CHRIS DONKIN

Faculty of Psychology and Educational Science, LMU Munich
Munich, Germany
Email: christopher.donkin@lmu.de

EMPLOYMENT

2022 Professor
Faculty of Psychology and Educational Science
LMU Munich

2018 Associate Professor
School of Psychology
UNSW Sydney

2014 Senior Lecturer
School of Psychology
UNSW Sydney

2013-2015 Discovery Early Career Research Fellow
Australian Research Council

2012 Lecturer
School of Psychology
UNSW Sydney

2010 Post-Doctoral Fellow
Richard Shiffrin and Robert Nosofsky
Indiana University

EDUCATION

2010 PhD – The University of Newcastle
Supervisors: A/Prof. Scott Brown and Prof. Andrew Heathcote

2006 B.Math – The University of Newcastle

2005 B.Psych (Hons. Class I) – The University of Newcastle

AWARDS

2016 Psychonomic Society Early Career Award

2015 Willam K Estes Early Career Award (Society for Mathematical Psychology)

2013 Discovery Early Career Research Award ($375,000 Fellowship over 3 years)

2012 Best Article in Psychonomic Bulletin & Review

2011 Netherlands Organisation for Scientific Research Rubicon grant (€118,000 Fellowship over 2 years, declined)

2010 Research Higher Degree Excellence Award - Faculty of Science and IT (PhD thesis)

2007 Australian Postgraduate Award (PhD Scholarship)

Vice Chancellor's Award for Outstanding Candidates ($30,000 over 3 years)

2005 J.A.Keats Prize in Quantitative Psychology (Honors Thesis)

PEER REVIEWED JOURNAL PUBLICATIONS

* indicates equal contribution of the authors

In Press

Sloane, J., **Donkin, C.**, Newell, B. R., Singh, H., & Meyer, A. N. D. (in press, accepted 30/12/22). Managing interruptions to improve diagnostic decision-making: Strategies and recommended research agenda. *Journal of General Internal Medicine*.

Hotaling, J., **Donkin, C.**, Jarvstad, A., & Newell, B. R. (in press, accepted 05/09/22). MEM-EX: An exemplar memory model of decisions from experience. *Cognitive Psychology*.

Rubin, M., & **Donkin, C.** (in press, accepted 11/08/22). Exploratory Hypothesis Tests Can Be More Compelling Than Confirmatory Hypothesis Tests. *Philosophical Psychology*.

Sloane, J., Newell, B. R., Liang, G., & **Donkin, C.** (in press, accepted 2/7/22). The Mazing Race: Effects of interruptions and benefits of interruptions lags in a novel maze-like decision-making paradigm. *Journal of Experimental Psychology: Applied*.

Szollosi, A., **Donkin, C.,** & Newell, B. R. (in press, accepted 12/20/21). Towards non-probabilistic explanations of learning and decision making. *Psychological Review*.

2022

Donkin, C., Szollosi, A., & Bramley, N. (2022). Observing effects in various contexts won't give us general psychological theories. *Behavioral and Brain Sciences, 45,* e13.

Liang, G., Sloane, J. F., **Donkin, C.,** & Newell, B. R. (2022). Adapting to the algorithm: how accuracy comparisons promote the use of decision aid. *Cognitive Research: Principles and Implications, 7:14*.

2021

Szollosi, A., & **Donkin, C.** (2021). Arrested theory development: The misguided distinction between exploratory and confirmatory research. *Perspectives in Psychological Science, 16,* 717-724.

Aczel, B., Szaszi, B., …, **Donkin, C.**, …, & Wagenmakers, E.-J. (2021). Consensus-based guidance for conducting and reporting multi-analyst studies. *eLife, 10: e72185*.

2020

Luckman, A., **Donkin, C.,** & Newell, B. R. (in press, accepted 5/5/20). An evaluation and comparison of models of risky inter-temporal choice. *Psychological Review, 127,* 1097-1138.

Szollosi, A., Kellen, D., Navarro, D. J., Shiffrin, R. M., van Rooij, I., Van Zandt, T., & **Donkin, C.** (2020). Is preregistration worthwhile? *Trends in Cognitive Science, 24,* 94-95.

2019

Hotaling, J., Jarvstaed, A., **Donkin, C.,** & Newell, B. R. (2019). How to change the weight of rare events in decisions from experience. *Psychological Science, 30*, 1767-1779.

Vandekerckhove, J., White, C. N., Trueblood, J. S., Rouder, J. F., Matzke, D., Leite, F. P., **Donkin, C**., Devezer, B., Criss, A. H., & Lee, M. D. (2019). Robust diversity in cognitive science. *Computational Brain & Behavior, 2,* 271-276.

Szollosi, A., & **Donkin, C.** (2019). Neglected sources of flexibility in psychological theories: from replicability to good explanations. *Computational Brain & Behavior, 2,* 190-192.

Lee, M. D., Criss, A. H., Devezer, **Donkin, C.**, Etz, A., Leite, F. P., Matzke, D., Rouder, J. F., Trueblood, J. S., White, C. N., & Vandekerckhove, J. (2019). Robust modelling in cognitive science. *Computational Brain & Behavior, 2,* 141-153.

Ayling, L., Henry, A., Tracy, S., **Donkin, C.,** Kasparian, N., & Welsh, A. (2019). How well do women understand and remember information in labour versus late pregnancy: A pilot randomized study. *Journal of Obstetrics and Gynaecology, 39,* 913-921.

