Clintin P. Davis-Stober

Contact Information	219 McAlester Hall Columbia, MO 65211	217-714-9270 stoberc@missouri.edu
Professional Positions	Professor Department of Psychological Sciences, University of Missouri Columbia, MO	September 2019 to present
	Associate Professor Department of Psychological Sciences, University of Missouri Columbia, MO	August 2015 to August 2019
	Assistant Professor Department of Psychological Sciences, University of Missouri Columbia, MO	August 2009 to July 2015
Appointments	Core Faculty Member MU Institute for Data Science and Informatio University of Missouri Columbia, MO	December 2018 to present cs,
	Adjunct Senior Research Fellow Institute for Choice, Business School University of South Australia Adelaide, South Australia	June 2015 to December 2018
Education	University of Illinois, Urbana-Champagin, IL	
	Ph.D., Quantitative Psychology, 2009	
	M.S., Mathematics, 2007	
	M.A., Psychology, 2007	
	University of Oregon, Eugene, OR	
	B.S., Psychology (Dept. Honors)/Mathematic	cs minor, 2003
	University of Iowa, Iowa City, IA	
	B.A., Journalism, 1999	

Awards	National Recognition	
	• Fellow of the Association for Psychological Science	2021
	• 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,	2012
	University of Exeter Business School	
	(with Drs. Dana and Regenwetter)	
	• R. Duncan Luce Outstanding Paper Award,	2011
	Journal of Mathematical Psychology	2011
	• Distinguished Dissertation Award, APA Division 5	2010
	-	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 Awar	
	• Provost Outstanding Junior Faculty Research	2013
	and Creative Activity Award (campus-wide award)	
	• Max Meyer Outstanding Junior Faculty Research Award	2012
	Graduate School Recognition — University of Illinois, Urbana-Ch	ampaign
	• Dissertation Completion Fellowship	2008-2009
	• Nancy Hirschberg Memorial Award for Scholarship and Resea	
	• Jeffrey Tanaka Memorial Award for Scholarship and Research	
	• Pre-doctoral Traineeship, Institutional National Research	2006-2008
	Service Award, National Institutes of Mental Health (NIMH)	
	• University of Illinois Graduate Fellowship	2004-2005
	U L	
Editorial	Co-Guest Editor (Special Issue in honor of Peter Fishburn)	2021-present
APPOINTMENTS	Journal of Mathematical Psychology	2021-present
	sournui of manomanicul i sychology	
	Co-Guest Editor (Special Issue in honor of R. Duncan Luce)	2014-2016
	Journal of Mathematical Psychology	
	······································	
	Associate Editor	2022-present
	Decision	Ĩ
	Associate Editor	2013-2022
	British Journal of Mathematical and Statistical Psychology	
	Associate Editor	2019-2022
	Journal of Mathematical Psychology	
	Consulting Editor	2022-present
	Psychological Review	

Consulting Editor 2013-present Judgment and Decision Making PROFESSIONAL • Executive Board Member (Elected), Society for Mathematical Psychology, **MEMBERSHIPS** 2015-2021 • Psychonomic Society, 2016-present • Association for Psychological Science, 2019-present • American Psychological Association, Division 5: Evaluation, Measurement and Statistics, 2019-present INTERNATIONAL • Co-organizer, Computational Approaches to Memory and Decision Making SERVICE Symposium, Mathematical Psychology Satellite Day, Psychonomic Society Annual Meeting, 2017; 2018; 2019 • 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 PANELS** • National Science Foundation (NSF) • National Institutes of Health (NIH): National Institute on Alcohol Abuse and Alcoholism (NIAAA) AD HOC GRANT • National Science Foundation (NSF) • Air Force Office of Scientific Research (AFSOR) REVIEWING • Swiss National Science Foundation (SNSF) • Social Sciences and Humanities Research Council of Canada (SSHRC) Ad hoc • Proceedings of the National Academy of Sciences Journal • Nature Human Behaviour • American Psychologist REVIEWING • Psychological Review • Management Science • Operations Research • Topics in Cognitive Science • Psychological Science • Perspectives on Psychological Science • Psychonomic Bulletin and Review • Journal of Mathematical Psychology • Mathematical Social Sciences • Psychometrika • Psychological Methods • Decision • 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
- Addictive Behaviors
- Psychology of Addictive Behaviors
- 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

