

## Clinton P. Davis-Stober

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CONTACT INFORMATION	219 McAlester Hall Columbia, MO 65211	217-714-9270 stoberc@missouri.edu
PROFESSIONAL POSITIONS	<b>Professor</b> Department of Psychological Sciences, University of Missouri Columbia, MO	September 2019 to present
	<b>Associate Professor</b> Department of Psychological Sciences, University of Missouri Columbia, MO	August 2015 to August 2019
	<b>Assistant Professor</b> Department of Psychological Sciences, University of Missouri Columbia, MO	August 2009 to July 2015
APPOINTMENTS	<b>Core Faculty Member</b> MU Informatics Institute, University of Missouri Columbia, MO	December 2018 to present
	<b>Adjunct Senior Research Fellow</b> Institute for Choice, Business School University of South Australia Adelaide, South Australia	June 2015 to present
EDUCATION	<b>University of Illinois</b> , Urbana-Champaign, IL  Ph.D., Quantitative Psychology, 2009  M.S., Mathematics, 2007  M.A., Psychology, 2007  <b>University of Oregon</b> , Eugene, OR  B.S., Psychology (Dept. Honors)/Mathematics minor, 2003  <b>University of Iowa</b> , Iowa City, IA  B.A., Journalism, 1999	

AWARDS

National Recognition

- Fellow of the Psychonomic Society 2019
- Clifford T. Morgan Best Article Award, Psychonomic Society 2014  
(with Dr. Dana)
- William K. Estes Early Career Award, 2012  
Society for Mathematical Psychology
- Exeter Prize for Best Paper in Experimental Economics, 2012  
Decision Theory, and Behavioral Economics,  
University of Exeter Business School  
(with Drs. Dana and Regenwetter)
- R. Duncan Luce Outstanding Paper Award, 2011  
*Journal of Mathematical Psychology*
- Distinguished Dissertation Award, APA Division 5 2010

University Recognition — University of Missouri

- MU Top Faculty Achievers 2016; 2017
- Faculty Fellowship, College of Arts and Sciences 2014
- Robert S. Daniels Outstanding Junior Faculty Teaching Award 2014
- Provost Outstanding Junior Faculty Research 2013  
and Creative Activity Award (campus-wide award)
- Faculty International Travel Award 2013
- Max Meyer Outstanding Junior Faculty Research Award 2012
- Summer Research Fellowship 2011

Student Awards — University of Illinois, Urbana-Champaign

- Dissertation Completion Fellowship 2008-2009
- Nancy Hirschberg Memorial Award for Scholarship and Research 2007
- Jeffrey Tanaka Memorial Award for Scholarship and Research 2007
- Pre-doctoral Traineeship, Institutional National Research 2006-2008  
Service Award, National Institutes of Mental Health (NIMH)
- University of Illinois Graduate Fellowship 2004-2005

EDITORIAL

APPOINTMENTS

Co-Guest Editor (Special Issue in honor of R. Duncan Luce) 2014-2016  
*Journal of Mathematical Psychology*

Associate Editor 2013-present  
*British Journal of Mathematical and Statistical Psychology*

Editorial Board 2015-present  
*Decision*

Editorial Board 2011-present  
*Journal of Mathematical Psychology*

Editorial Board 2013-present  
*Judgment and Decision Making*

- PROFESSIONAL MEMBERSHIPS
- Executive Board Member (Elected), Society for Mathematical Psychology, 2015-present
  - Psychonomic Society, 2016-present
  - Society for Judgment and Decision Making, 2012-present
  - American Psychological Association, Division 5: Evaluation, Measurement and Statistics, 2019-present
- INTERNATIONAL SERVICE
- Editor Search Committee Member, *Decision*
  - Co-organizer, Computational Approaches to Memory and Decision Making Symposium, Mathematical Psychology Satellite Day, Psychonomic Society Annual Meeting, 2017; 2018
  - Co-organizer, QTest Workshop, European Mathematical Psychology Group Meeting, Copenhagen, 2016
  - Co-organizer, International Workshop and Symposium on Probabilistic Specification and Quantitative Testing of Decision Theories, Society for Mathematical Psychology Annual Meeting, Madison, WI, USA, 2018
- GRANT PANEL REVIEWING
- National Science Foundation (NSF)
- AD HOC GRANT REVIEWING
- National Science Foundation (NSF)
  - Air Force Office of Scientific Research (AFSOR)
  - Swiss National Science Foundation (SNSF)
  - Social Sciences and Humanities Research Council of Canada (SSHRC)
- AD HOC JOURNAL REVIEWING
- Proceedings of the National Academy of Sciences
  - Psychological Review
  - Management Science
  - Operations Research
  - Psychological Science
  - Perspectives on Psychological Science
  - Psychonomic Bulletin and Review
  - Journal of Mathematical Psychology
  - Mathematical Social Sciences
  - Psychometrika
  - Psychological Methods
  - Multivariate Behavioral Research
  - Behavior Research Methods
  - Decision Analysis
  - Judgment and Decision Making
  - Journal of Behavioral Decision Making
  - American Journal of Political Science
  - Methodology: European Journal of Research Methods in Behavioral and Social Sciences
  - Frontiers in Psychology
  - Order
  - Applied Psychological Measurement

