Murray S. Bennett

The Ohio State University
Department of Psychology · College of Arts & Sciences
 1835 Neil Avenue Columbus, Ohio 43210
 | murray.bennett92@gmail.com

EDUCATION

Ph.D. Cognitive Psychology *2023*
University of Newcastle, Australia
Collective Workload: Human Performance in Competitive and Collaborative Tasks

B.S. Psychology (1st *Class Honours*) *2018*
University of Newcastle, Australia
Mental Representation of Symbolic Numerals

EMPLOYMENT

Postdoctoral Scholar *2024 – present*
Department of Psychology, The Ohio State University
Human social judgements and AI confidence

Postdoctoral Researcher *2022 – 2024*
Psychology Department, University of Texas at San Antonio
Human and AI perception for melanoma identification

Data Analyst *2021 – 2022*
Hunter New England Health Local Health District
FluTracking and COVID-19 Survey, Australia

Research Assistant *2021*
School of Biomedical Sciences and Pharmacy, University of Newcastle
Physiological correlates of cognitive workload

Research Assistant *2019 – 2022*
School of Psychology, University of Newcastle
Cognitive processing and decision making methodology and assessment

Research Internship *2018 – 2019*
Center for Brain and Mental Health Research, University of Newcastle
Cognitive load of helicopter pilots using 3-D helmet displays

ACHIEVEMENTS & AWARDS

2024 Best presentation People's Choice Award, Virtual Mathematical Psychology Conference

2023 Best poster presentation, UT Health Postdoctoral Research Forum.

2019 Summer research internship, University of Newcastle's Center for Brain and Mental Health

2018 Best presentation award, University of Newcastle Student Research Conference. Faculty of Science Commendation List, University of Newcastle

PUBLICATIONS

Journal Publications

11. Gronau, Q. F., **Bennett, M. S.**, Brown, S. D., Hawkins, G. E., and Eidels, A. (2023). Do choice tasks and rating scales elicit the same judgments? *Journal of Choice Modelling*, 49:100437

10. **Bennett, M. S.** (2023). Collective workload: Human performance in competitive and collaborative tasks. *NOVA repository*

9. **Bennett, M. S.**, Hedley, L. G., Love, J., Houpt, J. W., Brown, S. D., and Eidels, A. (2022). Human performance in competitive and collaborative human–machine teams. *Topics in Cognitive Science*

8. John, A. R., Singh, A. K., Do, T.-T. N., Eidels, A., Nalivaiko, E., Gavgani, A. M., Brown, S. D., **Bennett, M., S.**, Lal, S., Simpson, A. M., et al. (2022). Unraveling the physiological correlates of mental workload variations in tracking and collision prediction tasks. *IEEE Transactions on Neural Systems and Rehabilitation Engineering*, 30:770–781

7. Garrett, P. M., **Bennett, M. S.**, Hsieh, Y.-T., Howard, Z. L., Yang, C.-T., R., D., and Eidels, A. (2022). Wheel of fortune: A cross-cultural examination of how expertise shapes the mental representations of familiar and unfamiliar numerals. *Computational Brain & Behavior*, 5(1):45–59

6. **Bennett, M. S.**, Mullard, R., Adam, M. T., Steyvers, M., Brown, S. D., and Eidels, A. (2020). Going, going, gone: competitive decision-making in dutch auctions. *Cognitive Research: Principles and Implications*, 5(1):1–22

In Preparation or Under Review

5. **Bennett, M. S.**, Houpt, J. W., Wenger, M. J., Townsend, J. T., and Mark, L. (2025). Enhancing melanoma detection by combining continuous feature estimates from human perception and computer vision. *Preprint*, https://osf.io/ctg9s

4. Houpt, J. W., **Bennett, M. S.**, Silvas, E., and Chen, Y.-Y. (2025). Applied configural processing. *In preparation*

3. Hedley, L. G., **Bennett, M. S.**, Love, J., Brown, S. D., and Eidels, A. (2025a). Benchmarking the benchmark: A novel simulation benchmark for team performance. *Under review*

2. Hedley, L. G., **Bennett, M. S.**, Love, J., Brown, S. D., and Eidels, A. (2025b). Division of labour and team performance: Human-human teams compared to hybrid human-machine teams. *Under review*

Conference Proceedings

1. Hedley, L. G., **Bennett, M. S.**, Love, J., Houpt, J. W., Brown, S. D., and Eidels, A. (2023). The relationship between teaming behaviours and joint capacity of hybrid human-machine teams. In *Proceedings of the Annual Meeting of the Cognitive Science Society*, volume 45

Reviewing Activity

Ad hoc reviewer for: *Cognitive Research: Principles and Implications, Computational Brain and Behaviour, and Topics in Cognitive Science, Communications Psychology*

PRESENTATIONS

Invited Talks

2024 3. *Human-AI perceptual judgmeents of malignant melanoma*. Psychology Department, The University of Newcastle, Australia.
2. *Human-AI collaboration*. Department of Psychological Sciences at Tarleton State University.
1. *Collaborative and competitive 'Team Spirit'*. Joint meeting of the Newcastle Cognition Lab and UC Irvine's MADLAB.

