited guest lecture at a graduate training seminar in developmental science, University of Michigan
- Ahmed, S. F. (2015, November). *Genetic susceptibility to household income: Differential effects on executive function and academic achievement.* Invited talk at the Developmental Psychology Area Brown Bag, University of Michigan
- Ahmed, S. F. (2014, November). Experimental methodology in developmental science. Guest lecture at an undergraduate seminar in research methods. Department of Psychology, University of Michigan
- Ahmed, S. F. (2014, May). The relevance of population neuroscience for understanding human development. Invited discussant at the Society for Research on Child Development (SRCD) Special Topic Meeting on Population Neuroscience, Ann Arbor, MI

#### **CONFERENCE PAPER PRESENTATIONS**

- \* = Graduate trainees; \*\* = Undergraduate trainees
- Koepp\*, A. E., Watts, T. W., Gershoff, E. T., Ahmed, S. F., Davis-Kean, P., Duncan, G. J., Kuhfeld, M., & Vandell, D. L. (2023). Behavioral regulation problems during childhood prospectively predict adult outcomes: Conceptual replication and extension of Moffitt et al. (2011) using

- cohorts from the U.S. and the U.K. In T. Watts (Chair). Early self-regulation and long-term outcomes: Why does childhood self-regulation predict adult success? Paper to be presented at the biennial meeting of the Society for Research in Child Development (SRCD), Salt Lake City, UT
- Miller-Cotto, D., Ribner, A., Ahmed, S. F., & Ellis, A. (2023). Measurement invariance of working memory in early childhood: A registered report. In X. Portilla (Chair). Developing assessments for all early learners: Towards a more equitable understanding of young children's development. Paper to be presented at the biennial meeting of the Society for Research in Child Development (SRCD), Salt Lake City, UT
- Ahmed, S. F., Grammer, J. K., & Morrison, F. J. (2021). *Cognition in context: Validating group-based executive function assessments in young children*. In I. Korocu (Chair). The influence of peers on children cognitive and academic development. Paper presented at the biennial meeting of the Society for Research in Child Development (SRCD), Twin Cities, MN
- Ellis, A., Ahmed, S. F., Zeytinoglu, S., Isbell, A., Calkins S. D., Leerkes E. M., Grammer, J. K., Gehring, W., Morrison, F. J. & Davis-Kean, P. (2021). *Reciprocal associations between executive function and math achievement: A conceptual replication of Schmitt et al. (2017).* In J. Finch (Chair). The role of executive functions in supporting math achievement across early development. Paper presented at the biennial meeting of the Society for Research in Child Development (SRCD), Twin Cities, MN
- Ahmed, S. F., Wang, Y., Kelly\*, D., & Morrison, F. J. (2019, June). Sex and socioeconomic differences in early executive function components vary by measurement type. Paper presented at the 2nd Mathematical Cognition and Learning Society Conference (MCLS), Ottawa, CA
- Ahmed\*, S. F., & Morrison, F. J. (2019, March). *Understanding executive function during early childhood: The utility of direct assessments, group-based tasks, and teacher reports.* In F.J. Morrison (Chair). An integrative approach to understanding executive function development in young children. Paper presented at the biennial meeting of the Society for Research in Child Development (SRCD), Baltimore, MD
- Ahmed\*, S. F., Tang, S., Waters\*, N. E., & Davis-Kean, P. (2018, October). Executive function and academic achievement: Longitudinal relations from early childhood to adolescence. Paper presented at the SRCD Conference on the Use of Secondary and Open-Source Data in Developmental Science, Phoenix, AZ
- Ahmed\*, S. F. Grammer, J. K., & Morrison, F. J. (2018, September). *The development and validation of group-based executive function assessments in school-aged children.* In F.J. Morrison (Chair). Executive function development: Bridging psychological, neurological, and educational perspectives. Paper presented at the International Mind, Brain and Education Society (IMBES), Los Angeles, California
- Woods\*, A., Ahmed\*, S. F., Katz\*, B., Waters, N. E., & Morrison, F. J. (2017, April). *Utilizing ERP and behavioral data to identify persistent low academic performance across the K-1 transition.*Paper presented at the American Educational Research Association (AERA), San Antonio, TX