Grant Funding as PI	Department of Defense (DoD)	
A5 I I	 Quantitative ambulatory assessment and prognosis of the impact of severe upper limb injuries on real world behavior Total costs: \$1,500,000 Role: Co-Principal Investigator (Frey, co-PI) 	2021-2024 r
	National Institutes of Health (NIH)	
	 Advanced Mathematical Modeling of Decision Making, in Alcohol Research National Institute on Alcohol Abuse and Alcoholism (NIAAA ID# K25AA024182 Total costs: \$633,084 Role: Principal Investigator 	2016-2022)
	National Science Foundation (NSF)	
	 Collaborative Research: Invariants of Decision Making, Decision, Risk and Management Sciences (DRMS). SES# 1459866 (Davis-Stober, PI) Total costs to Davis-Stober: \$200,120 Total costs across all institutions: \$500,000 Role: Principal Investigator 	2015-2019
	Institute for Choice, University of South Australia	
	 Visiting Scholar Fellowship, <i>Improving Choice Models</i> (Swait, PI) Total costs: \$20,000 (AUD) Role: Principal Investigator 	2015-2016
	University of Missouri Research Board	
	• Inference Strategies and Information Search in	2012-2014

	Financial Decision Making Total costs: \$32,000 Role: Principal Investigator (Yilmazer, Co-PI)	
	Subcontract from Applied Research Associates	
	 Intelligence Advanced Research Projects Activity, Office of the Director of National Intelligence Aggregative Contingent Estimation System Total costs: \$155,019 Role: Co-Principal Investigator (Merkle, co-PI) 	2012-2013
	University of Missouri Research Board	
	 Empirical Tests of Decision Models Based on Lexicographic Semiorders Total costs: \$33,748 Role: Principal Investigator 	2010-2012
	University of Missouri	
	 Arts and Sciences Alumni Organization Faculty Incentive Grant <i>Evaluating Models of Risk</i> Total costs: \$1,500 Role: Principal Investigator 	2013-2014
	University of Missouri Research Council	
	• Understanding Individuals' Ability to Search, Process and Interpret Financial Information Total costs: \$7,500 Role: Principal Investigator	2012-2013
	University of Missouri	
	 Arts and Sciences Alumni Organization An Empirical Analysis of Decision Making Models Based on Lexicographic Semiorders Total costs: \$1,500 Role: Principal Investigator 	2010-2011
Grant Funding		
as Co-I	National Institutes of Health (NIH)	2023-2028
	 Individual, contextual, and geospatial influences on decision under the influence of cannabis National Institute on Drug Abuse (NIDA) Total costs: \$3,914,541 Role: Co-Investigator (Metrik, J., PI) 	ons to drive
	Centers for Disease Control and Prevention (CDC)	

 Culture, Longitudinal Patterns, and Safety Promotion of Handgun Carrying Among Rural Adolescents: Implications for Injury Prevention The National Center for Injury Prevention and Control, Division for Violence Prevention First year award: \$461,284 Role: Advisory Board Member (Rowhani-Rahbar, PI) 	2020-2023
National Institutes of Health (NIH)	
 Mathematical Models of Intoxicated Risky Decision Making National Institute for Alcohol Abuse and Alcoholism (NIAA, F31 Pre-doctoral Grant Role: Co-Mentor (L. Hatz, PI) 	2019-2022 A)
Australian Research Council (ARC)	
 Choice foundations: Diagnostic tools for individual-level model development Total costs: \$73,177 (AUD) Role: Co-Investigator (Swait, PI) 	2018-2019
National Institutes of Health (NIH)	
• Psychology of Alcohol Use and Dependence Training National Institute for Alcohol Abuse and Alcoholism (NIAA, T32 Training Grant Role: Preceptor (McCarthy, PI; Sher, PI)	2017-2022 A)
Subcontract from the University of Victoria	
 Social Sciences and Humanities Research Council Insight Program #435-2012 Total costs: \$19,126 Role: Co-Investigator (Marley, McCausland, PIs) 	2014-2017
National Institutes of Health (NIH)	
 Neural Correlates of Decision Making Under Risk and Substance Misuse National Institute for Alcohol Abuse and Alcoholism (NIAA, F31 Pre-doctoral Grant Role: Consultant (K. McCarty, PI) 	2018-2021 A)
National Center for Responsible Gambling	
• Unique Research Opportunities in the Genetics and Epidemiology of Disordered Gambling Center of Excellence in Gambling Research Grant Role: Preceptor (W. Slutske, PI)	2017-2020
National Institutes of Health (NIH)	

