
Curriculum Vitae

Michael R. Dougherty

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Positions

- 2017 – present Professor & Chair, Department of Psychology, University of Maryland
- *Employees: 152 total employees*
 - 30 Tenure/Tenure-track faculty
 - 16 Instructional faculty
 - 44 “Other” faculty
 - 16 Staff
 - 62 part-time Graduate Assistants
 - *Annual Budget: \$12.1 million*
 - *Annual Grants and Contracts: ~\$12 million*
 - *Students: ~1350 undergraduates; ~70 PhD students; ~65 students in two professional masters programs*
- 2013–2017 Professor, Department of Psychology, University of Maryland
Associate Chair/Director of Graduate Studies (2013–2017)
- 2005–2013 Associate Professor, Department of Psychology, University of Maryland
Associate Chair/Director of Graduate Studies (2012–2013)
- 1999–2005 Assistant Professor, Department of Psychology, University of Maryland

Leadership Highlights

Faculty Development

- Developed and implemented a multi-year strategic plan for hiring that prioritized diversity science and computational methods, leading to 11 new faculty hires and informing the creation of a college-wide cluster hire broadly on Social Justice and Health Disparities.
- Developed and implemented a tool for creating independent career development plans for faculty and post docs.
- Developed draft policy for creating a sabbatical-like experience for full-time *non-tenure* professional track faculty.

Diversity, Equity, and Inclusion

- Created new *Assistant Chair for Equity and Inclusion* position within department to amplify and coordinate DEI efforts across the department, representing the first such position on our campus.
- Created and implemented the departmental-level [*Broadening Participation Initiative*](#), which funds projects aimed at reducing cost of education, facilitating community-engaged research, increasing opportunities for traditional underrepresented groups to be involved in research (including a new post-doctoral training program), and the creation of open science pipelines.
- Developed departmental research assistantship in diversity science to support students conducting critical research, teaching, or outreach with diverse communities

- Under my leadership, the department experienced a 15-point increase in the proportion of URM students in our PhD program.

Policy Development

- Developed and implemented a nationally recognized overhaul of [promotion and annual review](#) policies to reward open science and inclusive practices. The policy is being used by the Higher Education Leadership Initiative for Open Scholarship ([HELIOS](#)) as a model policy (see [here](#)) and is featured as a [DORA](#) case study
- Provided briefing to campus deans and provost on flexible faculty workload policies that accommodate changes in faculty roles over the career.
- Created departmental guidelines for transparent and equitable salary setting practices.
- Revamped departmental procedures for conducting faculty searches to implement strategies designed to mitigate bias and enhance equity.
- Helped develop University of Maryland's policy on Equitable Access to Research and Scholarship.

Infrastructure, Curricular, and Program accomplishments

- Oversaw multiple infrastructure projects in our building including successfully advocating for funding to create a gender-neutral bathroom, upgrades to our clinical facility, and multiple laboratory renovation projects. Also initiated a major multi-year renovation of the Bio-Psyc roof, that required coordinating moves of multiple laboratories to other buildings.
- Oversaw curriculum innovation project aimed at modernizing departmental curriculum, including a newly planned effort to create a graduate PhD program in Diversity Science.
- Created departmental funding mechanism for graduate students to gain enhanced training in computational methods

Broader Leadership Activities

- Developed and [published](#) framework ([downloaded](#) over 4500 times) for reimagining how departments can better align research evaluation practices with institutional values, personal philosophies, and reporting mechanisms.
- Developed and implemented a workshop series on Aligning P&T policies with Institutional Values to incorporate open and inclusive practices for over 20 psychology departments across the US and Canada; Created and curated an open resource [repository](#) for workshop participants. Article summarizing these workshops is available [here](#).
- Developed [toolkit](#) for promotion and tenure reform efforts.
- Developed and organized “Chairapy”, an online forum for psychology department chairs to discuss issues related to being a department chair. Chairapy is now part of the Council of Graduate Departments of Psychology (COGDOP) programming.
- Involved with national initiatives through the Higher Education Leadership Initiative for Open Science, the Counsel of Graduate Studies, and NIH to develop incentive structures that foster an open, transparent, inclusive, and trustworthy research ecosystem.

Education

- Ph.D. The University of Oklahoma. Psychology (Cognitive/Decision Making). 1999.
 M.S. The University of Oklahoma. Psychology (Cognitive/Decision Making). 1996.
 B.S. Kansas State University. Psychology. 1993.

Awards

- NINDS Champion of Rigor Prize, 2024
- *Fellow*, Big Ten Academic Alliance, Academic Leadership Program, 2020-2021
- *Fellow*, Big Ten Academic Alliance, Department Executive Officer Program, 2018-2019
- *Faculty Early Career Development Award* (CAREER), National Science Foundation, 2002
- Dissertation nominated by University of Oklahoma for Microfilms International best dissertation in the social sciences (one nomination per university allowed), 2000
- *Chuck Gettys Award* for Outstanding Research in Graduate School, University of Oklahoma, 1999
- *Hillel Einhorn New Investigator Award*, Society for Judgment and Decision Making, 1998
- Outstanding Graduate Research Assistant Award, University of Oklahoma, 1997
- Outstanding Psychology Undergraduate Research Award, Kansas State University, 1993

Patents/Disclosures Filed

- *Number Piles*, Disclosure No. IS-2009-055 (Dougherty & Atkins)
- *Alpha-Numeric Memory Builder and Structuring Task*, Disclosure No. IS-2009-054 (Atkins, Harbison, & Dougherty)
- *Modular Shape Builder*, Disclosure No. IS-2009-053 (Dougherty, Atkins, & Dowling)
- *Matrix Memory Builder*, Disclosure No. IS-2009-052 (Harbison, Dougherty, & Atkins)

Research Resources Created

- Developed the General Monotone Model (GeMM), a regression model for modeling ordinal properties of data (MATLAB code created, R code available on github) (2012–present, ongoing)
- Created open source measures of cognitive ability (ongoing)
- Developed suite of cognitive training tasks for training working memory and language (Iraqi Arabic) (2014)

Grants and Contracts

Pending

No current grants pending

Past

Co-PI: Supporting A Navy Decision Science Strategy, Office of Naval Research (with the UMD Applied Research Laboratory for Intelligence and Security (ARLIS) and Georgia Institute of Technology). (2022-2023) \$407,000

Co-PI: *Reasoning About Multiple Paths and Alternatives to Generate Effective counterfactual forecasts (RAMPAGE). Intelligence Advanced Research Program Activity (IARPA) FOCUS Program* (with Charles River Analytics; Georgia Tech Research Institute; Georgia Institute of Technology), March 13, 2019 - February 12, 2021, (total UMD: approx \$327,315) ~\$2,000,000

PI: *Collaborative Proposal: Memory-Based Account of Cue Generation and Predictive Inference*. National Science Foundation, September 1, 2014 – 2018. (with Rick Thomas, *Georgia Tech*) (total UMD: \$317,000) ~\$530,000

PI: *Workshop proposal: Bridging Neuroscience and Learning*. National Science Foundation, Jan 1 2015 – Oct 31, 2017 ~\$30,000

PI: <i>Decision and memory: The effect of stopping rules on memory use.</i> National Science Foundation, September 1, 2010–August 31, 2014 (co-PIs: Eddy Davelaar & Isaiah Harbison).	\$325,000
PI: <i>Robust cognition through brain plasticity training.</i> Office of Naval Research, April 1, 2010–October 30, 2013.	\$749,231
Co-PI: <i>A center for cognitive, social, computational & mathematical neuroscience (ARI-R2).</i> National Science Foundation, June 1, 2010–September 30, 2013 (PI: ...).	\$1,500,000
Co-PI: <i>Effects of brain training on cognitive and language skills (TTO3501).</i> Department of Defense, University of Maryland Center for Advanced Study of Language (CASL), September 1, 2007–August 30, 2013. (PI: Michael Bunting, CASL, University of Maryland).	\$882,110
Co-PI: <i>Effects of brain training on cognitive and language skills.</i> Department of Defense, Defense Language Institute Foreign Language Center, September 1, 2011–September 30, 2012 (PI: Michael Bunting).	\$650,000
Co-PI: <i>MRI: Acquisition of a 3-Tesla Magnetic Resonance Imaging (MRI).</i> National Science Foundation, September 1, 2009 (with Nathan Fox [PI], Donald Bolger, Bob Dooling, & Colin Philips).	\$1,936,855
PI: <i>Attention, memory and judgment.</i> National Science Foundation, August 2006–July 2010.	\$350,000
PI: <i>Conference grant for Society for Mathematical Psychology,</i> Air Force Office of Scientific Research (AFOSR), July 2008.	\$11,000
Co-PI: <i>Support for the 2008 Annual Meeting for the Society for Mathematical Psychology,</i> National Science Foundation, July 2008 (PI: Trish Van Zandt, Ohio State).	\$10,000
PI: <i>CAREER: Using memory theory to describe judgment and decision making.</i> Faculty Early Career Development Award: NSF, SES-0134678, June 1, 2002–...	\$400,000
PI: Graduate Research Board Award, University of Maryland, 2001.	\$2,300
Co-PI: <i>Cognitive plasticity training. ACCIAC Fellows in Innovation and Creativity Program.</i> Grant awarded to fund a Gemstone undergraduate research project.	\$4,000

Publications

- Dougherty, M. R. P., Gettys, C. F., & Thomas, R. P. (1997). The role of mental simulation in judgments of likelihood. *Organizational Behavior and Human Decision Processes*, 70, 135–148.
- Gronlund, S., Ohrt, D. D., Dougherty, M. R. P., Perry, J., & Manning, C. A. (1998). Role of memory in air traffic control. *Journal of Experimental Psychology: Applied*, 4, 263–280.
- Durso, F. T., Hackworth, C. A., Barile, A. L., Dougherty, M. R. P., & Ohrt, D. D. (1998). Monitoring reality in cyberspace. *International Journal of Cognitive Technology*, 3, 32–38.
- Dougherty, M. R. P., & Shanteau, J. (1999). Averaging expectancies and perceptual experiences in the assessment of quality. *Acta Psychologica*, 101, 49–67.
- Dougherty, M. R. P., Gettys, C. F., & Ogden, E. E. (1999). MINERVA-DM: A memory processes model for judgments of likelihood. *Psychological Review*, 106, 180–209.
- Dougherty, M. R. P. (2001). Integration of the ecological and error models of overconfidence using a multiple-trace memory model. *Journal of Experimental Psychology: General*, 130, 579–599.

- Gronlund, S. D., Canning, J. M., Moertl, P. M., Johansson, J., Dougherty, M. R. P., & Mills, S. H. (2002). An information organization tool for planning in air traffic control. *International Journal of Aviation Psychology, 12*, 377–390.
- Moertl, P. M., Canning, J. M., Gronlund, S. D., Dougherty, M. R. P., Johansson, J. & Mills S. H. (2002). Aiding Planning in Air Traffic Control: An Experimental Investigation of the Effects of Perceptual Information Integration. *Human Factors, 44*, 404–412.
- Franco-Watkins, A., Derks, P., & Dougherty, M. R. P. (2003). Choice behaviour and probability judgements in the Monty Hall problem. *Thinking & Reasoning, 9*, 67–90.
- Dougherty, M. R. P., & Franco-Watkins, A. M. (2003). Reducing bias in frequency judgment by improving source monitoring. *Acta Psychologica, 113*, 23–44.
- Dougherty, M. R. P., & Hunter, J. E. (2003). Hypothesis generation, probability judgment and individual differences in working memory capacity. *Acta Psychologica, 113*, 263–282.
- Dougherty, M. R. P., & Hunter, J. E. (2003). Probability judgment and subadditivity: The role of working memory capacity and constrained retrieval. *Memory & Cognition, 31*, 968–982.
- Gronlund, S. D., Dougherty, M. R. P., Durso, F. T., Canning, J., & Mills, S. H. (2005). Planning in air traffic control. *International Journal of Aviation Psychology, 15*, 269–293.
- Dougherty, M. R., Scheck, P., Nelson, T. O. & Narens, L. (2005). Using the past to predict the future. *Memory & Cognition, 33*, 1096–1115.
- Sprenger, A., & Dougherty, M. R. (2006). Differences Between Probability and Frequency Judgments: The Role of Individual Differences in Working Memory Capacity. *Organizational Behavior and Human Decision Processes, 99*, 202–211
- Dougherty, M. R., & Sprenger, A. (2006). The influence of improper sets of information on judgment: How irrelevant information can bias judged probability. *Journal of Experimental Psychology: General, 138*, 262–281. (Featured in *APA Monitor*, June 2006)
- Franco-Watkins, A., & Dougherty, M. R. (2006). Does context discrimination in recognition memory depend on the concreteness of the to-be-remembered items? *Memory and Cognition, 34*, 973–985.
- Barnes, K. A., & Dougherty, M. R. (2007). The effect of divided attention on the accuracy of global JOLs. *American Journal of Psychology, 120*, 347–359. (First author's honors thesis).
- Dougherty, M. R., & Harbison, J. I. (2007). Retrieval failure in memory: How long does one keep going back to the well when the well is dry? *Journal of Experimental Psychology: Learning, Memory, & Cognition, 33*, 1108–1117.
- Dougherty, M. R., Franco-Watkins, A., & Thomas, R. P. (2008). The psychological plausibility of fast and frugal heuristics. *Psychological Review, 115*, 199–211.
- Dougherty, M. R., Thomas, R. & Franco-Watkins, A. M. (2008). PostScript: Vague heuristics revisited. *Psychological Review, 115*, 211–213.
- Thomas, R. P., Dougherty, M. R., Sprenger, A., & Harbison, J. I. (2008). Diagnostic hypothesis generation and human judgment. *Psychological Review, 115*, 155–185.
- Harbison, J. I., Dougherty, M. R., Davelaar, E., & Fayyad, B. (2009). The lawfulness of decisions to terminate memory search. *Cognition, 111*, 3, 397–402. DOI: 10.1016/j.cognition.2009.03.002.
- Pleskac, T. J., Dougherty, M. R., Rivadeneira, A. W., & Wallsten, T. S. (2009). Random error in judgment: The contribution of encoding and retrieval processes. *Journal of Memory and Language, 60*, 165–179. DOI: 10.1016/j.jml.2008.08.003
- Tomlinson, T., Marwinski, J., & Dougherty, M. R. (2011). Four challenges for understanding memory-based judgment and decision making. *Judgment and Decision Making, 6* (1), 89–99.

