MICHELE TINE

Dartmouth College | Department of Sociology | 306C Blunt Hall | Hanover, NH 03755 603.646.9043 | michele.tine@dartmouth.edu

PROFESSIONAL	
Associate Professor, Dartmouth College, Sociology Department	2021-present
Chair of the Education Steering Committee, Dartmouth College	2021-present
Department Chair, Dartmouth College, Department of Education	2019-2021
Associate Professor, Dartmouth College, Department of Education	2016-2021
Assistant Professor, Dartmouth College, Department of Education	2009-2016
Research Associate, University of Pennsylvania, Computational Memory Lab	2003-2005
Research Assistant, Brandeis University, Computational Memory Lab	2002-2003
5 th Grade Classroom Teacher, Chelsea Public Schools, Chelsea, MA	2001-2002
EDUCATION	
Ph.D., Applied Developmental and Educational Psychology Boston College, Lynch School of Education, Chestnut Hill, MA	2009
B.A., Psychology and Education Gettysburg College, Gettysburg, PA Magna Cum Laude, Phi Beta Kappa	2001

UNDERGRADUATE COURSES TAUGHT

The Impact of Poverty on Education (EDCU27), Dartmouth College Introduction to Education: Learning, Development, & Teaching (EDUC01), Dartmouth College History and Theory of Human Development and Learning (EDUC15), Dartmouth College Social and Emotional Development (EDUC57; EDUC47), Dartmouth College Educational Psychology (EDUC16), Dartmouth College Child Growth and Development (APSY1030), Boston College Family, School, and Society (APSY1031), Boston College

AWARDS

2021, 2019
2014
2012
2009
2008
2008

GRANTS, FELLOWSHIPS, AND PRIZES		
National Science Foundation and National Security Agency, GenCyber Grant ITIS GenCyber Introductory Cybersecurity Program for High School Students	2020-2022	
Amount: \$82,950 Role: Faculty		
Leslie Center for the Humanities, Dartmouth College, Theme Course	2020	
The Impact of Poverty on Education Amount: \$5,000		
National Institutes of General Medical Sciences, Science Education Partnership	2019-2024	
Award (SEPA)		
Dartmouth Rural STEM Education Partnership		
Amount: \$1,304,673.00 Role: Co-PI		
Jack and Dorothy Byrne Foundation		
An Intervention to Engage Children Living in Rural Poverty in STEM Amount: \$25,000.00 Role: PI	2018-2020	
Scholarly Innovation and Advancement Award, Dartmouth College	2017-2020	
The BUILD-IT BOX Project: Bringing Informal Out of School STEM		
Activities to Children Living in Rural Poverty		
Amount: \$25,000.00 Role: PI		
Friedman Family Fellowship, Dartmouth College	2016-2017	
The Income-Achievement Gap: In the Classroom		
Amount: \$2,000.00		
Spencer Foundation Small Research Grant	2014-2016	
Growing Up in Rural vs. Urban Poverty: Investigating the Relationship		
Between Distinct Ecological Contexts, Working Memory Ability, and		
Academic Achievement		
Amount: \$49,844.00 Role: PI		
Junior Faculty Fellowship, Dartmouth College	2014	
Uncovering the Neurocognitive Profile of Children Living in Rural Pover Amount: \$700.00	rty	
The Nelson A. Rockefeller Center Research Grant	2010-2011	
Rural and Urban Poverty: Distinct Effects on Working Memory		
Amount: \$6,669.70 Role: PI		
Walter and Constance Burke Research Initiation Award, Dartmouth College	2009-2016	
Underlying Cognitive Factors that Mediate Group Differences on		
Academic Outcomes		
Amount: \$25,000.00		

PUBLICATIONS

Sloboda, R., May, V., **Tine, M.** & Skinner, A. (2021). *Ticks: How climate change affects my health. Virtual curriculum. [Kit]* Hanover, NH: Dartmouth Rural STEM Education Partnership https://sepa.host.dartmouth.edu

