

ETHAN M. MCCORMICK

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March, 2025

POSITIONS

University of Delaware, School of Education Newark, DE, USA Assistant Professor, Educational Statistics and Data Science Resident Faculty, Data Science Institute Affiliated Faculty, Psychological and Brain Sciences	2024 - Present
Leiden University, Institute of Psychology Leiden, ZH, NL Affiliated Faculty, Methodology and Statistics Assistant Professor, Methodology and Statistics	2024 - Present 2022 - 2024
CenterStat Consultant Courses: Multilevel Modelling, Structural Equation Modeling, Longitudinal Structural Equation Modeling, Network Analysis, Mixture Modeling, Measurement Modeling, Machine Learning, Causal Inference	2020 - 2023
EDUCATION & TRAINING	
Radboud University Nijmegen, GE, NL Postdoctoral Fellow – Lifespan Cognitive Dynamics Lab Donders Institute for Brain, Cognition, and Behaviour	2021 - 2022
Rutgers University Newark, NJ, USA Postdoctoral Fellow – Cole Neurocognition Laboratory Center for Molecular and Behavioral Neuroscience	2020 - 2021
University of North Carolina at Chapel Hill Ph.D. in Developmental Psychology, Quantitative Psychology Concentration Supervisor: Dr. Eva Telzer Dissertation Title: Neural Network Plasticity in Response to Experience: Contribution of Learning and Development	2020 as
University of Arkansas B.S. (Honors) in Biochemistry and Biology	2013
GRANTS AND AWARDS	
CEHD Faculty Assistant Professor Research Award, University of Delaware (\$1000)	2025
DP250100019 (Silk, PI) Australian Research Council – Discovery Grant Models of adolescent brain development to predict socioemotional function	2025 - 2027

Role: Partner Investigator Total Costs: AUS \$457,623

K99HD113873 (Ji, PI)

2024 - 2029

Eunice Kennedy Shriver National Institute of Child Health & Human Development – K99/R00 Pathway to Independence Award

Longitudinal assessment of human brain connectome changes across the birth transition in both term and preterm pregnancies

Role: Mentor (Longitudinal Methodology)

Total Costs: \$1,000,000

VI.Veni.231G.012 (McCormick, PI)

2024 - 2027

Nederlandse Organisatie voor Wetenschappelijk Onderzoek (NWO) Talent Programme Veni SSH TOETS Project: Tracking Ongoing Education Through Statistical modeling of Math Learning

Role: Principal Investigator Total Costs: $\le 320,000$

1R01MH129634-01 (Humphreys, PI)

2024 - 2026

National Institute of Mental Health

Parent-child proximity and emerging psychopathology.

Role: Co-Investigator

Total Costs: \$804,165 (\$75,888 subcontract)

Starting Grant (McCormick, PI)

2024 - 2028

Nederlandse Organisatie voor Wetenschappelijk Onderzoek (NWO)

Bayesian methods for connecting short-term fluctuation to long-term change.

Role: Principal Investigator

Total Costs: €240,000

2023-1510-00 (McCormick, PI)

2024 - 2026

Jacobs Foundation Research Fellowship

Modeling Complex Growth in Underlying Math Ability

Role: Principal Investigator Total Costs: 165,000 CHF

INV-009195 (Lloyd-Fox, PI)

2023 - 2025

Bill & Melinda Gates Foundation

BRIGHT IMPACT: Implementing Modeling Pathways for Accelerating neuro Cognitive (global) Toolkits.

Role: Co-Investigator Total Costs: \$747,350

202307720051 (Liu, Fellow)

2023 - 2027

China Scholarship Council (CSC) - Leiden University Scholarship

Stepwise estimation approaches of growth mixture models.

Role: Co-promotor, Daily supervisor

Supervision Team: Mark De Rooij, Promotor; Zsuzsa Bakk, Co-Promotor

R25 MH125545-01 (Mills, PI)

2020

National Institute of Mental Health

Modeling Developmental Change in the ABCD Study: Longitudinal Analyses for Clinical Outcomes.

Role: Co-Investigator Total Costs: \$121,800

R01 DA051127 (Telzer, Lindquist, & Prinstein, Co-PIs)

2020 - 2024

National Institute on Drug Abuse

Neurobiological susceptibility to peer influence and drug use in adolescence.