Szollosi, A., Liang, G., Konstantinidis, E., **Donkin, C.,** & Newell, B. R. (2019). Simultaneous underweighting and overestimation of rare events: Resolving a paradox? *Journal of Experimental Psychology: General, 148,* 2207-2217.

Krefeld-Schwalb, A., **Donkin, C.,** Newell, B. R., & Scheibehenne, B. (2019). Empirical comparison of the Adjustable Spanner and the Adaptive Toolbox Models of Choice. *Journal of Experimental Psychology: Learning, Memory, & Cognition, 45,* 1151-1165.

Dutilh, G., Annis, J., Brown, S. D., Cassey, P., Evans, N. J., Grassman, R. P. P. P., & Hawkins, G. E., Heathcote, A., Holmes, W. R., Krypotos, A-M., Kupitz, C. N., Leite, F. P., Lerche, V., Lin, Y-S., Logan, G. D., Palmeri, T. J., Starns, J. J., Trueblood, J. S., van Maanen, L., van

Ravenzwaaij, D., Vandekerckhove, J., Visser, I., Voss, A., White, C. N., Wiecki, T. V., Rieskamp, J., & **Donkin, C.** (2019). The quality of response time data inference: A blinded, collaborative assessment of the validity of cognitive models. *Psychonomic Bulletin & Review, 26,* 1051-1069.

2018

Baribault, B.*, **Donkin, C.***, Little, D. R., Trueblood, J. S., Oravecz, Z., van Ravenzwaaij, D., White, C. N., De Boeck, P., & Vandekerckhove, J.* (2018). Meta-studies for robust tests of theory. *Proceedings of the National Academy of Sciences, 115,* 2607-2612.

Oberauer, K., Lewandowsky, S., Awh, E., Brown, G. D. A., Conway, A., Cowan, N., **Donkin, C.,** Farrell, S., Hitch, G. J., Hurlstone, M., Ma, W. J., Morey, C. C., Nee, D. E., Schweppe, J., Vergauwe, E., & Ward, G. (2018). Benchmarks provide common ground for model development: Reply to Logie (2018) and Vandierendonck (2018). *Psychological Bulletin, 144,* 972-977.

Oberauer, K., Lewandowsky, S., Awh, E., Brown, G. D. A., Conway, A., Cowan, N., **Donkin, C.,** Farrell, S., Hitch, G. J., Hurlstone, M., Ma, W. J., Morey, C. C., Nee, D. E., Schweppe, J., Vergauwe, E., & Ward, G. (2018). Benchmarks for models of working memory. *Psychological Bulletin, 144,* 885-958

Luckman, A., Newell, B. R., & **Donkin, C.** (2018). Can a single model account for both risky choices and inter-temporal choices? Testing the assumptions of models of risky inter-temporal choice. *Psychonomic Bulletin & Review, 25,* 785-792.

Potter, K., **Donkin, C.,** & Huber, D. (2018). The elimination of positive priming with increasing prime duration reflects a transition from perceptual fluency to disfluency rather than bias against primed words. *Cognitive Psychology, 101,* 1-28.

Navarro, D. J., Perfors, A., Kary, A., Brown, S. D., & **Donkin, C.** (2018). When extremists win: Cultural transmission via iterated learning when priors are heterogeneous. *Cognitive Science, 42,* 2108-2149.

Reimers, S., **Donkin, C.,** & Le Pelley, M. E. (2018). Perceptions of randomness in binary sequences: Normative, heuristics, or both? *Cognition, 172,* 11-25.

2017

Luckman, A., **Donkin, C.**, & Newell, B. R. (2017). People wait longer when the alternative is risky: The relation between preferences in risky and inter-temporal choice. *Journal of Behavioral Decision Making, 30,* 1078-1092.

Van Ravenzwaaij, D., **Donkin, C.**, & Vandekerckhove, J. (2017). The EZ diffusion model provides a powerful test of simple empirical effects. *Psychonomic Bulletin & Review, 24,* 547-556.

Mannion, D. J., **Donkin, C.**, & Whitford, T. J. (2017). No apparent influence of psychometrically-defined schizotypy on orientation-dependent contextual modulation of visual contrast detection. *PeerJ, 5,* e2921.

Taylor, R., Thomson, H., Sutton, D., & **Donkin, C.** (2017). Does working memory have a single capacity? *Journal of Memory and Language, 93,* 67-81.

2016

Nosofsky, R. M., & **Donkin, C.** (2016). Qualitative contrast between knowledge-limited mixed-state and variable-resources models of visual change detection. *Journal of Experimental Psychology: Learning, Memory & Cognition, 42,* 1507-1525.

Ferreira, M. B., Mata, A., **Donkin, C.,** Sherman, S., & Ihmels, M. (2016). Analytic and heuristic processes in the detection and resolution of conflict. *Memory & Cognition, 44,* 1050-1063.

Kary, A., Taylor, R. & **Donkin, C.** (2016). Using Bayes factors to test the predictions of models: A case study in visual working memory. *Journal of Mathematical Psychology, 72,* 210-219. †Special Issue on 'Bayes Factors for Testing Hypotheses in Psychological Research: Practical Relevance and New Developments

Lufityanto, G., **Donkin, C.,** & Pearson, J. (2016). Measuring intuition in decision making. *Psychological Science, 27,* 622-634.