- Sprenger, A. M., Dougherty, M. R., Atkins, S. M., Franco-Watkins, A. M., Thomas, R. P., Lange, N., & Abbs, B. (2011). Implications of cognitive load for hypothesis generation and probability judgment. *Frontiers in Cognitive Science*, 2(129), 1–15. doi: 10.3389/fpsyg.2011.00129
- Dougherty, M. R., & Thomas, R. P. (2012). Robust decision making in a nonlinear world. *Psychological Review*, 119(2), 321–344. doi: 10.1037/a0027039
- Sprenger, A., & Dougherty, M. R. (2012). Generating and evaluating options for decision making: The impact of sequentially presented evidence. *Journal of Experimental Psychology: Learning, Memory, And Cognition*, 38(3), 550–575. doi:10.1037/a0026036.
- Siegel, E. F., Dougherty, M. R., & Huber, D. E. (2012). Manipulating the role of cognitive control while taking the implicit association test. *Journal of Experimental Social Psychology*, 48(5), 1057–1068. <http://dx.doi.org/10.1016/j.jesp.2012.04.011> **For attempted replication of Study 3, see Johnson et al. 2021
- Chrabaszcz, J., & Dougherty, M. R. (2012). Deliberations on unconscious thought theory. *Frontiers in Psychology*, 3, 1–3.
- Davelaar, E., Yu, E. C., Harbison, J. I., Hussey, E. K., & Dougherty, M. R. (2013). A rational approach to memory search termination. *Cognitive Systems Research*, 24, 96–103. doi: 10.1016/j.cogsys.2012.12.012 [CSR]
- Sprenger, A. M., Atkins, S. M., Bolger, D. J., Harbison, J. I., Novick, J. M., Weems, S. A., Chrabaszcz, J. S., Smith, V., Bobb, S., Bunting, M. F., & Dougherty, M. R. (2013). Training working memory: Limits of transfer. *Intelligence*, 41, 638–663. [doi.org/10.1016/j.intell.2013.07.013](http://dx.doi.org/10.1016/j.intell.2013.07.013)

***Entries from here on use an annotated format based on recommendations in Dougherty, Slevc, & Grand (2019, doi: 10.1177/1745691618810693) to make research evaluation more transparent and to align academic reporting with departmental and institutional values.**

- Hussey, E. K., Dougherty, M. R., Harbison, J. I., & Davelaar, E. J. (2014). Retrieval dynamics in self-terminated memory search. *Quarterly Journal of Experimental Psychology*. Vol. 67, No. 2, 394–416, <http://dx.doi.org/10.1080/17470218.2013.816750>

Article Details

- **Article type:** Empirical/computational
- **Data:** original data/simulation
- **Number of experiments:** 1 (plus data from 2 prior studies re-analyzed)
- **Data type and sample size:** behavioral, N=49. Crossed design in which participants receive many trials. Additional reanalyses of two other prior datasets also included.
- **Reproducibility:** NA
- **Role:** co-primary author; co-conceived experiment, developed and conducted simulations, wrote large portions of first draft
- **Contribution:** Develops new paradigm for studying interresponse times in memory retrieval that enables people to decide when to terminate memory search. Illustrates that imposing a pre-determined amount of time changes response profiles.

- Yu, E. C., Sprenger, A. M., Thomas, R. P., & Dougherty, M. R. (2014). When heuristics and science collide. *Psychonomic Bulletin and Review*, 21, 268-82 DOI: 10.3758/s13423-013-0495-z

Article Details

- **Article type:** Empirical/methodological
- **Data:** original data/simulation
- **Number of experiments:** 1

- **Data type and sample size:** behavioral, N=314
- **Reproducibility:** NA
- **Role:** co-primary author; co-conceived experiment, developed and conducted simulations, wrote large portions of first draft
- **Contribution:** Examines heuristic rules that researchers use to decide when to stop collecting data. Illustrates the impact of these heuristic rules on statistical conclusions.

Sanborn, A.N., Hills, T.T., Dougherty, M.R., Thomas, R.P., Yu, E.C., & Sprenger, A. M. (2014). Reply to Rouder (2014): Good Frequentist Properties Raise Confidence. *Psychonomic Bulletin & Review*, *21*, 309 – 311.

Article Details

- **Article type:** Commentary
- **Data:** none
- **Number of experiments:** NA
- **Data type and sample size:** NA
- **Reproducibility:** NA
- **Role:** secondary author with Sanborn and Hills
- **Contribution:** Responds to critique of Yu et al.

Tidwell, J., Dougherty, M. R., Chrabaszcz, J., Thomas, R. P., & Mendoza, J. (2014). What counts as evidence for working memory training? Problems with correlated gains and dichotomization. *Psychonomic Bulletin and Review*, *21*, 620-628.

Article Details

- **Article type:** Statistical/methodological
- **Data:** none
- **Number of experiments:** 4 simulations
- **Data type and sample size:** NA
- **Reproducibility:** NA
- **Role:** co-primary; Conceptualized problem; wrote large portions of paper; conducted validation simulations;
- **Contribution:** Mathematical analysis of a commonly used statistical procedure that illustrates that it is inferentially invalid as used. This paper ultimately led many researchers to abandon the use of the critiqued method.

Thomas, R.P., Dougherty, M.R., & Buttaccio, D. (2014). Memory constraints on hypothesis generation and decision making. *Current Directions in Psychological Science*, *23*, 264-270.

Article Details

- **Article type:** Theoretical/review
- **Data:** none
- **Number of experiments:** NA
- **Data type and sample size:** NA
- **Reproducibility:** NA
- **Role:** secondary author; wrote large portions of first draft
- **Contribution:** Reviews theoretical advances and data related to hypothesis generation.

Atkins, S. M., Sprenger, A. M., Briner, T. L., Buchanan, J. B., Chavis, S. E., Chen, S-y, Iannuzzi, G. L., Kashtelyan, V., Dowling, E., Bolger, D. J., Bunting, M. F., & Dougherty, M. R. (2014). Measuring working memory is all fun and games: A four-dimensional spatial game predicts cognitive task performance. *Experimental Psychology*, *61*(6), 417-438. DOI: 10.1027/1618-3169/a000262

Article Details

- **Article type:** Experimental
- **Data:** Original
- **Number of experiments:** 6 experiments
- **Data type and sample size:** Behavioral (Exp 1, N=117; Exp 2, N=45; Exp 3, N=60; Exp 4, N=58; Exp 5, N=59; Exp 6, N=62). Experiment 1 includes a factor analysis of fourteen tasks; Experiment 2 includes six tasks; all other studies have two behavioral tasks.
- **Reproducibility:** NA
- **Role:** co-Primary with Atkins and Sprenger; developed task; Conceptualized problem; wrote majority of first draft, excluding statistics and method. First 2 authors were PhD students, authors 3-8 were undergraduate students.
- **Contribution:** Presents data from 6 new experiments validating a new measure of WM that I created. This measure is now used by multiple labs both within UMD and outside of UMD.

Dougherty, M.R., Harbison, J.I., & Davelaar, E. (2014). Optional stopping in the search of memory. *Current Directions in Psychological Science*, 23 (5), 332-337. DOI: 10.1177/0963721414540170

Article Details

- **Article type:** Theoretical/review
- **Data:** none
- **Number of experiments:** NA
- **Data type and sample size:** NA
- **Reproducibility:** NA
- **Role:** Primary author; Conceptualized problem; wrote majority of first draft
- **Contribution:** Reviews theoretical advances and data related to search termination decisions.

Dougherty, M. R., Thomas, R. P., Brown, R., Chrabaszcz, J. S., & Tidwell, J. W. (2015). An introduction to the general monotone model with application to two problematic datasets. *Sociological Methodology*, 45, 223-271.

Article Details

- **Article type:** quantitative
- **Data:** previously published and simulation
- **Number of experiments:** 2
- **Data type and sample size:** NA – previously published and simulation
- **Reproducibility:** open data (<https://osf.io/92g3r/>) and open method (<https://github.com/jchrszcz/gemmR>); cross-validation; robustness/sensitivity analysis; all analyses and simulations independently verified by 4th author; 4th and 5th authors created R package
- **Role:** Primary author; Conceptualized problem; co-developed method; conducted initial set of analyses; wrote majority of first draft
- **Contribution:** Methodological piece describing new regression approach. Includes monte carlo simulation, cross-validation, and robustness analysis; paper led to creation of R package

Buttaccio, D., Lange, N., Thomas, R.P., & Dougherty, M.R. (2015). Using a model of hypothesis generation to predict eye movements in a visual search task. *Memory & Cognition*. 43, 247-265. 10.3758/s13421-014-0463-5

Article Details

- **Article type:** Experimental/computational modeling
- **Data:** Original
- **Number of experiments:** 2
- **Data type and sample size:** Behavioral/Eye-tracking. Exp 1 (N=15), Exp 2 (N=17)
- **Reproducibility:** NA
- **Role:** Secondary author; helped conceptualize problem; edited draft; provided input on modeling

- **Contribution:** Application of computational model to explain visual search. Model accounts for how hypotheses generated from memory are used to guide visual attention.

Dougherty, M.R., Hamovitz, T., & Tidwell, J.W. (2016). Re-evaluating the effectiveness of n-back training on transfer through the Bayesian lens: Support for the null. *Psychonomic Bulletin and Review*, 23, 306–316.

Article Details

- **Article type:** Meta-analysis
- **Data:** Previously published
- **Number of experiments:** 24 previously published studies
- **Data type and sample size:** NA
- **Reproducibility:** Open data and open method (<https://osf.io/amwdh/>); Sensitivity analyses conducted with different prior distributions to ensure that conclusions were not dependent on prior distribution assumptions.
- **Role:** Primary; conceptualized problem; conducted Bayes factor meta-analyses; wrote first draft; provided input on Bayesian estimation method (developed by Tidwell)
- **Contribution:** Bayesian analysis provides evidence for the null hypothesis that N-back training does not improve cognitive ability. Contributes new hierarchical Bayesian method for meta-analysis..

Tidwell, J. W., Dougherty, M. R., Chrabaszcz, J., & Thomas, R. P. (2017). Order constrained linear optimization. *British Journal of Mathematical and Statistical Psychology*, 70, 391-411

Article Details

- **Article type:** Quantitative
- **Data:** Simulation
- **Number of experiments:** 270 (simulations)
- **Data type and sample size:** monte carlo simulated only
- **Reproducibility:** Open data, open method; <https://osf.io/j524q/>
- **Role:** co-primary with Tidwell; conceptualized problem; co-developed estimation algorithm; co-wrote first draft; independently verified subset of simulations
- **Contribution:** Development of robust method to estimate least-squares regression parameters using ordinal methods. Method is non-parametric; has better out of sample predictive accuracy than OLS; is less sensitive to outliers; and is less sensitive to researcher decisions to eliminate outliers.