Role: Consultant

Total Costs: \$3,395,273

Stanford PRISM Fellow	2019
ABCD Summer Workshop Travel Award (\$500)	2019
Dashiell Departmental Travel Award, UNC (\$1000)	2018
Dashiell Dissertation Startup Award, UNC (\$1000)	2017 - 2018
Ernest C. Davenport Award for Outstanding Research by a	
Student Who Enhances Diversity, UNC (\$200)	2017 - 2018
Social Affective Neuroscience Society Travel Grant (\$250)	2015
Rhymer's Fellowship, UIUC	2014 - 2015

SOFTWARE

leni (R-package) 🖸

creator, maintainer

Linear Estimation with Nonlinear Inference

gimme (R-package) 🔾 🗘

contributor

Group Iterative Multiple Model Estimation

PREPRINTS (TITLES LINK TO OPEN-ACCESS PDFS)

- † Denotes mentored student or trainee | * Denotes senior/corresponding author role
- **6.** Sørensen, Ø., & McCormick, E.M. (preprint). Modeling cycles, trends, and time-varying effects in dynamic structural equation models with regression splines. https://doi.org/10.31234/osf.io/2ajpt
- **5.** McCormick, E.M. (preprint). Moderating the consequences of longitudinal change for distal outcomes. https://doi.org/10.31234/osf.io/bmynp
- 4. Liu, Y., Bakk, Z. McCormick, E.M., & de Rooij, M.J. (preprint). A Two-step estimator for growth mixture models with covariates in the presence of direct effects. https://osf.io/preprints/psyarxiv/4n7ke
- **3.** Schaaf, J.V., Sørensen, Ø., **McCormick, E.M.**, Aristodemou, M., & Kievit, R.A. (*preprint*). Advocating a new default for time series modeling: Asymmetric temporal dynamics using threshold dynamics parameters. https://osf.io/preprints/osf/3b5ra
- 2. McCormick, E.M. (preprint). A tutorial on formalizing and testing specific psychological theory using nonlinear models. https://doi.org/10.31234/osf.io/4y7q9
- 1. McCormick, E.M., Borgeest, G.S., & Kievit, R.A. (preprint). Interrupted mediation: A cautionary note on using derived metrics as intervening variables in path models. https://doi.org/10.31234/osf.io/48xj5

PUBLICATIONS (TITLES LINK TO OPEN-ACCESS PDFS)

2025 (3)

42. Sadeghi, N., Van Der Velpen, I., Baker, B., Batta, I., Genon, S., McCormick, E.M., Michel, L., Moraczewski, D., Morton, J.B., Seraji, M., Shaw, P., Silva, R.F., Soleimani, N., Sprooten, E.,

- Sørensen, Ø., Thomas, A.G., Wazana, A., Zhou, Z., Calhoun, V., Chakravarty, M.M., Kievit, R.A., Plachti, A., Zuo, X., & White, T. (2025). What do we really know about the interplay between brain, behavior, and cognition from childhood to early adulthood? An international group effort to generate and share simulated datasets. *Scientific Data*, 12, 473. https://doi.org/10.1038/s41597-025-04740-3.
- **41.** McCormick, E.M. (2025). Deriving models of change with interpretable parameters: linear estimation with nonlinear inference. *Psychometrika*, 1–27. https://doi.org/10.1017/psy.2024.2 | Preprint
- **40.** †König, M., Smith, A., Moreno-Lopez L., Davidson, E., Dauvermann, M., Orellana, S., **Mc-Cormick, E.M.**, Kaçer, M., Ioannidis, K., & Van Harmelen, A.L. (2025). Friendship buffering effects on mental health symptoms before and during the COVID-19 pandemic: a UK longitudinal study of young people with childhood adversity. *Development and Psychopathology*. 1-16. https://doi.org/10.1017/S0954579424001986 | ♣ Preprint

2024 (5)

- **39.** Brandmaier, A.M., Lindenberger, U., & *McCormick, E.M. (2024). Optimal two-time point longitudinal models for estimating individual-level change: asymptotic insights and practical implications. *Developmental Cognitive Neuroscience*, 70, 101450. https://doi.org/10.1016/j.dcn.2024.101450 | Preprint
- **38.** McCormick, E.M., & Bauer, D.J. (2024). How should we model the effect of "change" − or should we?. *Psychological Methods*. Advance Online Publication. https://doi.org/10.1037/met0000663 | Preprint
- **37.** McCormick, E.M., Curran, P.J., & Hancock, G.R. (2024). Latent growth factors as predictors of distal outcomes. *Psychological Methods*. Advance Online Publication. https://doi.org/10.1037/met0000642 | Preprint
- **36.** †Michel L.C., **McCormick, E.M.**, & Kievit, R.A. (2024). Grey and white matter metrics demonstrate distinct and complementary prediction of differences in cognitive performance in children: Findings from ABCD (N= 11 876). *Journal of Neuroscience*, 44(12). e0465232023oi. https://doi.org/10.1523/JNEUROSCI.0465-23.2023 | **R**x Preprint
- **35.** †Parsons, S., & *McCormick, E.M. (2024). Limitations of two time point data for understanding individual differences in longitudinal modeling what can difference reveal about change?. *Developmental Cognitive Neuroscience*, 66, 101353. https://doi.org/10.1016/j.dcn.2024.101353 | ♣ Preprint

2023 (4)