Cassey, P., Hawkins, G., **Donkin, C.,** & Brown, S. D. (2016) Using alien coins to test whether simple inference is Bayesian. *Journal of Experimental Psychology: Learning, Memory & Cognition, 42,* 497-503.

Donkin, C., Kary, A., Tahir, F., & Taylor, R. (2016). Resources masquerading as slots: Flexible allocation of visual working memory. *Cognitive Psychology, 85,* 30-42.

Nosofsky, R. M., & **Donkin, C.** (2016). Response-time evidence for mixed memory states in a sequential-presentation change-detection task. *Cognitive Psychology, 84,* 31-62.

2015

Hawkins, G., Hayes, B., **Donkin, C.,** Pasqualino, M., & Newell, B. R. (2015). A Bayesian latent-mixture model analysis shows that informative samples reduce base-rate neglect. *Decision*, *2,* 306-318.

Donkin, C., Newell, B. R., Kalish, M., Dunn, J. C., & Nosofsky, R. M. (2015). Identifying strategy use in category learning tasks: A case for more diagnostic data and models. *Journal of Experimental Psychology: Learning, Memory & Cognition, 41,* 933-948.

Pearson, D., **Donkin, C.**, Tran, S., Most, S., & Le Pelley, M. (2015). Cognitive control and counterproductive oculomotor capture by reward-related stimuli. *Visual Cognition, 23,* 41-66. †Special Issue on Reward Guides Visual Attention

Donkin, C., Tran, S. C., & Le Pelley, M. (2015). Location-based errors in change detection: A challenge for the slots model of visual working memory. *Memory & Cognition, 43,* 421-431. †Special Issue on Working Memory

Endres, M. J., Houpt, J. W., **Donkin, C.,** & Finn, P. R. (2015). Working memory capacity and redundant information processing efficiency. *Frontiers in Psychology*, 6, 594. †Special Issue on Modeling Individual Differences in Perceptual Decision Making

Donkin, C., Nosofsky, R. M., Gold, J., & Shiffrin, R. M. (2015). Verbal labeling, gradual decay, and sudden death in visual short-term memory. *Psychonomic Bulletin & Review*, *22,* 170-178.

Donkin, C., Chan, V., & Tran, S. (2015). The effect of blocking inter-trial interval on sequential effects in absolute identification. *Quarterly Journal of Experimental Psychology, 68,* 129-143.

2014

Ben-David, B., Eidels, A., & **Donkin, C.** (2014). Effects of aging and distractors on detection of redundant visual targets and capacity: Do older adults integrate visual targets differently than younger adults? *PLoS One, 9(12)*, e113551.

Vlassova, A., **Donkin, C.,** & Pearson, J. (2014). Unconscious information changes decision accuracy but not confidence. *Proceedings of the National Academy of Sciences*, *111,* 16214-16218.

Donkin, C., & Van Maanen, L. (2014). Pieron's Law is not just an artifact of the response mechanism. *Journal of Mathematical Psychology, 62,* 22-32.

Donkin, C., Tran, S., & Nosofsky, R. M. (2014). Landscaping analyses of the ROC predictions of discrete-slots and signal-detection models of visual working memory. *Attention, Perception & Psychophysics, 76,* 2103-2116. †Special Issue on Visual Working Memory

Rae, B., Heathcote, A., **Donkin, C.**, Averell, L., & Brown, S. D. (2014). The hare and the tortoise: Emphasizing speed can change the evidence used to make decisions. *Journal of Experimental Psychology: Learning, Memory and Cognition, 40,* 1226-1243.

Donkin, C., Little, D., & Houpt, J. (2014). Assessing the speed-accuracy trade-off effect on the capacity of information processing. *Journal of Experimental Psychology: Human Perception and Performance, 40,* 1183-1202.

Endres, M., **Donkin, C.**, & Finn, P. (2014). An information processing/associative learning account of behavioral disinhibition in externalizing psychopathology. *Experimental and Clinical Psychopharmacology, 22,* 122-132.

Houpt, J. W., Townsend, J. T., & **Donkin, C.** (2014). A new perspective on visual word processing efficiency. *Acta Psychologica, 145,* 118-127.

2013

Donkin, C.*, Nosofsky, R. M.*, Gold, J., & Shiffrin, R. (2013). Discrete-slots models of visual working-memory response times. *Psychological Review*, *120,* 873-902.

Newell, B., Van Ravenzwaiij, D., & **Donkin, C.** (2013). A quantum of truth? Querying the alternative benchmark for human cognition. *Behavioral & Brain Sciences , 36,* 300-302.

Little, D. R., Nosofsky, R. M., **Donkin, C.,** & Denton, S. E. (2013). Logical rules and the classification of integral-dimension stimuli. *Journal of Experimental Psychology: Learning, Memory and Cognition, 39,* 801-820.

2012

Donkin, C. & Nosofsky, R. M. (2012). A power-law model of psychology memory strength in short- and long-term recognition. *Psychological Science, 23,* 625-634.

Donkin, C., & Nosofsky, R. M. (2012). The form of short-term memory scanning: an investigation using response time distribution models. *Psychonomic Bulletin & Review, 19,* 363-394.

