MATTHEW H. KIM 012-C Kastle Hall, Lexington, KY 40506-0044 matthew.kim@uky.edu | (859) 257-6835 | <u>www.developingmindslab.org</u>

EDUCATION

Ph.D.	University of Michigan, 2015 <i>Area of study:</i> Developmental Psychology
M.S.	University of Michigan, 2013 <i>Area of study:</i> Developmental Psychology
B.A.	New York University, 2008 <i>Majors:</i> Economics (honors) and Psychology

PROFESSIONAL APPOINTMENTS

2020-present	Assistant Professor, Department of Psychology, University of Kentucky
2018-2020	Research Scientist, Institute for Learning & Brain Sciences, University of Washington
2018-2020	Teaching Associate, College of Education, University of Washington
2016-2018	Research Associate, Inflexion
2015-2016	Post-Doctoral Research Scholar, Prevention Science Institute, University of Oregon
	Faculty Fellow, University of Oregon
2008-2010	Research Assistant, MDRC

STATEMENT OF RESEARCH

My program of research examines the nature and development of motivation and executive functions in early childhood through adolescence—with a special focus on school transitions—and how these cognitive processes relate to the student success of diverse learners. I embrace the values of inclusive, open, and reproducible science and strive to pursue these goals in my work.

GRANTS AND FELLOWSHIPS

Under review

Principal Investigator (Collaborating Site: University of Kentucky): *Collaborative Research: My STEM Journey: Using digital storytelling to enhance identity-based motivation in science.* National Science Foundation: Improving Undergraduate STEM Education Proposed period of support: 2022–2027

Awarded

Co-Principal Investigator (with E. Madison [PI], J. Husman [Co-PI], R. Anderson [Co-PI]): *RAPID: Developing and researching youth-driven media that highlights science as an act of service during a public health crisis.* National Science Foundation Rapid Response Research Grant DRL2032226 | Period of support: 2020–2022 | Total award: \$151,040

Co-Principal Investigator (with E. Madison [PI], J. Husman [Co-PI], R. Anderson [Co-PI]): *My STEM Story: Scaling STEM motivation through digital storytelling and near peer relationships.* National Science Foundation: Innovative Technology Experiences for Students and Teachers DRL1759442 | Period of support: 2018–2022 | Total award: \$1,203,658

Completed

Principal Investigator: Schooling and the development of executive functioning skills: Integrating cognitive, neurophysiological, and educational perspectives. National Science Foundation: Graduate Research Fellowships Program DGE1256260 | Period of support: 2012–2015 | Total award: \$134,000

PUBLICATIONS

Peer-reviewed journal articles

Kim, M. H., Bousselot, T. E, & Ahmed, S. F. (2021). Executive functions and science achievement during thefive-to-seven-yearshift.DevelopmentalPsychology,57(12),2119–2133.https://doi.org/10.1037/dev0001261

Kim, M. H., Anderson, R. C., DeRosia, N.,* Madison, E., & Husman, J. (2021). There are two I's in motivation: Interpersonal dimensions of science self-efficacy among racially diverse adolescent youth. *Contemporary Educational Psychology*, *66*, 101989. <u>https://doi.org/10.1016/j.cedpsych.2021.101989</u>

Kim, M. H., Ahmed, S. F., & Morrison, F. J. (2021). The effects of kindergarten and first grade schooling on executive function and academic skill development: Evidence from a school cutoff design. *Frontiers in Psychology*, *11*, 607973. <u>https://doi.org/10.3389/fpsyg.2020.607973</u>

Kim, M. H., & McIntyre, L. L. (2019). Early communication skills and special education outcomes at school entry: Implications for pediatric care and screening. *Global Pediatric Health, 6,* 1–9. https://doi.org/10.1177/2333794X19884185

Morrison, F. J., **Kim, M. H.,** Connor, C. M., & Grammer, J. K. (2019). The causal impact of schooling on children's development: Lessons for developmental science. *Current Directions in Psychological Science,* 28(5), 441–449. <u>https://doi.org/10.1177/0963721419855661</u>