	 Alcohol and Adult Development: Understanding Etiology and Consequences 5K05AA017242 National Institute for Alcohol Abuse and Alcoholism (NIAA. Total costs: \$195,139 Role: Mentee (Sher, PI) 	2015-2018 A)
Recently Submitted Grant Funding	 Centers for Disease Control and Prevention (CDC) Risky firearm behavior in justice-involved youth: Developing informed model of decision making to prevent firearm violence Total costs: \$1,607,288 Role: Co-Investigator (Gaylord-Harden, N., PI) Status: Scored but not funded (Impact Score: 48) Preparing for re-submission 	
	National Institutes of Health (NIH)	2023-2028
	 A rigorous test of dual process model predictions for problem involvement National Institute on Alcohol Abuse and Alcoholism (NIAAA Total costs: \$3,817,954 Role: Co-Investigator (Bartholow, B., PI) Status: Scored, 6th percentile 	
	National Institutes of Health (NIH)	2023-2028
	 CDACC: Data and Methodology Core National Institute on Alcohol Abuse and Alcoholism (NIAAA Total costs: \$896,524 Role: Co-Investigator (Steinley, D., PI) Status: Submitted 	A)
	National Institutes of Health (NIH)	2023-2028
	• CDACC: Project 4 National Institute on Alcohol Abuse and Alcoholism (NIAAA Total costs: \$1,444,225 Role: Co-Investigator (Bartholow, B., PI) Status: Submitted	A)
Peer-Reviewed Journal Articles (Students Listed in Italics)		e strengths spectives on
	 Davis-Stober, C. P., Dana, J., Kellen, D., McMullin, S. D., W. (in press). Better accuracy for better sciencethrough rando Perspectives on Psychological Science. 	

