

Nathaniel L. Foster

Assistant Professor
Department of Psychology
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EDUCATION

University of North Carolina at Greensboro, Greensboro, NC
Ph.D., Cognitive Psychology, August 2012
M.A., Cognitive Psychology, December 2008

Willamette University, Salem, OR
B.A., Psychology, May 2004

PROFESSIONAL EXPERIENCE

Assistant Professor of Psychology, The College of Wooster, Wooster, OH, 2019 - present

Assistant Professor of Psychology, St. Mary's College of Maryland, St. Mary's City, MD
2015 - 2019

Post-doctoral Research Associate, Kent State University, Kent, OH, Dr. John Dunlosky, Advisor, 2013-2015

Adjunct Instructor, Elon University, Elon, NC, 2012-2013

Graduate Research and Teaching Assistant, University of North Carolina at Greensboro, Greensboro, NC
Dr. Lili Sahakyan, Advisor, 2006-2012

Lab Manager, University of Oregon, Eugene, OR, Dr. Michael Anderson, Supervisor, 2004-2006

PUBLICATIONS

* designates work completed with College of Wooster undergraduate, ** St. Mary's undergraduate, and *** with graduate students

JOURNAL PUBLICATIONS and BOOK CHAPTERS

Foster, N. L., Mueller, M. L.***, Dunlosky, J., & Finkenthal, L. (2023). What is the impact of interleaving practice and delaying judgments on the accuracy of category-learning judgments? *Journal of Experimental Psychology: Applied*, 29(2), 374-385. <https://doi.org/10.1037/xap0000444>

Foster, N. L., & Harriman, G.** (2022). Instructions to shift eyes do not increase item-method directed forgetting. *Memory*, 30(9), 1118-1129. <https://doi.org/10.1080/09658211.2022.2085302>

Foster, N. L. & Bell, G.* (2021). The effects of divided attention on memory for road signs. *Psi Chi Journal of Psychological Research*, 26(3), 283-295. <https://doi.org/10.24839/2325-7342.JN26.3.283>.

Foster, N. L., Mueller, M. L.***, Was, C. A., Rawson, K. A., & Dunlosky, J. (2019). Why does interleaving improve math learning? The contributions of discriminative contrast and distributed practice. *Memory & Cognition*, 47, 1088-1101. <https://doi.org/10.3758/s13421-019-00918-4>.

Foster, N. L., Rawson, K. A., & Dunlosky, J. (2018). Self-regulated learning of principle-based concepts: Do students prefer worked examples, faded examples, or problem solving? *Learning and Instruction*, 55, 124-138. <http://doi.org/10.1016/j.learninstruc.2017.10.002>.

Morehead, K.***, Dunlosky, J., & **Foster, N. L.** (2017). Do people use category learning judgments to regulate their learning of natural categories? *Memory & Cognition*, 45, 1253-1269. <http://doi.org/10.3758/s13421-017-0729-9>.

Sahakyan, L., & Foster, N. L. (2016). The Need for Metaforgetting: Insights from Directed Forgetting. In J. Dunlosky & S. U. K. Tauber (Eds.), *Oxford Handbook of Metamemory*. Oxford Press: London, 341-355.

Foster, N. L., Was, C. A., Dunlosky, J., & Isaacson, R. M. (2016). Even after thirteen class exams, students are still overconfident: The role of memory for past exam performance in student predictions. *Metacognition and Learning*, 12, 1-19. <http://doi.org/10.1007/s11409-016-9158-6>.

Foster, N. L., Dunlosky, J., & Sahakyan, L. (2015). Is awareness of the ability to forget (or remember) critical for demonstrating directed forgetting? *The Journal of Memory and Language*, 85, 88-100.

Sahakyan, L., Delaney, P. F., Foster, N. L., & Abushanab, B. (2013). List-Method Directed Forgetting in Cognitive and Clinical Research: A Theoretical and Methodological Review. In B. H. Ross (Ed.), *The Psychology of Learning and Motivation*. Elsevier Inc.: Academic Press, 131–190.

Foster, N. L., & Sahakyan, L. (2012). Metacognition influences item-method directed forgetting. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 38(5), 1309-1324.

Foster, N. L., & Sahakyan, L. (2011). The role of forget-cue salience in list-method directed forgetting. *Memory*, 19, 110-117.

Sahakyan, L., & Foster, N. L. (2009). Intentional forgetting of actions: Comparison of list-method and item-method directed forgetting. *The Journal of Memory and Language*, 61, 134-152.

