DEREK POWELL

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EDUCATION

Ph.D., University of California, Los Angeles Psychology, focus in computational cognition Advisor: Prof. Keith Holyoak

B.S., Arizona State University Psychology, Minor in Philosophy

ACADEMIC APPOINTMENTS

Postdoctoral Scholar

Department of Psychology, Stanford University

PUBLICATIONS

- 1. Holyoak, K. J. & Powell, D. (Accepted). Moral judgment as reasoning by constraint satisfaction. Behavioral and Brain Sciences.
- Powell, D., Weisman, K., & Markman, E. M. (2018). Articulating lay theories through graphical models: A study of beliefs surrounding vaccination decisions. *Proceedings of the 40th Annual Conference of the Cognitive Science Society.* Austin, TX: Cognitive Science Society.
- <u>Powell, D., & Horne, Z. (2018)</u>. Expectations bias judgments of harm against others. Proceedings of the 40th Annual Conference of the Cognitive Science Society. Austin, TX: Cognitive Science Society.
- Powell, D., Keil, M., Brenner, D., Lim, L., & Markman, E. M. (2018). Misleading health consumers through violations of communicative norms: A case-study of online diabetes education. *Psychological Science*. 29(7), 1104-1112.
- 5. <u>Powell, D., Yu, J., DeWolf, M., & Holyoak, K. J. (2017)</u>. The love of large numbers: A popularity bias in consumer choice. *Psychological Science*, 28(10), 1432-1442.
- 6. <u>Powell, D., & Horne, Z. (2017)</u>. Moral severity is represented as a domain-general magnitude. *Experimental Psychology*, 64, 142-147.
- Holyoak, K. J., & Powell, D. (2016). Deontological Coherence: A framework for commonsense moral reasoning. *Psychological Bulletin*, 142(11), 1179-1203.
- 8. <u>Powell, D.</u>, Merrick, M. A., Lu, H., & Holyoak, K. J. (2016). Causal competition based on generic priors. *Cognitive Psychology.* 86, 62-86.
- 9. Horne, Z., & <u>Powell, D.</u> (2016). How large is the role of emotion in moral judgment? *PLoS ONE*, 11(7), e0154780.
- 10. <u>Powell, D.</u>, Waldmann, M. R., & Cheng, P. W. (2016). How should autonomous vehicles behave in moral dilemmas? Human judgments reflect abstract moral principles. *Proceedings of the 38th Annual Conference of the Cognitive Science Society.* Austin, TX: Cognitive Science Society.

2016 - Present

2016

2010

- 11. <u>Powell, D.</u>, Merrick, A., Lu, H., & Holyoak, K. J. (2016). Generic priors yield competition between independently-occurring preventive causes. *Proceedings of the 38th Annual Conference of the Cognitive Science Society.* Austin, TX: Cognitive Science Society.
- 12. Pritschet, L.[†], <u>Powell, D.</u>[†], & Horne, Z.[†] (2016). Marginally significant effects as evidence for hypotheses: Changing attitudes over four decades. *Psychological Science*, 27(7), 1036-1042. [†]shared first-authorship
- Horne, Z.[†], <u>Powell, D.[†]</u>, Hummel, J. E., & Holyoak, K. J. (2015). Reply to Betsch et al.: Highlighting risks of diseases shifts vaccine attitudes. *Proceedings of the National Academy of Sciences*, 112, E6727. [†]shared first-authorship
- 14. Horne, Z.[†], <u>Powell, D.[†]</u>, Hummel, J. E., & Holyoak, K. J. (2015). Countering antivaccination attitudes. *Proceedings of the National Academy of Science*, 112(33), 10321-10324. [†]shared first-authorship
- 15. <u>Powell, D.</u>, Horne, Z., Pinillos, N. A., & Holyoak, K. J. (2015). A Bayesian framework for knowledge attribution: Evidence from semantic integration. *Cognition*, 139(92), 92-104.
- Horne, Z., Powell, D., & Hummel, J. E. (2015). A single counterexample leads to moral belief revision. Cognitive Science, 39(8), 1950-1964.
- Homa, D., Powell, D., & Ferguson, R. (2013). Array training in a categorization task. Quarterly Journal of Experimental Psychology, 67(1), 45-59.
- Powell, D., Merrick, A., Lu, H., & Holyoak, K. J. (2013). Generic priors yield competition between independently-occurring causes. Proceedings of the 35th Annual Conference of the Cognitive Science Society. Austin, TX: Cognitive Science Society.
- Horne, Z., & Powell, D. (2013). More than a feeling: When emotions don't predict moral judgments. Proceedings of the 35th Annual Conference of the Cognitive Science Society. Austin, TX: Cognitive Science Society.
- 20. Powell, D., Horne, Z., Pinillos, A., & Holyoak, K. J. (2013). Justified true belief triggers false recall of "knowing". Proceedings of the 35th Annual Conference of the Cognitive Science Society. Austin, TX: Cognitive Science Society.
- 21. <u>Powell, D.</u>, Horne, Z., & Pinillos, A. (2013). Semantic integration as a method for investigating concepts. In J. Beebe (Ed.), *Advances in Experimental Epistemology*. London: Bloomsbury Academic.
- Horne, Z., Powell, D. & Spino, J. (2013). Belief updating in moral dilemmas. Review of Philosophy and Psychology, 4, 705-714.