Kim, M. H., & Morrison, F. J. (2018). Schooling effects on literacy skills during the transition to school. *AERA Open,* 4(3), 1–15. <u>https://doi.org/10.1177/2332858418798793</u>

Kim, M. H., Shimomaeda, L., Giuliano, R. J., & Skowron, E. A. (2017). Intergenerational associations in executive function between mothers and children in the context of risk. *Journal of Experimental Child Psychology*, *164*, 1–15. <u>https://doi.org/10.1016/j.jecp.2017.07.002</u>

Kim, M. H., Marulis, L. M., Grammer, J. K., Morrison, F. J., & Gehring, W. J. (2017). Motivational processes from expectancy-value theory are associated with variability in the error positivity in young children. *Journal of Experimental Child Psychology*, *155*, 32–47. <u>https://doi.org/10.1016/j.jecp.2016.10.010</u>

McIntyre, L. L., Pelham, W. E., III, **Kim, M. H.,** Dishion, T. J., Shaw, D., & Wilson, M. (2017). A brief measure of language skills at age three and special education use in middle childhood. *Journal of Pediatrics, 181*, 189–194. <u>https://doi.org/10.1016/j.jpeds.2016.10.035</u>

^{*} Graduate student author

Kim, M. H., Grammer, J. K., Marulis, L. M., Carrasco, M., Gehring, W. J., & Morrison, F. J. (2016). Early math and reading achievement are associated with the error positivity. *Developmental Cognitive Neuroscience*, *22*, 18–26. <u>https://doi.org/10.1016/j.dcn.2016.09.002</u>

Reports and white papers

Kim, M., Woods, A., Ellis, A., & Davis-Kean, P. (2020). *Teaching and mentoring open science*. <u>https://doi.org/10.17605/osf.io/jux4t</u>

Bousselot, T., **Kim, M.,** Storksdieck, M., O'Connell, K., & Keys, B. (2017). *STEM Hub capacity building to support evaluative thinking and continuous improvement: An interim report prepared for Oregon's Chief Education Office.* Educational Policy Improvement Center (dba Inflexion): Eugene, OR.

Other products

Madison, E., **Kim, M.**, & Guldin, R. (2021, December 7). How the pandemic may help more students see themselves as scientists. *EdSurge*. <u>https://www.edsurge.com/news/2021-12-07-how-the-pandemic-may-help-more-students-see-themselves-as-scientists</u>

Madison, E., Anderson, R., DeRosia, N., Guldin, R., Husman, J., & **Kim, M.** (2021). *My STEM Story: Students explore science identities.* Retrieved from <u>https://stemforall2021.videohall.com/presentations/1981</u>

MANUSCRIPTS

In principle acceptance

Kim, M. H., & Sidney, P. G.[^] (2022, July 12) Do teacher instructional practices shape children's academic self-concept and interest in mathematics and science? Evidence from TIMSS 2015. *Infant and Child Development*. <u>https://doi.org/10.17605/OSF.IO/FJDN9</u>

Under review

Kim, M. H. *A bioecological perspective on mindset.* In revision.

Kim, M. H., & Karr, J. E. *Examining associations between intelligence mindset, mental health symptom severity, and academic self-efficacy and performance.* [Preregistration: <u>https://osf.io/ekazj</u>] Revision under review.

Kim, M. H. *Examining self-theory and general measures of implicit theories of intelligence and interest.* [Stage 1 Registered Report]

Kim, M. H., DeRosia, N.,* Guldin, R.,* Lazaro, M.,* Husman, J., Madison, E., & Anderson, R. C. *Adolescent identity development in sociohistorical context during COVID-19: Integrating ecological systems theory and socioemotional selectivity theory.*

Morrison, F. J., Grammer, J. K., Gehring, W. J., Weixler, L. B., & **Kim, M. H.** Role of self-regulation in the transition to school. In K. Pugh, C. Perfetti, S. Nag, & L. Verhoaven (Eds.), *Global variation in literacy development*. Cambridge University Press.

[^] Authors contributed equally

^{*} Graduate student author

CONFERENCE PRESENTATIONS

Under review

Kim, M., & Buford, K.* (2023, April). *Interest development and implicit theories of interest: An integrative theoretical approach.* Paper submitted for presentation at the 2023 Annual Meeting of the American Educational Research Association, Chicago, IL.