Buttaccio, D. R., Lange, N. D., Thomas, R. P., & Dougherty, M. R. (2018). Does constraining memory maintenance reduce visual search efficiency? *Quarterly Journal of Experimental Psychology*, 71(3), 605-621. <https://doi.org/10.1080/17470218.2016.1270340>

Article Details

- **Article type:** Experimental
- **Data:** Original
- **Number of experiments:** 5
- **Data type and sample size:** Behavioral Exp 1a (N=50); Exp 1b (N=71); Exp 2a (N=55); Exp 2b (N=124); Exp 3 (N=78)
- **Reproducibility:** Open data <https://osf.io/8cmyq/>; Includes replications (Experiments 1B and 2B); sample sizes are large relative to typical visual search experiments; initial accepted draft included 2 experiments; conducted additional experiments to verify initial experiments because Bayes factors were not convincing; final accepted paper included two *failed* replications of initial experiments.
- **Role:** co-primary with Buttaccio; helped develop experiment ideas; co-wrote first draft and assisted in editing; conducted statistical analyses

- **Contribution:** Application of computational model to explain visual search. One unique feature of this paper is that we conducted additional replication experiments that failed to verify the experiments that were in the original submitted draft. These replications were not requested by reviewers or the editor and were done independently to verify results of the initial studies whose BFs were not convincing.

Robey, A.M., Dougherty, M.R., & Buttaccio, D. (2017). Making retrospective confidence judgments improves learners' ability to decide what 'not' to study. *Psychological Science*, 28, 1683-1693.

Article Details

- **Article type:** Experimental
- **Data:** Original
- **Number of experiments:** 2
- **Data type and sample size:** Behavioral Exp 1 (150); Exp 2 (N=150) (registered replication); N=150)
- **Reproducibility:** open data; open method; registered replication; <https://osf.io/m96ts/>;
- **Role:** Co-primary with Robey; co-conceptualized problem; co-wrote first draft;
- **Contribution:** Revealed that different types of metacognitive judgments can be used to nudge people toward making more accurate restudy decisions

Chrabaszcz, J.S., Tidwell, J.W., & Dougherty, M.R. (2017). Crowdsourcing prior information to improve study design and data analysis. *Plos One*, 12(11): e0188246. <https://doi.org/10.1371/journal.pone.0188246>

Article Details

- **Article type:** Methodological/quantitative
- **Data:** Original
- **Number of experiments:** 1
- **Data type and sample size:** Behavioral (N=42, online)
- **Reproducibility:** open paper (<https://doi.org/10.1371/journal.pone.0188246>); open method/open data https://github.com/jchraszcz/papers/tree/master/chrabaszcz_csp
- **Role:** Tertiary; helped conceptualize problem; edited draft
- **Contribution:** Proposes method for estimating effect sizes from the wisdom of the crowds to use in sample size planning

Lawrence, A., Thomas, R. P., & Dougherty, M.R. (2018). Integrating fast-and-frugal heuristics with a model of memory-based cue generation. *Journal of Behavioral Decision Making*, 31, 487-507. doi: 10.1002/bdm.2069

Article Details

- **Article type:** Theoretical/Experimental/computational modeling
- **Data:** Archival and Original
- **Number of experiments:** 2 (one original; one archival)
- **Data type and sample size:** Behavioral (original experiment N=175); Simulation
- **Reproducibility:** Data and computational modeling code <https://osf.io/tra4g/>
- **Role:** secondary; helped conceptualize problem; provided critical feedback on modeling; wrote small sections of initial draft; edited subsequent versions
- **Contribution:** Applied computational model to show that memory processes drive cue-use in inference tasks. Implies that the take-the-best heuristic depends on retrieval processes; Computational modeling component took over a year to complete

Dougherty, M.R., Robey, A.M., & Buttaccio, D. (2018). Do metacognitive judgments alter memory performance beyond the benefits of retrieval practice? A comment on and replication attempt of

Dougherty, Scheck, Nelson & Narens (2005). *Memory & Cognition*, 46(4):558-565. doi: 10.3758/s13421-018-0791-y

Article Details

- **Article type:** Empirical/Replication attempt/Meta-analysis
- **Data:** Original and archival
- **Number of experiments:** 4 (2 new)
- **Data type and sample size:** Behavioral. Exp 1 (N=160); Exp 2 (N=138)
- **Reproducibility:** open method; open data; <https://osf.io/mubzn/>; replication experiment included; includes meta-analysis of 4 experiments (N=600); larger sample size than is typical of meta-cognitive studies
- **Role:** co-primary with Robey; co-conceptualized problem with Robey and Buttaccio; co-developed methods; wrote first draft
- **Contribution:** Attempted to replicate a secondary finding from 2005 publication where different types of metacognitive judgments affect retrieval. Bayesian meta-analysis of 600 participants (from 4 studies) showed evidence for the null. Primary findings from 2005 replicate, though the focus of this replication was on the secondary findings which do not replicate.

Lawrence, A., Thomas, R., & Dougherty, M. (2018). Long-term serial position effects in cue-based inference. *PloS one*, 13(7), e0200821.

- **Article type:** Experimental
- **Data:** Original
- **Number of experiments:** 2
- **Data type and sample size:** Behavioral data Exp1 (N=22); Exp 2 (N=31) [within subjects designs]
- **Reproducibility:** Open access; open data; experiment 2 is a replication of experiment 1; <https://github.com/alawrencehuizena/Long-Term-Serial-Position>
- **Role:** Tertiary
- **Contribution:** Examines the effect of serial position effects on cue use in inference tasks. Data suggest that cue generation is driven by memory, not cue validity. Provides evidence against the take-the-best heuristic and for an alternative account based on HyGene.

Dougherty, M.R. & Robey, A.M. (2018). Neuroscience and education: A bridge astray? *Current Directions in Psychological Science*, 27 (6), 401–406

- **Article type:** Commentary/policy/review
- **Data:** none
- **Number of experiments:** none
- **Data type and sample size:** NA
- **Reproducibility:** NA
- **Role:** Primary; co-wrote first draft with Robey; co-edited subsequent drafts;
- **Contribution:** Argues against the usefulness of neuroscience for informing educational interventions. Recommends policy changes to funding priorities and cautions scientists about accurately depicting the implications of their science.

Dougherty, M.R., Slevc, L. R. & Grand, J.A. (2019). Making research evaluation more transparent: Aligning research philosophy, departmental values, and reporting. *Perspectives in Psychological Science*, 14(3), 361-375. doi: 10.1177/1745691618810693

- **Article type:** Commentary/policy
- **Data:** none
- **Number of experiments:** none
- **Data type and sample size:** NA
- **Reproducibility:** NA

- **Role:** co-Primary authorship shared with Slevc and Grand. MD conceptualized the initial problem; all three authors contributed equally to the production of the manuscript and the intellectual merit.
- **Contribution:** proposes two policy steps for improving transparency in reporting scholarship and aligning research philosophy with institutional values. Proposes policy changes in tenure and promotion that links to greater transparency of research reporting and research philosophy. The proposed policy changes are intended to change the incentive structure at the department level for how faculty are evaluated.

Robey, A., Castillo, C.*, Ha, J.*, Kerlow, M.*, Tesfa, N.*, & Dougherty, M. (2021). The impact of metacognitive judgments on restudy decisions: A ecologically valid study. *Metacognition and Learning*. <https://doi.org/10.1007/s11409-021-09274-8>

- **Article type:** Empirical
- **Data:** original data
- **Number of experiments:** 1 experiment; between subjects.
- **Data type and sample size:** Behavioral data, N=172
- **Reproducibility:** Open data and open analysis code (<https://osf.io/dgxut/>); pre-registered (<https://osf.io/3gdrn/>); paper available on psycarxiv.
- **Role:** secondary; helped draft manuscript; UG students are denoted with asterisks. Robey led the project as primary author.
- **Contribution:** Study presents a replication and generalization of Robey, Dougherty, & Buttaccio 2017. Results indicate that having participants make retrospective confidence judgments improves the accuracy of restudy decisions. The study was carried out as part of an open-science training seminar with undergraduate students.

Johnson, D. J., Ampofo, D., Erbas, S. A.*, Robey, A., Calvert, H.*, Garriques, V. R.*, Gulbransen, L.*, Hatch, J.*, Iqbal, R.*, Lewis, M.*, Stern, E.*, & Dougherty, M. R. (2021). Cognitive Control and the Implicit Association Test: A Replication of Siegel, Dougherty, and Huber (2012). *Collabra: Psychology* 4 January 2021; 7 (1): 27356. doi: <https://doi.org/10.1525/collabra.27356>

- **Article type:** Empirical
- **Data:** Original data.
- **Number of experiments:** 2 experiments.
- **Data type and sample size:** Behavioral data; IAT, AMP, & Stroop. Study 1 (N=148); Study 2 (N=218).
- **Reproducibility:** Open data and open analysis code (osf.io/973ez/); pre-registered. (<https://osf.io/dgxut/>). Paper open access.
- **Role:** Secondary. Conceptualized idea; assisted with methods; verified that models ran; and provided critical edits. UG students are denoted with asterisks. Robey, Johnson, and Ampofo are post doctoral students or graduate students. Johnson and Robey led the project.
- **Contribution:** Paper presents 2 failed replications of a study that I published in 2012. The study was carried out as part of an open-science training seminar with undergraduate students.

Dougherty, M. R., & Horne, Z. (2022). Citation counts and journal impact factors do not capture key aspects of research quality in the behavioral and brain sciences. <https://doi.org/10.31234/osf.io/9g5wk> *Royal Society Open Science*, 9 (8), 220334, (pp 1-18).

- **Article type:** Empirical/Policy
- **Data:** Archival data from multiple sources; Data sources supplemented by webscraping journal data and citation counts.
- **Number of experiments:** 3 studies.
- **Data type and sample size:** Study 1 (citation counts, impact factors, reported statistics, for N=45,144 journal articles in the behavioral and brain sciences); Study 2 (impact factors and Bayes factors for 299,504 statistical tests from N= 34,252 psychology journals); Study 3

- (article citation counts, author citation counts and replication data from 190 attempted replications)
- **Reproducibility:** Open data and open analysis code (OSF); Robustness analysis: Parameters estimated with Bayesian methods; extensive model checking (posterior predictive checks) and sensitivity analyses were conducted across various model specifications and different priors.
 - **Role:** Primary. Conceptualized idea; curated data; conducted statistical analyses; co-wrote initial draft. Second author assisted in developing the statistical models; verified that models ran; co-wrote the initial draft; and provided critical edits.
 - **Contribution:** Examines the validity of citation counts and journal impact factors as predictors of research quality. These indices were either weakly related or unrelated to statistical reporting errors; strength of statistical evidence; estimates of replicability; and actual replication success. In some cases, higher impact factor journals are associated with poorer quality. Results argue against the use of these indices for tenure and promotion decisions.

Feola B, Sand L, Atkins S, Bunting M, Dougherty M, Bolger DJ. (2023). Overlapping and unique brain responses to cognitive and response inhibition. *Brain and Cognition*, 166:105958. doi: <https://doi.org/10.1016/j.bandc.2023.105958>.

- **Article type:** Empirical
- **Data:** Data are all original and not previously published, though the study was a component of a larger behavioral study of WM training published in Sprenger et al. 2013.
- **Number of experiments:** 1 study
- **Data type and sample size:** fMRI and behavioral data from N=77 participants.
- **Reproducibility:** “Data will be made available on request.” Data will be moved to OpenNeuro once Bolger server is fixed
- **Role:** Conceptualization, Funding acquisition, Methodology, Resources, Writing – original draft, Supervision, Project administration. Overall authorship role is tertiary
- **Contribution:** Examines the degree to which response inhibition and cognitive inhibition engage the same neural processes. Results indicate that the two processes share some neural overlap, but that they engage distinct areas of the brain.

Dougherty, M. R., Illingworth, D. A. & Nguyen, R. (In press). A memory theoretic account of citation counts. *Royal Society Open Science*. (previous draft here <https://doi.org/10.31234/osf.io/zst69>)

- **Article type:** Theory/Policy
- **Data:** Data sources supplemented by webscraping journal data and citation counts.
- **Number of experiments:** 244 simulations.
- **Data type and sample size:** This paper simulates 32 years of citations from 46,960 articles in the behavioral and brain sciences collective cited over 2,000,000. The distribution of citations are what is modeled.
- **Reproducibility:** Open data and open analysis code (osf.io/zst69); Computational reproducibility of the model and simulations should be possible from the data and code provided on OSF; shiny app was created to allow others to easily do simulations
- **Role:** Primary. Conceptualized idea; curated data; conducted simulations; wrote initial draft. Second author conducted a subset of simulations; wrote code for memory theoretic model; performed a reproducibility audit by independently reproducing the model from the description in the text; developed simulation for plotting evolution of citations over time; developed companion shiny app; contributed sections to draft and provided edits.
- **Contribution:** Demonstrates that distributions of article-level citations are consistent with a memory process model. The model is a generalization of a preferential-attachment process, but models the attachment process as a function of cognitive processes.

