

Human Research Ethics Application

Application Management Information

Application ID: GF0001~~46~~

Created date: ~~29/0805/10~~/2017

Originating Application ID: GF00011

**This is the earliest application from which this application (GF0001~~46~~) was copied.*

Parent Application ID: GF00011

**This is the immediate predecessor from which this application (GF0001~~46~~) was copied.*

Version Number: ~~42~~

Application submitted to: University of Queensland; University of Queensland Human Research Ethics Committee (A, B, and LNR).

The applicant has requested that this ethics application be considered under the Negligible risk review pathway.

Section 1 – Core Information

Pre-application conditions

The applicant/s have acknowledged that:

1. The HREA has been designed for ethics review of human research, as defined in the [National Statement](#).
2. Adequate resources must be available to conduct this research project.
3. All relevant institutional policies pertaining to the conduct of this research project should be considered and adhered to.
4. Research activities must not commence until ethics approval (and site authorisation, if appropriate) has been provided.

Project Overview

Q1.1 Project Title:

Generalizability of Models of Response Time

Q1.2 Summary of the research project:

Evidence accumulation models have been used to characterise response time and accuracy data for projects investigating the speed-accuracy trade-off (SAT). Applying a formal model of the decision-making processes allows us to disentangle time costs associated with different components of decision-making. Recent work has suggested that traditional evidence accumulation accounts of the SAT may be incomplete (e.g., Rae et al., 2014). The aim of this project is to establish how reliable the phenomena predicted by these models are. Experiments will involve the administration of a perceptual discrimination task (e.g., judging the orientation of a line as horizontal or vertical) with instructions manipulating whether speed or accuracy is emphasised. Analyses will involve observing estimated model parameters and comparisons between competing models at the individual and group level. Comparing results to previous observations will contribute to establishing the reliability and generalisability of model predictions in the SAT literature.

Q1.3 Which category/ies of research best describes the project?

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Cognitive Experimental Psychology
Evidence Accumulation Modelling
Perceptual Psychology

Q1.4 In what environments will the research be conducted?

- Clinic(s)
- Community centre(s)
- Cultural/religious organisation(s)
- Hospital(s)
- **Online**
- Private residence(s)
- Professional organisation(s)
- Public place(s)
- Research institute(s)
- School system(s)
- **University(ies)**
- Workplace(s)

Q1.5 What organisation/entity has overall responsibility for this project?

The University of Queensland

Q1.6 Describe how this research project is currently, or will be, funded.

Participant remuneration for testing using Amazon Mechanical Turk at a rate of approximately \$5 per hour, for sessions either 30 minutes or one hour in duration (i.e. approximately \$2.50 - \$5.00 per participant). The exact rate for Amazon Mechanical Turk is dependent on the current market conditions. Funding for these participants is covered by existing credit on the Mechanical Turk account. Participant remuneration for testing through UQ Psychology's Paid Participant Pool, at a rate of \$20 per hour for testing sessions either 30 minutes or one hour in duration (i.e. \$10 or \$20 per participant).

Q1.7 Anticipated starting date of the research project:

As soon as ethics and any other relevant approvals have been provided.

Q1.8 Anticipated duration of the research project:

3 Years

Project Team

Name: Dr Timothy Ballard

Q1.9.4 Email Address:

t.ballard@uq.edu.au

Q1.9.5 Is this person the contact person for this application?

Yes

Q1.9.5.1 Email Address:	t.ballard@uq.edu.au
Q1.9.5.2 Telephone Number:	0733469506
Q1.9.5.3 Mailing Address	Room 331, McElwain Building (24A), St Lucia, The University of Queensland, 4067

Q1.9.6 Is this person a student on this project?

No

Q1.9.7 Institutional affiliation and position:

Postdoctoral Research Fellow, The University of Queensland

Q1.9.8 Staff ID (optional):

Q1.9.9 ORCID Identifier (optional):

Q1.9.10 Position on the research project:

Chief Investigator/Researcher

Q1.9.11 Does this person have authorisation to sign the application on behalf of all members of the research team?

Yes

Q1.9.12 Research activities Dr Timothy Ballard will be responsible for:

Project design, supervising research students and other personnel, data analysis, and mathematical modelling.

Q1.9.13 Expertise relevant to the research activity:

Tim's research sits at the intersection of organisational and cognitive psychology. His main areas of interest are motivation, decision making, and performance. Tim is an experienced researcher with a strong interest in research methods, in particular formal/computational modelling and Bayesian statistics. Tim has numerous publications in decision-making research, making him an experienced and competent researcher for the current project.

Name: Dr David Sewell

Q1.9.4 Email Address:

d.sewell@uq.edu.au

Q1.9.5 Is this person the contact person for this application?

No

Q1.9.6 Is this person a student on this project?

No

Q1.9.7 Institutional affiliation and position:

Lecturer, The University of Queensland

Q1.9.8 Staff ID (optional):**Q1.9.9 ORCID Identifier (optional):****Q1.9.10 Position on the research project:**

Chief Investigator/Researcher

Q1.9.11 Does this person have authorisation to sign the application on behalf of all members of the research team?

