

Kate Nussenbaum

New York University
Department of Psychology
6 Washington Place
New York, NY 10003

Phone: (617) 678-1919
Email: katenuss@nyu.edu
Web: <http://katenuss.com/>

Education

2017 - 2023: **Ph.D.**, Cognition and Perception
2015 - 2017: **M.Sc. by Research**, Experimental Psychology
2011 - 2015: **Sc.B.**, Cognitive Neuroscience (honors); Science & Society

New York University
University of Oxford
Brown University

Funding

2018 - 2021: **NDSEG Fellowship**, U.S. Department of Defense
2015 - 2017: **Rhodes Scholarship**
2011: **National Merit Scholarship**

Awards and Honors

2021: **Martin Braine Fellowship**, NYU Department of Psychology
2020: **Katzell Summer Fellowship**, NYU Department of Psychology
2018, 2019: **Dean's Student Travel Grant**, NYU Graduate School of Arts & Sciences
2017: **Travel Award**, Flux Society for Developmental Cognitive Neuroscience
2017: **Engberg Award for an Outstanding Entering Graduate Student**, NYU Department of Psychology
2017: **Grindley Grant**, Experimental Psychology Society
2016, 2017: **Murray Speight Research Grant**, Rhodes Trust
2016: **Editor's Choice Award for Best 2016 Paper**, *Journal of Cognition and Development*
2015 - 2017: **Marshall Scholarship** (*declined to accept Rhodes*)
2015: **Whalen Award for Undergraduate Research in Neuroscience**, Brown University
2015: **Research at Brown Travel Award**, Brown University
2015: Elected to **Sigma Xi**
2014: **Undergraduate Teaching and Research Award**, Brown University
2014: Elected to **Phi Beta Kappa** (*early election as a junior*)
2013 - 2014: **Teaching-Research-Impact Lab Student Fellowship**, Brown University Swearer Center for Public Service
2013: **Solsberry Summer Research Fellowship**, Brown University Center for the Study of Human Development
2011: **Presidential Scholar Award** (*1 of 2 from Massachusetts*), U.S. Department of Education

Publications

Trainees working under my mentorship are underlined. The * denotes equal author contribution.

Journal Articles

11. **Nussenbaum, K.** & Hartley, C.A. (in press). Developmental change in prefrontal cortex recruitment supports the emergence of value-guided memory. *eLife*.
10. Hartley, C.A., **Nussenbaum, K.**, & Cohen, A.O. (in press). Interactive development of adaptive learning and memory. *Annual Review of Developmental Psychology*.
9. **Nussenbaum, K.**, Scheuplein, M., Phaneuf, C.V., Evans, M.D. & Hartley, C.A. (2020). Moving developmental research online: comparing in-lab and web-based studies of model-based reinforcement learning. *Collabra: Psychology*.
8. Cohen, A.O.*, **Nussenbaum, K.***, Dorfman, H.M., Gershman, S.J., & Hartley, C.A. (2020). The rational use of causal inference to guide reinforcement learning strengthens with age. *npj Science of Learning*.
7. **Nussenbaum, K.***, Cohen, A.O.*, Davis, Z.J., Halpern, D.J., Gureckis, T.M., & Hartley, C.A. (2020). Causal information-seeking strategies change across childhood and adolescence. *Cognitive Science*.
6. **Nussenbaum, K.**, Prentis, E., & Hartley C.A. (2020). Memory's reflection of learned information value increases across development. *Journal of Experimental Psychology: General*.
5. **Nussenbaum, K.** & Hartley, C.A. (2019). Reinforcement learning across development: What insights can we draw from a decade of research? *Developmental Cognitive Neuroscience*.
4. **Nussenbaum, K.**, Scerif, G.*, & Nobre, A.C.* (2019). Differential effects of salient visual events on memory-guided attention in adults and children. *Child Development*.
3. **Nussenbaum, K.**, Amso, D., & Markant, J. (2017). When increasing distraction helps learning: Distractor number and content interact in their effects on memory. *Attention, Perception, & Psychophysics*.
2. Markant, J., Ackerman, L., **Nussenbaum, K.**, & Amso, D. (2016). Selective attention neutralizes the adverse effects of low socioeconomic status on memory in 9-month-old infants. *Developmental Cognitive Neuroscience*.
1. **Nussenbaum, K.** & Amso, D. (2016). An attentional Goldilocks effect: An optimal amount of social interactivity promotes word learning from video. *Journal of Cognition and Development*.