- Wang, Y., Ahmed\*, S. F., & Morrison, F. J. (2017, April) The development of executive function and relations to emergent academic skills: Exploring early sex differences. In H. Konishi (Chair). Self-regulation in early childhood and relations to emergent academic skills. Paper presented at the biennial meeting of the Society for Research in Child Development (SRCD), Austin, TX
- Ahmed\*, S. F. (2015, October). The interactive effect of dopaminergic polymorphisms and home environment in predicting academic achievement. In A. Woods (Chair). Longitudinal interactions between psychopathological precursors and contextual factors on education outcomes for at risk children. Paper presented at the Society for the Study of Human Development's scientific meeting (SSHD), Austin, TX
- Woods\*, A., Ahmed\*, S. F., & Morrison, F. J. (2015, October). *The Impact of chronic poverty on academic achievement and special education placement.* In A. Sullivan (Chair). *Educational Inequality.* Paper presented at the Society for Longitudinal and Life Course Studies (SLLS), Dublin, Ireland

#### **CONFERENCE POSTER PRESENTATIONS**

- \* = Graduate trainees; \*\* = Undergraduate trainees
- Ahmed, S. F., Skibbe, L. E., McRoy\*, K., Ozkum\*, B., & Scharphorn, L. (2021). Strategies, recommendations, and validation of virtual executive function tasks for use with young children. Poster presented at the biennial meeting of the Society for Research in Child Development (SRCD), Twin Cities, MN
- Waters\*, N. E., Ahmed, S. F., Tang, S., Morrison, F. J., & Davis-Kean, P. (2020, May). *Pathways from socioeconomic status to early academic achievement: The role of preschool executive functions.* Poster accepted at the 32<sup>nd</sup> Annual Convention of the Association for Psychological Science (APS), Chicago, Illinois
- Ellis\*, A., Ahmed\*, S. F., Davis-Kean, P. & Morrison, F. J. (2018, September) Which comes first? Examining causal relations between early executive function skills and math achievement. Poster presented at the International Mind, Brain and Education Society (IMBES), Los Angeles, California
- Waters\*, N. E., Ahmed\*, S. F., Davis-Kean, P. & Morrison, F. J. (2018, September) *Socioeconomic differences in children's performance monitoring: An ERP investigation.* Poster presented at the International Mind, Brain and Education Society (IMBES), Los Angeles, California
- Ahmed\*, S. F., & Morrison, F. J. (2018, April). *Classroom-based executive function assessments predict kindergarten children's' math achievement.* Poster presented at the 1st Mathematical Cognition and Learning Society Conference (MCLS), Oxford, UK
- Ahmed\*, S. F., Ellis\*, A. G., Waters\*, N. E., Wang, Y., & Morrison, F. J. (2017, October).

  Understanding the structure of executive function in young children using lab, classroom-based, and electrophysiological assessments. Poster presented at the Cognitive Development Society (CDS), Portland, OR