- **34.** Duell, N., Perino, M.T., **McCormick, E.M.**, & Telzer, E.H. (2023) Differential processing of risk and reward in delinquent and non-delinquent youth. *Social Cognitive and Affective Neuroscience*, 18(1), 1-9. https://doi.org/10.1093/scan/nsad040
- **33.** McCormick, E.M., Byrne, M.L., Flournoy, J.C., Mills, K.L., & Pfeifer, J.H. (2023). The Hitchhiker's guide to longitudinal models: A primer on model selection for repeated-measures methods. *Developmental Cognitive Neuroscience*, 63, 101281. https://doi.org/10.1016/j.dcn.2023.101281 | Preprint | Codebook Companion | •
- 32. McCormick, E.M., Cam-CAN, & Kievit, R.A. (2023). Poorer white matter microstructure predicts slower and more variable reaction time performance: evidence for a neural noise hypothe-

- sis in a large lifespan cohort. Journal of Neuroscience, 43(19), 3557-3566. https://doi.org/10.1523/JNEUROSCI.1042-22.2023 | En Preprint
- **31.** [†]Jorgensen, N.A., Muscatell, K.A., **McCormick, E.M.**, Prinstein, M.J., Lindquist, K.A., & Telzer, E.H. (2023). Neighborhood disadvantage, race, and neural sensitivity to social threat and reward among adolescents. *Social Cognitive and Affective Neuroscience*, 18(1), 1-12. https://doi.org/10.1093/scan/nsac053

2022 (4)

- **30.** †Metherell, T.E., Ghai, S., **McCormick, E.M.**, Ford T.J., & Orben, A. (2022). Digital exclusion predicts worse mental health among adolescents during COVID-19. *Scientific Reports*, 12, 19088. https://doi.org/10.1038/s41598-022-23899-y | Rx Preprint
- 29. †Do, K.T., McCormick, E.M., Prinstein, M.J., Lindquist, K.A., & Telzer, E.H. (2022). Intrinsic connectivity within the affective salience network moderates adolescent susceptibility to negative and positive peer norms. *Scientific Reports*, 12, 17463. https://doi.org/10.1038/s41598-022-17780-1
- 28. McCormick, E.M., Arnemann, K.L., Ito, T., Hanson, S.J., & Cole, M.W. (2022). Latent functional connectivity underlying multiple brain states. *Network Neuroscience*, 6(2), 570-590. https://doi.org/10.1162/netn_a_00234 | Rx Preprint
- **27.** Kievit, R.A, **McCormick, E.M.***, Fuhrmann, D.*, Deserno, M.*, & Orben, A*. (2022). Using large, publicly available data sets to study adolescent development: opportunities and challenges. *Current Opinion in Psychology, 44*, 303-308. *denotes equal contribution https://doi.org/10.1016/j.copsyc.2021.10.003 | ♣ Preprint

2021 (3)

- **26.** McCormick, E.M. (2021). Multi-Level multi-growth models: New opportunities for addressing developmental theory using advanced longitudinal designs with planned missingness. *Developmental Cognitive Neuroscience*, 51, 101001. https://doi.org/10.1016/j.dcn.2021.101001 | Rx Preprint
- **25.** McCormick, E.M., Peters, S., Crone, E.A., & Telzer, E.H. (2021). Longitudinal network reorganization across learning and development. *NeuroImage*, *229*, 117784. https://doi.org/10.1016/j.neuroimage.2021.117784 | Rx Preprint
- **24.** Duell, N., van Hoorn, J., **McCormick, E.M.**, Prinstein, M.J., & Telzer, E.H. (2021). Hormonal and neural correlates of prosocial conformity in adolescents. *Developmental Cognitive Neuroscience*, 48, 100936. https://doi.org/10.1016/j.dcn.2021.100936

2020 (4)

- 23. Kwon, S-J., Do, K.T., McCormick, E.M., & Telzer, E.H. (2020). Neural correlates of conflicting social influence on adolescent risk-taking. *Journal of Research on Adolescence*, 31(1), 139-152. https://doi.org/10.1111/jora.12587
- **22.** Do, K.T., **McCormick, E.M.**, & Telzer, E.H. (2020). Neural sensitivity to conflicting attitudes supports greater conformity toward positive over negative influence in early adolescence. *Developmental Cognitive Neuroscience*, 45, 100837. https://doi.org/10.1016/j.dcn.2020.100837
- **21.** van Hoorn, J., **McCormick, E.M.**, Perino, M.T., Rogers, C.R., & Telzer, E.H. (2020). Differential behavioral and neural profiles in high-risk youth with conduct problems during risky decision-making. *Journal of Research on Adolescence*, 30(3), 599-615. https://doi.org/10.1111/jora.12546