- Journal of Integer Sequences
- Communication in Statistics - Simulation and Computation
- Clinical Psychological Sciences
- Journal of Experimental Psychology: Learning, Memory, and Cognition

RECENT PRESS  
COVERAGE /  
MENTIONS IN  
POPULAR PRESS

- Goodwin, P. (2017). *Forewarned: A sceptic's guide to prediction*. Biteback publishing: London.
- Matthews, R. (2016). *Chancing it: The laws of chance - and what they mean for you*. Profile Books: London.
- Sustain, C. R. & Hastie, R. (2015). *Wiser: Getting beyond groupthink to make groups smarter*. Harvard Business Review Press: Boston, MA.
- July 8th, 2014. 'Wisdom of the crowd': *The myths and realities*, by Philip Ball, for *BBC Futures*.
- November 16, 2014. *Too many cooks spoil the broth? Not for this smartphone app*, by Robert Matthews, for *The National UAE*.

CURRENT  
GRANT FUNDING

National Institutes of Health (NIH)

- *Advanced Mathematical Modeling of Decision Making, in Alcohol Research* 2016-2020  
National Institute on Alcohol Abuse and Alcoholism (NIAAA)  
ID# K25AA024182  
Total costs: \$633,084  
Role: **Principal Investigator**

National Science Foundation (NSF)

- *Collaborative Research: Invariants of Decision Making, Decision, Risk and Management Sciences (DRMS)* 2015-2018  
SES# 1459866 (Davis-Stober, PI)  
Total costs to Davis-Stober: \$200,120  
Total costs across all institutions: \$500,000  
Role: **Principal Investigator**

National Institutes of Health (NIH)

- *Alcohol and Adult Development: Understanding Etiology and Consequences* 2015-2018  
5K05AA017242  
National Institute for Alcohol Abuse and Alcoholism (NIAAA)  
Total costs: \$195,139  
Role: Mentee (Sher, PI)

National Institutes of Health (NIH)

- *Psychology of Alcohol Use and Dependence Training* 2017-2022  
National Institute for Alcohol Abuse and Alcoholism (NIAAA)  
T32 Training Grant  
Role: Preceptor (McCarthy, PI; Sher, PI)

National Center for Responsible Gambling

- *Unique Research Opportunities in the Genetics and Epidemiology of Disordered Gambling* 2017-2020  
Center of Excellence in Gambling Research Grant  
Role: Preceptor (W. Slutske, PI)

National Institutes of Health (NIH)

- *Neural Correlates of Decision Making Under Risk and Substance Misuse* 2018-2021  
National Institute for Alcohol Abuse and Alcoholism (NIAAA)  
F31 Pre-doctoral Grant  
Role: Consultant (K. McCarty, PI)

COMPLETED  
GRANT FUNDING

Subcontract from the University of Victoria

- Social Sciences and Humanities Research Council 2014-2017  
Insight Program #435-2012  
Total costs: \$19,126  
Role: Co-Investigator (Marley, McCausland, PIs)

Institute for Choice, University of South Australia

- Visiting Scholar Fellowship, 2015-2016  
*Improving Choice Models* (Swait, PI)  
Total costs: \$20,000 (AUD)

University of Missouri Research Board

- *Inference Strategies and Information Search in Financial Decision Making* 2012-2014  
Total costs: \$32,000  
Role: **Principal Investigator** (Yilmazer, Co-PI)

Subcontract from Applied Research Associates

- Intelligence Advanced Research Projects Activity, 2012-2013  
Office of the Director of National Intelligence  
*Aggregative Contingent Estimation System*  
Total costs: \$155,019  
Role: **Co-Principal Investigator** (Merkle, PI)

University of Missouri Research Board

- *Empirical Tests of Decision Models Based on Lexicographic Semiorders* 2010-2012  
Total costs: \$33,748  
Role: **Principal Investigator**

University of Missouri

- Arts and Sciences Alumni Organization Faculty Incentive Grant  
*Evaluating Models of Risk* 2013-2014  
Total costs: \$1,500  
Role: **Principal Investigator**
- University of Missouri Research Council 2012-2013  
*Understanding Individuals' Ability to Search, Process  
and Interpret Financial Information*  
Total costs: \$7,500  
Role: **Principal Investigator**
- Seeding Interdisciplinary Research Collaborations (SIRC) 2011-2012  
*Understanding Decision Strategies and Information Search  
in the Context of Borrowing*  
Total costs: \$1,000  
Role: Co-Investigator (Yilmazer, PI)
- Arts and Sciences Alumni Organization Faculty Incentive Grant  
*An Empirical Analysis of Decision Making Models Based  
on Lexicographic Semiorders* 2010-2011  
Total costs: \$1,500  
Role: **Principal Investigator**

PENDING  
GRANTS

National Institutes of Health (NIH)

- *Mathematical Models of Intoxicated Risky  
Decision Making* 2018-2021  
National Institute for Alcohol Abuse and Alcoholism (NIAAA)  
F31 Pre-doctoral Grant  
Role: Co-Mentor (L. Hatz, PI)

National Institutes of Health (NIH)

- *Risks for Driving Under the Influence  
of Marijuana: A Multi-Modal Investigation Integrating Laboratory and  
Ambulatory Assessment Methods* 2018-2023  
National Institute on Drug Abuse (NIDA)  
R01DA047377  
Total costs: \$3,991,900  
Role: Co-Investigator (J. Metrik, PI)

PIPELINE /  
MANUSCRIPTS  
UNDER REVIEW  
(STUDENTS  
LISTED IN  
ITALICS)

4. *Hatz, L., Park, S., McCarty, K., McCarthy, D., & Davis-Stober, C. P.*  
(under review). Money or sex: When are we more rational?
3. **Davis-Stober, C. P.** & *Segert, S., & Kellen, D.* (under review). Comment  
on Regenwetter & Robinson (2017): Probabilistic error-free models are also  
subject to logical fallacies.

