# Manikya Alister

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Education	Doctor of Philosophy (Cognitive Science)	2022 – 2025 (expected)
	The University of Melbourne	Melbourne, Australia

Thesis topic: Learning from others: A computational and experimental study

**Bachelor of Psychological Science (Honours Class 1)** 2017 – 2020

The University of Queensland (UQ)

Brisbane, Australia

Honours GPA: 7/7 (WAM = 92%), cumulative 4-year GPA: 6.8/7 Honours thesis: *Prioritisation under pressure: The effect of* 

deliberation time on multiple goal pursuit

Universidad de Los Andes Santiago, Chile

GoUandes Intensive Latin American Business and January 2018

Politics Short Term Global Exchange

Honors and Awards University Medal (awarded to the top 5% of first class honours 2020

graduates across the whole university)

**Australian Psychological Society Prize** (for graduating ranked #1 in 2020 my honours cohort of approx. 250 students)

**McElwain Prize** (best honours thesis in the School of Psychology)

**High Achiever Award** (for obtaining a perfect GPA of 7 across the 2020

whole calendar year) 2019

2018

2020

**Dean's Commendation** (for obtaining a GPA of 6.6 or greater 2020

across the whole semester)

20192018

Sem. 2 2017

Publications

**Alister, M.**, McKay, KT., Sewell, DK., Evans, NJ., (2022). An Evidence Accumulation Account of the Cognitive Processes Underlying the Gaze Cueing Effect: A Computational Modelling Investigation. *PsyArXiv.* 10.31234/osf.io/yu7e5

McKay, KT., Talipski, LA., Grainger, SA, **Alister, M.**, Henry, JD. (2022). How Does Ageing Affect Social Attention? A Test of Competing Theories using Multi-Level Meta-Analysis. *The Journals of Gerontology: Series*. 10.1093/geronb/gbac052

**Alister, M.,** Vickers-Jones, R., Sewell, DK., Ballard, TJ., (2021). How do we Choose Our Giants? Perceptions of Replicability in Psychological Science. *Advancements in Methods and Practices in Psychological Science*. doi.org/10.1177/25152459211018199

## PhD Research

# Learning from others: A computational and experimental study of how social reasoning shapes human inference

Computational models of cognition are useful tools for describing how people integrate information when reasoning, but – despite the fact that humans mainly get their information from one another – these models have until recently been applied to abstract and idealised situations and neglected the role that social inference plays when reasoning in the real world. We know that people update their beliefs differently based on new evidence if that evidence comes from a trusted friend rather than an adversary, but we do not yet have precise accounts for how or why this happens. My PhD work will build on research in A/Prof Perfors' lab exploring how models that incorporate *social sampling* (i.e., the assumptions people make about the agent providing the information) can account for behaviour in more realistic social contexts.

# Professional Research Experience

### Research Assistant, UQ: Computational modelling of gaze cueing

Supervisor: Dr. Nathan J Evans Jan 2021 – Dec 2021 In this project, I am used evidence accumulation models to better understand the nature of the gaze cueing effect. My main duties included running recovery analysis simulations, developing theoretically informed variants of the Drift-Diffusion Model, fitting them to data using individual-level and hierarchical Bayesian parameter estimation techniques, and writing up the findings for publications.

#### Qualitative Analyst, University of Melbourne: RepliCATS Project

Supervisor: Dr. Martin Bush

July 2021 – Present

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My main duties include coding free text responses from a survey asking researchers to evaluate the quality of social science research.

#### Research Assistant, UQ: Perception and action lab

Supervisor: A/Prof. Ada Kritikos Summer 2019-2020 I was hired to facilitate a project investigating the self-reference effect and decision-making. My main duties included organising, running, and supervising testing sessions on UQ campus.

#### Summer Research Scholar, UQ: Literature review and analysis

Supervisor: Dr. Timothy J. Ballard

Summer 2019-2020

In this project, I received a scholarship to work on a literature review of studies that investigated how people pursue multiple goals with competing deadlines, with the aim of obtaining raw data for a large, multi-study modelling analysis.

My main duties included searching academic databases, cleaning any data that was obtained, and running preliminary statistical analyses using R Studio.

#### Summer Research Scholar, UQ: Replicability in psychological science

Supervisors: Dr. Timothy Ballard, Dr. David Sewell

Summer 2018-2019
In this project, I received a scholarship to help develop a registered report investigating how different study attributes influence perceptions of replicability among psychological scientists. I worked on this project for over two years after the official scholarship was completed and was first author of the resulting manuscript. My main duties included creating a survey using Qualtrics, cleaning and analysing data using RStudio, extracting meta-data of 10,000+ journal articles from the Web of Science, and co-writing a registered report.

