



Exponent®
Engineering & Scientific Consulting

Bobby McManus, Ph.D.

Scientist | Human Factors

Phoenix

+1-623-587-6739 tel | bmcmanus@exponent.com

Professional Profile

Dr. McManus is a cognitive psychologist with expertise in attention, perception, and action affordance. He has experience using both quantitative and qualitative methods to analyze how people perceive and interact with their surroundings.

These methods include eye tracking, behavioral measurements, memory assessments, and surveys, as well as numerous statistical procedures. He is currently a member of the Phoenix User Research Center, where he is applying this expertise to assess user experience with different products.

Dr. McManus received his Ph.D. from North Dakota State University, where he investigated embodied cognition. He studied how interacting with tools, ranging from simple hand-held tools to complex remotely operated drones, alters gaze behavior and target detection. He has also used eye tracking methods to measure and identify mind wandering in educational settings.

Academic Credentials & Professional Honors

Ph.D., Psychology, North Dakota State University, 2020

B.A., Cognitive Neuroscience, University of Notre Dame, 2016

Academic Appointments

Graduate Student Instructor of Record, Attention and Thinking, North Dakota State University, 2019

Prior Experience

Graduate Research Assistant, North Dakota State University, 2016-2019

Intern, Shields Health Care Group, 2014

Publications

McManus, R. R., & Thomas, L. E. (2020). Vision is biased near handheld, but not remotely operated, tools. *Attention, Perception, & Psychophysics*, 82, 1-20.

McManus, R., & Thomas, L. E. (2018). Immobilization does not disrupt near-hand attentional biases. *Consciousness and cognition*, 64, 50-60.

Krasich, K., McManus, R., Hutt, S., Faber, M., D'Mello, S. K., & Brockmole, J. R. (2018). Gaze-based signatures of mind wandering during real-world scene processing. *Journal of Experimental Psychology: General*, 147(8), 1111.

Presentations

Robert McManus, Laura E. Thomas. Visual biases near hand-held and remotely controlled tools. Poster presentation, Vision Sciences Society Eighteenth Annual Meeting, St. Pete Beach, FL, 2018

Robert McManus, Laura E. Thomas. Grasp affordances enhance target detection near the hands. Poster presentation, Psychonomic Society Fifty-eighth Annual Meeting, Vancouver, Canada, 2017

Robert McManus, Laura E. Thomas. Grasp affordances are necessary for enhanced target detection near the hand. Poster presentation, Vision Sciences Society Seventeenth Annual Meeting, St. Pete Beach, FL, 2017

Research Grants

UROP University Grant, 2015