MANUSCRIPTS UNDER REVIEW OR IN PREPARATION

Foster, N. L., Netz, E*, Thompson, T*, Lachhab, A*, & Sweeney, J*. (submitted to *Applied Cognitive Psychology*). Interleaved practice boosts math learning when participants can select exemplar elements that define the category.

Foster, N. L. (in preparation). Are false beliefs about ease of processing and item memorability related to item-method directed forgetting?

Foster, N. L., & Sahakyan, L. (in preparation). The effect of similarity on retroactive interference in free and serial recall.

Dunlosky, J., Foster, N. L., Was, C. A., Rawson, K. A., Updegraff, J., Merriman, W., Tonge, A. (in preparation). Predicting student achievement in a remedial mathematics course driven by an automated tutor: The ironic effects of self-efficacy.

BLOGS

Foster, N. L. (2020, August 18). Why do college students adopt poor study strategies? Research points to overconfidence and refusal to adopt spaced practice. *Society for the Teaching of Psychology*. <https://tinyurl.com/y6r2q7x4>

CONFERENCE TALKS

Foster, N. L. (April, 2023). How do people improve their metacognition of math concepts? Talk given at the 2023 Meeting of the Midwestern Psychological Association, Chicago, IL.

Foster, N. L. (April, 2021). Do instructions to move eyes cause directed forgetting? Talk given at the 2021 Meeting of the Midwestern Psychological Association, Virtual Conference.

Foster, N. L. (June, 2020). Interleaving promotes learning of math because of spacing and not discriminative contrast. Annual Meeting of the Eastern Psychological Association, Virtual Conference.

- Foster, N. L. (February, 2018). Do participants use beliefs about item processing to engage directed forgetting? Talk given at the North Carolina Cognition Conference 2018, Chapel Hill, NC.
- Foster, N. L., & Sahakyan, L. (November, 2012). Beliefs about item memorability affect metacognitive control in item-method directed forgetting. Talk given at the International Association for Metacognition, Minneapolis, MN.
- Foster, N. L., & Sahakyan, L. (February, 2012). Rehearsing to forget: The influence of metacognition on item-method directed forgetting. Talk given at the North Carolina Cognition Conference 2012, Chapel Hill, NC.
- Foster, N. L., & Sahakyan, L. (August, 2011). Revisiting McGeoch and McDonald (1931): Similarity and retroactive interference 80 years later. Talk given at the 5th International Conference on Memory, York, England.
- Foster, N. L., & Sahakyan, L. (February, 2011). Revisiting McGeoch and McDonald (1931): Similarity and retroactive interference 80 years later. Talk given at the North Carolina Cognition Conference, 2011, in Greensboro, NC.
- Foster, N. L., & Sahakyan, L. (November, 2010). Illusions of remembering and directed forgetting. Talk given at the 51st Annual Meeting of the Psychonomic Society, St. Louis, MO (read by L. Sahakyan).
- Foster, N. L., & Sahakyan, L. (April, 2009). Individual differences in forgetting strategies. Talk given at the 2009 Meeting of the Midwestern Psychological Association, Chicago, IL.

CONFERENCE POSTERS

- Netz, E*., Sweeney, J*., Lachhab, A*., Thompson, T*., & Foster, N. L. (April, 2023). Does contrasting elements of a formula help boost math learning? Poster presented at the 2023 Meeting of the Midwestern Psychological Association, Chicago, IL.
- Foster, N. L., & Harriman, G** (March, 2019). Instructed eye movements do not affect item-method directed forgetting. Poster presented at the 2019 Annual Meeting of the Eastern Psychological Association, New York City, NY.
- Foster, N. L., Mantell, J. T., & Azimi Vahdat, M. M** (November, 2018). Measuring the vigilance decrement under divided attention. Poster presented at the 59th Annual Meeting of the Psychonomic Society, New Orleans, LA.
- Foster, N. L., Lynn, J** (March, 2018). Back to the future again: List similarity affects reminding in retroactive interference. Poster presented at the 2018 Annual Meeting of the Eastern Psychological Association, Philadelphia, PA.
- Foster, N. L., Baroncinni, E**, & Jimenez, M** (November, 2017). Are beliefs about ease of processing and item memorability related to directed forgetting? Poster presented at the 58th Annual Meeting of the Psychonomic Society, Vancouver, BC, Canada.
- Foster, N. L., & Jimenez, M** (April, 2017). How do beliefs about ease of processing contribute to directed forgetting? Poster presented at the 89th Annual Meeting of the Midwestern Psychological Association, Chicago, IL.
- Morehead, K.***, Dunlosky, J. D., & Foster, N. L. (May, 2016). Do people use category learning judgments to regulate their learning of natural categories, Part II. Poster presented at the 2nd Triennial International Meeting of the Psychonomic Society, Granada, Spain.
- Mueller, M.***, Foster, N. L., & Dunlosky, J. (May, 2016). Are category learning judgments more accurate after a delay? Poster presented at the 2nd Triennial International Meeting of the Psychonomic Society, Granada, Spain.