- **20.** Chen, X., **McCormick, E.M.**, Ravindran, N., Telzer, E.H., & McElwain, N.L. (2020). Maternal emotion socialization in early childhood predicts adolescents' amygdala-vmPFC functional connectivity to emotion faces. *Developmental Psychology*, 56(3), 503-515. http://dx.doi.org/10.1037/dev0000852
- **2019** (5)
 - 19. Perino, M.T., Guassi Moreira, J., McCormick, E.M., & Telzer, E.H. (2019). Apples to apples? Neural correlates of emotion regulation differences between high and low risk adolescents. *Social Cognitive and Affective Neuroscience*, 14(8), 827-836. https://doi.org/10.1093/scan/nsz063
 - 18. Kwon, S-J., Ivory, S.L., McCormick, E.M., & Telzer, E.H. (2019). Behavioral and neural dysregulation to social reward and links to internalizing symptoms in adolescents. *Frontiers in Behavioral Neuroscience*, 13, 158. https://doi.org/10.3389/fnbeh.2019.00158
 - 17. McCormick, E.M., McElwain, N.L., & Telzer, E.H. (2019). Alterations in adolescent dopaminer-gic systems as a function of early mother-toddler attachment: a prospective longitudinal examination. *International Journal of Developmental Neuroscience*, 78, 122-129. https://doi.org/10.1016/j.ijdevneu. 2019.06.010
 - **16.** Do, K.T, **McCormick, E.M.**, & Telzer, E.H. (2019). The neural development of prosocial behavior from childhood to adolescence. *Social Cognitive and Affective Neuroscience*, 14(2), 129-139. https://doi.org/10.1093/scan/nsy117
 - **15.** McCormick, E.M., Gates, K.M., & Telzer, E.H. (2019). Model-based network discovery of developmental and performance-related differences during risky decision-making. *NeuroImage*, 188, 456-464. https://doi.org/10.1016/j.neuroimage.2018.12.042

2018 (10)

- **14.** McCormick, E.M., & Telzer, E.H. (2018b). Contributions of default mode network stability and deactivation to adolescent task engagement. *Scientific Reports*, 8(1), 18049. https://doi.org/10.1038/s41598-018-36269-4
- 13. van Hoorn, J., McCormick, E.M., Rogers, C.R., Ivory, S.L., & Telzer, E.H. (2018). Differential effects of parent and peer presence on neural correlates of risk taking in adolescence. *Social Cognitive and Affective Neuroscience*, 13(9), 945-955. https://doi.org/10.1093/scan/nsy071
- 12. McCormick, E.M., van Hoorn, J., Cohen, J.R., & Telzer, E.H. (2018). Functional connectivity in the social brain across childhood and adolescence. *Social Cognitive and Affective Neuroscience*, 13(8), 819-830. https://doi.org/10.1093/scan/nsy064
- 11. Rogers, C.R., McCormick, E.M., Van Hoorn, J., & Telzer, E.H. (2018). Neural correlates of sibling closeness and association with externalizing behavior in adolescence. *Social Cognitive and Affective Neuroscience*, 13(9), 977-988. https://doi.org/10.1093/scan/nsy063
- 10. Muscatell, K.A., McCormick, E.M., & Telzer, E.H. (2018). Subjective social status and neural processing of race in Mexican American adolescents. *Development and Psychopathology*, 30(5), 1837-1848. https://doi.org/10.1017/s0954579418000949
- 9. van Hoorn, J., McCormick, E.M., & Telzer, E.H. (2018). Moderate social sensitivity in a risky context supports adaptive decision-making in adolescence: Evidence from brain and behavior. *Social Cognitive and Affective Neuroscience*, 13(5), 546-556. https://doi.org/10.1093/scan/nsy016
- 8. Telzer, E.H., McCormick, E.M., Peters, S., Cosme, D., Pfeifer, J.H., & van Duijvenvoorde, A.C.K. (2018). Methodological considerations for developmental longitudinal fMRI research. *Developmental*

Cognitive Neuroscience, 33, 149-160. https://doi.org/10.1016/j.dcn.2018.02.004

- 7. McCormick, E.M., Perino, M.T., & Telzer, E.H. (2018). Not just social sensitivity: Selective adolescent suppression of social feedback during risk taking. *Developmental Cognitive Neuroscience*, 30, 134-141. https://doi.org/10.1016/j.dcn.2018.01.012
- **6.** McCormick, E.M., & Telzer, E.H. (2018a). Not doomed to repeat: Enhanced neural tracking of errors promotes adaptive task performance during adolescence. *Journal of Cognitive Neuroscience*. 30(3), 281-289. https://doi.org/10.1162/jocn_a_01206
- **5.** Qu, Y., Pomerantz, E.M., **McCormick, E.M.**, & Telzer, E.H. (2018). Youth's conceptions of adolescence predict longitudinal changes in prefrontal cortex activation and risk taking. *Child Development*, 89(3), 773-783. https://doi.org/10.1111/cdev.13017

2017 (3)

- 4. McCormick, E.M., Qu, Y., & Telzer, E.H. (2017). Activation in context: Differential conclusions drawn from cross-sectional and longitudinal analyses of adolescents' cognitive control-related neural activity. Frontiers in Human Neuroscience, 11, 141. https://doi.org/10.3389/fnhum.2017.00141
- **3.** McCormick, E.M., & Telzer, E.H. (2017b). Failure to retreat: Blunted sensitivity to negative feedback supports risky behavior in adolescents. *NeuroImage*, 147, 381-389. http://dx.doi.org/10.1016/j.neuroimage.2016.12.041
- **2.** McCormick, E.M., & Telzer, E.H (2017a). Adaptive adolescent flexibility: Neurodevelopment of decision-making and learning in a risky context. *Journal of Cognitive Neuroscience*, 29, 413-423. https://doi.org/10.1162/jocn_a_01061