2. Regenwetter, M., Smeulders, B., **Davis-Stober, C. P.**, Fields, B., & Wang, C. (under review). Correspondence: Rational mate choice in fruit flies? A re-analysis.
1. Kellen, D., Steiner, M., **Davis-Stober, C. P.**, & Pappas, N. (under review). Modeling choice paradoxes under risk: From prospect theories to sampling-based accounts.

PEER-REVIEWED  
JOURNAL  
ARTICLES  
(STUDENTS  
LISTED IN  
ITALICS)

44. **Davis-Stober, C. P.** & Regenwetter, M. (in press). The ‘paradox’ of converging evidence. *Psychological Review*.
43. *Segert, S.*, & **Davis-Stober, C. P.** (in press). A general approach to prior adjustment. *Journal of Mathematical Psychology*.
42. Heck, D. W., & **Davis-Stober, C. P.** (in press.) Multinomial models with linear inequality constraints: Overview and improvements of computational methods for Bayesian inference. *Journal of Mathematical Psychology*.
41. Rouder, J. N., *Haaf, J. M.*, **Davis-Stober, C. P.**, & Hilgard, J. (in press). Beyond overall effects: A Bayesian approach to finding constraints across a collection of studies in meta-analysis. *Psychological Methods*.
40. Zhao, W. J., Bhatia, S., & **Davis-Stober, C. P.** (in press). Optimal cue aggregation in the absence of criterion knowledge. *Journal of Behavioral Decision Making*.
39. Brusco, M. J., Steinley, D., Hoffman, M., **Davis-Stober, C. P.**, & Wasserman, S. W. (in press). Binary graphical models for the construction of symptom “networks” in psychopathological research. *Psychological Methods*.
38. **Davis-Stober, C. P.**, *McCarty, K. N.*, & McCarthy, D. M. (in press). Decision making and alcohol: Health policy implications. *Policy Insights from the Brain and Behavioral Sciences*.
37. McCausland, W. J., **Davis-Stober, C. P.**, Marley, A. A. J., *Park, S.*, & *Brown, N.* (in press). Testing the random utility hypothesis directly. *The Economic Journal*.
36. **Davis-Stober, C. P.**, McCarthy, D., Cavagnaro, D. R., Price, M., *Brown, N.*, & *Park, S.* (in press). Is cognitive impairment related to violations of rationality? An alcohol intoxication study testing transitivity of preference. *Decision*.
35. Cavagnaro, D. R., & **Davis-Stober, C. P.** (2018). A model-based test for treatment effects with probabilistic classifications. *Psychological Methods*, 23, 672-689.
34. **Davis-Stober, C. P.**, Dana, J., & Rouder, J. (2018). Estimation accuracy in the psychological sciences. *PLoS ONE*, 13, e0207239.

33. **Davis-Stober, C. P.**, Doignon, J.-P., Fiorini, S., Glineur, F., & Regenwetter, M. (2018). Extended formulations for order polytopes through network flows. *Journal of Mathematical Psychology*, *87*, 1-10.
32. Smeulders, B., **Davis-Stober, C. P.**, Regenwetter, M., & Spijksma, F. C. R. (2018). Testing probabilistic models of choice using column generation. *Computers & Operations Research*, *95*, 32-43.
31. Regenwetter, M., & **Davis-Stober, C. P.** (2018). The role of independence and stationarity in probabilistic models of binary choice. *Journal of Behavioral Decision Making*, *31*, 100-114.
30. *Brown, N., Park, S., Steinley, D., & Davis-Stober, C. P.* (2018). Modeling between-subject variability in decision strategies via statistical clustering: A  $p$ -median approach. *Journal of Behavioral Decision Making*, *31*, 250-264.
29. Kellen, D., Mata, R., & **Davis-Stober, C. P.** (2017). Individual classification of strong risk attitudes: An application across lottery types and age groups. *Psychonomic Bulletin & Review*, *24*, 1341-1349.
28. **Davis-Stober, C. P.**, *Brown, N., Park, S., & Regenwetter, M.* (2017). Recasting a biologically motivated computational model within a Fechnerian and random utility framework. *Journal of Mathematical Psychology*, *77*, 156-164.
27. Tierney, W., et al. (82 authors). (2016). Data from a pre-publication independent replication initiative examining ten moral judgement effects. *Scientific Data*, *3*, article number: 160082.
26. **Davis-Stober, C. P.**, *Park, S., Brown, N., & Regenwetter, M.* (2016). Reported violations of rationality may be aggregation artifacts. *Proceedings of the National Academy of Sciences of the United States of America*, *113* E4761-E4763.
25. **Davis-Stober, C. P.**, Morey, R. D., Gretton, M., & Heathcote, A. (2016). Bayes factors for state-trace analysis. *Journal of Mathematical Psychology*, *72*, 116-129.
24. Schweinsberg, M., et al. (81 authors). (2016). The pipeline project: Pre-publication independent replications of a single laboratory's research pipeline. *Journal of Experimental Social Psychology*, *66*, 55-67.
23. Dana, J., & **Davis-Stober, C. P.** (2016). Rational foundations for fast and frugal heuristics: An improper linear models approach. *Minds and Machines*, *26*, 61-86.
22. **Davis-Stober, C. P.**, Doignon, J.-P., & Suck, R. (2015). A note on the eigensystem of the covariance matrix of dichotomous Guttman items. *Frontiers in Psychology*, *6*, 1767.