- Foster, N. L., Rawson, K. A., & Dunlosky, J. (November, 2015). Self-regulated learning of rule-based concepts. Poster presented at the 56th Annual Meeting of the Psychonomic Society, Chicago, IL.
- Morehead, K.***, Dunlosky, J. D., & Foster, N. L. (November, 2015). Do people use category learning judgments to regulate their learning of natural categories, Part I. Poster presented at the 56th Annual Meeting of the Psychonomic Society, Chicago, IL.
- Foster, N. L., Dunlosky, J., & Sahakyan, L. (November, 2014). Dissociative effects of directed forgetting on global judgments of learning. Poster presented at the 55th Annual Meeting of the Psychonomic Society, Long Beach, CA.
- Mueller, M.***, Foster, N. L., & Dunlosky, J. (November, 2014). Does interleaving practice of mathematics problems impact category learning judgments? Poster presented at the 55th Annual Meeting of the Psychonomic Society, Long Beach, CA.
- Foster, N. L., & Sahakyan, L. (November, 2012). Metacognition influences item-method directed forgetting. Poster presented at the 53rd Annual Meeting of the Psychonomic Society, Minneapolis, MN.
- Foster, N. L., & Sahakyan, L. (November, 2009). Revisiting the similarity paradox in retroactive interference. Poster presented at the 50th Annual Meeting of the Psychonomic Society, Boston, MA.
- Foster, N. L., & Sahakyan, L. (May, 2009). Intentional forgetting of actions: Comparison of list-method and item-method directed forgetting. Poster presented at Association for Psychological Science 21st Annual Convention, San Francisco, CA.
- Foster, N. L., & Sahakyan, L. (November, 2007). On the intentionality of directed forgetting: Individual differences in forgetting instructions. Poster presented at the 48th Annual Meeting of the Psychonomic Society, Long Beach, CA.

INVITED TALKS

- Foster, N. L. (November, 2018). Remembering to forget: Metacognition and its relation to intentional forgetting (& other avenues of inquiry). Invited research talk at The College of Wooster, Wooster, OH.
- Foster, N. L. (November, 2018). Understanding memory. Invited lecture at The College of Wooster, Wooster, OH.
- Foster, N. L. (March, 2016). A split arrow: Exploration in serendipity, experience, and context. 2016 Psi Chi Induction Keynote, St. Mary's College of Maryland, St. Mary's City, MD.
- Foster, N. L. (January, 2015). The unseen power of intentional forgetting: New findings on old phenomena. Invited research talk at St. Mary's College of Maryland, St. Mary's City, MD.
- Foster, N. L. (March, 2013). The forgetting paradox: Conceptualizing the memory system by understanding properties of incidental forgetting and intentional forgetting. Invited research talk at Kent State University, Kent, OH.
- Foster, N. L. (February, 2013). Cognition & Emotion: The inextricable link between mental processes and affective states, stimuli, and memories. Invited lecture at Daemen College, Amherst, NY.
- Foster, N. L. (January, 2013). The opposite of remembering: Understanding the properties of intentional forgetting. Invited research talk at Tennessee Tech University, Cookeville, TN.