- Sloboda, R., May, V., **Tine, M.** & Skinner, A. (2020). *Ticks: How climate change affects my health. Classroom curriculum. [Kit]* Hanover, NH: Dartmouth Rural STEM Education Partnership https://sepa.host.dartmouth.edu
- **Tine, M.** & DeFrancis, G. (2020). *BUILD-IT-BOXES: Hands-on, investigative science activities* [Kits 1-12]. Norwich, VT: Montshire Museum of Science.
- **Tine, M.** (2019). Location matters: distinct cognitive and academic profiles of students from rural versus urban poverty. *Journal of Advances in Education Research*, 4(1), 1-12.
- **Tine, M.**, Batchelder, C. and Lenhihan, S. (2018). Educational implications of spatial memory. In A.S. Artis (Ed.), *Spatial Memory*. New York, NY: InTech Open Science.
- **Tine, M.** (2017). Growing up in rural vs. urban poverty: contextual, academic, and cognitive differences. In G.I. Staicu (Ed.), *Poverty and Deprivation*. NY, NY: InTech Open Science.
- Franke, V. (Director, Producer) & **Tine, M.** (Writer) (2017). Sparking a love of reading: why and how. In. Franke, V. (Producer), *Children's Literacy Foundation Educational Videos for Low-income Parents*, Waterbury, VT: Peregrine Productions.
- **Tine, M.** (2016). Can the science of learning close the achievement gap for students from low-income families, *Alliance for Excellent Education*, 10(12), 1-3.
- **Tine, M.**, & McMurchy, M. (2016). Empirical differences between rural and urban poverty: considerations for school administrators. *School Administrator*, 73(3), 38-40.
- **Tine, M.** (2014b). Acute aerobic exercise: an intervention for the selective visual attention and reading comprehension for low-income adolescents. *Frontiers in Psychology*, 5(575), 1-10.
- **Tine, M.** (2014a). Working memory differences between children living in rural and urban poverty. *Journal of Cognition and Development*, 15(4), 599-613.
- Lucariello, J., **Tine, M.**, & Ganley, C. (2014). A formative assessment of students' algebraic variable misconceptions. *Journal of Mathematical Behavior*, *33*, 30-41.
- **Tine, M.**, & Gotlieb, R. (2013). The effects of multiple stigmatized aspects of identity on working memory and math performance. *Social Psychology of Education*, 16(3), 353-376.
- **Tine, M.**, & Butler, A. (2012). The impact of an acute bout of aerobic exercise on selective attention: an exceptional boost in lower-income children. *Educational Psychology*, 32(6), 681-696.
- Lucariello, J., Butler, A., & **Tine, M.** (2012). Meet the "Reading Rangers": curriculum for teaching comprehension strategies to urban third graders. *Perspectives on Urban Education*, 9(2), 1-14.

Tine, M., & Lucariello, J. (2012). Unique Theory of Mind differentiation in children with Autism and Asperger syndrome. *Autism Research and Treatment*, 2012, 1-11.

Casey, B., Vasilyeva, M., Dearing, E., Ganley, C., & **Tine, M.** (2011). Spatial and numerical predictors of measurement performance: the moderating effects of community poverty and gender. *Journal of Educational Psychology*, *103*(2), 296-311.

Lucariello, J., & **Tine**, **M.** (2011). Algebraic misconceptions: a test for teacher (and researcher) use for diagnosing misconceptions of the variable. In N.L. Stein and S.W. Raudenbush (Eds.) *Developmental cognitive science goes to school* (pp. 250-266). Mahwah, NJ: Erlbaum.

Sederberg, P., Schulze-Bonhage, A., Madsen, J.R., Bromfield, E.B., McCarthy, D.C., Brandt, A., **Tully, M.**, & Kahana, M.J. (2007). Hippocampal and neocortical gamma oscillations predict memory formation in humans. *Cerebral Cortex*, *17*(5), 1190-1196.

Raghavachari, S., Lisman, J.E., **Tully, M.**, Madsen, J.R., Bromfield, E.B., & Kahana, M.J. (2006). Theta oscillations in human cortex during a working memory task: evidence for local generators. *Journal of Neurophysiology*, 95(3), 1630-1638.