- Davis-Stober, C. P., Marley, A. A. J., McCausland, W. J., & Turner, B. M. (in press). An illustrated guide to context effects. *Journal of Mathematical Psychology*.
- van Boorn, J., Haaf, J. M., Stefan, A. M., Wagenmakers, E.-J., Cox, G. E., Davis-Stober, C. P., Heathcote, A., Heck, D., D. W., Kalish, M., Kellen, D., Matzke, D., Morey, R. D., Nicenboim, B., van Ravenzwaaij, D., Rouder, J. N., Schad, D. J., Shiffrin, R. M., Singmann, H., Vasishth, S., Veríssimo, J., Bockting, F., Chandramouli, S., Dunn, J. C., Gronau, Q. F., Linde, M., McMullin, S. D., Navarro, D., Schnuerch, M., Yadav, H., & Aust, F. (in press). Bayes factors for mixed models: A discussion. Computational Brain & Behavior.
- 58. Singmann, H., Kellen, D., Cox, G. E., Chandramouli, S. H., Davis-Stober, C. P., Dunn, J. C., Gronau, Q. F., Kalish, M. L., McMullin, S. D., Navarro, D. J., & Shiffrin, R. M. (in press). Statistics in the service of science: Don't let the tail wag the dog. *Computational Brain & Behavior*.
- Gaylord-Harden, N., Alli, J., Davis-Stober, C. P., & Henderson, H. (2022). A trauma-informed approach to understanding firearm decisionmaking among Black adolescents: Implications for prevention. *Preventive Medicine*, 165, 107305.
- McMullin, S. D., Motschman, C., Hatz, L., McCarthy, D., & Davis-Stober, C. P. (2022). Decision strategies while intoxicated relate to alcohol-impaired driving attitudes and intentions. *Psychology of Addictive Behaviors*, 36, 895-905.
- 55. Regenwetter, M., Davis-Stober, C. P., Smeulders, B., Fields, B., & Wang, C. (2021). (Ir)rationality of animal choice? A guide to testing transitivity. *The Quarterly Review of Biology*, 96, 169-204.
- Brusco, M., Davis-Stober, C. P., & Steinley, D. (2021). Ising formulations of some graph-theoretic problems in psychological research: Models and methods. *Journal of Mathematical Psychology*, 110, 102536.
- McCarthy, D. M., McCarty, K. N., Hatz, L., Prestigiacomo, C. J., Park, S., & Davis-Stober, C. P. (2021). Applying Bayesian cognitive models to decisions to drive after drinking. *Addiction*, 116, 1424-1430.
- 52. Kellen, D., Davis-Stober, C. P., Dunn, J. C., & Kalish, M. L. (2021). The problem of coordination and the pursuit of structural constraints in psychology. *Perspectives on Psychological Science*, 16, 767-778.
- 51. Chen, M., Regenwetter, M., & **Davis-Stober, C. P.** (2021). Collective choice may tell nothing about anyone's individual preferences. *Decision Analysis*, 18, 1-24.
- 50. Kazmierczak, R. A., Dhagat-Mehta, B., Gulden, E., Lee, L., Ma, L., Davis-Stober, C. P., Barnett, A. A., & Chabu, Y. C. (2020). Evaluations of CRC2631 toxicity, tumor colonization, and genetic stability in the TRAMP prostate cancer model. *Oncotarget*, 11, 3943-3958.

- Motschman, C. A., Warner, O. M., Wycoff, A. M., Davis-Stober, C. P., & McCarthy, D. M. (2020). Context, acute tolerance, and subjective response affect alcohol-impaired driving decisions. *Psychopharmacology*, 237, 3603-3614.
- Merkle, E. C., Saw, G., & Davis-Stober, C. P. (2020). Beating the average forecast: Regularization based on forecaster attributes. *Journal* of Mathematical Psychology, 98, 102419.
- Hatz, L., Park, S., McCarty, K., McCarthy, D., & Davis-Stober, C.
 P. (2020). Young adults make rational sexual decisions. Psychological Science, 31, 944-956.
- McCausland, W. J., Davis-Stober, C. P., Marley, A. A. J., Park, S., & Brown, N. (2020). Testing the random utility hypothesis directly. The Economic Journal, 130, 183-207.
- Kellen, D., Steiner, M., Davis-Stober, C. P., & Pappas, N. (2020). Modeling choice paradoxes under risk: From prospect theories to samplingbased accounts. *Cognitive Psychology*, 118, 101258.
- Park, S., Davis-Stober, C. P., Synder, H., Messner, W., & Regenwetter, M. (2019). Cognitive aging and tests of rationality. The Spanish Journal of Psychology, 22, E57.
- Davis-Stober, C. P. & Regenwetter, M. (2019). The 'paradox' of converging evidence. *Psychological Review*, 126, 865-879.
- Segert, S., & Davis-Stober, C. P. (2019). A general approach to prior adjustment. Journal of Mathematical Psychology, 91, 103-118.
- Heck, D. W., & Davis-Stober, C. P. (2019) Multinomial models with linear inequality constraints: Overview and improvements of computational methods for Bayesian inference. *Journal of Mathematical Psychology*, 91, 70-87.
- Rouder, J. N., *Haaf, J. M.*, Davis-Stober, C. P., & Hilgard, J. (2019). Beyond overall effects: A Bayesian approach to finding constraints across a collection of studies in meta-analysis. *Psychological Methods*, 24, 606-621.
- Zhao, W. J., Bhatia, S., & Davis-Stober, C. P. (2019). Optimal cue aggregation in the absence of criterion knowledge. *Journal of Behavioral Decision Making*, 32, 415-430.
- Brusco, M. J., Steinley, D., Hoffman, M., Davis-Stober, C. P., & Wasserman, S. W. (2019). On Ising models and algorithms for the construction of symptom networks in psychopathological research. *Psychological Methods*, 24, 735-753.
- 37. Davis-Stober, C. P., *McCarty, K. N.*, & McCarthy, D. M. (2019). Decision making and alcohol: Health policy implications. *Policy Insights* from the Brain and Behavioral Sciences, 6, 64-71.