GRANTS, FUNDING, and RESEARCH SUPPORT

The Patuxent Partnership – Office of Naval Research STEM Grant, July 2017 – June 2018
 Role: Consultant
 Amount: \$10,000

Council on Undergraduate Research (CUR)
Role: Psychology Department Team Member

Faculty Development Grant, SMCM, 2017-2018
Amount: \$2,142

Faculty Development Grant, SMCM, 2016-2017
Amount: \$2,500

TEACHING

Courses Taught as Professor

Cognitive Psychology @The College of Wooster	1 Section
Memory & Cognition Lab @The College of Wooster	3 Sections
Statistics (PSYC 250) @The College of Wooster	8 Sections
First Year Seminar (“Fact, Fallacy, or Fantasy?”) @The College of Wooster	1 Section
Learning & Memory (PSYC 299) @The College of Wooster	2 Sections
General Psychology (PSYC101/PSY111/RCO273) @SMCM/Elon/UNCG	5 Sections
Research Methods (PSYC301) @SMCM	5 Sections
Learning and Cognition (PSY205) @SMCM	6 Sections
Cognitive Psychology with Lab (PSYC324) @SMCM	4 Sections
Cognitive Psychology (PSY40445) @Kent State (as Adjunct)	1 Section
Belief in Weird Things (PSY276) @Elon (as Adjunct)	1 Section
Bizarre Notions in the Modern World (Core 101 – First Yr. Sem) @ SMCM	1 Section

Courses Taught as a Lab Instructor

Statistics (PSY310) @UNCG	2 Sections
Research Methods (PSY311) @UNCG	2 Sections

SERVICE

Human Subjects Research Committee Board Member—appointed (Fall 2022 – present)
STEM Success Initiative Advisory Board Member—appointed (Fall 2021 – Spring 2022)
Tenure Track Faculty Search Committee Member (Neuro) – COW (2021-2022)
Neuroscience Curricular Committee Member (Spring 2021 – present)
Tenure Track Faculty Search Committee Member (Psyc) – The College of Wooster (2020-2021)
Visiting Faculty Search Committee Member – The College of Wooster (2019-2020)
IRB Co-Chair – St. Mary’s College of Maryland (2018 – 2019)
Strategic Plan Implementation Team Member (2018 – 2019)
Council on Undergraduate Research Committee Member (2017 – 2019)
Statistics & Research Methods Assessment Team Member – St. Mary’s College (2016-2019)
Faculty Search Committee Member for Double-Line – St. Mary’s College (2016-2017)
Faculty Lecture Series Committee Member – St. Mary’s College (2016-2018)
Writing Club Co-Founder – St. Mary’s College (2015-2019)
Writing Club Founder – Kent State (2013-2015)

DEPARTMENT TALKS AND PRESENTATIONS

Interleaving helps learning. Do students know this? – Talk given at the Science Round Table, The College of Wooster, February, 2023

Why interleaving helps learning: The contribution of mixing versus spacing. – Talk given at the Science Round Table, The College of Wooster, February, 2020.

Why does interleaving improve math learning? The contributions of discriminative contrast and distributed practice. – Talk given at the St. Mary’s Faculty Lecture Series, February 2019

Metacognitive mechanisms in directed forgetting: Encoding fluency versus perceptual largeness – UNCG cognitive area Spring Research Symposium, May 2012

Mis-guided Control: Monitoring and Control in Item-Method Directed Forgetting – UNCG cognitive area Spring Research Symposium, May 2011

Illusions of Remembering and Directed Forgetting - UNCG cognitive area Spring Research Symposium, May 2010

Revisiting the Similarity Paradox in Retroactive Interference – UNCG cognitive area Spring Research Symposium, May 2009

Do Nothing, Forget Nothing: Examining effort in list-method directed forgetting – cognitive area brown bag meeting, April 2009

Forgetting Our Doings – UNCG cognitive area Spring Research Symposium, May 2008

Context Variability and Directed Forgetting – cognitive area brown bag meeting, October 2007

An Individual Differences Approach to Understanding Directed Forgetting – UNCG Graduate Research Colloquium, September 2007

AWARDS

UNCG Psychology Department Summer Funding Recipient, May 2010

UNCG Psychology Department Summer Funding Recipient, May 2008

Outstanding Researcher Award, Department of Psychology, Willamette University

Honors Thesis Candidate

Willamette Oregon Scholar

REVIEWING

Acta Psychologica

Assessment in Education: Principles, Policy, & Practice

Cognition

Consciousness and Cognition

Journal of Applied Research in Memory and Cognition

Journal of Educational Psychology

Journal of Experimental Psychology: Learning, Memory, and Cognition
Memory

Memory & Cognition

Psychological Reports

Psychonomic Bulletin & Review

Scientific Reports

The Quarterly Journal of Experimental Psychology

PROFESSIONAL MEMBERSHIPS

The Psychonomic Society

Eastern Psychological Association

Midwestern Psychological Association

International Association for Metacognition