Zaromb, F.M., Howard, M.W., Dolan, E.D., **Tully, M.**, Sirotin, Y.B., Wingfield, A., & Kahana, M.J. (2006). Temporal associations and prior list intrusions in free associations and prior list intrusions in free recall. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 32(4), 792-804.

PRESENTATIONS

Talks

Tine, M. (July 2021). Unique Cognitive Profiles Associated with Growing up in Rural Poverty. *Student Success Summit*, Virtual.

Tine, M. (April 2021). Low-income rural youth: Understanding their unique cognitive development and what we can do about it. *Rural College Access and Success Summit*, Virtual.

Tine, M. (February 2021). Education in the age of COVID-19. Education Pathways, Virtual.

Tine, M. (January 2020). Survey methods: Considerations when working with low-income children. Survey Methods Graduate Course Ph22. *Dartmouth College*, Hanover, NH.

Tine, M. (February 2019). Rural poverty, cognitive development, and school. *Lebanon SAU Diversity Council*. Lebanon, NH.

- **Tine, M.** (October 2018). Poverty and cognition. Institutional Diversity and Equity Summit. *Dartmouth College*, Hanover, NH.
- **Tine, M.** (April 2018). The development of BUILD-IT Boxes: Bringing informal out of school STEM activities to children living in rural poverty. *American Educational Research Association*, New York, NY.
- Tine, M. (April 2017). Poverty and reading. Children's Literacy Foundation, Hanover, NH.
- **Tine, M.** (October 2017). Low-income rural youth and their unique needs. Keynote. *Vermont Educational Opportunity Programs Annual Conference*, Randolph, VT.
- **Tine, M.** (January 2017). How to be the best version of yourself: Based on science. *Last Lecture Series, Dartmouth College*, Hanover, NH.
- **Tine, M.** (August 2016). The unique cognitive development of students living in rural poverty: what to understand as an educator. *GEAR UP Development Conference*, Fairlee, VT.
- **Tine, M.** (May 2016). The relationship between teaching and learning. *Spring Lecture Series, Dartmouth College*, Hanover, NH.
- **Tine, M.** (April 2016). The unique income-achievement gap in impoverished rural areas: exploring causes and effects. *American Educational Research Association*, Washington, DC.
- **Tine, M.** (March 2016). The cognitive and academic consequences of rural poverty. *REL Northeast and Islands, EDC, U.S. Department of Education, Institute of Education Sciences Research Symposium*, Albany, NY.
- **Tine, M.** (October 2015). Rural vs. urban poverty: differences in cognition and academic achievement. *National Rural Education Association*, St. Louis, MO.
- **Tine, M.** (April 2015). Where you live matters: neurocognitive and academic differences between growing up in rural and urban poverty. *American Educational Research Association*, Chicago, IL.
- **Tine, M.** (April 2015). Tinkering with rural youth: a cognitive perspective. *Montshire Museum of Science*, Norwich, VT.
- **Tine, M.** (March 2015). Literacy and the income achievement gap. *Children's Literacy Foundation*, Waterbury, VT.
- **Tine, M**. (July 2014). Working memory profiles and use in rural and urban poverty. *International Conference on Working Memory*, Cambridge, UK.
- **Tine, M.** (March 2014). Improving the selective attention and reading comprehension of low-income adolescents. *Society for Research on Adolescence*, Austin, TX.