King, J., **Donkin, C.,** Korb, F., & Egner, T. (2012). Model-based analysis of context-specific cognitive control. *Frontiers in Psychology, 3*, 358. †Special Issue on Anticipation and the Control of Voluntary Action

2011

Nosofsky, R. M., Little, D. R., **Donkin, C.** & Fific, M. (2011). Short-term memory scanning viewed as exemplar-based categorization. *Psychological Review, 118,* 280-315.

Dodds, P. **Donkin, C.**, Brown, S., Heathcote, A & Marley, A. A. J. (2011). Stimulus-specific learning: Disrupting the bow effect in absolute identification. *Attention, Perception & Psychophysics, 73,* 1977-1986.

Dodds, P. **Donkin, C.**, Brown, S., & Heathcote, A. (2011). Increasing capacity: Practice effects in absolute identification. *Journal of Experimental Psychology: Learning, Memory and Cognition, 37,* 477-492.

Donkin, C., Brown, S., & Heathcote, A. (2011). Drawing conclusions from choice response time models: A tutorial using the Linear Ballistic Accumulator model. *Journal of Mathematical Psychology, 55,* 140-151.

Donkin, C., Brown, S., Heathcote, A. & Wagenmakers, E. J. (2011). Diffusion versus linear ballistic accumulation: Different models but the same conclusions about psychological processes? *Psychonomic Bulletin & Review, 18,* 61-69.

2010

Eidels, A. **Donkin, C.**, Brown, S., & Heathcote, A. (2010). Converging measures of workload capacity. *Psychonomic Bulletin & Review, 17,* 763-771.

2009

Donkin, C., Brown, S., & Heathcote, A. (2009). The over constraint of response time models: Rethinking the scaling problem. *Psychonomic Bulletin and Review, 16,* 1129-1135.

Donkin, C., Averell, L., Brown, S., & Heathcote, A. (2009). Getting more from accuracy and response time data: Methods for fitting the Linear Ballistic Accumulator. *Behaviour Research Methods, 41,* 1095-1110.

Donkin, C., Brown, & Heathcote, A. (2009). ChoiceKey: A real-time speech recognition program for psychology experiments with a small response set. *Behavioral Research Methods, 41,* 154-162.

Donkin, C., Brown, S., Heathcote, A., & Marley, A. A. J. (2009). Dissociating speed and accuracy in absolute identification: The effect of unequal stimulus spacing. *Psychological Research, 73,* 308-316.

2008

Brown, S., Marley, A. A. J., **Donkin, C.**, & Heathcote, A. (2008). An integrated architecture for absolute identification, *Psychological Review, 115*, 396-425.

PEER REVIEWED BOOK CHAPTERS

Donkin, C., & Brown, S. D. (in press). Response time modeling. In *The Stevens' Handbook of Experimental Psychology and Cognitive Neuroscience, Fourth Edition*

Cousineau, D., **Donkin, C.,** & Dumesnil, E. (2015). Unitization of features following training in a visual search task. In J. R. Raaijmakers, A. H. Criss, R. Goldstone, R. M. Nosofsky, & M. Steyvers (Eds.), *Cognitive modeling in perception and memory: A festhscrift for Richard M. Shiffrin.* Psychology Press.

Donkin, C., Rae, B., Heathcote, A., & Brown, S. D. (2015). Why is accurately labeling simple magnitudes so hard? A past, present and future look at simple perceptual

judgment. In J. Busemeyer, Z. J. Wang, J. Townsend, & A. Eidels (Eds.), *Oxford Handbook of Computational and Mathematical Psychology.* Oxford: Oxford University Press.

PEER REVIEWED CONFERENCE PAPERS

Ngo, J. & **Donkin, C.** (2019). The effect of stimulus presentation time on bias: A diffusion-model based analysis. *Proceedings of the 41st Annual Conference of the Cognitive Science Society.* Austin, TX: Cognitive Science Society.

Sloane, J., **Donkin, C.,** Newell, B. R., & Liang, G. (2019). What's lagging in our understanding of interruptions? Effects of interruption lags in sequential decision-making. *Proceedings of the 41st Annual Conference of the Cognitive Science Society.* Austin, TX: Cognitive Science Society.

Stewart, E., **Donkin, C.** & Le Pelley, M. (2019). Using eye gaze data to examine the flexibility of resource allocation in visual working memory. *Proceedings of the 41st Annual Conference of the Cognitive Science Society.* Austin, TX: Cognitive Science Society.

Liang, G., Konstantinidis, E., Szollosi, A., **Donkin, C.,** & Newell, B. R. (2017). The impact of decisions and incentives on the simultaneous underweighting and overestimation of rare events. *Proceedings of the 39th Annual Conference of the Cognitive Science Society.* Austin, TX: Cognitive Science Society.

Navarro, D. J., Perfors, A., Kary, A., Brown, S. D., & **Donkin, C.** (2017). When extremists win: On the behavior of iterated learning chains when priors are heterogeneous. *Proceedings of the 39th Annual Conference of the Cognitive Science Society.* Austin, TX: Cognitive Science Society.

Luckman, A., **Donkin, C.,** & Newell, B. R. (2015). Exploring the concept of utility: Are separate value functions required for risky and inter-temporal choice? In D.C. Noelle, R. Dale, A. S. Warlaumont, J. Yoshimi, T. Matlock, C. D. Jennings, & P. P. Maglio (Eds.), *Proceedings of the 37th Annual Conference of the Cognitive Science Society.* Austin, TX: Cognitive Science Society.