2016 (1)

1. McCormick, E.M., Qu, Y., & Telzer, E.H. (2016). Adolescent neurodevelopment of cognitive control and risk-taking in negative family contexts. *NeuroImage*, 124, 989-996. http://dx.doi.org/10.1016/j.neuroimage.2015.09.063

BOOK CHAPTERS

1. Curran, P.J., Strauss, C., McCormick, E.M., & McGinley, J.S. (2023). A multivariate growth curve model for three-level data. In H. Cooper (Ed.) APA Handbook of Research Methods in Psychology, Second Edition. Washington, DC: American Psychological Association.

MANUSCRIPTS UNDER REVIEW

- 7. Moriarity, D.P., Frumkin, M.R., Wang, S.B., Piccirillo, M.L., Girard, J.M., McCormick, E.M., & Ebrahimi, O.V. (under review). Expanding the Concept of "Precision" in Precision Mental Health: From Basic Research Through Clinical Implementation. Nature Reviews Psychology.
- **6.** Aczel, B., ..., **McCormick, E.M.**, ... & Nosek, B.A. (*under review*). Investigating the analytical robustness of the social and behavioural sciences. *Nature*.
- **5.** McCann, C.F., **et al.** (*under review*). Considerations for developmental scientists working with puberty data longitudinally. *Developmental Psychology*.
- **4.** McCormick, E.M. (under review). A tutorial on formalizing and testing specific psychological theory using nonlinear models. Invited submission at Advances in Methods and Practices in Psychological Science.

- **3.** Dugan, K., **et al.** (*stage 2 registered report minor revision*). A Prospective, Longitudinal Study of the Associations between Childhood and Adolescent Interpersonal Experiences and Adult Attachment Orientations. *Journal of Personality and Social Psychology*.
- 2. [†]Leshin, J.C., McCormick, E.M., Doyle, C.M., Gates, K.M., Nam, C.S., & Lindquist, K.A. (under review). Situating Brain Activity in Social and Cultural Contexts During Emotion. *Emotion*.
- 1. McCormick, E.M., Borgeest, G.S., & Kievit, R.A. (revise and resubmit). Interrupted mediation: A cautionary note on using derived metrics as intervening variables in path models. Perspectives on Psychological Science.

MANUSCRIPTS IN PREPARATION

1. McCormick, E.M., & Sørensen, Ø. (in prep). Semiparametric time-varying parameter dynamic structural equation modeling.

INVITED TALK/WORKSHOP PRESENTATIONS (SINCE 2020)

- **21.** McCormick, E.M. (November 2024). Building a nonlinear framework for theory-building in longitudinal modeling. Talk presented to the Quantitative Methodology: Measurement and Statistics program, University of Maryland, College Park, MD, USA.
- **20.** McCormick, E.M. (October 2024). Models and Methods for Understanding Short-term Fluctuation and Long-Term Change. Talk presented to the Department of Psychological and Brain Sciences, University of Delaware, Newark, DE, USA.
- 19. McCormick, E.M. (May 2024). Building (Better) Models of Change. Talk presented to the Centre for Lifespan Changes in Brain and Cognition, University of Oslo, Oslo, NO.
- 18. McCormick, E.M. (May 2024). Applications of longitudinal modeling to distal outcome research in the Gambia. Workshop presented to the BRIGHT Impact Group, University of Cambridge, Cambridge, UK.
- 17. McCormick, E.M. (April 2024). Introduction to Longitudinal Modeling. Workshop presented online to the University of the Sunshine Coast HDR/EMCR group, AU.
- 16. McCormick, E.M. (March 2024). Twins separated at birth? A discussion about Structural Equation Modeling and Multilevel Modeling. Talk presented online to the Jacobs Center for Productive Youth Development R Peer Mentoring Group, University Zürich, CH.
- 15. McCormick, E.M. (January 2024). Models of Change for Understanding Learning and Development. Talk presented to the University of Delaware School of Education, USA.
- 14. McCormick, E.M. (November 2023). Deriving models of change with interpretable parameters: linear estimation with nonlinear inference. Talk presented online to the Psicostats group, Università Delgi Studi Di Pavoda, IT.
- 13. McCormick, E.M. (September 2023). Mixed Effect and Structural Equation Modeling for Longitudinal Analysis. Talk presented online to the Quant Family Collective, USA.
- 12. McCormick, E.M. (September 2023). Introductory and Advanced Longitudinal Modeling. Workshops presented at the 2023 Flux Congress Annual Meeting, Santa Rosa, CA, USA.
- 11. McCormick, E.M. (March 2023). Introduction to Longitudinal Modeling. Workshop presented to the Department of Psychology & MRC Cognition and Brain Sciences Unit. Cambridge, UK.