21. **Davis-Stober, C. P.**, Budescu, D. V., Broomell, S. B., & Dana, J. (2015). The composition of optimally wise crowds. *Decision Analysis*, *12*, 130-143. **Selected for INFORMS Editor's Cut, Wisdom of the crowd: Crowdsourcing analytics.**
20. *Brown, N.*, **Davis-Stober, C. P.**, & Regenwetter, M. (2015). Commentary: "Neural signatures of intransitive preferences." *Frontiers in Human Neuroscience*, *9*, 509.
19. **Davis-Stober, C. P.**, *Brown, N.*, & Cavagnaro, D. R. (2015). Individual differences in the algebraic structure of preference. *Journal of Mathematical Psychology*, *66*, 70-82.
18. Cavagnaro, D. R., & **Davis-Stober, C. P.** (2014). Transitive in our preferences, but transitive in different ways: An analysis of choice variability. *Decision*, *1*, 102-122.
17. **Davis-Stober, C. P.**, Budescu, D. V., Dana, J., & Broomell, S. B. (2014). When is a crowd wise? *Decision*, *1*, 79-101. [Lead Article]
16. Regenwetter, M., **Davis-Stober, C. P.**, Lim, S. H., Guo, Y., Popova, A., Zwilling, C., Cha, Y.-C., & Messner, W. (2014). QTEST: Quantitative Testing of theories of binary choice. *Decision*, *1*, 2-34. [Lead Article]
15. **Davis-Stober, C. P.**, & Dana, J. (2014). Comparing the accuracy of experimental estimates to guessing: A new perspective on replication and the "crisis of confidence" in psychology. *Behavior Research Methods*, *46*, 1-14. **Awarded a Clifford T. Morgan Best Article Award.** [Lead Article]
14. **Davis-Stober, C. P.**, & *Brown, N.* (2013). Evaluating decision maker "type" under  $p$ -additive utility representations. *Journal of Mathematical Psychology*, *57*, 320-328.
13. Regenwetter, M., & **Davis-Stober, C. P.** (2012). Behavioral variability of choices versus structural inconsistency of preferences. *Psychological Review*, *119*, 408-416.
12. **Davis-Stober, C. P.** (2012). A lexicographic semiorder polytope and probabilistic representations of choice. *Journal of Mathematical Psychology*, *56*, 86-94.
11. Regenwetter, M., Dana, J., **Davis-Stober, C. P.**, & Guo, Y. (2011). Parsimonious testing of transitive or intransitive preferences: Reply to Birnbaum (2011). *Psychological Review*, *118*, 684-688.
10. **Davis-Stober, C. P.**, & *Brown, N.* (2011). A shift in strategy or "error"? Strategy classification over multiple stochastic specifications. *Judgment and Decision Making*, *6*, 800-813.
9. **Davis-Stober, C. P.** (2011). A geometric analysis of when fixed weighting schemes will outperform ordinary least squares. *Psychometrika*, *76*, 650-669.

8. Regenwetter, M., Dana, J., & **Davis-Stober, C. P.** (2011). Transitivity of preferences. *Psychological Review*, *118*, 42-56. **Awarded the Inaugural Exeter Prize for Best Paper in Experimental Economics, Decision Theory, and Behavioral Economics, University of Exeter Business School.**
7. **Davis-Stober, C. P.** (2010). A bijection between a set of lexicographic semiorders and pairs of non-crossing Dyck paths. *Journal of Mathematical Psychology*, *54*, 471-474. [Lead Article]
6. Regenwetter, M., Dana, J., & **Davis-Stober, C. P.** (2010). Testing transitivity of preferences on two-alternative forced choice data. *Frontiers in Psychology*, *1*, 148.
5. **Davis-Stober, C. P.**, Dana, J., & Budescu, D. V. (2010). A constrained linear estimator for multiple regression. *Psychometrika*, *75*, 521-541.
4. **Davis-Stober, C. P.**, Dana, J., & Budescu, D. V. (2010). Why recognition is rational: Optimality results on single-variable decision rules. *Judgment and Decision Making*, *5*, 216-229. [Lead Article]
3. **Davis-Stober, C. P.** (2009). Multinomial models under linear inequality constraints: Applications to measurement theory. *Journal of Mathematical Psychology*, *53*, 1-13. **Awarded the R. Duncan Luce Outstanding Paper Award for 2008-2010.** [Lead Article]
2. Regenwetter, M., Grofman, B., Popova, A., Messner, W., **Davis-Stober, C. P.**, & Cavagnaro, D. R. (2009). Behavioral social choice: A status report. *Philosophical Transactions of the Royal Society of London B*, *364*, 833-843.
1. Rueda, M. R., Posner, M. I., Rothbart, M. K., & **Davis-Stober, C. P.** (2004). Development of the time course for processing conflict: An event-related potentials study with 4 year olds and adults. *BioMed Central Neuroscience*, *5*, 39.