Received Editor's Choice Award for journal's best 2016 article.

Conference Proceedings

2. **Nussenbaum, K.** & Hartley, C.A. (2020). Prefrontal-striatal circuitry supports adaptive memory prioritization across development. In: *Proceedings of the 42nd Annual Meeting of the Cognitive Science Society*.
1. **Nussenbaum, K.***, Cohen, A.O.*, Davis, Z.J., Halpern, D., Gureckis, T.M., & Hartley, C.A. (2019). Causal intervention strategies change across adolescence. In: *Proceedings of the 41st Annual Meeting of the Cognitive Science Society*.

Presentations

Invited Talks

2021: Computational Modeling in Development Workshop, Flux Congress (virtually)
Model selection and validation

2021: Department of Psychology, NYU (virtually)
The development of adaptive memory

2020: Affective Brain Lab, University College London (virtually)
Developmental change in learning and using causal knowledge

2020: Developmental Affective Neuroscience Lab, Columbia University (virtually)
Developmental change in learning and using causal knowledge

2020: Developing Brains in Context Lab, University of Oregon (virtually)
Developmental change in learning and using causal knowledge

2020: Learning and Brain Development Lab, Tulane University (virtually)
Moving developmental research online

2019: Department of Psychology Miniconvention, NYU
Neural mechanisms underlying the use of information value to guide memory across development

2019: Concepts and Categories Seminar, NYU
Causal information-seeking strategies change across childhood and adolescence

2018: Department of Psychology Miniconvention, NYU
Developing the ability to remember useful information

Conference Talks

Nussenbaum, K., Hamling, H., Washington, B., Velez, J.A., & Hartley, C.A. (2021). Adaptability of positive and negative learning rates across development. Talk to be presented at the Flux Congress for Developmental Cognitive Neuroscience, virtual meeting.

Nussenbaum, K., Cohen, A.O., Davis, Z.J., Halpern, D.J., Gureckis, T.M. & Hartley, C.A. (2021). Causal information-seeking strategies change across development. Talk presented at the Society for Research in Child Development, virtual meeting.

Nussenbaum, K., Valencia, D., Greer, J., Keathley, N., & Hartley, C.A. (2020). Prefrontal-striatal circuitry supports adaptive memory prioritization across development. Flash talk presented at the Flux Congress for Developmental Cognitive Neuroscience, virtual meeting.

Nussenbaum, K. & Hartley, C.A. (2020). Prefrontal-striatal circuitry supports adaptive memory prioritization across development. Talk presented at the the 42nd Annual Meeting of the Cognitive Science Society, virtual meeting.

Nussenbaum, K., Cohen, A.O., Davis, Z.J., Halpern, D., Gureckis, T.M. & Hartley, C.A. (2019). Changes in causal intervention strategies across adolescence. Lightning talk presented at the Workshop on Curiosity, Exploration, and Explanation, Princeton University, Princeton, NJ.

Nussenbaum, K., Prentis, E., Valencia, D., & Hartley, C.A. (2019). The use of past experience to guide memory increases across development. Talk presented at the Manhattan Area Memory Meeting, Princeton University, Princeton, NJ.

Conference Posters

Scheuplein, M., **Nussenbaum, K.**, Phaneuf, C.V., Evans, M.D., & Hartley, C.A. (2020). Developmental differences in model-based learning and abstract reasoning: an online replication study. Poster presented at the Flux Congress for Developmental Cognitive Neuroscience, virtual meeting.