- Davis-Stober, C. P., McCarthy, D., Cavagnaro, D. R., Price, M., Brown, N, & Park, S. (2019). Is cognitive impairment related to violations of rationality? An alcohol intoxication study testing transitivity of preference. Decision, 6, 134-144.
- Cavagnaro, D. R., & Davis-Stober, C. P. (2018). A model-based test for treatment effects with probabilistic classifications. *Psychological Methods*, 23, 672-689.
- Davis-Stober, C. P., Dana, J., & Rouder, J. (2018). Estimation accuracy in the psychological sciences. *PLoS ONE*, 13, e0207239.
- 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.
- Smeulders, B., Davis-Stober, C. P., Regenwetter, M., & Spieksma, 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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]
- 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]
- 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]
- Davis-Stober, C. P., & Brown, N. (2013). Evaluating decision maker "type" under p-additive utility representations. Journal of Mathematical Psychology, 57, 320-328.
- Regenwetter, M., & Davis-Stober, C. P. (2012). Behavioral variability of choices versus structural inconsistency of preferences. *Psychological Review*, 119, 408-416.
- Davis-Stober, C. P. (2012). A lexicographic semiorder polytope and probabilistic representations of choice. *Journal of Mathematical Psychology*, 56, 86-94.

- 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.
- 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.
- 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 2012 Exeter Prize for Best Paper in Experimental Economics, Decision Theory, and Behavioral Economics, University of Exeter Business School.
- 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]
- Regenwetter, M., Dana, J., & Davis-Stober, C. P. (2010). Testing transitivity of preferences on two-alternative forced choice data. *Frontiers* in Psychology, 1, 148.
- 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]
- 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.
- Rueda, M. R., Posner, M. I., Rothbart, M. K., & Davis-Stober, C. P. (2004). Development of the time course for processing conflict: An eventrelated 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.
- Davis-Stober, C. P., Broomell S., & Lorenz, F. (2006). Review of the book: Exploratory data analysis with MATLAB. *Psychometrika* 71, 107-108.

INVITED TALKS 38. **Davis-Stober, C. P.** (2021, July). An investigation of rational decision making. Invited talk for the Mellenbergh lecture series, Psychological Methods Department of the University of Amsterdam.

- 37. Davis-Stober, C. P. (2021, April). Investigating rational decision making across multiple domains. Invited talk at the Zurich Center for Neuroeconomics, Department of Economics, University of Zurich.
- 36. Davis-Stober, C. P. (2021, April). The paradox of converging evidence and possible remedies. Invited talk at the Department of Psychology at the University of Oklahoma as part of the 50th anniversary celebration of OU quantitative psychology.
- 35. **Davis-Stober, C. P.** (2021, February). A new perspective on modeling decision making within the addiction sciences. Invited talk at Johns Hopkins University Behavioral Pharmacology Research Unit.
- 34. Davis-Stober, C. P. (2020, November). Understanding the wisdom of crowds. Invited talk at the Department of Psychology, University of Illinois, Urbana-Champaign, IL.
- 33. Davis-Stober, C. P. (2019, November). *The 'paradox' of converging evidence*. Invited talk at the University of Memphis, Memphis, TN.
- 32. Davis-Stober, C. P. (2019, September). *The 'paradox' of converging evidence*. Invited talk at the University of Kansas, Lawrence, KS.
- 31. Davis-Stober, C. P. (2019, September). *The 'paradox' of converging evidence*. Invited talk at the University of Mannheim, Mannheim, Germany.
- 30. Davis-Stober, C. P. (2019, February). Understanding the individual within the crowd: An analysis of how individual forecasters contribute to ideal group forecasts. Invited talk at the Santa Fe Institute, Santa Fe, NM.