No

Q1.9.12 Research activities Dr David Sewell will be responsible for:

Project design, supervising research students and other personnel, data analysis, and mathematical modelling.

Q1.9.13 Expertise relevant to the research activity:

David's research investigates the basic mechanisms underlying associative learning, memory, and decision-making. His work typically involves a combination of experimental and cognitive modeling techniques to address these issues. David is an experienced researcher in this field and has numerous publications relevant to the current project.

Name: Miss Gina Fisher

Q1.9.4 Email Address:

g.fisher@uq.edu.au

Q1.9.5 Is this person the contact person for this application?

No

Q1.9.6 Is this person a student on this project?

No

Q1.9.7 Institutional affiliation and position:

Research Assistant, The University of Queensland

Q1.9.8 Staff ID (optional):**Q1.9.9 ORCID Identifier (optional):****Q1.9.10 Position on the research project:**

Associate/Assistant/Sub-/Co- Investigator/Researcher

Q1.9.11 Does this person have authorisation to sign the application on behalf of all members of the research team?

No

Q1.9.12 Research activities Miss Gina Fisher will be responsible for:

Study piloting, participant recruitment, data collection.

Q1.9.13 Expertise relevant to the research activity:

Gina completed her degree in Psychological Science (Hons) in 2016. Gina has been involved with relevant research since the beginning of 2017. She has adequate experience reviewing literature, collecting data, recruiting participants and analysing data for the purposes of her role in this project.

Disclosure of interests**Q1.10 Do any members of the research team (including persons not listed in this application), have any financial or non-financial interests related to this research?**

No

Restrictions**Q1.11 Are there any restrictions or limits on publication of data or dissemination of research outcomes of this project?**

No

Evaluations**Q1.12 Has the scientific or academic merit of the research project been evaluated?**

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No

Q1.13 Has this research project had prior ethics review?

No

Q1.14 Will any further or additional specialised review of this application be sought?

No

Setting of research

Q1.15 Will this project be conducted at multiple sites?

No

Q1.16 Will separate institutional approvals or authorisations be required prior to commencing research at each site?

No

Section 2 – Research Details and Participants

Q1.17 The following research methods will be used in the research project:

Research Method	Status
Action research	X
Biospecimen analysis research	X
Data linkage research	X
Ethnographic research	X
Epidemiological research	X
Interventional/Clinical Trials research	X
Observational research	X
Survey/Interview/Focus Group research	X
Textual analysis research	X
None of the above	✓

Q1.18 The research will be conducted with the following:

Participation	Status
Human beings (via active participation), including their associated biospecimens and/or data.	✓
Human biospecimens only	X
Data associated with human beings only (i.e. as the primary object of research)	X

Q1.19 The research will involve the following participants:

Participants	Status
Women who are pregnant and the human fetus	X
Children and young people	X
People highly dependent on medical care who may be unable to give consent	X
People with a cognitive impairment, intellectual disability or mental illness	X
People in dependent or unequal relationships	X
People who may be involved in illegal activities	X
People in other countries	X
Aboriginal and Torres Strait Islander peoples	X

Method Specific Questions

Participant Specific Questions

Recruitment Questions

Q2.1.1 Indicate how you will identify and recruit participants for your research, referencing any relevant sections of your Project Description/Protocol as appropriate.

The sample will be recruited via either a) the UQ first year psychology research participation scheme, whereby students enrolled in first year psychology courses sign up on a website and receive course credit for participation, b) the UQ paid research participation scheme, whereby members of the UQ local community sign up on a similar website and receive financial remuneration (\$20 per hour) for their travel and time spent participating, or c) crowdsourcing platforms such as Amazon Mechanical Turk and recruitment services such as Crowdfunder or Qualtrics whereby participants sign up to complete the study via the web and receive financial remuneration (e.g., \$5 per hour) for their time spent participating. It is expected that participants will range in age from 17 to 60, with an equal distribution of males and females, who will have no significant health issues that would affect their ability to provide voluntary, informed consent.

Q2.1.2 How will your recruitment strategy take account of the ethical considerations relevant to the specific people you are recruiting?

The recruitment methods described are commonly used and professionally regulated. The perceptual discrimination tasks involved in the project require basic perceptual judgements that would not be severely influenced by demographic variables. The recruitment methods are appropriate for the aims and methods of this research project.

Consent Questions

Q2.2.1 Indicate by reference the relevant section/s of your Project Description/Protocol that address/es consent.

The 'Participant Commitment' section of the Project Description addresses procedures for establishing participant consent.

Q2.2.2 Will you be obtaining consent from some or all participants to participate in the research?

Yes for all participants

Q2.2.2.1 What is the scope of consent that you will be seeking?

- Specific
- Extended
- Unspecified

Q2.2.2.2 How will consent be obtained?

- Written
- Verbal
- Implied

Q2.2.2.3 Are you proposing to obtain consent using limited disclosure?

NoYes

Q2.2.2.3.1 Are you proposing to obtain consent using active concealment or planned deception?

