MERIEL DOYLE

meriel.doyle@kellogg.northwestern.edu | mcd710.github.io

EDUCATION

The University of Chicago Oct. 2019 - Jun. 2023

B.A. in Psychology with Honors
B.A. in Neuroscience
Senior Thesis: *Motivational Influences on Intuitive Physical Judgments*
GPA: 3.68/4.00 (overall), 3.96/4.00 (Psychology)

RESEARCH EXPERIENCE

Empirical Research Fellow Aug. 2024 - Present

Kellogg School of Management, Northwestern University
PI: Dr. William J. Brady, Dr. Tessa Charlesworth

Patterns of Implicit and Explicit Attitudes V: Trends from 2021-2024

- Analyzed ~10 million implicit and explicit attitude tests from the Project Implicit website to quantify long-term changes in social biases (race, sexuality, body-weight, etc.) in the U.S. over an 18-year period
- Trained time-stamped word embedding (Word2vec) models on 30 years of Corpus of Contemporary American English (COCA) data and 16 years of Twitter/X data to explore possible links between rhetoric and attitudes
- Led data processing pipeline (cleaning, raking weights, multiple imputation) and statistical analyses (ARIMA time series models), created visualizations, and co-authored manuscript

Redesigning algorithms to intervene on social norm misperceptions during a national election

- Created, optimized, and automated entire recruitment and data cleaning pipeline for a longitudinal study investigating how custom feed-ranking algorithms on Bluesky influenced users' perceptions of platform social norms and partisan animosity during the 8 weeks before the 2024 U.S. presidential election
- Designed and administered dynamic weekly surveys to ~ 4,000 participants; ran network analyses (clique detection, Jaccard similarity) to identify and remove clusters of fraudulent sign-ups with multiple accounts

Engagement-based algorithms disrupt human social norm learning

- Conducted three pre-registered studies (N ≈ 8,000) demonstrating that engagement-based algorithms systematically amplify ingroup-aligned, moral and emotional (IME) political content, distorting social norm perceptions and increasing intentions to post divisive content
- Built JavaScript-based platform (hosted on AWS) that simulates the experience of scrolling on social media, conducted data analysis and visualization, co-authored manuscript, and presented findings at the annual Psychology of Technology conference at Boston University

Lab Manager & Research Assistant Aug. 2023 - Jul. 2024

Shenhav Lab, Brown University
PI: Dr. Amitai Shenhav

- Analyzed cognitive control data with GLMs; troubleshot and optimized MATLAB task code for a novel probabilistic approach avoidance task across multiple OS environments and fMRI systems; traveled to Conte Center grant sites to train research teams on task administration and GitHub version control workflows
- Managed IRB protocol amendments, NDA data submissions and progress reports, subject recruitment and scheduling, lab finances, and outreach initiatives (social events, social media, public tours)

Research Assistant Dec. 2021 - Jun. 2023

Computational Affective and Social Neuroscience Lab, University of Chicago
PI: Dr. Yuan Chang Leong

- Completed senior thesis examining the influence of motivation on intuitive physical judgments and the extent to which intuitive physics engine (IPE) computational models can approximate human-like physical reasoning
- Programmed novel psychophysics task in JavaScript, collected online and in-person eye-tracking data, and analyzed behavioral results with GLMMs in R and eye-tracking results with intersubject correlation (ISC) in MATLAB; visualized eye fixation patterns using Gaussian kernel density estimation heatmaps

Collaborator Jan. 2023 - Jul. 2023

University of Pennsylvania, University of British Columbia, University of Toronto
Team: Dr. Cory Clark, Dr. Azim Shariff, Dr. Brett Mercier

- Independently led data analysis and visualization for a study (N = 1,249) examining associations between moral judgements, agency evaluations, and mental illness perceptions across 10 conditions (e.g., homosexuality, obesity, drug addiction); conducted exploratory analyses in Python (correlation, regression, mediation, moderation); co-authored manuscript