Hendrickson, A. T., Navarro, D. J., & **Donkin, C.** (2015). Quantifying the time course of similarity. In D.C. Noelle, R. Dale, A. S. Warlaumont, J. Yoshimi, T. Matlock, C. D. Jennings, & P. P. Maglio (Eds.), *Proceedings of the 37th Annual Conference of the Cognitive Science Society.* Austin, TX: Cognitive Science Society.

Lin, D., **Donkin, C.,** & Newell, B. R. (2015). The exemplar-confusion model: An account of biased probability estimates in decisions from description. In D.C. Noelle, R. Dale, A. S. Warlaumont, J. Yoshimi, T. Matlock, C. D. Jennings, & P. P. Maglio (Eds.), *Proceedings of the 37th Annual Conference of the Cognitive Science Society.* Austin, TX: Cognitive Science Society.

Donkin, C. & Shiffrin, R. (2011). Visual search as a combination of automatic and attentive processes. In L. Carlson, C. Hoelscher, & T. Shipley (Eds.), *Proceedings of the 33rd Annual Conference of the Cognitive Science Society.* Austin, TX: Cognitive Science Society.

Donkin, C., Shiffrin, R., Brown, S., & Heathcote, A. (2010). Does micro-variability make models more complex? A comparison between diffusive and linear evidence accumulation. In S. Ohlsson & R. Catrambone (Eds.), *Proceedings of the 32nd Annual Conference of the Cognitive Science Society.* Austin, TX: Cognitive Science Society.

Dodds, P., **Donkin, C.**, Brown, S., & Heathcote, A. (2010). Multidimensional Scaling Methods for Absolute Identification Data. In S. Ohlsson & R. Catrambone (Eds.), *Proceedings of the 32nd Annual Conference of the Cognitive Science Society.* Austin, TX: Cognitive Science Society.

Donkin, C., Heathcote, A., & Brown, S. (2009). Is the Linear Ballistic Accumulator model really the simplest model of choice response times: A Bayesian model complexity analysis? In A. Howes, D. Peebles, R. Cooper (Eds.), *9th International Conference on Cognitive Modeling – ICCM2009,* Manchester, UK.

Donkin, C., Heathcote, A., Brown, S., & Andrews, S. (2009). Non-decision time effects in the lexical decision task. In N. A. Taatgen & H. van Rijn (Eds.), *Proceedings of the 31st Annual Conference of the Cognitive Science Society.* Austin, TX: Cognitive Science Society.

Dodds, P., **Donkin, C.,** Brown, S., & Heathcote, A. (2009). Revisiting the limits of learning in absolute identification. In N. A. Taatgen & H. van Rijn (Eds.), *Proceedings of the 31st Annual Conference of the Cognitive Science Society.* Austin, TX: Cognitive Science Society.

GRANTS

2020-2022 ARC Discovery Project "Eyes on the prize: Investigation attentional economics" $357,838. 2020-2022. DP200101314. Cis: M. Le Pelley, C. Donkin.

2019-2021 ARC Discovery Project "Evidence-accumulation models of external influences on decision-making" $425,000. 2019-2021. DP190101675. CIs: C. Donkin, B. R. Newell.

2017-2019 ARC Discovery Project "Towards a process model of visual working memory" $295,000. 2017-2019. DP170101684. CIs: C. Donkin, M. Le Pelley.

2016-2018 ARC Discovery Project "Unifying decisions from experience and description" $290,558. 2016-2018. DP160101186. CIs: B. R. Newell, C. Donkin.

2013-2015 ARC Discovery Project "A new approach to understanding decision making" $229,000.00, 2013-2015, DP130100124. CIs: C. Donkin, S. D. Brown, Partner Investigators: G. Logan.

2013-2015 ARC Discovery Early Career Research Award "A model based approach to investigating short-term memory: Exploiting response time distributions" $374,943.00, 2013-2015, DE130100129. Sole investigator (Fellowship).

2011 Rubicon grant: Postdoctoral Fellowship for €118,000 over 2 years (declined). Netherlands Organisation for Scientific Research (NWO)

PHD SUPERVISION

Ashley Luckman, graduated in 2016, co-supervised with B. R. Newell

Arthur Kary, graduated in 2020

Aba Szollosi, graduated in 2021, co-supervised with B. R. Newell

Jeremy Ngo, graduated in 2021

Luke Mills, graduated in 2021, co-supervised with S. Kinoshita

Ed Stewart, graduated in 2021

Jenny Sloane, graduated in 2022

Garston Liang, graduated in 2022

Jiashun Wang, 2022 -

Luke Gelagin, 2022 -

REVIEWING ACTIVITY

Associate Editor, *Behavior Research Methods*, 2014-2018

Associate Editor, *Experimental Psychology*, 2015-2018

Consulting Editor, *Journal of Experimental Psychology: Human Perception & Performance*, 2015-

Editorial Board, *Journal of Memory and Language*, 2015-

Consulting Editor, *Psychonomic Bulletin & Review, 2016-*

Ad-hoc reviewer for *Nature Communication, Psychological Review; Perspectives on Psychological Science; Journal of Experimental Psychology: General; Cognitive Psychology; Cognition; Cognitive Science; Psychological Methods; Journal of*

Experimental Psychology: Learning, Memory & Cognition; Journal of Experimental Psychology: Human Perception & Performance; Journal of Memory & Language; Psychonomic Bulletin & Review; Journal of Mathematical Psychology; Current Directions in Psychological Science; Journal of Vision; Memory & Cognition; Attention, Perception & Psychophysics; Quarterly Journal of Experimental Psychology; Decision; Current Directions in Psychological Science; Emotion; Acta Psychologica; PLoS One; Canadian Journal of Experimental Psychology; Australian Journal of Psychology; Experimental Psychology; Behavior Research Methods; and the *Annual Cognitive Science Meeting*.