Professional Teaching Experience

#### Academic Tutor, University of Melbourne

Semester 1 2022

PSYC30013: Research Methods for Human Inquiry

My main duties included the R programming language and statistics to two in-person classes and marking assignments.

**Lead Academic Tutor, UQ School of Psychology**Semester 2 2021

PSYC1030: Introduction to Developmental, Social, and Clinical Psychology

After just one semester, I was promoted to lead tutor for this subject.

My main duties as lead tutor included working directly under the course coordinator to help guide, mentor, and organise the other tutors. I also continued to perform the normal teaching and marking duties expected of any tutor.

#### Academic Tutor, UQ School of Psychology

Semesters 1 & 2 2021

PSYC1030: Introduction to Developmental, Social, and Clinical Psychology

PSYC2371: The Science of Everyday Thinking

My main duties included independently teaching multiple classes per week planning and facilitating weekly workshops, and marking assignments.

**Private Tutor, Union College & St Johns College** March 2021 – present Union and St Johns college are on-campus residential facility for students at the University of Queensland. My main duties included tutoring residents in several psychology, neuroscience, and research methodology subjects.

Other Professional

#### General Assistant, Institute for Continuing and TESOL Education

March 2017 - April 2021

Experience

This institute provided English Language courses and international development training for overseas students and government departments. My main duties included scheduling, organising, setting up, and providing tech support for various events within the institute such as meetings, English classes, welcome events, tours, and activities for visiting students.

Scholarships & Funding

UQ Summer Research Scholarship **\$3,500** 

Summer

2019-2021

\$7,000 total

UQ Summer Research Scholarship **\$3,500** 

Summer

2018-2019

Talks &

#### **International Conference Presentations**

Presentations
\*Presenter

**Manikya Alister**\*, Kate T. McKay, David K. Sewell, Nathan J. Evans (poster accepted, scheduled for November 2021), *A computational modelling investigation of the mechanisms subserving the gaze-cueing effect*, 62nd Meeting of the Psychonomic Society

Timothy Ballard\*, **Manikya Alister**, Raine Vickers-Jones, David K. Sewell (2020, November), *How do we choose our giants? Perceptions of replicability in psychological science*, 61st Meeting of the Psychonomic Society

#### **Domestic Conference Presentations**

**Manikya Alister**\*, Raine Vickers-Jones, David K. Sewell, Timothy Ballard (2021, February), *Perceptions of replicability in psychological science*, Australasian Mathematical Psychology Conference, Newcastle (recording)

Manikya Alister, Scott Herbert\*, Timothy Ballard (2021, February), *Pursuing Multiple Goals under Time Pressure: A Computational Investigation*, Australasian Mathematical Psychology Conference, Newcastle (recording)

Manikya Alister\*, Raine Vickers-Jones, David K. Sewell, Timothy Ballard (2020, November), *Perceptions of replicability in psychological science*, UQ Centre for Perception & Cognitive Neuroscience Mini-Conference, Brisbane

#### Seminar Talks

**Manikya Alister**\*, Kate T. McKay, David K. Sewell, Nathan J. Evans (2021, May). *A computational modelling investigation of the gaze-cueing effect* Statistics, Modelling, and Cognition Group seminar, UQ School of Psychology

**Manikya Alister**\*, Raine Vickers-Jones, David K. Sewell, Timothy Ballard (2021, March), *Perceptions of replicability in psychological science*, Centre for Research in Social Psychology Seminar, UQ School of Psychology

Manikya Alister\*, Scott Herbert, Timothy Ballard (2020, March), *The effect of deliberation time on multiple goal pursuit*, Centre for Business and Organisational Psychology Seminar, UQ School of Psychology

#### Skills **Programming**

Proficient in: R. Familiar with: Stan, Google Cloud SDK, JavaScript, HTML

Data analysis

Specialising in statistical & computational modelling using Bayesian methods

Research design

With experience designing and implementing novel experiments, replications, and surveys across multiple platforms and software.

**Spoken Languages** 

English (native), Spanish (conversational)

Other programs/software

Github, LaTeX, SPSS, Jamovi, Qualtrics, Microsoft Office

# Professional Memberships

#### **Australasian Mathematical Society**

Jan 2022 - Present

## 2022 AMPC Planning Committee

Jan 2021 - Feb 2022

My duties include assisting with planning the annual meeting of the Australasian Mathematical Psychology Conference which will be held in Brisbane, Australia in 2022

## **Australian Psychological Society**

March 2021 - March 2022

Honorary membership for winning the Australian Psychological Society Prize

Referees Provided upon request