- 10. McCormick, E.M. (February 2023). Time coding effects in latent growth factors as predictors of distal outcomes. Talk presented to the SEMantics Group, King's College London, London, UK.
- **9.** McCormick, E.M. (February 2023). Introduction to SEM. Workshop presented to the Embodied Cognition Group, Aarhus University. Seville, ES.
- 8. McCormick, E.M. (November 2022). Introduction to SEM. Workshop presented to the Department of Experimental Psychology, University of Oxford. Oxford, UK.
- 7. McCormick, E.M. (October 2022). Establishing Trajectories in Longitudinal Models. Workshop presented to the University of Zürich Department of Psychology. Zürich, CH.
- **6.** McCormick, E.M. (March 2022). Advanced considerations in longitudinal modeling. Preconference workshop presented at the 2022 Flux Congress Annual Meeting, Paris, FR.
- 5. McCormick, E.M. (March 2022). Selecting the right model for analyzing already-collected longitudinal data. Practical presented to the Fetal, Infant, & Toddler Neuroimaging Group (FIT'NG) Trainee Committee (remotely). https://vimeo.com/691030727/2fdbfdcf2f
- **4.** McCormick, E.M., (February 2022). Linking brain structure and behavioral variability in dynamic structural equation models. Talk presented as a part of the Mellenbergh Lecture Series for the Psychological Methods group at the Unviersity of Amsterdam, Amsterdam, NL (remotely). https://sites.google.com/view/mellenberghlectures/lectures
- **3.** McCormick, E.M. (January 2022). Bringing dynamic structural equation models to bear to model inter-individual differences in intra-individual performance variability. Talk presented at the Radoud University Medical Center's Neurodevelopmental Disorders Group Meeting, Nijmegen, NL.
- 2. McCormick, E.M. (December 2020). Multi-level, multi-growth models: new opportunities for addressing developmental theory. Talk presented at the University of Melbourne, AU (remotely).
- 1. McCormick, E.M. (November 2020). Multi-level, multi-growth models: new opportunities for addressing developmental theory. Talks presented at Cambridge University, UK and the University of Oregon, OR, USA (remotely).

CONFERENCE TALK PRESENTATIONS (SINCE 2020)

- 10. McCormick, E.M. (March 2025). Building a nonlinear framework for testing meaningful trajectories of change. Talk presented at the Human Trajectories: Models and Applications meeting. Université Paris Cité, Paris, FR.
- **9.** McCormick, E.M. (June 2024). Deriving models of change with interpretable parameters: linear estimation with nonlinear inference. Talk presented at the Modern Modeling Methods (M³) Conference. University of Connecticut, Storrs, CT, USA.
- **8.** McCormick, E.M. (May 2024). Deriving Models of Change with Interpretable Parameters: Linear Estimation with Nonlinear Inference. Talk and poster presented at the Association for Psychological Science 2024 Annual Convention. San Francisco, CA, USA.
- **7.** McCormick, E.M. (March 2024). Bridging the gap between theoretical and statistical models in education and development. Talk presented at the Jacobs Research Foundation Annual Meeting, Barranquilla, CO.

- **6.** McCormick, E.M. (March 2024). Latent Growth Factors as Predictors of Distal Outcomes. Talk presented at the Meeting of the Working Group Structural Equation Modeling, University of Twente, Enschede, NL.
- 5. McCormick, E.M. (March 2024). Deriving mixed-effects models of change with interpretable parameters: linear estimation with nonlinear inference. Talk presented at the International Congress on Multilevel Analysis, Utrecht University, Utrecht, NL.
- **4.** McCormick, E.M. (September 2023). Using novel longitudinal models to test specific developmental hypotheses examples in the study of adversity. Talk presented at the 2023 Flux Congress Annual Meeting, Santa Rosa, CA, USA.
- **3.** McCormick, E.M., Pagliaccio, D., Romeo, R.R., & Cardenas-Iniguez, C. (September 2022). Combatting LGBTQIA+ Discrimination in Access and Opportunity: A Call to Action for the Flux Society. Talk presented at the 2022 Flux Congress Annual Meeting, Paris, FR.
- 2. McCormick, E.M. (September 2022). Advanced Modeling of Longitudinal Data in Developmental Cognitive Neuroscience. Pre-conference Workshop presented at the 2022 Flux Congress Annual Meeting, Paris, FR.
- 1. McCormick, E.M. (September 2021). Leveraging missing data to model simultaneous growth processes. Talk presented at the 2021 Flux Congress Annual Meeting, Remote.