Platform Presentations

15. **Bennett, M. S.**, Alaukik, A., Smith, C., and Kvam, P. (2025, July 25-28). Processing independence in implicit attitudes: An sft and grt analysis. In *Meeting of the Society for Mathematical Psychology/ICCM*

14. **Bennett, M. S.** and Houpt, J. W. (2024, June 17-21). A grt examination of the abcs for melanoma identification with comparison to a deep convolutional neural network. In *Virtual Meeting of the Society for Mathematical Psychology/ICCM*

13. **Bennett, M. S.** and Houpt, J. W. (2024, March 27-30). Using ai and human feature perception to improve melanoma identification. In *Southwestern Psychology Association Convention*

12. **Bennett, M. S.** and Houpt, J. W. (2023, October 6-7). Improving human perception and computer vision identification of malignant melanoma. In *The Association for Research in Memory, Attention, Decision-making, Imaging, Language, Learning, and Organization*

11. **Bennett, M. S.** and Houpt, J. W. (2023, July 18-21). A bradley-terry-luce model-based analysis of human perception and computer vision to identify melanoma lesions. In *Meeting of the Society for Mathematical Psychology*

10. **Bennett, M. S.** (2021, April 9-11). Cognitive workload and performance of collaborative and competitive teams. In *Australasian Experimental Psychology Society*

9. **Bennett, M. S.** (2021, February 11-12). Cognitive workload and performance of collaborative and competitive teams. In *Australasian Mathemetical Psychology Conference, Newcastle*

8. **Bennett, M. S.** (2020, October 16). Effects of competitive and collaborative team environments on individual cognitive load. In *Centre for Brain and Mental Health Research Post-Graduate and Postdoctoral Conference, Newcastle*

7. **Bennett, M. S.** (2020, July 20-31). An iterated prospect theory model for the dutch auction. In *Society for Mathematical Psychology/ICCM Virtual Conference*

6. **Bennett, M. S.**, Mullard, R., Adam, M. T., Steyvers, M., Brown, S. D., and Eidels, A. (2020, February 12-14). Competitive decision-making in dutch auctions. In *Australasian Mathematical Psychology Conference, Sydney*

5. Eidels, A. and **Bennett, M. S.** (2019, November 13). Workload capacity in collaborative and competitive group performance. In *Configural Processing Consortium, Montréal*

4. **Bennett, M. S.** and Eidels, A. (2019, August 2). Mental workload in a team based dual task. In *Centre for Brain and Mental Health Research Post-Graduate Conference, Newcastle*

3. **Bennett, M. S.**, Eidels, A., and Garrett, P. M. (2019, February 14-16). The cost of errors: Confusion analysis and the mental representation of numerals. In *Australasian Mathematical Psychology Conference, Melbourne*

2. **Bennett, M. S.**, Garrett, P. M., Yang, C.-T., and Eidels, A. (2018, November 14). Mental representation of familiar and unfamiliar numerals. In *Configural Processing Consortium, New Orleans*

1. **Bennett, M. S.** and Eidels, A. (2018, November 9). At sixes and sevens: The mental representation of familiar and unfamiliar symbolic numerals. In *University of Newcastle Psychology Student Research Conference, Ourimbah*

Poster Presentations

3. **Bennett M., S.** (2025, November 20-23). Integrating human and ai perception for enhanced melanoma diagnosis. In . *66th Annual Meeting of the Psychonomic Society*

2. **Bennett M., S.** (2023, September 19). Improving human perception and computer vision identification of malignant melanoma. In . *San Antonio Postdoctoral Research Forum*

1. **Bennett, M. S.** (2023, September 22). Human perception of melanoma features vs computer vision algorithm. In . *University of Texas at San Antonio Postdoctoral Showcase*

PROFESSIONAL EXPERIENCE

Teaching

Course Instructor

Course	Institute	Year	Enrolled	Rating	Description
Introduction to Psychology	UTSA	2024	80	4.6/5	Introduction to the study of and scientific approaches to attention, sensation, perception, emotion, motivation, learning, memory, problem solving, personality, mental and behavioural development, abnormal behaviour, and social behaviour in group settings.

Lab Demonstrator and Grader

Course	Institute	Year	Enrolled	Rating	Description
Psychology Graded Honours Thesis	UoN	2021	3		Honours thesis grading
Advanced Research Methods & Design	UoN	2021	40		Bayesian analysis and quantitative and qualitative experimental design.
Cognitive Psychology	UoN	2020	90		Demonstrate, content generation.
		2019	60		

Accreditation

2024	Centre for the Integration of Research, Teaching and Learning (CIRTL) Associate

Committee Activity

2024	UTSA Postdoctoral Appreciation Week Organisational Committee
2023	Member of the UTSA Postdoctoral Association

General Service

2025	Session chair - Society for Mathematical Psychology Conference. Graduate presentations judge - The Ohio State University's Hayes Advanced Research Forum.
2024	Postdoctoral Mentor of the Year judge - UTSA. Abstract reviewer - Southwestern Psychological Association Convention. Postgraduate research conference poster judge - UTSA. Postgraduate writing club founder and organiser - UTSA.
2023	3-minute thesis judge - UTSA.
2022	Honours conference chair - University of Newcastle School of Psychology.
2020-21	Board of Directors student representative - Newcastle University Sport.

Outreach & Community Engagement

2021 Online article published on The Conversation, Australia: *Why the competitive spirit can take over in auctions and how you can stay in control.*

MEMBERSHIPS

Society for Mathematical Psychology
Southwestern Psychological Association
Psychonomic Society