- **Tine, M.** (December 2013). The verbal and visuospatial working memory abilities of children growing up in rural poverty: implications for informal learning. *Montshire Museum of Science*, Norwich, VT.
- **Tine, M.** (September 2013). Cognition in rural and urban poverty. *Keynote Alumni Address, Gettysburg College*, Gettysburg, PA.
- Gotlieb, R., & **Tine**, **M.** (April 2013). The effects of multiple stigmatized aspects of identity on math performance and working memory. *American Educational Research Association*, San Francisco, CA.
- **Tine, M.**, & Gersen, W. (February 2013). Transforming instead of reforming education: a mind, brain, and education approach. *Dartmouth Rotaract*, Dartmouth College, Hanover, NH.
- Holcombe, R., & **Tine**, **M.** (January 2013). Stereotype threat, the achievement gap, and the challenge for educators. *Educurious*, Dartmouth College, Hanover, NH.
- **Tine, M.** (October 2012). Unique communities, unique development: Working memory differences between children living in rural and urban poverty. *National Rural Education Association*, Cincinnati, OH.
- **Tine, M.** (April 2012). Rethinking theory of mind for children with autism spectrum disorders. *Autism Spectrum Parents Information and Resource East Meeting*, Hanover, NH.
- **Tine, M.** (February 2012). Improving literacy in rural towns: research and strategy. *Children's Literacy Foundation*, Howe Library, Hanover, NH.
- **Tine, M.** (June 2011). Uncovering working memory differences in rural and urban poverty. *SPRIG*, Dartmouth College, Hanover, NH.
- **Tine, M.** (May 2011). Different communities, different development. *Exploring the Interface Conference*, Dartmouth College, Hanover, NH.
- **Tine, M.** (March 2011). Working memory, academic achievement, and neighborhoods. *Merrimack School Board*, Merrimack, NH.
- **Tine, M.** (June 2010). Working memory: driving the income-achievement gap on standardized math tests. *Jean Piaget Conference*, St. Louis, MO.
- **Tine, M.** (April 2010). Cognitive strengths for children with autism spectrum disorders. *Autism Spectrum Parents Information and Resource East Meeting*, Dartmouth College, Hanover, NH.
- **Tine, M.** (February 2010). Poverty and gender as predictors of measurement performance. *Social Brain Sciences Brownbag*, Dartmouth College, Hanover, NH.

Lucariello, J., Butler, A., & **Tully Tine, M.** (April 2009). Harnessing social cognitive resources for instruction on reading comprehension. *Society for Research in Child Development,* Denver, CO.

Lucariello, J., & **Tully Tine**, **M.** (April 2009). Diagnostic assessment: a test for teacher and researcher use to identify students with variable misconceptions. *Society for Research in Child Development*, Denver, CO.

Russell, M., Lucariello, J., Miranda, H., Kay, R. & **Tully, M.** (March 2008). Diagnosing algebraic misconceptions in eighth and ninth grade students. *American Educational Research Association*, NY, NY.

Lucariello, J., Butler, A., & **Tully, M.** (April 2007). Meet the "Reading Rangers": a social-cognitive curriculum for learning comprehension strategies. *American Educational Research Association*, Chicago, IL.

Lucariello, J., Butler, A., & **Tully, M.** (March 2007). So much to learn, so much time: learning in the sociality domain. *Society for Research in Child Development*, Boston, MA.

Posters

Sloboda, R. **Tine, M**., May, V., Skinner, V., Foster-Johnson, L., Brahms, L., Fenzel, M., & Price, K. (December 2020). Dartmouth STEM Educator Partnership, *American Society for Cell Biology*, Virtual.

Sloboda, R. **Tine, M**., May, V., Skinner, V., Foster-Johnson, L., Brahms, L., Fenzel, M., & Price, K. (May 2020). Dartmouth STEM Educator Partnership, *NIHSciEd Conference* Virtual.

McDermott, C., McCormack, K., Kannam, J., & **Tine, M.** (May 2014). Determining the cognitive effects of rural and urban poverty. *Wetterhahn Undergraduate Science Poster Symposium*, Dartmouth College, Hanover, NH.

Hulbert, S., Gotlieb, R., Towner, A., O'Dea, A., Hamlin, E., Wearn, A., & **Tine, M.** (May 2012). Effects of acute bouts of exercise on selective attention and reading comprehension of high- and low-income college students. *Wetterhahn Undergraduate Science Poster Symposium*, Dartmouth College, Hanover, NH.

Gotlieb, R. & **Tine, M.** (May 2012). Gender-, race-, and class-based stereotype threat: the effects of multiple stigmatized aspects of identity on math performance and working memory. *Psychological and Brain Sciences Honors Poster Presentations*, Dartmouth College, Hanover, NH.

Tine, M., Gangne, C., Gotlieb, R., Schneider, J., & Towner, A. (October 2011). The manifestation of rural vs. urban poverty on working memory. *Cognitive Development Society*, Philadelphia, PA.