Kim, M., Braun, C.,[†] Antony, C.,[†] Buford, K.,^{*} Hurst, T.,[†] & Todd, J.[†] (2023, April). *Implicit theories of interest among academic advisors and undergraduate students*. Paper submitted for presentation at the 2023 Annual Meeting of the American Educational Research Association, Chicago, IL.

Accepted

Husman, J., **Kim, M.,** Madison, E., & Anderson, R. (2022, August). *Imaging the future: Exploration of the effect of future thinking on self-regulated learning.* Abstract accepted for presentation at the 17th International Conference on Motivation, Dresden, Germany.

Presented

Kim, M., Anderson, R., Bousselot, T., Husman, J., & Madison, E. (2022, August). *Implicit theories of science ability and interest among diverse adolescent youth.* Poster presented at the 2022 Annual Meeting of the American Psychological Association, Division 15, Minneapolis, MN. <u>https://osf.io/32nj5/</u>

Kim, M., DeRosia, N.,* Guldin, R.,* Lazaro, M.,* Husman, J., Madison, E., & Anderson, R. (2022, July). *Science identity in sociohistorical context: Interpersonal connections, social goals, and perceptions of time and agency in adolescence during a pandemic.* Poster presented at the Network Gender & STEM Conference 2022, Munich, Germany.

Kim, M. H., Han, J.,* Buford, K.,* Usher, E. L., & Osterhage, J. (2022, June). *Impacts of instructor ability mindset on undergraduate academic performance.* Paper presented at the Tenth SELF International Conference, Quebec City, Canada.

Madison, E., Husman, J., Anderson, R., & **Kim, M. H.** (2022, June). *Cultivating a science identity in underrepresented students through near peer mentoring.* Paper presented at the Tenth SELF International Conference, Quebec City, Canada.

Antony, C.,[†] Braun, C.,[†] Hurst, T.,[†] Todd, J.,[†] Buford, K.,^{*} & **Kim, M.** (2022, April). *Examining academic advisors' beliefs about interest and ability and their influence on student academic decision making.* Poster presented at the 16th Annual Showcase of Undergraduate Scholars, Lexington, KY.

Antony, C.,[†] & **Kim, M.** (2022, April). *Blue or pink? Art or math? Gender roles and children's implicit theories of ability in the arts and sciences.* Poster presented at the 16th Annual Showcase of Undergraduate Scholars, Lexington, KY.

Patel, N. R.,[†] **Kim, M. H.,** & Karr, J. E. (2022, March). *Detecting reliable change in academic self-efficacy.* Poster presented at the 2022 Kentucky Psychological Science Conference, Louisville, KY.

Kim, M. H. (2022, February). *Impacts of COVID-19 on science interest and possible futures in science: Reflections from adolescent youth.* Paper presented at the University of Kentucky Center for Equality and Social Justice Research Symposium: The social and the science: Psychosocial and biomedical research on COVID-19.

^{*} Graduate student author

[†] Undergraduate student author

Buford, K.,* Han, J.,* **Kim, M.,** Usher, E., & Osterhage, J. (2021, December). Impacts of teacher mindset on undergraduate academic performance. In **M. Kim** (Session Discussant). *Students' perspectives on instructional practices during COVID-19.* Presented at the University of Kentucky Teaching and Learning During COVID-19 Research Symposium.

DeRosia, N.,* Bousselot, T., **Kim, M. H.,** Anderson, R., Madison, E., & Husman, J. (2021, July). Pathways and intersections: STEM futures and identity-based motivation. In C. Starr (Chair). *Forming and supporting STEM identities.* Paper presented at the Network Gender and STEM 2021 meeting, Sydney, Australia.

Kim, M. H., DeRosia, N.,* Guldin, R.,* & Lazaro, M.,* Anderson, R., Bousselot, T., ... Madison, E. (2021, April). How does viewing mentored science learning activities shape identity development in adolescent youth during a pandemic? A qualitative study. In **M. H. Kim** (Chair). *Identity exploration, discrimination, and information access among diverse youth and families during COVID-19.* Paper presented at the 2021 biennial meeting of the Society for Research in Child Development.