#### BOOK CHAPTERS

2. Regenwetter, M., & **Davis-Stober, C. P.** (2011). Ternary paired comparisons induced by semi- or interval order preferences. In E. Dzhafarov, L. Perry (Eds.), *Descriptive and normative approaches to human behavior*. World Scientific.
1. Regenwetter, M., & **Davis-Stober, C. P.** (2008). There are many models of transitive preference: A tutorial review and current perspective. In T. Kugler, J. C. Smith, T. Connolly, and Y. J. Son (Eds.), *Decision modeling and behavior in uncertain and complex environments*. New York: Springer.

OTHER  
PUBLICATIONS

3. Marley, A. A. J., **Davis-Stober, C. P.**, & Steingrimsson, R. (2016). Editors' forward for the special issue in honor of R. Duncan Luce. *Journal of Mathematical Psychology*, 75, 1-2.
2. **Davis-Stober, C. P.** (2008). Review of the book: The mathematics of behavior. *Psychometrika* 73, 341.
1. **Davis-Stober, C. P.**, Broomell S., & Lorenz, F. (2006). Review of the book: Exploratory data analysis with MATLAB. *Psychometrika* 71, 107-108.

INVITED TALKS

29. **Davis-Stober, C. P.** (2018, November). *More rational than a rational person might guess*. Invited talk at the Department of Psychology, University of California, San Diego, CA.
28. **Davis-Stober, C. P.** (2018, October). *Linking axiomatic perspectives on decision making to brain connectivity*. Mathematical models of decision making processes: State of the art and challenges, advanced international seminar, Universidad Complutense de Madrid, Madrid, Spain.
27. **Davis-Stober, C. P.**, Cavagnaro, D. R., Heck, D. W., & Park, S. (2018, October). *Testing the separable representation of utility theories: An experiment evaluating monotonicity, transitivity, and double cancellation*. CIREQ Montreal Microeconomic Theory Conference: Foundations of discrete choice, Montreal, CA.
26. **Davis-Stober, C. P.** (2017, November). *Tests of rationality across multiple experimental domains*. Computational approaches to memory and decision making symposium, Psychonomics Annual Meeting, Vancouver, CA.
25. **Davis-Stober, C. P.** (2017, February). *Understanding the individual within the crowd: An analysis of how individual forecasters contribute to ideal group forecasts*. Invited talk at Microsoft Research, New York City.
24. **Davis-Stober, C. P.** (2016, January). *A new perspective on identifying and testing invariants of decision making*. Invited talk at the Department of Psychology, University of Michigan, Ann Arbor.
23. **Davis-Stober, C. P.** (2016, January). *A new perspective on identifying and testing invariants of decision making*. Invited talk at the Department of Social and Decision Sciences, Carnegie Mellon University, Pittsburgh.
23. **Davis-Stober, C. P.** (2015, December). *A new perspective on identifying and testing invariants of decision making*. Invited talk at the University of Kansas.
22. **Davis-Stober, C. P.** (2015, December). *A new perspective on identifying and testing invariants of decision making*. Invited talk at the University of California at Davis.
21. **Davis-Stober, C. P.** (2015, November). *The composition of optimally wise crowds*. Invited talk at the Institute for Choice, University of South Australia.
20. **Davis-Stober, C. P.** (2015, November). *The composition of optimally wise crowds*. Invited talk at the University of New South Wales, Australia.
19. **Davis-Stober, C. P.** (2015, October). *The composition of optimally wise crowds*. Invited talk at the University of Tasmania, Australia.

