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Engineering & Scientific Consulting

Morgan Waddell, Ph.D.

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Professional Profile

Morgan Waddell has expertise in cognitive science, with a history of research in how haptics and kinematics influence human perception. She has experience using converging methodologies to study how humans interact with their environments.

These methodologies include psychophysics, electromyography, and kinesiology. She uses her years of experience studying human perception and advanced statistical methods to answer a variety of human factors research questions. Morgan is a member of Exponent's Phoenix User Research Center (PURC), where she currently supports studies evaluating the user experience of a variety of products to help clients answer complex research questions.

Morgan Waddell received her Ph.D. in Psychology from Arizona State University in May of 2021. During her master's and doctoral training, she investigated how muscle activity and movement combine for the perception of lifted objects. She has presented her research at the Association for Psychological Science Annual Convention, and at the ASUofA (with University of Arizona) Annual Cognitive Science Conclave. She has published her research in several academic journals, including Experimental Brain Research and Journal of Experimental Psychology: Human Perception and Performance.

Academic Credentials & Professional Honors

Ph.D., Psychology, Arizona State University, 2021

M.A., Psychology, Arizona State University, 2016

B.A., Psychology, University of Cincinnati, 2011

Academic Appointments

Teaching Assistant and Guest Lecturer, Statistical Methods, 2016-2019

Teaching Assistant - Instructor, Research Methods, 2014-2015

Teaching Assistant, Introduction to Psychology; Introduction to Statistics; Learning and Motivation, 2013-2016

Professional Affiliations

Association for Psychological Science

Publications

Waddell, M. L., & Amazeen, E. L. (2020). Does Attention Modify Contributions to Heaviness Perception? Research Quarterly for Exercise and Sport, 1-13.

Waddell, M. L., & Amazeen, E. L. (2018b). Leg Perception of Object Heaviness. Ecological Psychology, 30(4), 314-325.

Waddell, M. L., & Amazeen, E. L. (2018a). Lift speed moderates the effects of muscle activity on perceived heaviness. Quarterly Journal of Experimental Psychology, 70(10), 2174-2185.

Waddell, M. L., & Amazeen, E. L. (2017). Evaluating the contributions of muscle activity and joint kinematics to weight perception across multiple joints. Experimental Brain Research, 235(8), 2437-2448.

Waddell, M. L., Fine, J. M., Likens, A. D., Amazeen, E. L., & Amazeen, P. G. (2016). Perceived heaviness in the context of newton's second law: Combined effects of muscle activity and lifting kinematics. Journal of Experimental Psychology. Human Perception and Performance, 42(3), 363-374.

Waddell, M. L., Fine, J. M., Likens, A., Amazeen, E. L., Amazeen, P.G. (2015). Muscle Activity and Lifting Kinematics combine in the Perception of Weight by Dynamic Touch. Studies in Perception & Action XVIII (pp. 161-164). Taylor & Francis Group, LLC.

Kallen, R. W., Amon, M. J., Malone, M., Waddell, M. L., & Richardson, M. J. (2012). Social constraints on group coordination: Effects of team membership. Journal of Sport & Exercise Psychology, 34, S94.

Presentations:

Waddell, M.L. (December, 2018). Attention and Heaviness Perception. Presented at ASUofA (with University of Arizona) Cognitive Science Conclave.

Waddell, M. L. (May, 2018). Focus of Attention Influences Physiological and Kinematic Contributions to Heaviness Perception. Presented at the 30th Association for Psychological Science Annual Convention.

Waddell, M. L. (December, 2017). Heaviness Perception in the Leg and Arm. Presented at ASUofA (with University of Arizona) Cognitive Science Conclave.

Waddell, M. L. (December, 2015). Heaviness Perception at Different Speeds: Preference Matters. Presented at ASUofA (with University of Arizona) Cognitive Science Conclave.

Waddell, M. L., Fine, J. M., Likens, A., Amazeen, E. L., Amazeen, P.G. (July, 2015). Muscle Activity and Lifting Kinematics combine in the Perception of Weight by Dynamic Touch. Poster presented at the International Conference of Perception and Action XVIII.

Waddell, M. L. (December, 2014). Weight perception in the context of Newton’s 2nd Law: Combined effects of muscle activity and lifting kinematics. Paper presented at ASUofA (with University of Arizona) Cognitive Science Conclave.

Additional Education & Training

Annual Nonlinear Analysis Workshop at University of Nebraska Omaha Biomechanics Laboratory, 2018