Grammer, J. K., Isbell, E., **Kim, M. H.**, Gehring, W., Hazlett, C., & Morrison, F. (2021, April). The impact of school experience on cognitive control processes. In Y. L. Shing (Chair). *Causal impacts of schooling on children's cognitive and brain development*. Paper presented at the 2021 biennial meeting of the Society for Research in Child Development.

Kim, M. H., Woods, A. D., Ellis, A., & Davis-Kean, P. E. (2020, June). *Teaching and mentoring open science*. Unconference session presented at the annual meeting of the Society for the Improvement of Psychological Science, Victoria, BC, Canada. [Virtual conference due to COVID-19.]

Madison, E., Husman, J., Anderson, R., & **Kim, M. H.** (2020, May). *Opening access and diversifying science through digital storytelling and near peer mentoring.* Paper presented at the annual conference of the International Communication Association, Gold Coast, Australia. [Virtual conference due to COVID-19.]

Husman, J., **Kim, M.,** Anderson, R., & Madison, E. (2019). *Stories of the future: Integration of research on Future Thinking and Future Time Perspective—A discussion of two interventions.* Paper presented at the International Symposium on Time Perspective., Chongqing, China.

Grammer, J., Xu, K., **Kim, M.**, Hazlett, C., Morrison, F., & Gehring, W. (2018, October). Examining the neural and behavioral correlates of young children's response inhibition. In A. Beltz (Chair). *Insights from shared and open data in developmental neuroimaging research.* Paper presented at DEVSEC: Conference on the Use of Secondary and Open Source Data in Developmental Science, Phoenix, AZ.

Thier, M., **Kim, M. H.,** & Daquilanto, K. M. (2018, April). *It matters how you ask: Assessing the knowledge, skills, behaviors, or dispositions of global citizenship.* Paper presented at the annual meeting of the American Educational Research Association, New York, NY.

Xu, K., Gehring, W., **Kim, M.,** Morrison, F., & Grammer, J. (2017, October). *Brain and behavioral correlates of error monitoring in young children.* Presented at the biennial meeting of the Cognitive Development Society, Portland, OR.

Kim, M. H. (2017, April). Schooling effects on early academic skills: Replication and extension of a natural experiment. In **M. H. Kim** (Chair). *Causal inference in developmental research: Using regression discontinuity to illuminate academic, brain, and policy outcomes.* Presented at the biennial meeting of the Society for Research in Child Development, Austin, TX.

Shimomaeda, L., **Kim, M.,** Giuliano, R., & Skowron, E. (2017, April). *Maternal cardiac physiology and child executive function.* Presented at the biennial meeting of the Society for Research in Child Development, Austin, TX.

^{*} Graduate student author

Torgrimson, S. J., Grammer, J., **Kim, M. H.**, Morrison, F., & Gehring, W. J. (2017, April). *Executive functions and academic success: Neural indices of response inhibition relate to children's literacy and math achievement.* Presented at the biennial meeting of the Society for Research in Child Development, Austin, TX.

Kim, M. H. (2016, May). Early math and reading achievement are associated with the error positivity. In S. Lo & J. Grammer (Chairs). *The role of self-regulation in predicting social-emotional and academic outcomes in young children: A neurophysiological approach.* Presented at the annual convention of the Association for Psychological Science, Chicago, IL.

Grammer, J. G., **Kim, M.**, Gehring, W., & Morrison, F. (2015, April). Associations between non-task behavior and error monitoring in children undergoing ERP testing. In K. Fitzgerald & J. Moser (Chairs). *Error monitoring brain activity in child and adolescent anxiety*. Paper presented at the annual meeting of the Anxiety and Depression Association of America, Miami, FL.

Marulis, L., **Kim, M.,** Grammer, J., Morrison, F., Gehring, W., & Carrasco, M. (2015, March). *The association between preschoolers' metacognitive knowledge, error-related brain activity, and their pre-academic achievement.* Presented at the biennial meeting of the Society for Research in Child Development, Philadelphia, PA.

