

Perception, Memory, and Coordination

Alexandra Paxton

paxton.alexandra@gmail.com
Institute of Cognitive and Brain Sciences
Berkeley Institute for Data Science
University of California, Berkeley

Jordan W. Suchow

suchow@berkeley.edu
Social Science Matrix
University of California, Berkeley

Thomas J. H. Morgan

thomas.j.h.morgan@asu.edu
School of Human Evolution and Social Change
Arizona State University

Thomas L. Griffiths

tom.griffiths@berkeley.edu
Department of Psychology
University of California, Berkeley

Abstract

With cognitive scientists' increasing interest in moving outside of the lab, recent advances in crowdsourcing platforms can help strike a balance between the tight experimental control of lab designs and the affordances of web-based experiments to reach beyond traditional undergraduate subject pools. By taking advantage of new tools, scientists interested in social cognition and behavior can create new designs and adapt traditional ones to deliver experiments at scale. Dallinger is one such tool, providing researchers with an open-source experiment platform that provides end-to-end automation of the experiment pipeline, from participant recruitment and consent to data de-identification and participant compensation. Here we demonstrate how Dallinger can be used to run complex experimental studies of interactive human social behavior, as a demonstration of its potential to study social cognition and behavior using designs drawn from across cognitive science.

Keywords: interpersonal interaction; human communication; crowdsourcing; Dallinger

Introduction

Method

All research activities were completed in compliance with oversight from Committee for the Protection of Human Subjects at the University of California, Berkeley.

Participants

Participants ($n = 12$) were individually recruited from Amazon Mechanical Turk to participate as dyads ($n = 6$). Participants were paired with one another according to the order in which they began the experiment. All participants were over 18 years of age and fluent English speakers (self-reported), located within the U.S.

The experiment lasted an average of 11.96 minutes (range: 8.13–17.66 minutes). In return for their participation, all participants were paid \$1.33 simply for finishing the experiment. Each participant also earned a bonus based on mean performance of up to \$2 (for the entire experiment).

Procedure

All data collection procedures occurred on Dallinger (<http://github.com/dallinger/Dallinger>), deployed on Amazon Mechanical Turk (<http://mturk.com>). Code for the experiment is available on GitHub: <http://github.com/thomasmorgan/joint-estimation-game>, and the resulting experiment data are available on the OSF repository for the project: <https://osf.io/8fu7x/>.

Each participant was individually recruited on Amazon Mechanical Turk to play a “Line Estimation Game” advertised as a way to “Test your memory skills!”.

Participants were given no information about their partner other than the guess that their partner made.

Analyses

Results

Discussion

Conclusion

Acknowledgements

Place acknowledgments (including funding information) in a section at the end of the paper.

References