- Ahmed\*, S. F., Remer\*\*, S., Sheppard\*\*, N., & Morrison, F. J. (2017, October). *The development and validation of classroom-based executive function assessments in school-aged children.*Poster presented at the biennial meeting of the Cognitive Development Society (CDS), Portland, OR
- Shintani\*\*, M., Ahmed\*, S. F., & Morrison, F. J., (2017, October). *Executive function and academic achievement: Differential relations across socioeconomic status.* Poster presented at the biennial meeting of the Cognitive Development Society (CDS), Portland, OR
- Goldberg\*\*, J., Waters\*, N. E., Ahmed\*, S. F., & Morrison, F. J. (2017, October). *Do teacher's ratings of self-regulation predict children's executive function and academic achievement?* Poster presented at the biennial meeting of the Cognitive Development Society (CDS), Portland, OR
- Gappy\*\*, D., Dennis, B. S., Waters, N. E., Ahmed\*, S. F., Grammer, J. K., & Morrison, F. J., (2017, April). *The utility of coding child behavior in EEG studies.* Poster presented at the University of Michigan annual UROP conference, Ann Arbor, MI
- Barron\*\*, J., Ahmed\*, S. F., & Morrison, F. J., (2017, April). Examining links between children's selfregulation and academic achievement: Does context matter? Poster presented at the University of Michigan annual UROP conference, Ann Arbor, MI - Blue Ribbon Award for Best Undergraduate Presentation
- Shintani\*\*, M., Ahmed\*, S. F., & Morrison, F. J., (2017, April). *Executive function and academic achievement: Differential relations across socioeconomic status.* Poster presented at the University of Michigan annual UROP conference, Ann Arbor, MI
- Ahmed\*, S. F., Salander, Z., Waters, N. E., Grammer, J. K., Gehring, W., & Morrison, F. J. (2017, April). *Self-regulation during the early school transition: An ERP exploration.* Poster presented at the biennial meeting of the Society for Research in Child Development, (SRCD) Austin, TX
- Dennis, B. S., Ahmed\*, S. F., & Morrison, F. J. (2017, April). Working memory mediates the relation between SES and academic achievement. Poster presented at the biennial meeting of the Society for Research in Child Development (SRCD), Austin, TX
- Ahmed\*, S. F., Wang, Y. & Morrison, F. J. (2016, September) *Gender and SES differences in subcomponents of executive function in kindergarten and first grade.* Poster presented at the International Mind, Brain and Education Society (IMBES), Toronto, Ontario, Canada
- Ahmed\*, S. F., Wang, Y. & Morrison, F. J. (2016, September) *The relative importance of executive function components for young children's academic achievement.* Poster presented at the International Mind, Brain and Education Society (IMBES), Toronto, Ontario, Canada
- Barron\*\*, J., Dennis, B., Waters, N. E., Ahmed\*, S. F., & Morrison, F. J., (2016, June). *Do experimental assessments of children's executive function predict classroom-based behavior.*

- Poster presented at the University of Michigan annual SROP conference Blue Ribbon Award for Best Undergraduate Presentation
- Waters, N. E., Ahmed\*, S. F., & Davis-Kean, P. (2016, May). Early parental dialogue predicts children's self-regulation: Evidence from digital audio recordings. Poster presented at the 28th Annual Convention of the Association for Psychological Science (APS), Chicago, Illinois
- Ahmed\*, S. F., & Mitchell, C. (2016, May). *Genetic susceptibility to household income: Differential effects on executive function and math achievement.* Poster presented at the 28<sup>th</sup> Annual Convention of the Association for Psychological Science (APS), Chicago, Illinois
- Ahmed\*, S. F., Katz\*, B., Waters, N. E., Stilwell, S. M., Grammer, J. K., & Morrison, F. J. (2015, October) *Classroom-based measures of executive function in young children: Evidence for a new ecologically valid measure of executive function.* Poster presented at the 9<sup>th</sup> biennial meeting of the Cognitive Development Society (CDS), Columbus, OH
- Ahmed\*, S. F., Waters, N. E., Stilwell, S. M., Salander, Z. B., Kats\*, B., Grammer, J. K, & Morrison, F. J. (2015, October). *The relation between lab-based and classroom-based measures of executive function in kindergarten students.* Poster presented at the 9<sup>th</sup> biennial meeting of the Cognitive Development Society (CDS), Columbus, OH
- Ahmed\*, S. F., Waters, N., Mitchell, C. (2015, May). *Dopaminergic polymorphisms moderate the relation between home environment and attention regulation.* Poster presented at the 27<sup>th</sup> Annual Convention of the Association for Psychological Science (APS), New York, NY
- Johnson\*\*, M. E., Stilwell, S. M., Ahmed\*, S. F., & Morrison, F. J., (2015, April). *The relation between attention control and academic achievement.* Poster presented at the University of Michigan annual UROP conference, Ann Arbor, MI
- Woods\*, A., & Ahmed\*, S. F. (2015, March) *The risk factors of special education placement among fragile families.* Poster presented at the biennial meeting of the Society for Research in Child Development (SRCD), Philadelphia, PA
- Ahmed\*\*, S. F., Sirin, S. R., & Gupta, T., & Novoa\*\*, A. D. (2013, April). *Urban adolescents' school engagement: Exploring the immigrant paradox and the protective influence of community connection.* Poster presented at the Society for Research in Child Development (SRCD), Seattle, WA
- Gupta, T. Sirin, S. R., Rogers-Sirin, L., Ahmed\*\*, S. F., Palmeri\*\*, J. M, & Duca\*\*, K. (2013, April). Gender and Generation status variations in the role of bicultural identification on cognitive engagement. Paper presented at the biennial meeting of the Society for Research in Child Development (SRCD), Seattle, WA
- Ahmed\*\*, S. F., Gupta, T., Palmeri\*\*, J. M., & Rogers-Sirin, L. (2012, August). *The role of community connection for immigrant youth's school engagement.* Poster presented at the 120<sup>th</sup> Annual Convention of the American Psychological Association (APA), Orlando, FL