Brumback, A. William Ngiam, Dana Lapato, David Allison, Sophia Crüwell, Christin Daniels, Michael Dougherty, Hayley Hazlett, Kara Kerr, Susan Pusek, Naomi Schrag, on behalf of attendees of the NIH / NINDS workshop. Catalyzing Communities of Research Rigor Champions. (in press) Catalyzing Communities of Research Rigor Champions. *Brain Communications*.

- **Article type:** Theory/Policy
- **Data:** NA
- **Number of experiments:** NA
- **Data type and sample size:** none
- **Reproducibility:** open access
- **Role:** secondary. contributed sections to draft and provided edits.
- **Contribution:** Discusses how to build a better and more trustworthy science.

Hauenstein, C.E., Thomas, R.P., Illingworth, D. A. & Dougherty, M. R. (In press). Rethinking the role of teams and training in geo-political forecasting: The effect of uncontrolled method variance on statistical conclusions. *Psychological Science*.

- **Article type:** Empirical
- **Data:** Data are openly available archival data collected as part of the IARPA forecasting tournament by Phil Tetlock and Barbara Mellers
- **Number of experiments:** data from two studies are reanalyzed.
- **Data type and sample size:** Data are behavioral data. Study 1: N=835. Study 2: N=1235
- **Reproducibility:** Open data and open analysis code are provided on OSF: https://osf.io/hufgb/?view_only=80b17bc8d86f450ca349d52ebe5852ef
- **Role:** Secondary. My role has been in writing and editing the paper, developing and coding graphical representations of the data, and helping to guide some of the analyses. Thomas and Hauenstein are co-primary on this paper and led the conceptualization of the problem and the model development.
- **Contribution:** This paper re-analyzes data collected as part of an IARPA forecasting tournament. Our re-analyses use Item Response theory models to control for a number of confounds present in the original analyses published by in Mellers et al. (2014) and Mellers et al (2015). Our analysis suggest that the original conclusions were not warranted. This paper is important because the findings presented in Mellers et al. (2014) have real-world consequences for the Intelligence Community and national security. Our analyses suggest that the methods proposed in Mellers et al. could well be harmful to the IC if adopted. Of note, finishing the analyses and paper took approximately 2 years to complete due to the complexity of the analyses, size of the data set, and the lack of transparency in Mellers et al. (2014).

Fagan, B. ... Dougherty ... Calabrese... (under review). Wild canids and felids differ in memory-related use of travel routes. *Proceedings of the National Academies of Sciences*.

- **Article type:** empirical
- **Data:** uses archival geospatial location and navigation data.
- **Number of experiments:** NA
- **Data type and sample size:** reuses multiple real world datasets of feline and canine movement in the wild. Data are gps tracking data.
- **Reproducibility:** Due to conservation concerns of threatened and endangered species, raw GPS data for animal tracks are not publicly available.
- **Role:** 22nd author out of 179; played tertiary. Contributed sections to draft, provided edits, consulted with Fagan on conceptual framing.
- **Contribution:** Analyzes cross-species navigation data examining differences between felines and canines. Suggests that species differences could be due to spatial working memory differences.

Books

- Reyna, V. F., Chapman, S. B., Dougherty, M. R., & Confrey, J. (Eds.) (2011). *The adolescent brain: Learning, reasoning, and decision making*. Washington, DC: American Psychological Association.
- Novick, J., Bunting, M. F., Dougherty, M. R., & Engle, R. (Eds.) (under contract). *Cognitive and working memory training: Perspectives from psychology, neuroscience, and human development*. Oxford University Press.

Chapters in Books

- Dougherty, M. R. P., & Franco-Watkins, A. M. (2002). The use of memory models to explain judgments of frequency and probability: Minerva 2 and Minerva-DM. In T. Betsch & P. Sedlmeier's (Eds.) *Etc - Frequency Processing and Cognition* (pp. 121–136). Oxford, UK: Oxford University Press.
- Dougherty, M. R. P., Gronlund, S. D., & Gettys, C. F. (2003). Memory as a fundamental heuristic for decision making. In S. L. Schneider & J. Shanteau's (Eds.) *Emerging Perspectives on Judgment and Decision Research* (pp. 125–164). Cambridge, MA: Cambridge University Press.
- Dougherty, M. R., & Thomas, R. (2009). Minerva-DM. *Encyclopedia of Medical Decision Making*. Sage.
- Dougherty, M. R., Thomas, R. P., & Lange, N. (2010). Toward an integrative theory of hypothesis generation, probability judgment, and hypothesis testing. *The Psychology of Learning and Motivation, Volume 52* (pp. 300–342). Academic Press.
- Atkins, S., Bunting, M., Bolger, D. J., & Dougherty, M. R. (2011). Cognitive training, mathematics, and the adolescent brain. In Reyna, V. F., Chapman, S. B., Dougherty, M. R., & Confrey, J. (Eds.) *The adolescent brain: Learning, reasoning, and decision making* (pp. 211–241). Washington, DC: American Psychological Association.
- Reyna, V. F., Chapman, S. B., Dougherty, M. R., & Confrey, J. (2011). Introduction. In Reyna, V. F., Chapman, S. B., Dougherty, M. R., & Confrey, J. (Eds.) *The adolescent brain: Learning, reasoning, and decision making* (pp. 3–11). Washington, DC: American Psychological Association.
- Reyna, V. F., & Dougherty, M. R. (2011). Paradoxes of the adolescent brain in cognition, emotion, and rationality. In Reyna, V. F., Chapman, S. B., Dougherty, M. R., & Confrey, J. (Eds.) *The adolescent brain: Learning, reasoning, and decision making* (pp. 431–436). Washington, DC: American Psychological Association.
- Pachur, T., Raaijmakers, J. G. W., Davelaar, E. J., Daw, N. D., Dougherty, M. R., Hommel, B., Lee, M. D., Polyn, S. M., Ridderinkhof, K. R., Todd, P. M., & Wolfe, J. M. (2012). Unpacking cognitive search: Mechanisms and processes. In: P. M. Todd, T. T. Hills, & T. W. Robbins (Eds.), *Cognitive search: Evolution, algorithms, and the brain*. Strüngmann Forum Reports, Vol. 9. Cambridge, MA: MIT Press.
- Lange, N., Buttaccio, D., Sprenger, A., Harbison, J. I., Thomas, R. P., & Dougherty, M. R. (2015). A memory theoretic account of hypothesis generation and judgment and decision making. In A. Feeney and V. A. Thompson's *Reasoning as Memory* (pp. 71-92). Current Issues in Thinking and Reasoning. New York: Psychology Press.
- Tidwell, J. W., Dougherty, M.R., Chrabaszcz, J. S., Buttaccio, D., & Thomas, R. P. (2016). Sources of confidence in judgment and decision making. To In J. Dunlosky and S. Tauber's (ed). *The Oxford Handbook of Metacognition*. (pp 109-126). Oxford University Press.
- Dougherty, M.R. & Engle, R. (2021). Don't buy the snake oil. To appear in Bunting, Novick, Dougherty & Engle's (Eds) *Working memory training*. Cambridge University Press.

Peer-Reviewed Conference Proceedings

- Dougherty, M. R. P., Perry, J. L., Ohrt, D. D., Gronlund, S. D., & Manning, C. A. (1997). Use of spatial memory in air traffic controllers. In R. S. Jensen & L. Rakovan (Eds.) *Proceedings of the Ninth International Symposium on Aviation Psychology* (vol. 2). Ohio State University, Columbus OH.
- Dougherty, M. R. P., Gronlund, S. D., Durso, F. T., Canning, J., & Mills, S. H. (1999). Plan generation in air traffic control. *Proceedings of the Tenth International Symposium on Aviation Psychology*.
- Canning, J., Gronlund, S. D., Johansson, J., Dougherty, M. R. P., & Mills, S. H. (1999). A novel interface for strategic planning in air traffic control. *Proceedings of the Tenth International Symposium on Aviation Psychology*.
- Moertl, P. M., Canning, J. M., Johansson, J., Gronlund S. D., Dougherty, M. R. P., & Mills, S. H. (2000). Workload and Performance in FOPA: A Strategic Planning Interface for Air Traffic Control. *Proceedings of the Human Factors and Ergonomics Society*, 44 (3), 65–68.
- Dougherty, M. R., & Thomas, R. (2007). Diagnostic hypothesis generation and human judgment. Symposium on Cognitive Decision Theory. *Proceedings of the Cognitive Science Society*.
- Harbison, J. I., Davelaar, E., & Dougherty, M. R. (2008). Stopping rules and memory search termination decisions. In B. C. Love, K. McRae, & V. M. Sloutsky (Eds.), *Proceedings of the 30th Annual Conference of the Cognitive Science Society* (pp. 575–570). Austin, TX: Cognitive Science Society. (30% of 514 total submissions accepted).
- Thomas, R. P., Hahn, S., Lange, N. D., Buttaccio, D., Alberts, T., Dougherty, M. R., & Rose, L. (2010). Target identification and assessment in visual intelligence, surveillance, & reconnaissance. *Proceedings of the Missile Defense Sensors, Environments and Algorithms*; published by the Military Sensing Information Analysis Center (SENSIAC), a Department of Defense chartered Information Analysis Center (not for public release).
- Harbison, J. I., Atkins, S. M., & Dougherty, M. R. (2011). N-back Training Task Performance: Analysis and Model. *Proceedings of the 33rd Annual Conference of the Cognitive Science Society* (pp. 120–125). Boston, MA: Cognitive Science Society.
- Davelaar, E., Harbison, J. I., Yu, E. C., Hussey, E. K., & Dougherty, M. R. (2012). Rational search of Associative Memory. In N. Miyake, D. Peebles, & R. Cooper (Eds.) *Proceedings of the 34th Annual Meeting of the Cognitive Science Society*. (pp. 1459–1463). [[PDF](#); [Cog Sci](#)] (Acceptance rate for papers, 38%)
- Harbison, J. I., Hussey, E. K., Dougherty, M. R., & Davelaar, E. (2012). Self-terminated versus experimenter-terminated memory search. In N. Miyake, D. Peebles, & R. Cooper (Eds.) *Proceedings of the 34th Annual Meeting of the Cognitive Science Society*. (pp. 426–431). [[PDF](#); [Cog Sci](#)] (Acceptance rate for papers, 38%)
- Davelaar, E. J., Yu, E. C., Harbison, J. I., Hussey, E. K., & Dougherty, M. R. (2012). A rational analysis of memory search termination. In N. Russwinkel, U. Drewitz, & H. van Rijn (Eds.), *Proceedings of the 11th International Conference on Cognitive Modeling*. (pp. 169–174). Berlin, Germany.
- Harbison, J.I., Davelaar, E.J., Yu, E.C., **Hussey, E.K.**, & Dougherty, M.R. (2013). Intrusions and the decision to terminate memory search. In Knauff, M., Pauen, M., Sebanz, N., & Wachsmuth, I. (Eds.) [Proceedings of the 35th Annual Cognitive Science Society](#), pp. 549-545. (acceptance rate for papers: 28%).
- Robey, A. M. & Dougherty, M. R. (2018). Optimal cue use in student restudy decisions. In T.T. Rogers, M. Rau, X. Zhu, & C. W. Kalish (Eds.), *Proceedings of the 40th Annual Conference of the Cognitive Science Society* (pp. 2352-2357). Austin, TX: Cognitive Science Society. (acceptance rate for posters: 30%; 43% total acceptance rate for talk *and* posters)
- **Article type:** Experimental (Peer reviewed conference proceedings)
 - **Data:** Original
 - **Number of experiments:** 1

- **Data type and sample size:** Behavioral (N=248; approximately equal N's across 4 conditions). Target sample size was 200; over subscribed because the creation of summary statistics at the individual participant level yielded NAs due to the lack of variability within subject. Each subject completes a behavioral task that takes approximately 50 minutes to complete with roughly 104 total data points provided by each subject.
- **Reproducibility:** Pre-registration (<https://osf.io/xug7f>); Open Method, material, and data (<https://osf.io/xug7f>)
- **Role:** co-primary.
- **Contribution:** Attempted to replicate (and extend) previously published finding using a much larger sample.

Book Reviews

Dougherty, M. R. P., & Franco-Watkins, A. M. (2000). A rational analysis of rationality? Review of K. Stanovich's "Who is rational? Studies of individual differences in reasoning." *Applied Cognitive Psychology*, 14, 593–597. Invited by Editor.

Other Non-refereed Publications

Novick, J. M., Bunting, M. F., Dougherty, M. R., Harbison, J. I., & Weems, S. A. (2009). A working memory workout for language practitioners. *The Next Wave*, 18(1), 6–13.

Carter, C, Dougherty, M.R. McKiernan, E.C., & Tananbaum, G (2023). "Promoting Values-Based Assessment in Review, Promotion, and Tenure Processes." *Commonplace*, December. <https://doi.org/10.21428/6ffd8432.9eadd603>.