Kim, M. H., Marulis, L. M., Grammer, J. K., Gehring, W. J., & Morrison, F. J. (2014, July). *Motivational beliefs and achievement-related emotions are associated with error monitoring processes: Linking brain and behavioral perspectives.* Presented at the annual meeting of the Society for the Scientific Study of Reading, Santa Fe, NM.

Grammer, J., **Kim, M.,** Carrasco, M., Gehring, W., & Morrison, F. (2014, July). *Literacy and executive functions: An electrophysiological perspective.* Presented at the annual meeting of the Society for the Scientific Study of Reading, Santa Fe, NM.

Grammer, J., **Kim, M.**, Gehring, W., & Morrison, F. (2014, April). *Examining neurophysiological correlates of executive function in elementary schools.* Presented at the SRCD Special Topic Meeting: Strengthening connections among child and family research, policy, and practice, Alexandria, VA.

Marulis, L. M., **Kim, M. H.**, Grammer, J. K., Carrasco, M., Morrison, F. J., & Gehring, W. J. (2013, August). *Is young children's metacognitive knowledge associated with their error-related brain activity?* Presented at the 15th biennial EARLI conference for research on learning and instruction, Munich, Germany.

Kim, M. H., Marulis, L. M., Grammer, J. K., Carrasco, M., Gehring, W. J., & Morrison, F. J. (2013, April). *Motivation and error-related brain activity in young children.* Presented at the biennial meeting of the Society for Research in Child Development, Seattle, WA.

Marulis, L. M., **Kim, M. H.,** Grammer, J. K., Carrasco, M., Morrison, F. J., & Gehring, W. J. (2013, April). *Young children's inhibitory control skills are associated with error-related brain activity.* Presented at the annual meeting of the Cognitive Neuroscience Society, San Francisco, CA.

Kim, M. H., Marulis, L. M., Grammer, J. K., Carrasco, M., Morrison, F. J., & Gehring, W. J. (2013, April). *Motivational characteristics of young children are associated with error-related brain activity.* Presented at the annual meeting of the Cognitive Neuroscience Society, San Francisco, CA.

Grammer, J. K., Gehring, W. J., Carrasco, M., **Kim, M. H.,** & Morrison, F. J. (2011, October). *Exploring the effects of schooling on changes in behavioral and neurological indices of children's executive functioning skills.* Presented at the annual conference of the Cognitive Development Society, Philadelphia, PA.

Kim, M. H., Grammer, J. K., Gehring, W. J., Carrasco, M., Knieper, K., & Blain, M., & Morrison, F. J. (2011, April). *An event-related potential (ERP) study of the effects of schooling on young children's executive function development: Integrating educational and neurophysiological perspectives.* Presented at the annual conference of the Center for Culture, Mind, and the Brain, Ann Arbor, MI.

Kim, M. H., Bell, L. H., & Morrison, F. J. (2011, March). *Math in kindergarten classrooms: Effects of children's executive functioning and instruction on early math achievement.* Presented at the biennial meeting of the Society for Research in Child Development, Montreal, Canada.

O'Shea, G., **Kim, M.,** Astuto, J., & Allen, L. (2009, April). *Pathways to civic engagement: Self-efficacy and the role of schools in promoting citizenship in urban youth.* Presented at the biennial meeting of the Society for Research in Child Development, Denver, CO.

Scheduled	
2022	University of Louisville, Department of Psychological and Brain Sciences, Louisville, KY
2022	University of Alabama, College of Education, Tuscaloosa, AL
Completed	
2021	University of Kentucky College of Education and Fayette County Public Schools, <i>Teacher Support Learning Labs: Supporting Student and Teacher Self-Regulation</i> , Lexington, KY
2021	University of Kentucky, Developmental, Social, and Health Area Brown Bag, Lexington, KY
2020	University of Kentucky, P20 Motivation and Learning Lab, Lexington, KY
2020	NSF RAPID COVID-19 K–12 Mini-Conference, virtual meeting
2019	University of Alabama, College of Education, Tuscaloosa, AL
2019	University of Kentucky, Department of Psychology, Lexington, KY
2019	University of Washington, Department of Psychology, Seattle, WA
2018	Ball State University, Department of Educational Psychology, Muncie, IN
2017	University of Scranton, Department of Psychology, Scranton, PA
2015	ERN data blitz meeting, East Lansing, MI
2014	ERN data blitz meeting, Ann Arbor, MI
2014	Washtenaw County Birth to Six Advisory Council Meeting, Ann Arbor, MI
2013	University of Oregon, Department of Psychology, Eugene, OR
2013	Pat Gurin Lecture Series Colloquium, Ann Arbor, MI
2012	Cognition and Cognitive Neuroscience Forum, Ann Arbor, MI