Research Assistant Oct. 2020 - Dec. 2021

Human Nature and Potentials Lab, University of Chicago
PI: Dr. Fan Yang

- Conducted developmental psychology studies via Zoom exploring awe, prosociality, and moral transcendence; led literature reviews, recruited participants, and coded qualitative interview and survey data

PUBLICATIONS

JOURNAL ARTICLES

Maheshka, C., **Doyle, M.,** Mercier, B., Clark, C.J., & Shariff, A. (2024). Perceived mental illness is associated with judgments of less agency, yet more moral wrongness. *Possibility Studies & Society*.

Brady, W.J., **Doyle, M.**, Elnakouri, A., Finkel, E., Jackson, J.C., Kteily, N., Parker, V., Puryear, C., Spelman, T., Teeny, J., & Torres, M. (2025). (In Principle Acceptance; registered report). Redesigning algorithms to intervene on social norm misperceptions during a national election. *Nature*.

UNDER REVIEW & IN PREPARATION

Brady, W.J., **Doyle, M.,** Jackson, J.C., & Baier, S. (2025). (R & R – *Nature Communications*). Engagement-based algorithms disrupt human social norm learning.

Charlesworth, T.E.S., **Doyle, M.** & Banaji, M.R. (2025). Patterns of Implicit and Explicit Attitudes V: Continuity and reversal of trends from 2020-2024. *In preparation.*

Calabro, R., **Doyle, M.,** Bhattacharyya, K., Bainbridge, W., & Leong, Y.C. (2025). Shared visual sampling guides intuitive physical judgments in humans and convolutional neural networks. *In preparation.*

CONFERENCE PRESENTATIONS

Doyle, M., Baier, S., Jackson, J.C., & Brady, W.J. Engagement-based algorithms disrupt social norm learning. *New Directions in Research on the Psychology of Technology.* (Boston, MA, October 2024).

HONORS AND AWARDS

Earl R. Franklin Research Fellowship, Honorable Mention Apr. 2022
Department of Psychology, University of Chicago

- Awarded for original research proposal, *Strong Belief in Free Will: A Justification for Punitive Desires*

TEACHING & LEADERSHIP EXPERIENCE

Lecture Teaching Assistant (TA) Mar. 2022 - Jun. 2022
Department of Biology, University of Chicago

- Held weekly office hours for a 200-person introductory biology course to review lecture material and answer student questions; graded homework, quizzes and exams

First Chair Violin Oct. 2019 - Jan. 2022
Department of Music, University of Chicago

- Performed as first chair violinist in four concerts annually with the university chamber orchestra; served as a member of the pit for UChicago's productions with the Gilbert & Sullivan Opera Company

WORK EXPERIENCE

User Experience (UX) Research Intern Jun. 2022 - Sep. 2022
Gopuff

- Led cross-functional UX research initiatives to improve the Gopuff Driver app; conducted large-scale (N = 3,135) surveys, user interviews, concept testing, usability testing, and A/B tests; ran ANOVAs and visualized data in R; presented findings to stakeholders

Research Assistant Aug. 2021 - Jan. 2022
Center for Decision Research, University of Chicago Booth School of Business

- Founding research assistant at Mindworks, the first-ever combination working lab and public discovery center; engaged hundreds of Chicago visitors in research participation and taught them about applying behavioral science insights in their own lives (e.g., prospect theory, behavioral "nudges," perspective-taking vs. perspective-getting)

SKILLS

Programming: R, Python, JavaScript/HTML/CSS, MATLAB, shell scripting
Software: Amazon AWS (S3, Lambda, API Gateway), Node.js, Git, Qualtrics, NetLogo, LIWC-22, EyeLink
Industry: UX research methods, Adobe Illustrator, Figma
Languages: English (native), French (proficient)

ADDITIONAL INFORMATION

Citizenship: United States, United Kingdom
Extracurricular interests: Meditation, yoga, backpacking, live music