Joseph Heffner, Ph.D.

Department of Psychology - Yale University New Haven, CT 06511 joseph.heffner@yale.edu

APPOINTMENTS

2022-Present Post-Doctoral Associate, Yale University

Department of Psychology

EDUCATION

2022 Ph.D., Psychology

Brown University. Providence, RI.

2009 B.S., Psychology and B.A., Philosophy

University of Chapel Hill at North Carolina. Chapel Hill, NC.

PUBLICATIONS

- 1. Gunsilius, C.*, **Heffner, J.***, Bruinsma, S., Corinha, M., Cortinez, M., Dalton, H., Duong, E., Lu, J., Omar, A., Long, L., Owen, W., Nazario Roarr, B., Tang, K., Petzschner, F. (2024). SOMAScience: A novel platform for multidimensional, longitudinal pain assessment, *JMIR mHealth and uHealth.* *shared first authorship
- 2. Vives, M., **Heffner, J.,** & FeldmanHall, O. (2023). Conceptual representations of uncertainty predict risky decision making. *Cognitive, Affective, and Behavioral Neuroscience*.
- 3. FeldmanHall, O., & **Heffner**, **J.** (2022). A generalizable framework for assessing the role of emotion during choice. *American Psychologist*.
- 4. **Heffner, J.**, & FeldmanHall, O. (2022). A probabilistic map of emotional experiences during competitive social interactions. *Nature Communications*.
- 5. **Heffner, J.,** Son, J., & FeldmanHall, O. (2021). Emotion prediction errors guide socially adaptive behavior. *Nature Human Behavior*.
- 6. **Heffner, J.,** & Vives, M., & FeldmanHall, O. (2021). Anxiety, gender, and social media consumption predict COVID-19 emotional distress. *Humanities and Social Science Communications*.

- 7. **Heffner, J.,** & Vives, M., & FeldmanHall, O. (2021). Emotional responses to prosocial messages increase willingness to self-isolate during the COVID-19 pandemic. *Personality and Individual Differences*.
- 8. **Heffner, J.,** & FeldmanHall, O. (2019). Why we don't always punish: Preference for non-punitive responses to moral violations. *Scientific Reports*.
- 9. FeldmanHall, O., Son, J., & **Heffner, J.** (2018). Norms and the flexibility of moral action. *Personality Neuroscience*.
- 10. Schaich Borg, J., Srivastava, S., Lin, L., **Heffner, J.,** Dunson, D., Dzirasa, K., & Lecesa, L. (2017). Rat intersubjective decisions are encoded by frequency-specific oscillatory contexts. *Brain and Behavior*.
- 11. Strohminger, N., Gray, K., Chituc, V., **Heffner, J.,** & Heagins, T. B. (2016). The MR2: A multi-racial, mega-resolution database of facial stimuli. *Behavior Research Methods*.

IN REVISION & UNDER REVIEW

12. **Heffner, J.,** Frömer, R., Nassar, M., & FeldmanHall, O. (2024). Dissociable neural signals for reward and emotion prediction errors. *bioRxiv*.

INVITED TALKS

- 2024 *Dissociable neural dynamics of emotion and reward prediction errors.* Society for Affective Science Conference. New Orleans, LA.
- 2024 A computational model of regret. Society for Affective Science Conference. New Orleans, LA.
- 2024 Effects of conversational agents on wellbeing. Google DeepMind. London, UK.
- 2023 *Using word embeddings in psychology research.* Yale University. Department of Psychology. New Haven, CT.
- 2023 Study proposal Effects of conversational agents on wellbeing. Google DeepMind. London, UK.
- 2023 Emotion prediction errors guide socially adaptive behaiour. University College London. London, UK.
- 2022 A generalizable framework for measuring emotion's role in social decision-making. Harvard University. Department of Psychology. Cambridge, MA.
- 2022 *Economic inequality corrupts moral standards*. Research Matters. Graduate School at Brown University, Providence RI.
- 2022 *Modeling emotions using computational tools and machine learning.* Society for Affective Science Conference. Methods workshop. Virtual.
- 2021 *Emotional experiences shape social decisions*. Yale University. Department of Psychology. New Haven, CT.
- 2021 Reverse engineering emotions during social interactions. Society for Affective Science. Virtual.

- 2020 Emotion prediction errors guide socially adaptive behavior. Brown University. Social and Cognitive Brown Bag Series. Providence, RI.
- 2020 Emotion prediction errors guide socially adaptive behavior. Society for Neuroeconomics. Virtual.
- 2020 *Emotion prediction errors guide socially adaptive behavior*. Harvard University. New England Research on Decision-Making. Cambridge, MA.
- 2020 Emotional mechanisms support prosocial, but not threat, appeals regarding COVID-19. SocialBRIDGES Conference. Virtual.
- 2020 *Emotion prediction errors guide socially adaptive behavior*. Brown University Unconference. Providence, RI.
- 2019 Development of wealth-based obligations. Brown University. Developmental Brown Bag Series. Providence, RI.
- 2019 *The power of emotion prediction errors (and not reward) in biasing social choice.* Northeastern University. Department of Psychology. Boston, MA.
- 2018 Emotion prediction errors motivate decisions to punish. Harvard University. New England Research on Decision-Making. Providence, RI.
- The power of turning the other cheek: The utility of non-punitive responses to fairness violations. Brown University. New England Research on Decision-Making. Providence, RI.