- **Article type:** Public article
- **Data:** none
- **Number of experiments:** none
- **Data type and sample size:** NA
- **Reproducibility:** NA
- **Role:** co-primary.
- **Contribution:** Summarizes outcome of a series of workshops delivered for department chairs aimed at reforming promotion and tenure policies.

Technical Reports

Bunting, M. F., Novick, J. M., Dougherty, M. R., Harbison, J. I., Weems, S. A., Atkins, S., Hussey, E. K., Teubner-Rhodes, S., Chrabaszc, J., Smaliy, A., Clarady, C. K., & Corbett, R. (2010). *Assessing the effects of cognitive training: Improving individuals' ability to reason, to remember, and to resolve sentence ambiguity* (TTO 3501). College Park, MD: University of Maryland Center for Advanced Study of Language.

Bunting, M. F., Novick, J. M., Dougherty, M. R., Harbison, J. I., Weems, S. A., Atkins, S., Hussey, E. K., Teubner-Rhodes, S., Chrabaszc, J., Smaliy, A., Clarady, C. K., & Corbett, R. (2010). *Assessing the effects of cognitive training: Improving individuals' ability to reason, to remember, and to resolve sentence ambiguity* (TTO 3501). College Park, MD: University of Maryland Center for Advanced Study of Language.

Add two technical reports for ONR - Not for Public Release

Invited Colloquia

- Dougherty, M. R. P. (1999). Invited Presentation. *Using memory theory to account for judgment and decision making phenomena*. German Science Foundation's Small Group Meeting: "Frequency Processing." Heidelberg, Germany, Nov. 26 – 28.
- Dougherty, M. R. P. (2002). Invited Presentation. *Intuitive Hypothesis Generation*. Kansas State University, Manhattan KS, Nov. 26.
- Dougherty, M. R. P. (2003). Invited Presentation. *Probability judgment and subadditivity: The role of working memory capacity and constraining retrieval*. Carnegie Mellon University, Pittsburg, Pa, June 15.
- Dougherty, M. R. (2004). Invited Presentation. *The Importance of Attentional Control and Working Memory for Diagnostic Decision Making*. Columbia University, New York, April, 8.
- Dougherty, M. R., & Sprenger, A. (2005). Invited Presentation. *Proactive interference and judgments of probability: How irrelevant information can bias probability judgments*. Carnegie Mellon University, Pittsburg, Pa, March 23. (presented by M.R.D.)
- Dougherty, M., Tomlinson, T., Sprenger, A., & Harbison, I. (2006). Invited presentation. *What does a judgment theorist have to say about memory, and vice versa?* University of Oklahoma, Norman OK. March 23. (presented by M.R.D.)
- Dougherty, M. R. (2006). Invited Presentation. *Dissociating measures of accuracy: Why we can't trust an accurate judge*. University of Oklahoma, Norman, Oklahoma, Mar. 25.
- Dougherty, M. R., Thomas, R. P., & Sprenger, A. (2006). Invited Presentation. *Diagnostic Hypothesis Generation and Human Judgment*. University of Canterbury, Christchurch New Zealand. (presented by M. Dougherty).
- Dougherty, M. R. (2008, September). Diagnosing diagnostic hypothesis generation in adolescents. *NSF workshop on Higher order cognition in Adolescents*. Arlington, VA.
- Dougherty, M. R. (2010). Addressing early achievement discrepancies through brain plasticity training. *Benjamin Banneker Association mini-conference on "Beyond the numbers: Celebrating the Best of how Teachers Teach and African American Students Learn Math."* Temple University. Feb 26–27, 2010 (postponed until June due to weather).
- Dougherty, M. R. (2014). Improving cognitive functioning through targeted brain training: Does it work? Kansas State University, Manhattan, KS, Sept. 26, 2014.
- Dougherty, M.R. (2014). Diagnostic hypothesis generation and human judgment. United States Institute for Peace. USIP Dialogue Series: Choice and Decision-Making Processes. Washington DC. October 6, 2014
- Dougherty, M.R. (2015). A skeptics guide to the measurement, analysis, and training of working memory University of Virginia. January 21, 2015.
- Dougherty, M.R. (2015). A skeptics guide to working memory training. Invited symposium on WM training. *Association of Psychological Science*, New York City, May 23, 2015.
- Dougherty, M.R. (2015). A skeptic guide to working memory training. Invited talk George Mason University. Sept. 16, 2015.
- Dougherty, M.R. (2015). The Biasing Effects of Hypothesis Generation on Visual Information Search. Psychonomics Leading Edge Workshop on Explanation. Urbana-Champaign IL, Nov 6, 2015.
- Dougherty, M.R. (2020, Jan). Understanding the origins of why we cite who we do. Carnegie Mellon University
- Dougherty, M.R. (2020, Feb). ReproducibiliTea. University College London.
- Dougherty, M.R. (2020, Sept). Evaluating Research Quality. Department of Psychology, University of Kansas

Keynote speaker, 2021. Oklahoma-Kansas Judgment and Decision Making meeting
 Dougherty, MR. (March 28th, 2023), Presentation to Federation of Associations in Behavioral and Brain Sciences on Aligning Incentives. Atmosphere
 Dougherty, MR. (Feb X, 2024). Presentation at NSF
 Dougherty, MR. (April 24th, 2024). Invited Plenary Speaker AESIS
 Dougherty, MR. (April 30th, 2024). Georgia Institute of Technology, School of Psychology.

Conference Presentations and Participation

- Dougherty, M. R. P., & Shanteau, J. (1993). *A model for the placebo effect: Averaging of expectations and perceptions*. Presented at the 26th annual Mathematical Psychology meetings, Norman, OK, August.
- Gettys, C. F., & Dougherty, M. R. P. (1993). *A new model for feelings of likelihood or certainty: A lot of bull, a little data*. Presented at the Fall 1993 Oklahoma Judgment and Decision Making Conference, Norman, OK, October.
- Gettys, C. F., & Dougherty, M. R. P. (1994). *At last...At last...data at last: Empirical data for a model of likelihoods*. Paper presented at the Oklahoma-Kansas Judgment and Decision Making meeting, Stillwater, OK, April 29.
- Dougherty, M. R. P., & Gettys, C. F. (1994). *Instance recall and judgments of likelihood: Does instance probability matter?* Paper presented at the 12th annual Oklahoma Psychological Society, Stillwater, OK.
- Gettys, C. F., & Dougherty, M. R. P. (1994). *Decision models based on modern memory theory: An instance-based theory of certainty*. Poster presented at the annual meeting of the Society for Judgment and Decision Making, St. Louis, MO, November 14–16.
- Shanteau, J. S., & Dougherty, M. R. P. (1995). *Expectancy effects in consumer products*. Workshop on choice behavior. Presented at Columbia University, New York, May.
- Gettys, C. F., & Dougherty, M. R. P. (1995). *Advances in the likelihood memory model*. Paper presented at the Oklahoma-Kansas Judgment and Decision Making meeting, Oklahoma City, OK, May 5.
- Gettys, C. F., Dougherty, M. R. P., & Ogden, E. E. (1996). *Beyond heuristics: A memory-processes model for judgments of likelihood*. Paper presented at the Eastern Psychological Association, Philadelphia, PA, March.
- Gettys, C. F., Dougherty, M. R. P., & Ogden, E. E. (1996). *Beyond heuristics: A memory-processes model for judgments of likelihood*. Paper presented at the Oklahoma-Kansas Judgment and Decision Making conference, Norman, OK, April.
- Dougherty, M. R. P., & Gettys, C. F. (1996). *Single-path vs. several-path reasoning in decision making*. Paper presented at the Oklahoma-Kansas Judgment and Decision Making conference, Norman, OK, April.
- Gettys, C. F., Dougherty, M. R. P., & Ogden, E. E. (1996). *A MINERVA model for frequency and likelihood estimates*. Paper presented at the Meeting of the Psychonomic Society, Chicago, IL, November 1–3.
- Gettys, C. F., Dougherty, M. R. P., & Ogden, E. E. (1996). *The pieces put together: An umbrella theory for likelihood judgments called MINERVA-DM*. Paper presented at the annual meeting of the Society for Judgment and Decision Making, Chicago, IL, November 2–4.
- Gettys, C. F., Dougherty, M. R. P., & Ogden, E. E. (1997). *The pieces put together: An umbrella theory for likelihood judgments called MINERVA-DM*. Paper presented at Bayesian conference, Los Angeles, CA, February 17.

- Durso, F. T., Hackworth, C. A., Barile, A. L., Shi Lin Eng, S., Ohrt, D. D., Dougherty, M. R. P., & Linville, P. E. (1997). *Monitoring reality in cyberspace*. Paper presented at the First U. S. Conference on Cognitive Technology, Indiana State University, April 3–5.
- Ogden, E. E., Gettys, C. F., & Dougherty, M. R. P. (1997). *Encoding bias explanation of the availability heuristic*. Paper presented at the Oklahoma-Kansas Judgment and Decision Making meeting, Norman, OK, April 12.
- Thomas, R. P., Dougherty, M. R. P., Gettys, C. F., & Ogden, E. E. (1997). *The conjunction fallacy as a memory phenomenon*. Paper presented at the Oklahoma-Kansas Judgment and Decision Making meeting, Norman, OK, April 12.
- Dougherty, M. R. P., Gettys, C. F., & Ogden, E. E. (1997). *The effect of experience and learning on the calibration of probabilities*. Paper presented at the Oklahoma-Kansas Judgment and Decision Making meeting, Norman, OK, April 12.
- Gronlund, S. D., Dougherty, M. R. P., Ohrt, D. D., Perry, J. L., & Manning, C. A. (1997). *Memory and air traffic control*. Paper presented at the Ninth International Symposium on Aviation Psychology, Columbus OH, April 27–May 1.
- Barile, A., Hackworth, C. A., Ohrt, D. D., Dougherty, M. R. P., & Durso, F. T. (1997). *Reality monitoring in cyberspace*. Paper presented at the American Psychological Society, Washington, May 23–26.
- Dougherty, M. R. P., Thomas, R. P., Gettys, C. F., & Ogden, E. E. (1997). *The conjunction error as a memory retrieval phenomenon*. Poster presented at the meeting of the Society for Judgment and Decision Making, Philadelphia, Nov. 22–24.
- Session Chair, 1997, Society for Judgment and Decision Making, Philadelphia, Nov. 22–24.
- Dougherty, M. R. P. (1998). *The misinformation effect: How irrelevant information can bias judgments*. Paper presented at the Oklahoma-Kansas Judgment and Decision Making meeting, Stillwater, OK, March 6.
- Dougherty, M. R. P., Gronlund, S. D., Canning, J., Durso, F. T., & Mills, S. (1998). *Strategic awareness in air traffic control*. Poster presented at the Fourth conference on Naturalistic Decision Making, Washington DC, May 29–June 1.
- Dougherty, M. R. P. (1998). *The effect of experience on the calibration of probability judgments*. Paper presented at 31st annual meeting of the Society for Mathematical Psychology, Nashville TN, August 7–9.
- Gronlund, S. D., Dougherty, M. R. P., Durso, F. T., Canning, J., & Mills, S. (1998). *Strategic planning in air traffic control*. Poster presented at the 39th annual meeting of the Psychonomic Society, Dallas, TX, Nov. 19–22.
- Dougherty, M. R. P. (1998). *A memory processes account of the calibration of probability judgments*. Poster presented at the Society for Judgment and Decision Making meeting, Dallas TX, Nov. 24–26.
- Dougherty, M. R. P. (1998). *Using a mathematical memory model to account for judgment and decision phenomena*. Invited Address, Society for Judgment and Decision Making, Dallas TX, Nov. 24–26.
- Canning, J., Gronlund, S. D., Johanssen, J., Dougherty, M. R. P., Durso, F. T., & Mills, S. H. (1999). *Interface to aid strategic planning in air traffic control*. Paper presented at the 10th International Symposium on Aviation Psychology, Columbus OH, April 29–May 3.
- Gronlund, S. D., Dougherty, M. R. P., Canning, J., Durso, F. T., & Mills, S. H. (1999). *Strategic planning in air traffic control*. Paper presented at the 10th International Symposium on Aviation Psychology, Columbus OH, April 29–May 3.
- Franco-Watkins, A., & Dougherty, M. R. P. (1999). *How does the specificity of the retrieval cue affect judgments of probability?* Poster presented at the Society for Judgment and Decision Making meeting, Los Angeles, CA, May. 21–23.