CONFERENCE POSTER PRESENTATIONS

- 22. Liu, Y., Bakk, Z., McCormick, E.M., & De Rooij (July 2024). Two-step estimator for growth mixture model with covariates in the presence of direct effects. Poster presented at the 2024 International Meeting of the Psychometric Society, Prague, CZ.
- **21.** McCormick, E.M., Telzer, E.H, & Gates, K.M. (August 2019). Reliability in clustering solutions derived from resting state fMRI: Insights from the Human Connectome Project. Poster presented at the 2019 Flux Congress Annual Meeting, New York City, NY, USA.
- **20.** Duell, N., Van Hoorn, J., **McCormick, E.M.**, & Telzer, E.H (August 2019). The culture of socioeconomic status and social reward processing in adolescence. Poster presented at the 2019 Flux Congress Annual Meeting, New York City, NY, USA.
- 19. Jorgensen, N.A., McCormick, E.M., Lindquist, K.A., Prinstein, M.J., & Telzer, E.H (August 2019). The culture of socioeconomic status and social reward processing in adolescence. Poster presented at the 2019 Flux Congress Annual Meeting, New York City, NY, USA.
- 18. Kwon, S-J., Do, K.T., McCormick, E.M., & Telzer, E.H (August 2019). Neural correlates of conflicting social influences on adolescent risk-taking. Poster presented at the 2019 Flux Congress Annual Meeting, New York City, NY, USA.
- 17. Ravindran, N., McElwain, N.L., McCormick, E.M., & Telzer, E.H (March 2019). Warmth and negativity in mother-adolescent relationships: Associations with adolescents' neural responses to angry faces. Poster presented at the 2019 Biennial Meeting of the Society for Research in Child Development, Baltimore, MD, USA.
- 16. Chen, X., McCormick, E.M., McElwain, N.L., & Telzer, E.H (March 2019). Maternal emotion talk in early childhood predicts adolescents' neural activity when labeling facial emotion. Poster presented at the 2019 Biennial Meeting of the Society for Research in Child Development, Baltimore, MD, USA.

- 15. McCormick, E.M., & Telzer, E.H. (September 2018). Model-based network discovery of developmental and performance-related differences during risky decision-making. Poster presented at the 2018 Flux Congress Annual Meeting, Berlin, DE.
- 14. McCormick, E.M., & Telzer, E.H. (May 2018). Functional dynamics of the social brain: Network insights from the Human Connectome Project. Poster presented at the 2018 Flux Society Satellite Conference, Chapel Hill, NC, USA.
- 13. Chen, X., McCormick, E.M., McElwain, N.L., & Telzer, E.H. (May 2018). Maternal mental-state talk in early childhood predicts adolescents' neural activity to ambiguous facial emotions. Poster presented at the 2018 Flux Society Satellite Conference, Chapel Hill, NC, USA.
- 12. Qu, Y., Pomerantz, E.M., McCormick, E.M., & Telzer, E.H. (April 2018). Youth's conceptions of adolescence predict longituidnal changes in prefrontal cortex activation and risk taking during adolescence. Poster presented at the 2018 Social for Research on Adolescence Biennial Meeting, Minneapolis, MN, USA.
- 11. Do, K.T., McCormick, E.M., & Telzer, E.H. (April 2018). Is blood thicker than water? How conflicting parent and peer attitudes influence the neural correlates of adolescent conformity. Poster presented at the 2018 Social for Research on Adolescence Biennial Meeting, Minneapolis, MN, USA.
- 10. McCormick, E.M., van Hoorn, J., & Telzer, E.H. (March 2017). Functional network architecture of the social brain during childhood and adolescence. Poster presented at the 2017 Flux Congress Annual Meeting, Portland, OR, USA.
- 9. Ivory, S.I., McCormick, E.M., & Telzer, E.H. (March 2017). Can't fight this feeling: The impact of emotional faces on adolescents' cognitive control. Poster presented at the 2017 Meeting of the Social and Affective Neuroscience Society, Los Angeles, CA, USA.
- **8.** van Hoorn, J., **McCormick, E.M.**, & Telzer, E.H. (March 2017). Social learning and adaptive risk-taking in adolescence: Evidence from brain and behavior. Poster presented at the 2017 Meeting of the Social and Affective Neuroscience Society, Los Angeles, CA, USA.
- 7. McCormick, E.M., & Telzer, E.H. (March 2017). Not just social sensitivity: Selective adolescent suppression of social information during risk taking. Poster accepted to the 2017 Meeting of the Social and Affective Neuroscience Society, Los Angeles, CA, USA.
- **6.** McCormick, E.M., & Telzer, E.H. (September 2016). Two roads diverge: Context-specific outcomes associated with decreased neural sensitivity to negative feedback during adolescence. Poster presented at the Fourth Annual Meeting of the Flux Congress, St. Louis, MO, USA.
- **5.** McCormick, E.M., & Telzer, E.H. (April 2016). Adaptive adolescent flexibility: Decision-making in a risky context. Poster presented at the 2016 Meeting of the Social and Affective Neuroscience Society, New York, NY, USA.
- **4.** Do, K.T., **McCormick, E.M.**, & Telzer, E.H. (April 2016). Prosocial and social brain development from childhood to adolescence. Poster presented at the 2016 Meeting of the Social and Affective Neuroscience Society, New York, NY, USA.
- **3.** McCormick, E.M., & Telzer, E.H. (September 2015). Longitudinal links between negative family relationships and adolescent cognitive control-related neural processing. Poster presented at the Third Annual Meeting of the Flux Congress, Leiden, NL.