#### **UNIVERSITY TEACHING**

## *Undergraduate Courses:*

Early Childhood Development (HDF 308, University of Rhode Island)
Methods Lab in Developmental Psychology (Psych 351, University of Michigan)
Introduction to Psychology as a Natural Science (Psych 111, University of Michigan)
Advanced Research Methods in Psychology (Psych 304, University of Michigan)
Research Methods in Psychology (Psych 303, University of Michigan)

#### Graduate Courses:

Seminar in Child Development (HDF 511, University of Rhode Island) Applied Structural Equation Modeling (HDFS 961, Michigan State University)

## **PROFESSIONAL SERVICE**

## Grant Reviewer:

Advisory Panel Member for the National Science Foundation (Developmental Sciences)	2023
Ad Hoc Reviewer for the National Science Foundation (Developmental Sciences)	2022

## Ad-Hoc Journal Reviewer:

Child Development; Journal of Educational Psychology; Developmental Psychology; Cognitive Development; Intelligence; Learning and Instruction; Infant and Child Development; Journal of Early Adolescence; Journal of Experimental Child Psychology; Children and Youth Services Review; Journal of Applied Developmental Psychology; Frontiers in Psychology; Mind, Brain, and Education; Developmental Science; Early Childhood Research Quarterly; Computers and Education; Educational Psychology Review; Scientific Reports (Registered Report); Journal of Child Psychology and Psychiatry

## Conference Reviewer:

Society for Research in Child Development (Panel #1 Attention, Learning, Memory; Panel #4 Cognitive Processes; Panel #12 Methods, History, Theory); Association for Psychological Science (General and Methodology Sections); American Educational Research Association; Cognitive Development Society

#### **UNIVERSITY SERVICE**

Child Development Center Teacher Search Committee; University of Rhode Island	2023
Developmental Science Committee Member; University of Rhode Island	2022
Curriculum Committee Member; University of Rhode Island	2022
Undergraduate Research and Arts Forum Judge; Michigan State University	2020
Tenure-Track Faculty Search Committee Member; University of Michigan	2016
Diversity Weekend Recruitment Representative; University of Michigan	2015
Curriculum Committee, Department of Psychology; University of Michigan	2014
Staff Writer, Online Publication of Undergraduate Studies; New York University	2010

## **COMMUNITY SERVICE**

Belleville Tech Science and Biology Representative; Belleville High School, MI	2017
Math and Science Fair Representative; Romulus Elementary School, MI	2016
Athletic Learning Services Mentor; University of Michigan Athletic Department	2014
Community Health Researcher; Academy of Medical & Public Health Services, NY	
PROFESSIONAL TRAINING	
Graduate Teaching Certificate; Center for Research on Learning and Teaching	2019
Graduate Degree Certificate in Data Science; Michigan Institute for Data Science	2017
Institute for Social Science Genomics; Russell Sage Foundation	2016
Multilevel Modeling, ICPSR Summer Institute Workshop	2015