POSTER PRESENTATIONS

- 2022 A computational model of counterfactual regret and its implications. Computational Psychiatry Conference, Dublin, Ireland.
- 2022 Variation in emotion representations predict prosocial choice. Society for Affective Science Conference, Virtual.
- 2019 *The joy of punishment: Early emotional reactions predict decisions to restore justice.* Social and Affective Neuroscience Society, Miami, FL.
- 2018 Emotion prediction errors predict decisions to punish. Mind Brain Research Day, Brown University, Providence RI.
- 2018 *The power of turning the other cheek: The limited value of punishment.* Society for Personality and Social Psychology, Atlanta, GA.
- 2017 Turning the other cheek: The limited utility of punishment. Mind Brain Research Day, Brown University, Providence RI.
- 2013 Relevance of emotions in morality: Emotion differentiation moderates influences of disgust on moral judgments. Celebration of Undergraduate Research, University of North Carolina at Chapel Hill, NC.

GRANTS AND AWARD

2023	Society for Neuroeconomics (SNE) Best Dissertation Award
2020 - 2021	Graduate Award in Brain Science at Brown University (\$57,000)
2020	Carney Institute Brain Science Reproducible Paper Prize at Brown University
2018	Travel Award Society for Personality and Social Psychology Annual Convention
2015 - 2016	Duke Institute for Brain Science (DIBS) Incubator Award (\$75,000)

Measure Implicit Moral Attitudes Renewal; Cowrote with Dr. Walter Sinnott-Armstrong

2014 – 2015 Duke Institute for Brain Science (DIBS) Incubator Award (\$120,000) *Measure Implicit Moral Attitudes;* Cowrote with Dr. Walter Sinnott-Armstrong

TEACHING EXPERIENCE

2022	Making Decisions – Teaching Assistant and Guest Lecturer
	Brown University, Cognitive, Linguistics, and Psychological Sciences
	Department
2021	Research Methods – Teaching Assistant and Guest Lecturer
	Brown University, Cognitive, Linguistics, and Psychological Sciences Department
2018	Core Concepts in Cognitive and Psychological Sciences II – Teaching Assistant
	and Guest Lecturer
	Brown University, Cognitive, Linguistics, and Psychological Sciences
	Department
2018	Human Cognition – Teaching Assistant and Guest Lecturer
	Brown University, Cognitive, Linguistics, and Psychological Sciences
	Department
2017	Making Decisions – Teaching Assistant and Guest Lecturer
	Brown University, Cognitive, Linguistics, and Psychological Sciences
	Department
2011 - 2013	Psychological and Philosophical Summer Studies – Teaching Assistant
	Duke University, Duke Talent Identification Program

SERVICE

2023 - 2024	Sneak Peak mentor for underrepresented minorities applying to Ph.D. programs,
	Yale University
2023 - 2024	Committee on Racial Equity and Justice member, Yale University
2023 - 2024	Department Committee on Diversity and Inclusiveness member, Yale University
2020 - 2022	Member of Diversity and Inclusion Action Plan, Brown University
2019 - 2020	Colloquium Organizer, Brown Uniersity
2018 - 2019	Social Cognitive Science Seminar Organizer, Brown University
2018 - 2019	Graduate Student Council (GSC) Representative, Brown University

AD HOC REVIEW (* indicates co-reviewer)

NSF Decision, Risk, and Management Sciences

Applied Cognitive Psychology

Biological Psychology*

Current Directions in Psychological Science* Evolution and Human Behavior Journal of Experimental Psychology: General Judgment and Decision Making* Neuropsychopharmacology* Psychological Review Scientific Reports Cyberpsychology IJHPM Journal of Experimental Social Psychology Nature Human Behaviour* PNAS* Psychological Science*

MENTORING

2022 - Present

Yale University, New Haven, CT

Abigail Ricketts – Sneak Peak undergraduate mentee working on PhD / masters applications, now studying clinical social work at University of Connecticut

2016 - 2022

Brown University, Providence, RI

Grace Dennings – Honors thesis, Winner of Muriel Fain Sher Premium For Excellent in psychology for this work

Willy Lee – Honors thesis

Skye Harris – Independent research study affiliated with Princeton Day High School Eleanor Gorham – Independent research study affiliated with School Without Walls High School

Deeksha Cirigadi – Action Potential Advising Program high school mentee Gregory Wu – Action Potential Advising Program high school mentee