Reviewer for Australian Research Council *Future Fellowship, Discovery Projects,* and *Discovery Early Career Research Fellowship* Schemes, and for the National Science Foundation (United States) and Swiss National Science Foundation (Switzerland).

TEACHING

Ludwig Maximilian University of Munich

2022 P9.2 Masters-level Seminar

University of New South Wales

Course Coordinator/Convener

2016-2021 PSYC2001 (Research Methods 2)

Honours-level Elective

2012 PSYC3001 (Research Methods 3)

2012-2021 Honours-level Elective

Lecturer

2012-2021 PSYC2001 (Research Methods 2)

PSYC3211 (Cognitive Science)

University of Newcastle

2007 **Course Coordinator**

STAT2000 (Applied Statistics and Research Methods)

2006-2007 **Lecturer**

STAT1050 (Statistics for Business)

2004-2009 **Tutor**

Tutoring computer laboratories and tutorials for various Psychology and Statistics courses

INVITED TALKS

Donkin, C. (2021). Is preregistration worthwhile? Invited talk at *2021 Vision Science Society Conference*.

Donkin, C. (2021). Is preregistration worthwhile? Invited talk at the *Behavioural Insights for Business and Policy Research Network Luncheon*. Sydney, Australia.

Donkin, C. (2020). Is preregistration worthwhile? Invited talk at *University of Queensland*. Brisbane, Australia.

Donkin, C. (2020). Is preregistration worthwhile? Invited talk at *University of Melbourne*. Melbourne, Australia.

Donkin, C. (2018). Is the exploration part of our research program inefficient? Invited talk at the *Behavioural Insights for Business and Policy Research Network Luncheon*. Sydney, Australia.

Donkin, C., Vandekerckhove, J., et al. (2018). Embrace the random effects. Invited talk at *Macquarie University*. Sydney, Australia.

Donkin, C., Vandekerckhove, J., et al. (2016). Large N and radical randomization to test the robustness of empirical results. *Computational Approaches to Cognition.* Boston, USA.

Donkin, C. Vandekerckhove, J., Taylor, R., et al. (2016). Embrace the random effects. Invited talk at *University of Cologne*. Cologne, Germany.

Donkin, C. Vandekerckhove, J., Taylor, R., et al. (2016). Embrace the random effects. Invited talk at *University of Zurich.* Zurich, Switzerland.

Donkin, C. Vandekerckhove, J., Taylor, R., et al. (2016). Embrace the random effects. Invited talk at *University of Bristol*, England.

Donkin, C., Taylor, R., & Le Pelley, M. (2016). Slot models of visual working memory. Invited talk at *Bernstein Center for Computational Neuroscience, Berlin*, Germany.

Donkin, C., Taylor, R., & Le Pelley, M. (2016). Slot models of visual working memory. Invited talk at *University of Mannheim*, Germany.

Donkin, C. Vandekerckhove, J., Taylor, R., et al. (2016). Embrace the random effects. Invited talk at *University of Mannheim.* Mannheim, Germany.

Donkin, C., et al. (2016). Using many-labs projects to understand our theories and our data. Invited presentation at *University of Heidelberg,* Germany.

Donkin, C. (2016). The Stochastic Linear Ballistic Accumulator Model. Early Career Award talk at *Annual Meeting of the Society of Mathematical Psychology*. New Brunswick, USA.

Donkin, C. (2015). A critical look at slots models of visual working memory. Invited talk at *University of Cologne*. Cologne, Germany.

Donkin, C., Lin, D., & Newell, B. (2015). Exemplar Confusion in Decision Making Models. Invited talk at *Workshop of Memory and Decision Making*. Hoelstein, Switzerland.

Donkin, C. (2015). Slots models of visual working memory. Invited talk at *University of Zurich, Switzerland*. Zurich, Switzerland.

Donkin, C. (2015). Testing the predictions of models: Or how I learned to stop worrying and love the prior. Invited talk at *University of Basel, Switzerland*. Basel, Switzerland.

Donkin, C. (2014). Testing complex hypotheses with simple accumulators. Invited talk at *Workshop on Sequential Sampling Models for Cognitive and Perceptual Decision Making, Cognitive Science Meeting*. Quebec City, Canada.

Donkin, C. (2013). An introduction to Bayesian statistics. Invited talk at *University of New South Wales*. Sydney, Australia.

Donkin, C. Modeling response times in visual search. (2011). Invited colloquium at *University of Newcastle*. Newcastle, Australia.

Donkin, C. (2011). Using response time models to understand cognitive processes. Invited talk at *University of New South Wales*. Sydney, Australia.