18. **Davis-Stober, C. P.** (2015, October). *The composition of optimally wise crowds*. Invited talk at the University of Melbourne, Australia.
17. **Davis-Stober, C. P.** (2015, April). *The composition of optimally wise crowds*. Invited talk at the University of Illinois, Urbana-Champaign.
16. **Davis-Stober, C. P.** (2014, October). *A new perspective on identifying and testing invariances of decision-making*. Invited talk for the department of Psychology, Purdue University.
15. **Davis-Stober, C. P.** (2014, May). *A new perspective on identifying and testing invariances of decision-making*. Invited talk for the department of Psychology, University of California, Irvine.
14. **Davis-Stober, C. P.** (2014, February). *Optimal group configuration and member weighting*. Invited talk for the Good Judgment Group, Department of Psychology, University of Pennsylvania, Philadelphia.
13. **Davis-Stober, C. P.** (2013, December). *A new perspective on the algebraic structure of decision-making: Theoretic and empirical results*. Invited talk at the departments of Psychology and Statistics, University of Minnesota, Minneapolis.
12. **Davis-Stober, C. P.** (2013, August). *Evaluating fixed weighting rules*. Invited talk at the Max Planck Institute for Human Development, Berlin, Germany.
11. **Davis-Stober, C. P.** (2013, August). *A new perspective on non-compensatory decision-making: theoretic and empirical results*. Keynote address presented at the 46<sup>th</sup> annual meeting of the Society for Mathematical Psychology, Potsdam, Germany.
10. **Davis-Stober, C. P., & Brown, N.** (2013, July). *Evaluating the risk attitude of decision makers under p-additive model representations*. Invited talk at the Centre for the Study of Choice (CenSoc), University of Technology Sydney, Sydney, Australia.
9. **Davis-Stober, C. P., Budescu, D. V., Dana, J., & Broomell, S. B.** (2012, May). *When is a crowd wise?* Paper presented at the 2012 APS annual convention as part of the symposium "A closer look at the wisdom of crowds," Chicago, IL.
8. **Davis-Stober, C. P.** (2011, February). Invited discussant of the paper *Muddling Through and Making Do: Bounded Rationality and Its Impact on How We Decide* by Dr. Elke Weber. Presented at the University of Missouri Symposium on Realistic Decision Making, Columbia, MO.
7. **Davis-Stober, C. P., & Brown, N.** (2011, October). *A shift in strategy or error? Strategy classification over multiple stochastic specifications*. Paper presented to the Max Planck Institute for Collective Goods, Bonn, Germany.
6. **Davis-Stober, C. P.** (2010, August). *Evaluating Decision-Making Models and New Perspectives on Choice Variability*. Paper presented to APA Division 5 during acceptance of Distinguished Dissertation Award, 118th Annual Convention of the American Psychological Association, San Diego, CA.
5. **Davis-Stober, C. P.** (2009, October). *The never-ending robust beauty of improper linear models*. Paper presented as part of the Quantitative Division Brownbag Series, Department of Psychology, University of Illinois at Urbana-Champaign, Champaign, IL.
4. **Davis-Stober, C. P.** (2009, January). *Why Dewey Decimal won't cut it: A*

*lexicographic model of individual and group decision making.* Paper presented to the Strategic Resources Department at State Farm Insurance Corporate Headquarters, Bloomington, IL.

3. **Davis-Stober, C. P.** (2008, December). *Why Dewey Decimal won't cut it: A lexicographic model of individual decision making.* Paper presented to the Department of Psychological Sciences at the University of Missouri at Columbia, Columbia, MO.
2. **Davis-Stober, C. P.** (2007, November). *Analysis of choice probabilities under inequality constraints.* Paper presented at the annual meeting for the Institute for Operations Research and the Management Sciences (INFORMS), Seattle, WA.
1. **Davis-Stober, C. P.** (2006, August). *Frequentist axiom testing: A generalization of Iverson and Falmagne's likelihood ratio technique.* In J. Myung (Chair), Intransitivity of preference: Revisited. Symposium conducted at the 39<sup>th</sup> annual meeting of the Society for Mathematical Psychology, Vancouver, British Columbia, Canada.

SELECTED  
PRESENTATIONS

- **Davis-Stober, C. P.**, Marley, A. A. J., McCausland, W. J., & Turner, B. (2018, July). *An illustrated guide to context effects.* Paper presented at the annual meeting of the Society for Mathematical Psychology, Madison, WI.
- Regenwetter, M., & **Davis-Stober, C. P.** (2018, July). *The ?paradox? of converging evidence.* Paper presented at the annual meeting of the Society for Mathematical Psychology, Madison, WI.
- **Davis-Stober, C. P.**, Park, S., & Regenwetter, M. (2018, July). *Cognitive aging and tests of rationality.* Paper presented at the annual meeting of the Society for Mathematical Psychology, Madison, WI.
- Fields, B. R., Regenwetter, M., Smeulders, B., **Davis-Stober, C. P.**, & Wang, C. (2018, July). *Rational mate choice in fruit flies? A re-analysis.* Paper presented at the annual meeting of the Society for Mathematical Psychology, Madison, WI.
- McCausland, W. J., **Davis-Stober, C. P.**, & Marley, A. A. J. (2018, July). *Testing axioms of stochastic discrete choice using population choice probabilities.* Paper presented at the annual meeting of the Society for Mathematical Psychology, Madison, WI.
- Hatz, L., McCarty, K., Park, S., McCarthy, D. M., & **Davis-Stober, C. P.** (2018, July). *Mathematical modeling of sexual decision making strategies.* Paper presented at the annual meeting of the Society for Mathematical Psychology, Madison, WI.
- McCarty, K. N., Hatz, L., Park, S., McCarthy, D. M., & **Davis-Stober, C. P.** (2018, July). *Applying Bayesian cognitive models to decision to drive after drinking.* Paper presented at the annual meeting of the Society for Mathematical Psychology, Madison, WI.
- **Davis-Stober, C. P.** (2017, August). *A large-scale study examining differences in risk attitude across three choice contexts: financial, health care, and climate change policies.* Paper presented at the annual meeting of the Society for Mathematical Psychology, Coventry, UK.
- **Davis-Stober, C. P.**, Budescu, D. V., Broomell, S. B., & Dana, J. (2014,