Nussenbaum, K., Valencia, D., Greer, J., Keathley, N., & Hartley, C.A. (2020). Prefrontal-striatal circuitry supports adaptive memory prioritization across development. Poster presented at the Flux Congress for Developmental Cognitive Neuroscience, virtual meeting.

Nussenbaum, K., Valencia, D., Greer, J., Keathley, N., & Hartley, C.A. (2020). Neural mechanisms underlying the use of learned value to guide memory across development. Poster presented at the Context and Episodic Memory Symposium, virtual meeting.

Nussenbaum, K., Valencia, D., Greer, J., Keathley, N., & Hartley, C.A. (2020). Neural mechanisms underlying the use of learned value to guide memory across development. Poster presented at the Cognitive Neuroscience Society, virtual meeting.

Nussenbaum, K., Cohen, A.O., Davis, Z.J., Halpern, D., Glover, M., Valencia, D., Shen, X., Gureckis, T.M., & Hartley, C.A. (2019). Causal information-seeking strategies change through adolescence. Poster presented at the Flux Congress for Developmental Cognitive Neuroscience, New York, NY.

Cohen, A.O., **Nussenbaum, K.**, Dorfman, H., Glover, M., Valencia, D., Shen, X., Gershman, S.J., & Hartley, C.A. (2019). Developmental change in the influence of causal judgments on reinforcement learning. Poster presented at the Flux Congress for Developmental Cognitive Neuroscience, New York, NY.

Nussenbaum, K., Cohen, A.O., Davis, Z.J., Halpern, D., Gureckis, T.M., & Hartley, C.A. (2019). Causal intervention strategies change across adolescence. Poster presented at the Cognitive Science Society, Montreal, Canada.

Nussenbaum, K., Cohen, A.O., Dorfman, H., Glover, M., Valencia, D., Shen, X., Gershman, S.J., & Hartley, C.A. (2019). Developmental change in the use of causal inference to guide reinforcement learning. Poster presented at the conference on Reinforcement Learning and Decision Making, Montreal, Canada.

Cohen, A.O., **Nussenbaum, K.**, Dorfman, H., Shen, X., Sardar, H., Valencia, D., Glover, M., Gershman, S.J., & Hartley, C.A. (2019). Age-related change in the effects of causal judgments on learning from reinforcement. Poster presented at the Social and Affective Neuroscience Society, Miami, FL.

Nussenbaum, K., Prentis, E., & Hartley, C.A. (2018). Strategic encoding of useful information across development. Poster presented at the Society for Neuroeconomics, Philadelphia, PA.

Nussenbaum, K., Prentis, E., Ocampo, J.D., & Hartley, C.A. (2018). Developmental changes in the use of environmental statistics to strategically modulate memory. Poster presented at the Flux Congress for Developmental Cognitive Neuroscience, Berlin, Germany.

Nussenbaum, K. & Hartley, C.A. (2018). Developing the ability to remember information with high future reward. Poster presented at the Social and Affective Neuroscience Society, New York, NY.

Nussenbaum, K. & Hartley, C.A. (2018). Developing the ability to remember useful information. Poster presented at the UC Irvine International Conference on Learning and Memory, Irvine, CA.

Nussenbaum, K., Nobre, A.C., & Scerif, G. (2017). Salient visual events disrupt memory-guided attention in adults but not children. Poster presented at the Flux Congress for Developmental Cognitive Neuroscience, Portland, OR.

Nussenbaum, K., Nobre, A.C., & Scerif, G. (2017). Memories and exogenous cues interact differently across age groups to influence attentional orienting. Poster presented at the Society for Research in Child Development, Austin, TX.

Nussenbaum, K., Myers, N., Nobre, A.C., & Scerif, G. (2016). Developmental changes in memory-guided and exogenously cued attention. Poster presented at the Autumn School in Cognitive Neuroscience, Oxford, UK.

Nussenbaum, K., Markant, J., & Amso, D. (2016). Increasing distractor set size reduces conceptual interference during target encoding. Poster presented at the Cognitive Neuroscience Society, New York, NY.