Donkin, C. (2011). Using response time models to understand mental architecture. Invited talk at *University of California, Irvine*. Irvine, USA.

Donkin, C. (2011). Using response time models to understand mental architecture. Invited talk at *University of Basel*. Basel, Switzerland.

PUBLISHED ABSTRACTS AND PRESENTATIONS (PRESENTING AUTHOR)

Donkin, C. (2021). Strategic reasoning in false memory. *Australian Mathematical Psychology Conference*. Newcastle, Australia.

Donkin, C. (2020). Doing post hoc explanation right. *Annual Conference of the Psychonomic Society.* Online.

Donkin, C. (2020). Clarifying the role of mathematics in theory development. *Annual Meeting of the Society of Mathematical Psychology*. Online.

Donkin, C. (2020). Fit indices are redundant, at best. *Australian Mathematical Psychology Conference*. Sydney, Australia.

Donkin, C. (2019). External influences on decision making. *Subjective Probability, Utility, and Decision Making*. Amsterdam, Netherlands.

Donkin, C. (2019). Arrested Theory Development. *Annual Meeting of the Society of Mathematical Psychology.* Montreal, Canada.

Donkin, C. (2019). The limited utility of preregistration and direct replication in science. *Australasian Experimental Psychology Conference*. Wellington, New Zealand.

Donkin, C. (2018). Investigation. *Annual Conference of the Psychonomic Society.* New Orleans, USA.

Donkin, C. (2018). Inferring task-specific psychological representation. *Australian Mathematical Psychology Conference*. Perth, Australia.

Donkin, C. (2018). We should do estimation more. *Australasian Experimental Psychology Conference*. Sydney, Australia.

Donkin, C., Taylor, R., & Le Pelley, M. (2017). Testing all-or-none models of verbal working memory using a ranking task. *Annual Conference of the Psychonomic Society*. Vancouver, Canada.

Donkin, C., Taylor, R., & Pleskac, T. (2017). Hierarchical Bayesian meta-analysis. *Annual Meeting of the Society of Mathematical Psychology.* Warwick, England.

Donkin, C., Baribault, B., Vandekerckhove, J., et al. (2017). Large N and radical randomization. *Australasian Experimental Psychology Conference.* Shoal Bay, Australia.

Donkin, C., Taylor, R., & Le Pelley, M. (2017). Are verbal short- term memories all-or-none? *Australian Mathematical Psychology Society.* Brisbane, Australia.

Donkin, C., Dutilh, G., et al. (2016). The EZ diffusion model provides a powerful test of empirical effects: Simulations and a Many-Lab Validation Study. *Annual Conference of the Psychonomic Society.* Boston, USA.

Taylor, R., Nosofsky, R. M., & **Donkin, C.** (2016). Constraining the variable precision model of visual working memory. *Annual Meeting of the Society of Mathematical Psychology*. New Brunswick, USA.

Donkin, C., Taylor, R., & Nosofsky, R. M. (2016). Exploring Bayesian decision rules in models of visual working memory. *Annual Summer Interdisciplinary Conference.* Sal Gardena, Italy.

Donkin, C. (2016). What is Bayes bad for? Exploring Bayesian decision rules in models of visual working memory. *Australasian Experimental Psychology Conference.* Melbourne, Australia.

Donkin, C., Kary, A., Tahir, F., & Taylor, R. (2016). Resources masquerading as slots. Talk at *Australian Mathematical Psychology Conference*. Hobart, Australia.

Donkin, C., Lin, D., & Newell, B. (2015). Exemplar Confusion in Decision Making Models. Talk at *The 37th Annual Conference of the Cognitive Science Society.* Pasedena, USA.

Donkin, C. & Taylor, R. (2015). Is there a single working memory capacity? Talk at *Annual Meeting of the Society of Mathematical Psychology*. Newport Beach, USA.

Donkin, C. (2015). Is Psychology ready for Bayesian statistics? Talk at *Australasian Experimental Psychology Conference*. Sydney, Australia.

Donkin, C. (2015). Testing model predictions using Bayes factors and informed priors. Talk at *Australian Mathematical Psychology Conference*. Shoal Bay, Australia.

Donkin, C., Kary, A., Tahir, F., & Taylor, R. (2014). Resources masquerading as slots: Flexible allocation of visual working memory. Paper presented at *Annual Conference of the Psychonomic Society*. Long Beach, USA.

Donkin, C., Tran, S., & Nosofsky, R. M. (2014). ROC predictions of slots and resources models of visual working memory: Bayes Factors and Landscaping. Paper presented at *Annual Meeting of the Society of Mathematical Psychology*. Quebec City, Canada.

Donkin, C., Nosofsky, R. M., Gold, J., & Shiffrin, R. M. (2014). Verbal labeling, gradual decay, and sudden death in visual short-term memory. Paper presented at *Australasian Experimental Psychology Conference*. Brisbane, Australia.

Donkin, C., Tran, S., & Nosofsky, R.M. (2014). Landscaping analyses of the ROC predictions of discrete-slots and signal-detection models of visual working memory. Paper presented at *Australasian Mathematical Psychology Conference*. Canberra, Australia.

Donkin, C., Nosofsky, R. M., Gold J., & Shiffrin, R. M. (2013). Discrete-slots models of visual working memory response times. Talk at the *Annual Conference of the Psychonomic Society.* Toronto, Canada.