- 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.

- 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.
- Davis-Stober, C. P. (2013, August). A new perspective on non-compensatory decision-making: theoretic and empirical results. Keynote address presented at the 46th 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.
- 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.
- 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.

- 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 39th annual meeting of the Society for Mathematical Psychology, Vancouver, British Columbia, Canada.
- Selected Presentations
- Davis-Stober, C. P. (2022, July). *Better accuracy for better science...through random conclusions.* Paper presented at the annual meeting of the Society for Mathematical Psychology, Toronto, CA.
- Davis-Stober, C. P. (2019, November). *The 'paradox' of converging evidence*. Annual meeting of the Psychonomic Society, Montreal, CA.
- Hatz, L., McCarty, K., Park, S., McCarthy, D. M., & **Davis-Stober, C. P.** (2019, July). Associations between sexual decision making, behavior, and expectancies using order constrained Bayesian inference. Paper presented at the annual meeting of the Society for Mathematical Psychology, Montreal, CA.
- Heck, D., **Davis-Stober, C. P.**, & Cavagnaro, D. (2019, July). Testing informative hypotheses about latent classes of strategy users based on probabilistic classifications. Paper presented at the annual meeting of the Society for Mathematical Psychology, Montreal, CA.
- McCarty, K., Hatz, L., Segert, S., McCarthy, D. M., & Davis-Stober, C. P. (2019, July). Applying dynamic cognitive models of intertemporal choice to addiction. Paper presented at the annual meeting of the Society for Mathematical Psychology, Montreal, CA.
- Davis-Stober, C. P., Cavagnaro, D., Heck, D., & Park, S. (2019, July). Testing the separable representation of utility theories: An experiment evaluating monotonicity, transitivity, and double cancellation. Paper presented at the annual meeting of the Society for Mathematical Psychology, Montreal, CA.
- 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 34th 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 46th 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 45th 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 32nd 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 44th 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 49th 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 31st 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 43rd 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 75th annual meeting of the Psychometric Society, Athens, GA.
- Davis-Stober, C. P. (2008, July). A lexicographic semiorder polytope. Paper presented at the 41st 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 38th 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 38th 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 40th 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 40th 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 45th 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 37th 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 44th 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^{th} 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 46th 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 44th 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 40th 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.

Post-Doctoral Advisees	• Dr. Sara D. McMullin, Fall 2020-present
Graduate Student Advisees	 Dr. Nicholas Brown, graduated 2017, Data Scientist, Adobe Systems Inc. Ms. Hope Synder, Fall 2018-2019, Data Scientist, Carfax Inc. Mr. Sang Hyuk Park, Fall 2012-present Mr. Simon Segert, Fall 2016-Fall 2017
Courses Taught	 PERCEPTION AND HUMAN THOUGHT Taught during semesters: Fall 2020, Spring 2021, Fall 2021, Spring 2022 and Fall 2022. This is an online, asynchronous course on the neuroscience behind human perception. I designed this course for online, asynchronous education. RESEARCH METHODS II, Taught during semesters: Spring 2010, Spring

• 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, Spring 2016 and Spring 2022. 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 • Measuring and evaluating 'invisible labor' at the University of Missouri, Co-Project Lead, Fall 2022-present SERVICE

- Departmental Committee on Diversity and Inclusion, Member, Fall 2020present
- Campus Faculty Committee on Tenure, Fall 2021-present
- Advisory Committee to the Department Chair, Fall 2018-Spring 2019
- Big Data Search Committee, Department of Engineering, Fall 2017-Spring 2018
- 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