Nussenbaum, K. & Amso, D. (2015). An attentional Goldilocks effect for children's word-learning from digital media. Poster presented at the Society for Research in Child Development, Philadelphia, PA.

Teaching

Summer 2021: **Guest Lecture**, Developmental Psychology, *Developing cognitive control*

Spring 2020: **Guest Lecture**, Developmental Psychology, *Memory development*

Spring 2020: **Teaching Assistant**, Developmental Psychology, NYU (Dr. Karen Adolph)

Spring 2015: **Teaching Assistant**, Human Cognition, Brown University (Dr. Joe Austerweil)

Mentoring

NYU MA and Postbacc Students

2021 -present: **Naiti Bhatt**

2018 - 2020: **Daphne Valencia** Currently: Research Coordinator, Mt. Sinai

NYU Undergraduates

* Received NYU Dean's Undergraduate Research Fund award

2020 - present: **Hannah Hamling****
Honors thesis, Coons/Leibowitz Research Award

2020 - present: **Lia Washington****

2020 - present: **Juan Velez****
Collegiate Research Initiative Scholar

2019: **Michael Parola**

2018 - 2019: **Euan Prentis**** Currently: Ph.D. Student, University of Chicago
Honors thesis, Doris Aaronson Award for outstanding departmental research

2018: **Daryl Ocampo** Currently: Lab Manager, NYU

Summer Research Assistants

- 2021: **Leticia Wood**, Brown University '22
NYU Center for Neural Science REU participant
- 2019: **Nora Keathley**, Emory University '20 Currently: Research Coordinator, Imagen
- 2019: **Jamie Greer**, Vassar College '20 Currently: Lab Manager, UCLA
- 2018: **Dhiraj Patel**, University of Chicago '21
- 2018: **Sree Panuganti**, NYU GSTEM program participant

Service

Peer Review (independently)

- | | |
|--|--|
| Cognitive Science Society (x8) | <i>Journal of Experimental Psychology: Learning, Memory, and Cognition</i> |
| <i>Child Development</i> (x2) | <i>Neurobiology of Aging</i> |
| <i>Clinical Psychological Science</i> | <i>PLOS One</i> |
| <i>Current Opinion in Behavioral Sciences</i> | <i>Psychology of Popular Media</i> |
| <i>Journal of Experimental Child Psychology</i> | <i>Psychonomic Bulletin & Review</i> |
| <i>Journal of Experimental Psychology: General</i> | |

Volunteer positions

- 2020 - present: *Rhodes, Marshall, & Mitchell Scholarship Committee*, Brown University
- 2021: *Reviewer*, NYU Global Awards Summer Application Development Cohort
- 2021: *Project Reviewer*, RISE Global Scholarship
- 2018 - 2020: *Trainee Committee Co-Chair*, Flux Society for Developmental Cognitive Neuroscience
- 2020: *Doctoral Admissions Working Group Member*, NYU Psychology Department
- 2020: *Expenses and Reimbursement Working Group Member*, NYU Psychology Department
- 2020: *Research Experience Leader*, NYU Psychology Department virtual summer internship
- 2017 - 2020: *Volunteer*, brainY
- 2019 - 2020: *Student Board Member*, Cognition & Perception Graduate Program, NYU
- 2017 - 2018: *Volunteer*, Scientist Action and Advocacy Network, NYU
- 2016 - 2017: *Speakers Committee*, Global Scholars Symposium, Cambridge, UK
- 2015 - 2016: *Logistics Committee*, Global Scholars Symposium, Oxford, UK
- 2013 - 2014: *Organizing Committee*, Early Childhood Development Symposium, Providence, RI

Science Communication

- 2018: Article: [Equation invasion! How math can explain how the brain learns](#). *Frontiers for Young Minds*.
- 2018: Policy brief: [Scientific support for a developmentally informed approach to Miranda rights](#).

Other Training

2019: Methods in Neuroscience at Dartmouth

2018: NYU Science Communication Workshop

2016 - 2017: Oxford Center for Functional Magnetic Resonance Imaging Graduate Training Programme

Last updated: August 24, 2021