- Moertl, P. M., Canning, J. M., Johansson, J., Gronlund S. D., Dougherty, M. R. P., Mills, S. H. (2000). *Workload and Performance in FOPA: A Strategic Planning Interface for Air Traffic Control*. HFES 2000 Congress, San Diego, July 30–Aug. 4.
- Gronlund, S. D., Dougherty, M. R. P., Durso, F. T., Canning, J. M., & Mills, S. H. (2000). *Evolution of strategic planning in a complex environment*. Presented at the OKJDM Workshop, Oklahoma City, OK, April, 2000.
- Gronlund, S. D., Dougherty, M. R. P., Durso, F. T., Canning, J. M., & Mills, S. H. (2000). *Evolution of strategic planning in a complex environment*. Presented at the Missouri Cognition Conference, St. Louis, MO, May, 2000.
- Gronlund, S. D., Dougherty, M. R. P., Durso, F. T., Canning, J. M., & Mills, S. H. (2000). *Evolution of Planning Behavior in a Dynamic Environment*. Society for Applied Research on Memory and Cognition, Orlando, June.
- Franco-Watkins, A. M., & Dougherty, M. R. P. (2000). *Regret and endowment in the 3- 4- and 5- door Monty Hall problem*. Society for Judgment and Decision Making, New Orleans, LA. Nov. 19–21.
- Dougherty, M. R. P., & Franco-Watkins, A. M. (2000). *Availability biases in frequency judgment: A failure of source monitoring?* Society for Judgment and Decision Making, New Orleans, LA. Nov. 19–21.
- Pleskac, T. J., Hunter, J. E., Franco-Watkins, A., Scheck, P., Kim, J., & Dougherty, M. R. P. (2001). *Confidence in predictive statements: Manipulations of source and presentation*. Poster presented at Society for Judgment and Decision Making, Orlando, FL, Nov. 20–21.
- Dougherty, M. R. P., & Hunter, J. (2001). *Working memory constraints induce sub-optimal hypothesis generation and subadditivity*. Paper presented at Society for Judgment and Decision Making, Orlando, FL, Nov. 20–21.
- Dougherty, M. R. P., & Franco-Watkins, A. M. (2001). *Context Discrimination and Source Monitoring in Judgments of Frequency*. Poster presented at Psychonomic Society, Orlando, FL, Nov. 19–21.
- Dougherty, M. R. P., & Hunter, J. (2002). *Individual Differences in Probability Judgment and Subadditivity*. Poster presented at Psychonomic Society, Kansas City, MO, Nov. 21–24.
- Franco-Watkins, A. M. & Dougherty, M. R. P. (2002). *Estimating Frequency: Does Typicality affect Strategy Use?* Poster presented at Society for Judgment and Decision Making, Kansas City, MO, Nov. 24–25.
- Hunter, J. E., & Dougherty, M. R. P. (2002). *Effects of Time Pressure on Probability Judgments and Subadditivity*. Poster presented at Society for Judgment and Decision Making, Kansas City, MO, Nov. 24–25.
- Dougherty, M. R. P. (2003). *Probability judgment and subadditivity: The role of working memory capacity and constraining retrieval*. Paper presented at the Research Conference on Subjective Probability, Utility and Decision Making (SPUDM-19). Zurich, Switzerland, Aug. 25–27.
- Dougherty, M. R., & Barnes, K. A. (2003). *Divided attention and metamemory judgments*. Poster presented at Psychonomic Society meeting, Vancouver Canada, Nov. 6–9.
- Lehman, A., & Dougherty, M. R. (2003). *Differences Between Probability and Frequency Judgments: The Role of Individual Differences in Working Memory Capacity*. Poster presented at Society for Judgment and Decision Making, Vancouver Canada, Nov. 9–10.
- Dougherty, M. R. (2004). *The Role of Attentional Control and Working Memory in Hypothesis Generation and Probability Judgment*. Poster presented at Third Annual Summer Interdisciplinary Conference, Cavalese, Val di Fiemme, Dolomiti, Italy, June 27–July 2.

- Pleskac, T. J., Dougherty, M. R., & Wallsten, T. S. (2004). *Cognitive processes in confidence and recognition: Encoding, retrieval, and mapping*. 36th Annual Mathematical Psychology Meeting, Ann Arbor Michigan, July 29–31.
- Sprenger, A., & Dougherty, M. R. (2004). *Proactive interference in judgments of probability*. 36th Annual Mathematical Psychology Meeting, Ann Arbor Michigan, July 29–31.
- Thomas, R. & Dougherty, M. (2004). *A memory theoretic account of hypothesis generation, evaluation, and testing*. Society for Judgment and Decision Making., Minneapolis MN. November 15.
- Sprenger, A., & Dougherty, M. (2004). *The Role of Proactive Interference in Probability Judgment* Society for Judgment and Decision Making, Minneapolis MN, November 15.
- Dougherty, M. R., & Sprenger, A. (2005). (presented by A. Sprenger). *Proactive interference and judgments of probability: How irrelevant information can bias probability judgment*. Paper presented at the Research Conference on Subjective Probability, Utility and Decision Making (SPUDM-20). Stockholm Sweden, August 24, 2005.
- Thomas, R., Dougherty, M., & Sprenger, A. (2006). *Diagnostic Hypothesis Generation and Human Judgment: HyGene*, 5th Annual Summer Interdisciplinary Conference. Andalsnes, Norway.
- Dougherty, M., Sprenger, A., & Thomas, R. (2006). *Violations of set theoretical assumptions as a result of error prone memory processes*. The 4th International Conference on Memory, Sydney Australia, July 16–July 21, 2006.
- Harbison, J. I., Dougherty, M. R., & Davelaar, E. (2006). Stopping memory search: When and why do people terminate memory search. Psychonomic Society meeting, Houston, TX, Nov. 2006
- Harbison, J. I., & Dougherty, M. R. (2006). Conditional memory search. Society for Judgment and Decision Making, Houston, TX, Nov. 2006
- Thomas, R. P., & Dougherty, M. R. (2006). Psychological Plausibility of fast and frugal heuristics. Brunswik Society, Houston, TX, 2006.
- Harbison, J. I., & Dougherty, M. R. (2006). Belief updating and delusional ideation. Society for Judgment and Decision Making, Houston TX, Nov. 2006
- Tomlinson, T., & Dougherty, M. R. (2006). Part-set cuing and retrieval induced forgetting in judgment. Society for Judgment and Decision Making, Houston, TX, Nov. 2006
- Dougherty, M. R., & Thomas, R. P. (2007). Diagnostic hypothesis generation and human judgment. Symposium on Cognitive Decision Theory. 29th annual meeting of the Cognitive Science Society, Nashville, TN, Aug. 1–4.
- Tomlinson, T. D., & Dougherty, M. R. (2007). The Effect of Juror Ethnicity on Judgments and Perceptions of Courtroom Testimony. Society for Judgment and Decision Making, Long Beach CA Nov. 15.
- Harbison, J. I., & Dougherty, M. R. (2007). The Changing of an Occupied Mind: Belief Adjustment under Divided Attention. Society for Judgment and Decision Making, Long Beach, CA Nov. 15.
- Harbison, J. I., Dougherty, M. R., Davelaar, E., & Faayed (2008). On the lawfulness of the decision to terminate memory search. Cognitive Science Meeting. Washington, DC.
- Dougherty, M. R., Thomas, R. P., & Atkins, S. (2008). The mediating role of memory on judgments of probability. Society for Mathematical Psychology. Washington, DC.
- Dougherty, M. R., Sprenger, A., Atkins, S., Franco-Watkins, A., & Thomas, R. P. (2008). The mediating role of memory and attentional control in probability judgment. Psychonomic Society, Chicago, IL, November.
- Atkins, S. & Dougherty, M. R. (2008). Hypothesis guided information search and the deployment of visual attention in judgment tasks. Psychonomic Society, Chicago, IL, November.

- Harbison, J. I., Dougherty, M. R., & Bunting, M. (2008). Block span: A new automated working memory task. Psychonomic Society, Chicago, IL, November.
- Thomas, R. P., Lange, N. D., & Dougherty, M. R. (2008). A Memory Theoretic Account of Hypothesis Generation & Information Search. Annual Meeting of the Society for Judgment and Decision Making, Chicago, IL, November.
- Siegel, E., Curtis, R., & Dougherty, M. (2008). Jekyll and Hyde Meet Task Switching: The Influence of Perceived Threat on Task Switching. Annual Meeting of the Society for Judgment and Decision Making, Chicago, IL, November.
- Dougherty, M. & Hanges, P. (2008). Reexamining the white-male effect: The mediating role of cognitive skill in the judged probability. Annual Meeting of the Society for Judgment and Decision Making, Chicago, IL, November.
- Hussey, E. K. & Dougherty, M. R. (2008). Cognitive Foundations of Risk Perception and Risk-Seeking Behavior. Annual Meeting of the Society for Judgment and Decision Making, Chicago, IL, November.
- Harbison, J. I., & Dougherty, M. R. (2008). Judgment and the Termination of Memory Search. Annual Meeting of the Society for Judgment and Decision Making, Chicago, IL, November.
- Tomlinson, T. D., & Harbison, J. I., Sprenger, A., Dougherty, M. R. (2008). Unpacking the Relationship Between Judgments and Working Memory. Annual Meeting of the Society for Judgment and Decision Making, Chicago, IL, November.
- Dougherty, M. R., Hussey, E., & Harbison, J. I. (2009). Implications for self-terminated memory search for understanding the dynamics of memory retrieval. Psychonomic Society, Boston, MA, November 18–22.
- Hussey, E., Teubner-Rhodes, S., Dougherty, M. R., & Novick, J. (2009). Psychonomic Society, Boston, MA, November 18–22.
- Harbison, J. I., Bunting, M. F., Atkins, S., & Dougherty, M. R. (2009). Adaptive N-back training. Poster presentation at Psychonomic Society, Boston, MA, November 18–22.
- Atkins, S., Harbison, J. I., Dougherty, M. R., & Bunting, M. F. (2009). Validation of two new automated measures of cognitive ability. Psychonomic Society, Boston, MA, November 18–22.
- Atkins, Dougherty et al., (2010). The Transferability and Persistence of Working Memory Training over Time. Psychonomic Society, Nov. 19, 2010
- Hussey, E., Teubner-Rhodes, S., Novick, J., Dougherty, M. R., Harbison, J. I., & Bunting, M. F. (2010). Improving garden-path recovery through cognitive control training. AMLaP. York, United Kingdom., Sept. 6, 2010.
- Teubner-Rhodes, S., & Dougherty, M. (2010). Emotional interference: The magnitude and time-course of automatic emotional language processing. Neurobiology of Language Conference. San Diego California, Nov 11 - Nov13, 2010
- Teubner-Rhodes, Hussey, Harbison, Dougherty, Bunting, & Novick (2010) Improving garden-path recovery through cognitive control training. Psychonomic Society. Saint Louis, Missouri, Nov. 19, 2010
- Thomas, R. P., Hahn, S., Lange, N. D., Buttaccio, D., Alberts, T., Dougherty, M. R., & Rose, L. (Oct. 2010). *Target identification and assessment in visual intelligence, surveillance, & reconnaissance*. Paper to be presented as the MSS Missile Defense Sensors, Environment and Algorithms, Orlando, FL.
- Hussey, E., Teubner-Rhodes, S., Novick, J., Dougherty, M., Harbison, J. I., & Bunting, M. (2011). Improving garden-path recovery through cognitive control training. CUNY