Donkin, C., Nosofsky, R. M., Gold, J., & Shiffrin, R. M. (2013). Discrete-slots models of visual working memory response times. Talk at the *Annual Meeting of the Society of Mathematical Psychology.* Berlin, Germany.

Donkin, C., Nosofsky, R. M., Gold, J., & Shiffrin, R. M. (2013). Discrete-slots models of visual working memory response times. Talk at the *Annual Summer Interdisciplinary Conference.* Cortina, Italy.

Donkin, C., Nosofsky, R. M., Kalish, M., Dunn, J., & Newell, B. (2013). Identifying classification strategy in information-integration categorization tasks. Talk at *Australasian Mathematical Psychology Conference*. Sydney, Australia.

Donkin, C., Eidels, A., & Ben-David, B. (2012). Parametric and non-parametric capacity: An application to aging. Talk at the *Annual Meeting of the Society of Mathematical Psychology.* Columbus, USA.

Donkin, C., & Nosofsky, R. M. (2012). A power-law of psychological memory strength in short-term and long-term recognition. Talk at the *Australasian Experimental Psychology Conference.* Sydney, Australia.

Donkin, C., & Nosofsky, R. M. (2012). A power-law of psychological memory strength in short-term and long-term recognition. Talk at the *Australasian Mathematical Psychology Conference.* Adelaide, Australia.

Donkin, C., & Nosofksy, R. M. (2011). The form of short-term memory scanning: an investigation based on response time distributions. Talk at the *Annual Meeting of the Society of Mathematical Psychology.* Boston, USA.

Donkin, C. & Shiffrin, R. (2011). Visual search as a combination of automatic and attentive processes. Talk at *The 33rd Annual Conference of the Cognitive Science Society.* Boston, USA.

Donkin, C., & Nosofksy, R. M. (2011). Dual- or single-process scanning of short-term memory: Evidence based on response time distributions. Paper presented at the *Annual Summer Interdisciplinary Conference.* Caldes de Boi, Spain.

Donkin, C. & Shiffrin, R. M. (2011). A quantitative framework for visual search. Talk at *Australasian Mathematical Psychology Conference*. Melbourne, Australia.

Donkin, C., Shiffrin, R., Brown, S., Heathcote, A., & Wagenmakers, E-J. (2010). Diffusion versus Linear Ballistic Accumulation: Different Models for Response Time, Same Conclusions about Psychological Mechanisms? Poster presented at the *Annual Conference of the Psychonomic Society.* St.Louis, USA.

Donkin, C., Cousineau, D., & Shiffrin, R. (2010). Modeling RT in guided visual search. Paper presented at the *Annual Conference of the Psychonomic Society*. St.Louis, USA.

Donkin, C., Shiffrin, R., Brown, S., & Heathcote, A. (2010). Does micro-variability make models more complex? A comparison between diffusive and linear evidence accumulation. Poster at *The 32nd Annual Conference of the Cognitive Science Society.*

Donkin, C., Brown, S., Heathcote, A., & Wagenmakers, E-J. (2010). Diffusion and LBA: Different models, same conclusions? Paper presented at the *Annual Meeting of the Society for Mathematical Psychology,* Portland, USA.

Donkin, C., Cousineau, D., & Shiffrin, R. (2010). A model of visual search. Paper presented at the *Annual Summer Interdisciplinary Conference*. Bend, USA.

Donkin, C., Heathcote, A., Brown, S., & Andrews, S. (2009). Non-decision time effects in the lexical decision task. Poster at *The 31st Annual Conference of the Cognitive Science Society.* Amsterdam, Netherlands.

Donkin, C., Brown, S., Heathcote, A., & Marley, A. A. J. (2009). The scaling properties of response time models. Paper Talk at *Annual Meeting of the Society for Mathematical Psychology*, Amsterdam, Netherlands.

Donkin, C., Heathcote, A., & Brown, S. (2009). Is the Linear Ballistic Accumulator model really the simplest model of choice response times: A Bayesian model complexity analysis? Poster at *9th International Conference on Cognitive Modeling,* Manchester, UK.

Donkin, C., Heathcote, A., Brown, S., & Andrews, S. (2009). Non-decision time effects in the lexical decision task. Talk at *Australasian Experimental Psychology Conference*. Wollongong, Australia.

Donkin, C., Brown, S., Heathcote, A., & Marley, A. A. J. (2008). Dissociating speed and accuracy in absolute identification. Talk at *Annual Meeting of the Society for Mathematical Psychology*, Washington DC, USA.

Donkin, C., Brown, S.D. & Heathcote, A. (2008). Why both response latency and choice are important in absolute identification. Talk at *Australasian Experimental Psychology Conference*. Freemantle, Australia.

Donkin, C., Brown, S., & Heathcote, A. (2008). The LBA: A simple math model. Talk at *CBMHR Postgraduate and Postdoctoral Conference*. Newcastle, Australia.

Donkin, C. Brown, S., Heathcote, A., & Dodds, P. (2007). Testing a truism: people cannot learn absolute identification. Talk at *Australasian Mathematical Psychology Conference*. Canberra, Australia.

Donkin, C., Dodds, P., Brown, S., & Heathcote, A. (2007). Learning in absolute identification. Talk at *Psychology Postgraduate Conference*. Newcastle, Australia.