INVITED TALKS

HONORS AND AWARDS

- 2022 Nominee, UK Excellent Undergraduate Research Mentor Award
- 2020 UW College of Education Teaching Excellence in 2019–2020
- 2015 Nominee, Marquis Award for best dissertation in the Department of Psychology
- 2014 Rackham Conference Travel Grant (also awarded in 2011 and 2013)
- 2013 Pat Gurin Distinguished Lecture Award
- 2013 Rackham Graduate Student Research Grant (also awarded in 2011)

TEACHING

Teaching		
University of Kentucky	PSY 311: Learning and Cognition (UG)	
	PSY 375: Special Topics in Psychology: Self-Regulation/Motivation (UG)	
University of Washington	ECFS 401: Understanding Early Childhood & Family Studies Research (UG)	
	EDPSY 528: Achievement Motivation in Education (G)	
	EDPSY 532: Adolescence and Youth (G)	
	EDUC 310: Current Issues in Education—Self-Regulation and Motivation: Research, Policy, and Practice (UG)	
Professional development		
2019	UW Evidence-Based Teaching Program	
2014	University of Michigan Graduate Teacher Certificate	

MENTORING

Graduate advising

2021-present	Kristen Buford, M.A., University of Kentucky (Chair)
2021-present	Julie Shirah, M.S., University of Kentucky (Committee member)
2019	Lucy Moffitt Herr, M.Ed., Learning Sciences and Human Development, College of Education, University of Washington (Committee member)

Undergraduate honors theses/capstone projects

Susana Gutierrez-Leiva, 2022-present

Licia Henneberg, High schoolers' experiences in college preparatory programs, 2022-present

Mayson Spillman, 2022–present

Christine Antony, Blue or pink? Art or math? Gender roles and children's implicit theories of ability in the arts and sciences, 2021–present

Claire Braun, Academic mindset and intelligence beliefs of high-achieving students attending a residential STEM-focused high school program, 2021–present

High school senior capstone projects

Karen Matsui, *My STEM Story and its effects on intrinsic motivation in STEM on high school students*, 2022–present

Research/internship in psychology

2022-present	PSY 399: Lindsey Crowley, Abby Graham
2021-present	PSY 394/395: Tabetha Hurst, Meghan Pawsat, Julia Todd
Other activities	
2013-2015	Research Mentor, U-M Undergraduate Research Opportunity Program

2014	Mentor, U-M Athletics Academic Success Program
2012-2014	Academic Advisor, U-M Department of Psychology Student Academic Affairs

SERVICE

Ad-hoc journal reviewer

AERA Open Applied Developmental Science Autism Computers and Education Early Childhood Research Quarterly Infant and Child Development Intelligence International Journal of Educational Development Journal of Educational Psychology Journal of Experimental Child Psychology Social Development

Grant review panels

2022	NIH-NINDS Special En	nphasis Panel: Enha	ncing Experimental Rigo

Conference reviewer

2019	SRCD biennial meeting (Panel #1: Attention, I	Learning, Memory)

Departmental service and community engagement

Organist, Mary Queen of the Holy Rosary Catholic Church
Developmental Area Graduate Student Award Selection Committee
UK/Fayette County Public Schools Partnership Collaborative Committee
U-M Developmental Area Admissions Committee
U-M Developmental Psychology Curriculum Committee

PROFESSIONAL AFFILIATIONS

American Educational Research Association (+ Motivation in Education SIG) American Psychological Association (+ Division 15: Educational Psychology) Society for the Improvement of Psychological Science Society for Research in Child Development (+ Asian Caucus)