- June). *When is a crowd wise?* Paper presented at the Collective Intelligence Conference, MIT. Cambridge, MA
- **Davis-Stober, C. P., & Dana, J.** (2013, November). *When are our experimental findings better than a guess?* Paper presented at the 34<sup>th</sup> annual meeting of the Society for Judgment and Decision Making, Toronto, Canada.
  - **Davis-Stober, C. P., & Brown, N.** (2013, July). *Evaluating the risk attitude of decision makers under p-additive model representations.* Paper presented at the 46<sup>th</sup> annual meeting of the Society for Mathematical Psychology, Potsdam, Germany.
  - **Davis-Stober, C. P., Brown, N., & Cavagnaro, D. R.** (2013, July). *Evaluating decision makers' preferences via lexicographic semiorders.* Paper presented at the International Choice Modeling Conference, Sydney, Australia.
  - **Davis-Stober, C. P., & Dana, J.** (2013, July). *When are our experimental findings better than a guess?* Paper presented at the Efficient Science: Methodological Controversies in Judgment and Decision Making Research Small Group Meeting, Bonn, Germany.
  - **Davis-Stober, C. P., & Dana, J.** (2012, August). *Acceptable measurement accuracy in psychology.* Paper presented at the 45<sup>th</sup> annual meeting of the Society for Mathematical Psychology, Columbus, OH.
  - **Davis-Stober, C. P., & Dana, J.** (2012, July). *Acceptable measurement accuracy in psychology.* Paper presented at the annual meeting of the Psychometric Society, Lincoln, NE.
  - **Davis-Stober, C. P., & Dana, J.** (2011, November). *When should we trust our results? A new perspective on replication.* Paper presented at the 32<sup>nd</sup> annual meeting of the Society for Judgment and Decision Making, Seattle, WA.
  - **Davis-Stober, C. P., & Dana, J.** (2011, July). *When should we trust our data? A new perspective on power and replication.* Paper presented at the 44<sup>th</sup> annual meeting of the Society for Mathematical Psychology, Medford, MA.
  - **Davis-Stober, C. P.** (2011, January). *Underpowered and Out of Luck.* Paper presented at the 49<sup>th</sup> annual Ward Edwards Bayesian Conference, Fullerton, CA.
  - **Davis-Stober, C. P., & Brown, N.** (2010, November). *Changing Minds: Estimation of Multiple Preference States Via Normalized Maximum Likelihood.* Paper presented at the 31<sup>st</sup> annual conference of the Society for Judgment and Decision Making, St. Louis. MO.
  - **Davis-Stober, C. P.** (2010, August). *Changing Minds: Estimation of Multiple Preference States Via Normalized Maximum Likelihood.* Paper presented at the 43<sup>rd</sup> annual meeting of the Society for Mathematical Psychology, Portland, OR.
  - **Davis-Stober, C. P.** (2010, July). *Changing Minds: Estimation of Multiple Preference States Via Normalized Maximum Likelihood.* Paper presented at the 75<sup>th</sup> annual meeting of the Psychometric Society, Athens, GA.
  - **Davis-Stober, C. P.** (2008, July). *A lexicographic semiorder polytope.* Paper presented at the 41<sup>st</sup> annual meeting of the Society for Mathematical Psychology, Washington, D.C.
  - **Davis-Stober, C. P.** (2007, December). *Love in the time of convex geometry.*

Paper presented at the Quantitative Psychology Brownbag Seminar, University of Illinois at Urbana-Champaign.

- **Davis-Stober, C. P.**, & Regenwetter, M. (2007, September). *Ternary choice data and order polytopes*. Paper presented at the 38<sup>th</sup> annual meeting of the European Mathematical Psychology Group, Luxembourg City, Luxembourg.
- **Davis-Stober, C. P.**, Dana, J., & Budescu, D. V. (2007, September). *An improper weighted model*. Paper presented at the 38<sup>th</sup> annual meeting of the European Mathematical Psychology Group. Luxembourg City, Luxembourg.
- **Davis-Stober, C. P.**, & Regenwetter, M. (2007, August). *Ternary choice data and order polytopes*. Paper presented at the 40<sup>th</sup> annual meeting of the Society for Mathematical Psychology, Costa Mesa, CA.
- Regenwetter M., Dana, J., & **Davis-Stober, C. P.** (2007, August). *Testing intransitivity of preference: A status report*. Paper presented at the 40<sup>th</sup> annual meeting of the Society for Mathematical Psychology, Costa Mesa, CA.
- **Davis-Stober, C. P.** & Verkuilen, J. (2007, January). *P-rep and you*. Paper presented at the Quantitative Psychology Brownbag Seminar, University of Illinois at Urbana-Champaign.
- **Davis-Stober, C. P.**, Dana, J., & Budescu, D. V. (2007, January). *The benefits of being improper*. Paper presented at the 45<sup>th</sup> annual Ward Edwards Bayesian Conference, Fullerton, CA.
- **Davis-Stober, C. P.**, & Regenwetter, M. (2006, September). *Frequentist axiom testing: A generalization of Iverson and Falmagne's likelihood ratio technique*. Paper presented at the 37<sup>th</sup> annual European Mathematical Psychology Group meeting, Brest, France.
- **Davis-Stober, C. P.** (2006, May). *Frequentist axiom testing: Analysis of choice data under convex polytope constraints*. Paper presented at the Discrete Mathematics and Computer Science (DIMACS) Workshop on Polyhedral Combinatorics of Random Utility, Piscataway, NJ.
- **Davis-Stober, C. P.**, & Regenwetter, M. (2006, April). *Tversky's intransitivity of preference revisited*. Paper presented at the Air Force Office of Scientific Research (AFOSR) Cognitive and Decision Making Program Review, Fairborn, OH.
- **Davis-Stober, C. P.** (2006, January). *Axiom testing "Bayesed" on frequentist methods*. Paper presented at the 44<sup>th</sup> annual Ward Edwards Bayesian Conference, Fullerton, CA.
- **Davis-Stober, C. P.**, & Regenwetter, M. (2005, August). *Maximum likelihood estimation for convex polytopes: Applications to axiom testing and probabilistic measurement theory*. Paper presented at the 38<sup>th</sup> annual meeting of the Society for Mathematical Psychology, Memphis, TN.
- Rueda-Cuerva, M. R., Rothbart, M. K., **Davis-Stober, C. P.**, & Posner, M.I. (2005, April). *Effects of development and training on executive attention in 4 to 6 year old children*. Paper presented at the biannual meeting of the Society for Research in Child Development, Atlanta, GA.