- Atkins, S., Harbison, J. I., & Dougherty, M. R. (2011). N-back Assessment Performance: Analysis and Model. Annual Meeting of the Psychonomic Society. Seattle, WA, November 2011.
- Harbison, J. I., Atkins, S., & Dougherty, M. R. (2011). [N-back Training Task Performance: Analysis and Model](#). Cognitive Science. Boston MA, July 2011
- Dougherty, M. R. & Thomas, R. P. (2011). Robust decision making in a monotone world. Advanced Summer Institute on Cognitive Science (ASIC). Caldes de Boi, Spain, July 2011.
- Chrabaszcz, J S., Dougherty, M.R. (2012, November). Revealing Non-Linear Numerical Perception Using Reaction Time. Annual Meeting of the Psychonomic Society. Minneapolis, MN.
- Atkins, S. M., Dougherty, M. R., Bunting, M. F., & Bolger, D. J. (2012, November) Examining Visual Spatial Working Memory Training. Annual Meeting of the Psychonomic Society. Minneapolis, MN.
- Buttaccio, D. R., Lange, N. D., Thomas, R.P., Hahn, S., & Dougherty, M.R. (2012). Hypothesis Generation Supports Visual Search: The Influence of Alternative Outcomes and Working Memory Capacity. Annual Meeting of the Psychonomic Society. Minneapolis, MN.
- Yu, E.C., Hussey, E.K., Dougherty, M.R., Harbison, J.I., & Davelaar, E. (2012, November). Terminating Search in Retrieval from Memory. Annual Meeting of the Psychonomic Society. Minneapolis MN
- Chrabaszcz, J S., Dougherty, M.R., Sprenger, A.M., Yu, E. Thomas, R P., Lawrence, A. (2012, November). Using Heuristic Models to Predict Utterly Random Events. Society for Judgment and Decision Making, Minneapolis, MN.
- Yu., E. C., Dougherty, M. R., Sprenger, A. M., & Thomas, R. P. (2012, November). When Decision Heuristics and Science Collide. Society for Judgment and Decision Making, Minneapolis, MN.
- Dougherty, M. R., Thomas, R. P., & Brown, R. (2012, November). Robust Decision Making in a Nonlinear World. Society for Judgment and Decision Making, Minneapolis, MN.
- Lawrence, A. M., Thomas, R. P., & Dougherty, M. R. (2012, November). Modeling Monotonic Relationships: A Comparison of OLS, GeMM, and OMR. Society for Judgment and Decision Making, Minneapolis, MN.
- Atkins, S. M., Bolger, D. J., Bunting, M. F., & Dougherty, M. R. (2012, November). Efficiency Following Visual-Spatial Working Memory Training: Increases in Default Mode and Decreases in Fronto-Parietal Activation. Poster presented at Cognitive Neuroscience Society, Chicago, IL.
- Davelaar, E. J., Harbison, J. I., Yu, E. C., Hussey, E. K., Dougherty, M. R. (2012, July). Rational search of associative memory. Poster to be presented at the 34th Annual meeting of the Cognitive Science Society. Sapporo, Japan.
- Yu, E. C., Hussey, E., Dougherty, M. R., Harbison, J. I., & Davelaar, E. J. (2012, April). Is termination of memory search rational? Paper presented at 54th Tagung experimentell arbeitender Psychologen, Mannheim, Germany.
- Yu, E. C., Hussey, E., Dougherty, M. R., Harbison, J. I., & Davelaar, E. J. (2012, April). Is termination of memory search rational? Paper presented at the meeting of the Experimental Psychological Society, Hull, UK.
- Atkins, S. M., Bolger, D. J., Bunting, M. F., & Dougherty, M. R. (2012). Training-related Plasticity in Brain Activity Following Visual Spatial Working Memory Training. Poster presented at Organization for Human Brain Mapping, Beijing, China.
- Harbison, J. I., Atkins, S. M., & Dougherty, M. R. (2012). N-back performance: Comparing assessment and training performance. Paper presented at the 34th Annual Conference of the Cognitive Science Society, Sapporo Japan.
- Davelaar, E. J., Yu, E. C., Harbison, J. I., Hussey, E. K., & Dougherty, M. R. (2012, April). A rational analysis of memory search termination. Paper presented at 11th International Conference on Cognitive Modeling. Berlin, Germany.

- Davelaar, E. J., Harbison, J. I., Yu, E. C., Hussey, E. K., & Dougherty, M. R. (2012, July). Rational search of associative memory. Paper presented at 34th Annual meeting of the Cognitive Science Society. Sapporo, Japan.
- Harbison, J. I., Hussey, E. K., Dougherty, M. R., & Davelaar, E. J. (2012, July). Self-terminated vs. experimenter-terminated memory search. Paper presented at 34th Annual meeting of the Cognitive Science Society. Sapporo, Japan.
- Chrabaszcz, J. S., & Dougherty, M. R. (2012, November). Revealing Non-Linear Numerical Perception Using Reaction Time. Annual Meeting of the Psychonomic Society. November, 16, Minneapolis MN
- Atkins, S. M., Dougherty, M.R., Bunting, M. F., & Bolger, D. J. (2012, November) Examining Visual Spatial Working Memory Training. Annual Meeting of the Psychonomic Society. November, 16, Minneapolis MN
- Buttaccio, D. R., Lange, N. D., Thomas, R.P., Hahn, S., & Dougherty, M.R. (2012, November). Hypothesis Generation Supports Visual Search: The Influence of Alternative Outcomes and Working Memory Capacity. Annual Meeting of the Psychonomic Society. November, 16, Minneapolis MN
- Chrabaszcz, J. S., Dougherty, M. R., Sprenger, A. M., Yu, E., Thomas, R. P., & Lawrence, A. (2012, November). Using Heuristic Models to Predict Utterly Random Events. Society for Judgment and Decision Making, November, 18, Minneapolis MN.
- Yu., E. C., Dougherty, M. R., Sprenger, A. M., & Thomas, R. P. (2012, November). When Decision Heuristics and Science Collide. Society for Judgment and Decision Making, November, 18, Minneapolis, MN.
- Dougherty, M., Thomas, R. P., & Brown, R. (2012, November). Robust Decision Making in a Nonlinear World. Society for Judgment and Decision Making, November, 18, Minneapolis, MN.
- Lawrence, A. M., Thomas, R. P., & Dougherty, M. R. (2012, November). Modeling Monotonic Relationships: A Comparison of OLS, GeMM, and OMR. Society for Judgment and Decision Making, November, 18, Minneapolis, MN.
- Atkins, S. M., Bolger, D. J., Bunting, M. F., & Dougherty, M. R. (2012). Efficiency Following Visual-Spatial Working Memory Training: Increases in Default Mode and Decreases in Fronto-Parietal Activation. Poster presented at Cognitive Neuroscience Society, Chicago, IL.
- Chrabaszcz, J. S., Yu, E., Sprenger, A. M., & Dougherty, M. R. (2013). Evidence for influence of frame on cue ordering. Society for Judgment and Decision Making, Toronto, Canada, Nov. 15-18.
- Chrabaszcz, J. S., Sprenger, A. M., Atkins, S. M., Bolger, D. J., Colflesh, G., H., Bunting, M., F., & Dougherty, M. R. (2013). Need for Cognition as a Predictor of Individual Differences in Cognitive Ability. Psychonomic Society, Toronto, Canada, Nov. 14-17.
- Tidwell, J., Dougherty, M. R., Thomas, R.P., & Chrabaszcz, J. (2014). Order constrained linear optimization. Psychonomics Society, Long Beach, CA, November.
- Buttaccio, D., Lange, N., Thomas, R.P., Dougherty, M.R. (2014) Using a Model of Hypothesis Generation to Predict Eye Movements in a Visual Search Task. Psychonomics Society, Long Beach, CA, November.
- Lawrence-Huizenga, Ashley, Thomas, Rick, Dougherty, Michael (2014) Extension of the General Monotone Model to Non-Monotonic Data. Society for Judgment and Decision Making, Long Beach, CA, November.
- Dougherty, Michael R, Tidwell, Joe W., Chrabaszcz, Jeffrey, S., Thomas, Rick P (2014). A (partial) solution to the problem of flexibility in data analysis and researcher degrees of freedom. Society for Judgment and Decision Making, Long Beach, CA, November.
- Chrabaszcz, Jeffrey S., Dougherty, Michael R., Bolger, Donald J., Calloway, Regina, Brown, Nicholas (2014). Stress during learning impairs probability estimation. Society for Judgment and Decision Making, Long Beach, CA, November.
- Thomas, Rick, Lawrence-Huizenga, Ashley, Dougherty, Michael (2014). A memory-based account of cue generation and predictive inference. Society for Judgment and Decision Making, Long Beach, CA, November.

- Chrabaszcz, J., Bolger, D. J., Calloway, R., Brown, N., Wettroth, C. & Dougherty, M. R. (2015). An Alternative Explanation for Working Memory Training Effects. *Psychonomics*
- Robey, A., Hamovitz, T., Buttaccio, D., & Dougherty, M. (2015). Revisiting the Past to Predict the Future: A Comparison of Different Judgment Types for Predicting Future Recall. *Psychonomics*, Chicago, IL, Nov. 16-21.
- Lawrence-Huizenga, A., Thomas, R., & Dougherty, M. (2015). Integrating Fast-and-Frugal Heuristics with a Model of Memory-Based Cue Generation. *Psychonomics*, Chicago, IL, Nov. 16-21.
- Buttaccio, D., & Dougherty, M. (2015). The Biasing Effects of Hypothesis Generation on Visual Information Search. *Psychonomics*, Chicago, IL, Nov. 16-21.
- Buttaccio, D., Dougherty, M., Thomas, R., & Hamovitz, T. (2015). Irrelevant Cue Activation in an Inference from Memory Decision Task. *Psychonomics*, Chicago, IL, Nov. 16-21.
- Harbison, J. I., Dougherty, M., & Colflesh, G. J. H. (2015). What Cognitive Changes Occur During Working Memory Training? *Psychonomics*, Chicago, IL, Nov. 16-21.
- Bolger, D. J., Feola, B., Hamovitz, T., Atkins, S., Sprenger, A., & Dougherty, M. (2015). Variation in Inhibition: Neural Underpinnings of No-Go and Incongruency Effects. *Psychonomics*, Chicago, IL, Nov. 16-21.
- Chrabaszcz, J., Bolger, D. J., Kayes, M. K., Feola, B., Atkins, S. M., Sprenger, A. M., Harbison, J. I., Hatfield, B., & Dougherty, M. R. (2015). Evidence Against Moderators of Working Memory training. *Psychonomics*, Chicago, IL, Nov. 16-21.
- Chrabaszcz, J. S., Tidwell, J. W., & Dougherty, M. R. (2015). A method for eliciting and integrating prior information into psychological studies. Annual meeting of the Society for Judgment and Decision Making, Chicago IL, Nov. 20-23.
- Nguyen, R., Sand, L.A., Dougherty, M.R., & Bolger, D.J. (2017). Neural correlates of N-back performance depend on the level of N. Poster presented at the 58th annual meeting of the Psychonomic Society, Vancouver, Canada.
- Ampofo, D., & Dougherty, M.R. (2017). Relation between math performance, stress mindset, and working memory. Poster presented at the 58th annual meeting of the Psychonomic Society, Vancouver, Canada.
- Nguyen, R. & Dougherty, M. (November, 2018). Understanding biases in decision making: A latent variable approach of memory and judgments of likelihood. Poster presented at the 59th annual meeting of the Psychonomic Society, New Orleans, LA.
- Robey, A., & Dougherty, M. (November, 2018). Optimizing cue use in student restudy decisions. Poster presented at the 59th annual meeting of the Psychonomic Society, New Orleans, LA.
- Robey, A., & Dougherty, M. (July, 2018). Optimizing cue use in student restudy decisions. Poster presented at the annual meeting of the Cognitive Science Society, Madison, WI.
- Robey, A., (Nov, 2019). A latent profile analysis of student restudy decisions. Poster presented at the 60th annual meeting of the Psychonomic Society, Montreal, QC.
- Castillo, C.*, Ha, J.*, Kerlow, M.*, Lubana, S.*, Tesfa, N.*, Robey, A., & Dougherty, M. (Nov, 2019). The impact of metacognitive judgments on restudy decisions: A ecologically valid study. Poster presented at the 60th annual meeting of the Psychonomic Society, Montreal, QC.
- Illingworth, D., Dougherty, M., Erbas, S., & Thomas, R. (2020). It's tough to make predictions, especially about the future: On interventions to enhance the crowd within for prospective forecasts. Society for Judgment and Decision Making. Virtual conference.
- Miller, J.A. & Dougherty, M.R. (2021). Stress, anxiety, and cognitive performance. Poster presented at the 62nd annual meeting of the Psychonomic Society. Virtual conference.
- Miller, J.A. & Dougherty, M.R. (2023). Understanding the role of temporal information in memory. Poster presents at the 64th annual meeting of the Psychonomic Society. San Francisco CA

Illingworth, Dougherty, Thomas (2023). Search termination decision are consistent across varied meta-cognitive self-assessments. Poster presents at the 64th annual meeting of the Psychonomic Society. San Francisco CA

Invited Workshops

NSF Workshop: Workshop on Higher Cognition in Adolescents and Young Adults, Arlington Virginia, Sept. 28–30, 2008 (Organizer: Valerie Reyna)

NSF Workshop: Bridging the Cyber, Physical and Social Worlds, Kansas City, MO, May 27–28, (Organizer: Bruce McMillin)

NSF Conference: Beyond the numbers: Celebrating the Best of How Teachers Teach and African American Students Learn Math. Philadelphia, PA, Feb 26–27, 2010 (organizer: Jacqueline Leonard)

Ernst Strungmann Forum: Cognitive Search: Evolution, Algorithms, and the Brain (Chairpersons: Peter M. Todd and Trevor Robbins), Berlin Germany, Feb. 2011

Psychonomics Leading Edge Workshop on the Process of Explanation. Urbana Champaign, IL, Fall 2015

White House Office of Science and Technology Policy: Workshop on Bridging Neuroscience and Learning, January, 2015 (co-organizer: Michael Dougherty)

AERA-CGS-NSF Higher Ed Convening Open Science-Scholarship, (UMD representative) February, 2022

Catalyzing Champions of Rigor. Workshop. National Institute for Neurological Disorders and Stroke. May 2022

NASEM Aligning Incentives with Open Science. Workshop working group. Washington DC, December, 5-6, 2022.

NIH workshop on Publication Bias, 2024

Workshops Created

Reimagining Promotion and Tenure through institutional values. Oct 10th, 2022 (2 sessions, ~20 PSYC departments from US and Canada represented); Follow-up session Oct. 31st.