WORKS IN PROGRESS

- 1. <u>Powell, D.</u>, Bian, L., & Markman, E. M. (Submitted). When intents to educate can misinform: Unintentional paltering through violations of communicative norms.
- 2. <u>Powell, D., & Horne, Z. (Submitted)</u>. Expectations bias moral evaluations. Preprint available at <u>http://psyarxiv.com/s7fu2</u>.
- 3. <u>Powell, D.</u>, Weisman, K., & Markman, E. M. (In Preparation). Modeling belief systems and belief revision.
- Weisman, K., <u>Powell, D.</u>, & Markman, E. M. (In Preparation). Emphasizing the dangers of childhood diseases improves attitudes toward vaccination: Preregistered replication of Horne, et al. 2015. Preregistration available at https://osf.io/wm7ph/.

5. <u>Powell, D.</u> (In Preparation). Expectations influence moral concern: Evidence from Tweets in response to terrorism.

INVITED TALKS

- 1. Powell, D. (2019, May). Modeling intuitive theories and belief revision. Department of Cognitive Science, University of California, Irvine.
- 2. Powell, D. (2019, Feb.). Modeling intuitive theories and belief revision. Department of Psychology, Brown University.
- 3. Powell, D. (2019, Jan.). Modeling intuitive theories and belief revision. Department of Psychology, University of California, San Diego.
- 4. Powell, D. (2018, Nov.). Modeling intuitive theories and belief revision. Department of Psychology, Yale University.
- 5. Powell, D. (2018, Oct.). Modeling belief revision in intuitive theories. Department of Psychology, University of California, Los Angeles.
- 6. Powell, D. (2017, Dec.). Understanding biases and correcting misconceptions: The Interface of prior beliefs, experience, and decision-making. *Department of Psychology, University of Minnesota*.
- 7. Powell, D. (2014, Sept.). Parsimony and competition in causal learning. Department of Psychology, University of Illinois at Urbana-Champaign.
- 8. Powell, D. (2014, Sept.). What is knowledge? Evidence from semantic integration. Department of Psychology, University of Illinois at Urbana-Champaign.

CONFERENCE TALKS

- 1. <u>Powell, D.</u>, Weisman, K., & Markman, E. M. (2018, July). Articulating lay theories through graphical models: A study of beliefs surrounding vaccination decisions. *The 40th Annual Conference of the Cognitive Science Society.* Madison, WI, USA.
- Powell, D., Horne, Z., & Hummel, J. E. (2016, Aug.). Toxic beliefs. The 38th Annual Conference of the Cognitive Science Society. Philadelphia, PA, USA.
- Powell, D., Merrick, A., Lu, H., & Holyoak, K. J. (2013, Aug.). Generic priors yield competition between independently-occurring causes. *The 35th Annual Conference of the Cognitive Science Society*. Berlin, Germany.
- 4. Powell, D., Horne, Z., Pinillos, A., & Holyoak, K. J. (2013, Aug.). Justified true belief triggers false recall of "knowing". *The 35th Annual Conference of the Cognitive Science Society*. Berlin, Germany.
- 5. Horne, Z. & Powell, D. (2012, May). Emotional arousal and moral judgment. *Experiments on Ethical Dilemmas Workshop*. University of London, London, England.
- Powell, D. & Horne, Z. (2010, Dec.). Moral dilemmas re-examined: Are emotions the primary cause of people's moral judgments? *Graduate Philosophy Conference*. Western Michigan University. Grand Rapids, MI, USA.
- Powell, D. & Horne, Z. (2010, Nov.). Moral dilemmas re-examined: Are emotions the primary cause of people's moral judgments? *Building Bridges Conference*. Southern Illinois University. Carbondale, IL, USA.