CONFERENCE  
POSTERS

- *Brown, N.*, **Davis-Stober, C. P.**, McCarthy, D. M., Cavagnaro, D., & Price, M. (2014, November). *Robust rationality: Alcohol-induced decision makers*

*do not violate fundamental property of rational choice.* Poster presented at the Society for Judgment and Decision Making, Long Beach, CA.

- *Park, S.-H., & Davis-Stober, C. P.* (2013, August). *Evaluating the estimation accuracy of Ordinary Least Squares: Predicting how the sign changes across repeated samples.* Poster presented at the 46<sup>th</sup> annual meeting of the Society for Mathematical Psychology, Potsdam, Germany.
- *Brown, N., & Davis-Stober, C. P.* (2011, July). *When ‘improper’ is proper: A comparison of different weighting rules to ordinary least squares.* Poster presented at the 44<sup>th</sup> annual meeting of the Society for Mathematical Psychology, Medford, MA. (NB presenter)
- *Messner, W., Regenwetter, M., & Davis-Stober, C. P.* (2007, August). *Evaluating the priority heuristic: a comparison of decision making models.* Poster presented at the 40<sup>th</sup> annual meeting of the Society for Mathematical Psychology, Irvine, CA. (WM presenter)
- *Davis-Stober, C. P., Regenwetter, M., Kim, A., & Kantor, A.,* (2005, November). *Did Tversky really prove intransitivity of preference?* Poster presented at the 26th annual conference of the Society for Judgment and Decision Making, Toronto, Ontario, Canada.
- *Davis-Stober, C. P., & Arrow, H.* (2004, February). *Emergent leadership in focus group settings.* Poster presented at the annual conference of the Society for Personality and Social Psychology, Austin, TX.

GRADUATE  
STUDENT  
ADVISEES

- Dr. Nicholas Brown, graduated 2017, Data Scientist, Adobe Systems Inc.
- Mr. Sang Hyuk Park, Fall 2012-present
- Mr. Simon Segert, Fall 2016-Fall 2017

COURSES  
TAUGHT

- RESEARCH METHODS II, Taught during semesters: Spring 2010, Spring 2016, Summer 2017 and Spring 2018. This undergraduate course covers basic statistical estimation and inference. Topics include: basic probability theory, t-tests, ANOVA, and linear regression.
- TOPICS IN DECISION THEORY, Taught during semesters: Spring 2011, Spring 2013, Spring 2015 and Spring 2016. This is a graduate course on decision theory that I developed. Topics include a rigorous derivation of expected utility theory, wisdom of the crowds, basic game theory, and related topics.
- GENERAL LINEAR MODELS I, Taught during semesters: Fall 2011, Fall 2012, Fall 2013 and Fall 2014. This course is the first part of a two semester sequence on graduate statistics for psychology doctoral students. Topics include: the general linear model, estimation and inference.
- GENERAL LINEAR MODELS II, Taught during semesters: Spring 2012, Spring 2014 and Spring 2015. This course is the second part of a two semester sequence on graduate statistics for psychology doctoral students. Topics include: the general linear model, experimental design, MANOVA, ANCOVA and related topics.
- PROFESSIONAL DEVELOPMENT, Taught during Spring 2015. This is a graduate course on professional developmental that I developed. Topics include: how to give a job talk, interviewing skills, professional issues in the workplace and related topics.



DEPARTMENTAL  
AND UNIVERSITY  
SERVICE

- Big Data Search Committee, Department of Engineering, Fall 2017-present
- Member of Dissertation Committee, Dr. Meredith Phinzey, Spring 2018
- Member of Master's Committee for Hope Synder, Fall 2017
- Advisory Committee to the Department Chair, Fall 2017-present
- Participant in Campus-wide Conference on Big Data, Fall 2017
- Chair of Dissertation Committee, Dr. Nicholas Brown, Spring 2017
- Chair of Master's Committee, Sanghyuk Park, Spring 2016
- Member of Distinguished Lecture Committee, Fall 2014-Spring 2016
- Member of Dissertation Committee, Dr. April Swagman, Spring 2016
- Member of Dissertation Committee, Dr. Michela Hoffman, Spring 2016
- Advisory Committee to the Department Chair, Fall 2011-Spring 2013
- Departmental Chair Search Committee, Fall 2013-present
- Quantitative Faculty Search Committee, Fall 2010-Spring 2011
- Quantitative Training Committee, Fall 2009-Present
- Chair of Master's Committee for Mr. Nicholas Brown, Spring 2013
- Member of Dissertation Committee, Dr. Kiero Guerrra, Spring 2012
- Computing Committee, Fall 2010-Spring 2011