- 2. McCormick, E.M., & Telzer, E.H. (September 2015). Longitudinal links between negative family relationships and adolescent cognitive control-related neural processing. Poster presented at the Satellite Meeting for the Society for Research in Child Development, Leiden, NL.
- 1. McCormick, E.M., & Telzer, E.H. (April 2015). Necessity of longitudinal analyses for understanding the neural development of cognitive control. Poster presented at the 2015 Meeting of the Social and Affective Neuroscience Society, Boston, MA, USA.

SUPERVISION

Jacob Westlund	Leiden University, Supervisor 2024 Masters Project & Thesis, Spring 2024: "Regularization approaches for combining heterogenous questionnaire data."
Yuqi Liu	Leiden University, Supervisor Masters Project & Thesis, Spring 2023: "Time-coding effects in Latent Class Growth Mixture Models." PhD Thesis, Fall 2023 - present: "Stepwise estimation approaches of growth mixture models."
Léa Michel	Radboud University Medical Center, Co-supervisor 2023 - present PhD Thesis , Fall 2021 - present: "The brain structural mechanisms of cognitive development"

INSTITUTIONAL SERVICE

Flux Strategic Plan Task Force	2023-2024
Quant Family Collective - Speaker and Faculty Mentor	2023 - $present$
Flux Diversity Working Group Member	2022 - $present$
Flux Diversity Session Planning Committee	2022
Flux LGBTQIA+ Affinity Group Coordinator	2021 - $present$
Flux Programme Committee Member	2022
Neuroscience Club Graduate School Panel, UNC	2019
fMRI Methodology & Coding Summer Seminar, UNC	2018
NeuroGrads Organizer, UNC	2018
Diversity Admissions Committee, UNC	2017 - 2018
Developmental Seminar Planning Committee, UNC	2017 - 2018
fMRI Methodology & Coding Summer Seminar, UNC	2017
fMRI Methodology & Coding Summer Seminar, UNC	2016
Graduate Student Recruitment Organizer, UIUC	2015 - 2016
fMRI Methodology Summer Seminar, UNC	2015

PROFESSIONAL AFFILIATIONS

Association for Psychological Science	Member
Flux Society for Developmental Cognitive Neuroscience	Member
Society for Multivariate Experimental Psychology	$Invited\ Guest$
Psychometric Society	Member

AD HOC REVIEWER

Methodological Journals: Psychological Methods; Multivariate Behavioral Research; Structural Equation Modeling; Behavior Research Methods; Advances in Methods and Practices in Psychological Science (AMPPS)

Substantive Journals: Developmental Cognitive Neuroscience; Nature Neuroscience; Nature Communications; Trends in Cognitive Science; Journal of Neuroscience; Psychological Science; Child Development; Child Development Perspectives; Proceedings of the National Academy of Sciences (PNAS); Scientific Reports; Human Brain Mapping; Biological Psychiatry; Cognitive, Behavioral, and Affective Neuroscience; Social Cognitive and Affective Neuroscience; Cerebral Cortex; NeuroImage; Journal of Experimental Gerontology

TEACHING EXPERIENCE

Bachelors Courses	
Instructor, Multivariate Data Analysis Leiden University	Spring 2023; 2024
Supervisor, Bachelors Project Leiden University	Spring 2023
Instructor, Introduction to Statistics University of North Carolina at Chapel Hill	Summer 2020
Masters & Ph.D. Courses	
Instructor , Psychometrics and Structural Equation Modeling Leiden University	Fall 2023
Instructor, Regression Modeling Leiden University	Fall 2023
Instructor, Applied Multivariate Data Analysis Leiden University	Spring 2023; 2024
Instructor, Data Visualization Leiden University	Spring 2023; 2024
Instructor, fMRI Data and Statistics Leiden University	Spring 2023; 2024
Supervisor, Masters Project Leiden University	Spring 2023; 2024
Instructor , Applied Multivariate Data Analysis University of Delaware	Fall 2024
Instructor, Data Visualization University of Delaware	Fall 2024

TECHNICAL STRENGTHS

Programming Languages R, Python, Julia, MATLAB, Bash

Analysis Techniques ANOVA, Regression, Mediation, Moderation, Multi-Level Model-

ing, Structural Equation Modeling, Latent Curve Modeling, Dynamic Structure Equation Modeling, Time Series Analysis, Computational Modeling, Neural Network Analyses, Data Simulation, CART Analysis, Latent Class Analysis, Latent Profile Analysis,

Mixture Models, Growth Mixture Models

Statistical Software R, MPlus, SAS, Python, MATLAB, HLM, SPSS