POSTERS

- 1. <u>Powell, D., & Horne, Z. (2018, July)</u>. Expectations bias judgments of harm against others. *The 40th* <u>Annual Conference of the Cognitive Science Society</u>. Madison, WI, USA.
- 2. <u>Powell, D.</u> & Markman, E. M. (2017, August). Encouraging fruit and vegetable consumption through intuitive theory building. *Analogy 2017*. Paris, France.
- 3. <u>Powell, D.</u> & Markman, E. M. (2017, July). Encouraging fruit and vegetable consumption through intuitive theory building. *The 39th Annual Conference of the Cognitive Science Society*. London, England.
- Powell, D., Waldmann, M. R., & Cheng, P. W. (2016). How should autonomous vehicles behave in moral dilemmas? Human judgments reflect abstract moral principles. *The 38th Annual Conference of the Cognitive Science Society.* Philadelphia, PA, USA.
- Powell, D., & Horne, Z. (2015, Feb.). Once more with a measure of feeling: Examining the role of emotion in moral judgment. The 16th Annual Conference of the Society for Personality and Social Psychology. Long Beach, California, USA.
- Powell, D. (2014, Nov.). Two's a crowd: Testing dual-systems theories of moral judgment with responsetime measures. The 55th Annual Conference of the Psychonomic Society. Long Beach, California, USA.
- Powell, D., Merrick, A., Lu, H., & Holyoak, K. J. (2014, July). Generic priors yield competition between independently-occurring preventive causes. The 36th Annual Conference of the Cognitive Science Society. Qubec City, Canada.
- 8. <u>Powell, D., & Holyoak, K. J. (2014, Feb.)</u>. Are people moral absolutists or moral relativists? The 15th Annual Meeting of the Society for Personality and Social Psychology. Austin, Texas, USA.
- 9. Horne, Z., Powell, D., & Spino, J. (2013, Aug.). Belief updating in moral dilemmas. The 35th Annual Conference of the Cognitive Science Society. Berlin, Germany.
- 10. <u>Powell, D.</u>, & Holyoak, K. J. (2012, Nov.). Are people moral absolutists or moral relativists? The 53rd Annual Meeting of the Psychonomic Society. Minneapolis, MN, USA.

SELECTED MEDIA COVERAGE

Countering antivaccination attitudes

The New York Times, The Washington Post, The Wall Street Journal, CNN, Time, Forbes, Huffington Post, Voice of America, US News and World Report, The Daily Beast, Vox, Arstechnica, Healthydebate.ca

The love of large numbers: A popularity bias in consumer choice

The Guardian, BBC Radio, The Toronto Star, The London Times, New York Magazine, Reader's Digest, Lifehacker, Axios, Quartz, Co.Design, The Doctor Will See You Now, The New York Post, The Mirror

TEACHING EXPERIENCE

Teaching Assistantships, University of California, Los Angeles

Cognitive Psychology Lab

2 Quarters

Upper-level research methods course focused on cognitive psychological research. Course (25 students) was co-taught by professor and TA, meeting four hours per week for lectures and supervised group work.

Cognitive Psychology

3 Quarters (10 lab sections total)

Survey course covering topics in cognitive psychology such as attention, memory, concept learning, and higher-order reasoning. Lab sections (25-30 students) met one hour per week to review lectures and present additional material.

Psychology Research Methods

Introductory-level research methods requirement for psychology students. Reviewed basic statistical concepts and introduced ANOVA framework, as well as fundamentals of experimental and non-experimental research designs. Final project consisted of novel experimental study conducted by groups of students. Lab section (20 students) met four hours per week for presentation of material, hands-on labs and activities, and supervised group work.

Sensation and Perception

Survey course covering topics in sensation and perception, with a focus on visual and auditory perception. Lab sections (25-30 students) met one hour per week to review lectures and present additional material.

GRANTS, FELLOWSHIPS, AND AWARDS

UCLA Graduate Summer Research Mentorship (\$6,500)	2014
UCLA Graduate Research Mentorship (tuition + \$20,500) National Science Foundation: Graduate Fellowship Honorable Mention	$\frac{2013-2014}{2013}$
UCLA Graduate Summer Research Mentorship (\$6,500)	2012
Caton Award for Graduate Writing	2012
Edwin W. Pauley Fellowship (tuition $+$ \$36,500)	2011 - 2012

PROFESSIONAL SERVICE

Cognition. Cognitive Research: Principles and Implications. Cognitive Science. Reviewer Experimental Psychology, Journal of Cross-Cultural Psychology, Journal of Experimental Psychology: General, Pediatrics, Psychological Review, Psychological Science, Quarterly Journal of Experimental Psychology

REFERENCES

Prof. Ellen Markman (Postdoctoral advisor, 2016 - Present)	markman@stanford.edu
Prof. Keith Holyoak (Ph.D. advisor, 2011 - 2016)	holyoak@psych.ucla.edu
Prof. Hongjing Lu (Ph.D. committee member)	hongjing@ucla.edu

3 Quarters

1 Quarter (4 lab sections)