

Paul B. Sharp

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Academic Appointments

Present	Bar-Ilan University , Assistant Professor, Psychology Department, Gonda Multidisciplinary Brain Research Center
2023 – 2024	Yale University , Postdoctoral Research Associate
2021 – 2023	Hebrew University , Fulbright Postdoctoral Associate
2019 – 2021	Max Planck UCL Center for Computational Psychiatry , Postdoctoral Associate

Education

2016 – 2019	University of North Carolina at Chapel Hill , PhD, Psychology
2013 – 2016	University of Illinois at Urbana-Champaign , MA, Psychology (PhD Track)
2010 – 2013	Temple University , BA, Psychology, Political Science, <i>Magna Cum Laude</i>

Awards and Funding

2024 – 2027	Azrieli Early Career Faculty Fellowship, Azrieli Foundation, Value: \$202,000.
2021 – 2023	Fulbright Postdoctoral Fellowship, Fulbright Foundation, Value: \$95,000.
2022	eLife Early-Career Reviewer.
2008	American Mathematics Competition Honor Roll, MAA.

Publications

2024	Anxiety involves altered planning. Sharp PB. <i>Trends in Cognitive Sciences</i> .
2024	Humans adaptively deploy forward and backward prediction. Sharp PB, Eldar E. <i>Nature Human Behaviour</i> .
2023	Hierarchical inference as a source of human biases. Sharp PB, Fradkin I, Eldar E. <i>Cognitive, Affective, and Behavioral Neuroscience</i> .
2022	Humans persevere on punishment avoidance goals in multigoal reinforcement learning. Sharp PB, Russek E, Huys Q, Dolan RJ, Eldar E. <i>eLife</i> .
2022	Training diversity promotes absolute-value-guided choice. Solomyak L, Sharp PB, Eldar E. <i>PLOS Computational Biology</i> .

- 2021 Disrupted state transition learning as a computational marker of compulsivity. Sharp PB, Dolan RJ, Eldar E.
Psychological Medicine.
- 2021 Cognitive control deployment is flexibly modulated by social value in early adolescence. Sharp PB, Do KT, Lindquist KA, Prinstein MJ, Telzer EH.
Developmental Science.
- 2020 Towards formal models of psychopathological traits that explain symptom trajectories. Sharp PB, Miller GA, Dolan RJ, Eldar E.
BMC Medicine.
- 2020 Modernizing conceptions of valuation and cognitive control deployment in adolescent risk taking. Do KT*, Sharp PB*, Telzer EH.
Current Directions in Psychological Science.
- 2019 Computational models of anxiety: Nascent efforts and future directions. Sharp PB, Eldar E.
Current Directions in Psychological Science.
- 2019 Mechanistic science: A new approach to comprehensive psychopathology research that relates psychological and biological phenomena. Thomas JG, Sharp PB.
Clinical Psychological Science.
- 2019 Reduction and autonomy in psychology and neuroscience: A call for pragmatism. Sharp PB, Miller GA.
Journal of Theoretical and Philosophical Psychology.
- 2018 Mindfulness training induces structural connectome changes in insula networks. Sharp PB, Sutton BP, Paul EJ, et al.
Scientific Reports.
- 2017 Structural connectomics of anxious arousal in early adolescence: Translating clinical and ethological findings. Sharp PB, Telzer EH.
NeuroImage: Clinical.
- 2017 Selective neural sensitivity to familial threat in adolescents with weak family bonds. Sharp PB, Heller W, Telzer EH.
Social Neuroscience.
- 2015 Transdiagnostic dimensions of anxiety: Neural mechanisms, executive functions, and new directions. Sharp PB, Miller GA, Heller W.
International Journal of Psychophysiology.

Under Review Bedder RL, Hitchcock PF, Sharp PB. Unravelling Repetitive Negative Thinking With Reinforcement Learning.

Garvert MM, McFadyen J, Linke S, McCloud T, Meyer SS, Sobanska S, Sharp PB, Long A, Huys QJM, Ahmadi M. Safety and efficacy of a modular digital psychotherapy for social anxiety: A randomized controlled trial.

In Preparation Sharp PB, Eran E. Delayed Planning in Human Decision Making.

Sharp PB, Feng GW, Rutledge RB. Early outcomes shift Pavlovian biases.

Fradkin I, Sharp PB. Offline learning biases in psychopathology.

Conference Symposia

July 2025 Chair. Cognitive map biases across psychopathology. Computational Psychiatry Conference, Tübingen, Germany.

June 2022 Co-Chair. Repetitive Negative Thinking and Simulation in Natural and Artificial Cognition. The 5th Multidisciplinary Conference on Reinforcement Learning and Decision Making, Brown University.

Fall 2017 Co-Chair. Constructing riskier tests of theory, linking psychological and biological phenomena, and introducing a new mechanistic philosophy of science. Society for Psychophysiological Research, Vienna, Austria,

Talks

February 2025 **Meta-control and Planning**
Emory University, Psychology Department.

January 2025 **Why plan forward or backward?**
Rick Adams Lab, UCL.

July 2024 **Over-planning computations in worry.**
Computational Psychiatry Conference, Minneapolis, MN.

June 2022 **Using a science of planning to understand the dynamics of worry.**
The 5th Multidisciplinary Conference on Reinforcement Learning and Decision Making.

August 2022 **Understanding worry using planning algorithms.**
Laboratory of Neural Computation and Cognition (Michael J. Frank Lab), Brown University, RI.

February 2022 **Efficient planning algorithms humans use to pursue multiple goals.**
Israeli Society for Cognitive Psychology.

September 2021 **Computations of Chronic Worry: Dysfunction in Multi-goal Learning and Planning Efficiency.**
Society for Research in Psychopathology.

March 2021 **Neuroscience only leads to understanding with computation: A brief history of efforts to understand human anxiety.**
Leelab, Virginia Tech, VA.

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| December 2019 | <p>How task-irrelevant emotion affects model-building: Implications for basic learning processes and psychopathology.</p> <p>Tel Aviv University, Bar-Haim Lab.</p> |
| October 2019 | <p>Computations in human anxiety: New developments in a nascent field.</p> <p>National Institute of Mental Health, Pine Lab, Bethesda, MD.</p> |

Mentorship

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| 2024 – 2025 | Marine Hainguerlot , Postdoctoral Researcher, Bar-Ilan University. |
| 2024 – 2025 | Noa Yadid , Psychology Undergraduate, Bar-Ilan University. |

Professional Memberships

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| 2023 - Present | Reinforcement Learning and Decision Making. |
| 2023 – Present | Computational Psychiatry. |

Ad Hoc Reviewer

Biological Psychiatry, eLife, Nature Communications, Translational Psychiatry, PLOS Computational Biology, Current Opinion in Behavioral Sciences, Journal of Neuroscience, Neuroscience and Biobehavioral Reviews, Biological Psychiatry: Cognitive Neuroscience and Neuroimaging, Behavior Research and Therapy, Developmental Science, Clinical Psychology Review, Cognitive Affective and Behavioral Neuroscience.