- **Tine, M.**, & Butler, A. (March 2011). Addressing the income-achievement gap with acute bouts of aerobic exercise. *Society for Research in Child Development*, Montreal, Canada.
- **Tine, M.** (March 2011). Rural and urban poverty: distinct impacts on working memory? *Society for Research in Child Development*, Montreal, Canada.
- **Tine, M.**, & Butler, A. (October 2010). The impact of aerobic exercise on the selective attention of low- and middle-SES students. *New England Psychological Association*, Colchester, VT.
- **Tine, M.** (May 2010). Math SES differences mediated by working memory capacity. *Association for Psychological Science*, Boston, MA.
- **Tine, M.** (May 2010). Imputing mental states: strengths and weaknesses in autism and asperger syndrome. *Association for Psychological Science*, Boston, MA.
- Smith, E., Towner, A., Schneider, J., Aronson, S., & **Tine, M.** (May 2010). Acute bouts of exercise: a novel way to reduce the income achievement gap. *Wetterhahn Undergraduate Science Poster Symposium*, Dartmouth College, Hanover, NH.
- **Tine, M.** (October 2009). Uncovering a differentiated theory of mind in children with autism and Asperger's syndrome. *Cognitive Development Society*, San Antonio, TX.
- **Tully Tine, M.** (April 2009). Establishing SES differences on working memory tasks: one step closer to narrowing the achievement gap. *Society for Research in Child Development*, Denver, CO.
- Ganley, C., Casey, B., Dearing, E., Vasilyeva, M., & **Tully Tine, M.** (April 2009). Spatial and numerical predictors of measurement performance. *Society for Research in Child Development*, Denver, CO.
- Russell, M., Lucariello, J., Miranda, H., & **Tully, M.** (June 2007). Diagnostic algebra assessment. *Institute of Education Sciences*, Washington DC.
- Butler, A.G., **Tully, M.**, Lobron, A., & Lucariello, J. (March 2007). Strategy learning with the "Reading Rangers": recruiting social cognition in literacy instruction. *Society for Research in Child Development*, Boston, MA.
- **Tully, M.**, Butler, A., Lobron, A., & Lucariello, J. (March 2007). Strategy learning with the "Reading Rangers": recruiting social cognition in literacy instruction. *Boston College Graduate Research Forum*, Boston College, Boston, MA.
- Kahana, M. J., **Tully, M.**, Bromfield, E., Schulze-Bonhage, A., Fried, I., & Madsen, J. (April 2005). Intracranial recordings reveal memory-related brain oscillations. *Cognitive Neuroscience Society*, NY, NY.

Zaromb, F., Howard, M.W., Dolan, E.D., Sirotin, Y.B., **Tully, M.**, Wingfield, A., & Kahana, M.J. (April 2005). Temporal association and prior list intrusions in free recall. *Cognitive Neuroscience Society*, NY, NY.

Kahana, M.J., Dolan, E.D., **Tully, M.**, Zaromb, F., & Wingfield, A. (May 2004). Intrusions in episodic recall: Episodic and semantic contributions. *American Psychological Society*, Chicago, IL.

Madsen, M., **Tully, M.**, Myers, D., Kahana, M., & Madsen, J. (November 2003). Computer investigation of oscillations in simple cellular automata: A model of brain activity accessible in secondary school. *Society for Neuroscience*, New Orleans, LA.

PROFESSIONAL SERVICE

Grant Review Panel: National Science Foundation

Editorial Board: Journal of Research in Rural Education

Higher Education Research Committee: National Rural Education Association

Award Committee: American Educational Research Association Rural SIG

Annual Convention Review Board: American Educational Research Association

Ad hoc Reviewer for: Journal of Cognition and Development, Journal of Experimental

Education, Psychology in the Schools, Cognition and Instruction, Journal of Applied

Developmental Psychology, Journal of Abnormal Development

Children's Literacy Foundation, Board of Advisors

Montshire Museum of Science, Board of Trustees

PROFESSIONAL MEMBERSHIPS

American Educational Research Association National Rural Education Association American Psychological Association Society for Research in Child Development Cognitive Development Society Psi Chi National Honor Society of Psychology Phi Beta Kappa Society