Chairapy. An informal meeting of COGDOP department chairs. Ad hoc online gathering (starting in 2020) of PSYC department chairs to discuss challenges of being a Chair during these times).

Aligning promotion and tenure with institutional Values..

Teaching and Mentorship

Courses Taught

Undergraduate

Psyc100H: Introductory Psychology (honors section)

Psyc341: Memory & Cognition

Psyc440: Experimental Psychology: Cognitive Processes

Psyc443: Thinking and Problem Solving

Psyc498: Honors seminar

Graduate

Psyc601: Statistical Methods I

Psyc607: Cognitive Psychology
 Psyc778: Seminar in Cognitive Psychology

Student and Post Doctoral Advisees

Post Doctoral Advisees

J. Isaiah Harbison (2006–2009, Research Faculty, Johns Hopkins Applied Physics Laboratory)
 Amber M. Sprenger (2010–2012, MITRE Corporation)
 Erica C. Yu (2010–2013, Bureau of Labor and Statistics)
 Sharona Atkins (2011–2013)
 Dan Buttaccio (2016-2017)
 David Illingworth (2019-2022, Cal State Long Beach)
 Alison Robey (2017-2019, SUNY-Empire State)

PhD Students with first position

Ana Franco-Watkins, PhD (2004, Professor, Auburn University; Dean, University of Kentucky)
 Rickey P. Thomas, PhD (2004, Kansas State University, advised PhD research, Associate Professor, Georgia Tech University)
 Amber Sprenger, PhD (2007, MITRE Corporation)
 Tracy Tomlinson, PhD (2009, Lecturer, University of Maryland)
 Xing Tian, PhD (2008, co-advised with David Huber, Post Doc, New York University)
 Sharona Atkins, PhD (2011, Post doc, University of Maryland)
 Erika Hussey, PhD (2012, Post doc, University of Illinois at Urbana-Champaign)
 Susan Teubner-Rhodes, PhD (2014, Post doc Medical School of South Carolina, Currently assistant professor at Auburn University))
 Jeffrey Chrabaszcz (PhD 2016, post doctoral student Carnegie Mellon)
 Joe Tidwell (PhD 2016, founded start up company)
 Alison Robey (PhD 2017, SUNY-Empire State)
 Roselind Nguyen (PhD expected 2022)
 Jessica Miller (PhD expected 2025)

MS Students

Jennifer Hunter, MS (2002)
 Andrew Herst, MS (2009)

Undergraduate Students and Advisees

Amir Goren (2000–2001, received PhD from Princeton)
 Brandon Abbs (2000–2003, co-authored article, received PhD from University of Iowa, now at Harvard Med school)
 Adnan Abassi (1999–2000)
 Kelly Barnes (2001–2003, co-authored article, received PhD from Georgetown, currently at NIH)
 Renee Richards (2001)
 Jared Smith (2001, received PhD from UC Irvine)
 Steven Pipe (2002)
 John Salogiannis, Advisor (2002, attended medical school)
 Jennifer Joy (2003, received PhD from University of Virginia)
 Leah Meltzer (2003)
 Francine Drummand (2002–2006, attended dental school)
 Shannon Carbery (2004)
 Matthew Sams (2004)
 Basma Faayed (2004–2006, co-authored article in *Cognition*)
 Gregory Cox (2010, *Proceedings in Cognitive Science*, several conference presentations, PhD program, Indiana, Assistant Prof at SUNY Albany)
 Brian Lerner (2009–2010, attended Psychonomics conference)

David Alexander (2006–2008, MS in Counseling Psychology)
 Pooja Datta (2008–2010)
Over 50 other undergraduates have been mentored in my lab

Service

Departmental Service

- Tenure Review Committee, junior faculty representative (1999–2000)
- Undergraduate Studies Committee (2000–2006)
- Statistics Task Force (2001–2002)
- Policy Review Committee (Spring 2001, 2002–2003)
- Policy Review Committee, alternate (2001–2002, 2004–2005)
- Departmental Human Subjects Review Board Committee (2002–present)
- Human Subjects Allocation Committee (2003–2006)
- Salary Review Committee (2005)
- Cognitive Psychology Search Committee (2005–2006)
- Developmental Search Committee (2006)
- Chair/organizer of Departmental retreat (2006)
- Executive Committee (2008–2009, 2012–present)
- fMRI Director Search Committee (2009–2010)
- Faculty Hiring Committee (2009–2012)
- Graduate Studies Committee (2006–present)
- NACS Executive Committee (2008–2010)
- I/O Quant Search Committee (2011–2012)
- Computational Search Committee (2011–2012)
- Associate Chair/Director of Graduate Studies (2012–2017)
- Area head Cognitive and Neural System (CNS, 2014–2017)
- Ad Hoc committee for Grade Appeal (2015)
- Department Chair (2017 – present)

University Service

- Graduate Council (2003–2006)
- Graduate Council Committee Chair (2003–2004), ad hoc committee on use of GRB research funds for library staff
- Graduate Council Fellowship committee (2004–2005)
- Chair Graduate Council dissertation fellowship committee (2005)
- Invited presentation for New student orientation (invited by Dr. Allen Stairs, Dept. of Philosophy) (2003, 2004)
- Invited speaker, First year honors seminar (invited 2003, 2004)
- Panel Discussant, “Building a CV” Center for Teaching Excellence (Spring 2005)
- Gemstone Mentor, Team IAMSPIE (2006–2008)
- Gemstone team subject matter expert for Team OM (2007)
- Gemstone Mentor, Team Cognitive Training (2008–2011)
- Faculty Senate (2008–2010)
- BSOS Distinguished Dissertation Award (2012–2013)
- Co-founder (with Rebecca Ratner) and Spokesperson, Decision Science Field Committee (2012–present)
- LOSC (Safety committee) (2014–2015)
- Graduate Counsel (2016–2019)
- Publishing, Access, and Contract Terms (PACT) committee, 2019–present
- COVID Return to work Internship subcommittee, 2020
- COVID Return to work Behavioral Science subcommittee, 2020
- Faculty Senate (PSYC Representative), 2021–2024

- UMD representative on Higher Education Leadership Initiative in Open Scholarship (HELIOSopen.org)

Service to Professional Organizations

- Advisory Council for the Higher Education Leadership Initiative in Open Science (HELIOS) (2024-)
- COGDOP Executive Board (2023-)
- COGDOP representative to APA-Board of Science Advisors (2017-present)
- Society for Judgment and Decision Making (SJDM), Student Poster Committee (2001, 2003, 2004, 2006)
- Federation of Associations in Behavioral & Brain Sciences (FABBS), SJDM Representative (2007–2017)
- Representative on NSF-SBE communications committee

Advisory and Grant Panels

- Committee of Visitors, Decision Risk, and Management Science, National Science Foundation (2006)
- Advisory Panel, Kansas State University, Department of Psychology (2010–2013)
- Major Research Instrumentation, Grant panel, National Science Foundation (2009)
- Secure and Trustworthy Cyberspace (SaTC), Grant panel, National Science Foundation (2012, 2013)

Grant Reviewer

- Air Force Office of Scientific Research (AFOSR): external reviewer (2000, 2004, 2006)
- National Science Foundation: External reviewer (2001–2003, 2005, 2011–2013)
- Israeli Science Foundation: External reviewer (2004–2005)
- European Research Council: External reviewer (2010)
- NIH Grant Panel Research Rigor Panel (2023)

Editorial Boards

Journal of Experimental Psychology: Learning, Memory, & Cognition, Consulting Editor (2002–2005, 2010–2011)

Frontiers in Cognitive Science, Associate Editor (2009–present)

Proceedings of the National Academy of Science, Guest Editor (1 article, 2020)

Ad Hoc Reviewer

1999

Journal of Experimental Psychology: Applied
Acta Psychologica
Organizational Behavior and Human Decision Processes
Wiley, Handbook of Applied Cognition (1999)

- 2000
Psychological Review
Acta Psychologica
- 2001
Journal of Experimental Psychology: Applied
Journal of Experimental Psychology: Learning, Memory and Cognition
Organizational Behavior and Human Decision Processes
Oxford University Press (2001)
Thompson Press (2001)
- 2002
Journal of Experimental Psychology: Learning, Memory and Cognition
Experimental Psychology
- 2003
Journal of Experimental Psychology: Learning, Memory, and Cognition
Memory & Cognition
Journal of Experimental Psychology: Applied
Psychology and Aging
Acta Psychologica
Organizational Behavior and Human Decision Processes
- 2004
Journal of Experimental Psychology: Learning, Memory, and Cognition
Psychology and Aging
- 2005
Journal of experimental Psychology: Learning, Memory, and Cognition
Organizational Behavior and Human Decision Processes
Applied Cognitive Psychology
- 2006
Journal of Experimental Psychology: Learning, Memory, and Cognition
Memory & Cognition
Handbook of Applied Cognitive Psychology
Psychonomic Bulletin & Review
Psychological Review
Organizational Behavior and Human Decision Processes
European Journal of Cognitive Psychology
Cognition
- 2007
Journal of Experimental Psychology: General
Journal of Experimental Psychology: Learning, Memory, and Cognition
Memory and Cognition
Cognition
Psychological Review
- 2008
Journal of Experimental Psychology: Learning Memory, and Cognition
Memory & Cognition
Acta Psychologica
Abnormal Psychology
Psicológica
Cognition
Cognitive Psychology
Current Directions in Psychological Science
- 2009
Judgment and Decision Making
Psychological Bulletin
Psychological Science

- Psychonomic Bulletin & Review
Memory & Cognition
Thinking and Reasoning
Journal of Experimental Psychology: Learning, Memory, and Cognition
Journal of Experimental Psychology: General
- 2010
Judgment and Decision Making
Psychological Bulletin
Journal of Experimental Psychology: Learning, Memory, and Cognition
Psychonomic Bulletin & Review
Journal of Behavioral Decision Making
Psychological Science
Cognition
Organizational Behavior and Human Decision Processes
- 2011
Judgment and Decision Making
Psychological Bulletin
Journal of Experimental Psychology: Learning, Memory, and Cognition
Psychological Science
Cognition
Memory & Cognition
Frontiers in Cognitive Science
Psychonomic Bulletin and Review
- 2012
Psychological Science
Journal of Experimental Psychology: Learning, Memory, and Cognition
Topics in Cognitive Science
Psychonomic Bulletin & Review
Journal of Experimental Psychology: General
Frontiers in Cognitive Science
Psychological Methods
- 2013
Psychological Science
Journal of Experimental Psychology: General
Memory
Quarterly Journal of Experimental Psychology
Psychonomic Bulletin and Review
Memory and Cognition
Journal of Memory and Language
- 2014
Frontiers in Neuroscience
Frontiers in Cognitive Science
Psychological Review
Memory and Cognition
Decision
Quarterly Journal of Experimental Psychology
Journal of Experimental Psychology: Learning, Memory, and Cognition
Psychological Methods
Psychological Science
Experimental Psychology
- 2015
Psychological Methods
Psychonomic Bulletin and Review

- Journal of Experiment Psychology: General
 Perspectives in Psychological Science
 Psychological Methods
 Transactions on Neural Systems & Rehabilitation Engineering
 Journal of American Medical Association Pediatrics
- 2016
 Psychonomic Bulletin and Review
 Quarterly Journal of Experimental Psychology
 Journal of Behavioral Decision Making
 Psychological Science
 Journal of Experimental Psychology: Learning, Memory, and Cognition
- 2017
 Psychological Review
 Journal of Behavioral Decision Making
 J of Experimental cognitive psychology
 Cognition
- 2018
 Psychological Science
 Current Directions in Psychological Science
 Journal of Memory and Language
 Memory and Cognition
 Human Brain Mapping
- 2019
 JEP:General
 Memory
 Psychology and Aging
- 2020
 Psychology of Aging
 Cognitive Science
 Thinking and Reasoning
 PNAS
- 2021
 Behavioral Research Methods
 Thinking and Reasoning
 Psychological Methods

Professional Memberships

Society for Judgment and Decision Making
 Psychonomics Society
 Cognitive Science Society

Research Interests

Judgment and decision making

Hypothesis generation
 Probability judgment
 Heuristic algorithms
 Quantitative estimation
 Hypothesis testing and visual information search
 Application of memory theory to judgment and decision making
 Implicit attitude expression and cognitive control

Memory

Measurement of working memory
Role of working memory in judgment
Stopping decisions in information retrieval
Role of motivation in memory search and hypothesis generation
Metacognition and student learning

Methodology and statistics

Statistical modeling of ordered data
Selection biases in the evaluation of decision models

Translational and applied interests

Cognitive and brain plasticity training
Quantitative abilities and cognitive control
Metacognition and student learning
Assessment tools for diagnosing neurological disorders