No

Q2.2.2.3.1.1.1 How will you ensure that the research meets the guidance provided in National Statement 2.3.1 regarding the use of limited disclosure without active concealment or planned deception?

As outlined in the project description, we will be investigating potential differences in results arising from differing recruitment methods. Participants are not told about this research question/area of investigation, as it would compromise the behavioural results. It is necessary to withhold this information because informing participants of the aim would alter their behaviours, and disallow us from gaining a valid understanding of the effect participation incentive has on performance. The nature of the task and all activities participants will be asked to complete are fully explained, so there is no active concealment and deception. Therefore, withholding information of one of the areas of investigation will not interfere with participants' ability to provide informed consent. Participants will be informed on all areas of investigation after their participation is completed, via the debrief sheet. They are provided with the researchers contact information, and contact information to speak to someone involved with the ethical clearance of the study in the case they felt misinformed about the study prior to the provision of their consent.

Q2.2.3 Are family members, authorised representatives or any others involved in the participants' decision to participate in the research?

No

Q2.2.4 Will there be an opportunity to confirm or re-negotiate consent during the research project?

No

Q2.2.6 Describe any ethical considerations related to the approach to consent that you will be seeking and your strategies for addressing and managing these issues.

Participants will be informed about the nature of research activities and what is involved in participation prior to indicating consent via a button-press. They are also informed that they are free to withdraw from the study at any time without any negative consequences, and that they will still receive remuneration for the study. Therefore, there is no cause for ethical concern about the way participants convey their consent.

Q2.2.7 Are you proposing to use an opt-out approach with respect to some or all of the participants?

No

Q2.2.8 Are you requesting a waiver of the requirement for consent with respect to some or all participants?

No

Risk Questions

Q 2.3.1 Describe the risks and burdens associated with your research, referencing any relevant sections of your [Project Description](#) as appropriate.

No physical or psychological harm will result from participating in the current project. See 'Research Activities' in the project description for more details on the method. The task requires participants to make a judgement about a perceptual stimuli (i.e. whether a line is tilted to the left or the right), and respond via a button press. Participants are given appropriate opportunities for breaks during the task.

Q 2.3.2 Describe how these risks will be mitigated and managed.

Participants will be made aware beforehand that they can withdraw from the study at any time. In the case that they feel uncomfortable during the task, participants are free to discontinue.

Benefit Questions

Q2.4.1 Describe the benefits associated with your research, referencing any relevant sections of your [Project Description](#) as appropriate.

The 'Background' section of the project description provides a rationale for the current project. Primary benefits include contributing to the speed-accuracy trade-off literature by establishing the generalisability and reliability of phenomena predicted by models of decision making. Consolidating modelling accounts of the speed-accuracy trade-off is beneficial for understanding how to optimise performance for difficult, time critical tasks.

Q2.4.2 Explain how benefits of this research justify any risks or burdens associated with the research.

Participants' time and effort in completing the research tasks will provide a sufficient amount of data for modelling. This data will allow us to assess the reliability of findings in the speed-accuracy trade-off literature, offering considerable advancements to our current understanding in this research area.

Q2.4.3 How will you manage participants' expectations of the perceived benefit of participating in the research?

Participants will read information about the study prior to participating. The nature of the study is not emotionally sensitive, and the findings of the study are unlikely to be of significant personal importance to participants. A debrief sheet will be administered to participants after the study that includes contact details of the experimenters. Participants are free to inquire about the study findings and their implications if they are interested when they become available.

Section 3 – Data and Privacy

Data Characteristics

Q3.1 Indicate the type of information/data you will be collecting for this project.

- ☐ Personal information
- ☐ Sensitive information
- ☐ Health information
- ☒ Not personal information

Q3.2 Indicate the type of information/data you will be using in this project:

- ☐ Personal information
- ☐ Sensitive information
- ☐ Health information
- ☒ Not personal information

Q3.3 Indicate the degree of identifiability of information/data you will be collecting for this project.

- ☐ Individually identifiable information
- ☐ Re-identifiable (coded) information
- ☒ Non-identifiable information

Q3.4 Indicate the degree of identifiability of information/data you will be using in this project.

- ☐ Individually identifiable information
- ☐ Re-identifiable (coded) information
- ☒ Non-identifiable information

Q3.5 Describe any ethical considerations relating to the collection and/or use of the information/data in this project.

See 'Data Collection/Gathering and Techniques' and 'Data management' sections in the project description for information relevant to this section.

The only information collected from participants is their gender, age, and button presses (i.e. left or right button) for the perceptual discrimination task. Participant names will not be recorded or linked to any of their data. Participants recruited through the first year course-credit pool will have their names ticked off from a list to attain course-credit, however, there will not be a way to connect this list to the data they provide. Participants being remunerated through the UQ paid participant pool will have to sign their name on a list for financial remuneration records. Again, these names are not able to be connected to specific participant data.

Q3.6 Identify the source/s of the information/data that you will be collecting and/or using in this project.

- ☒ Individual participants
- ☐ Relatives or associates of participants
- ☐ Medical/health/mental health record
- ☐ Electoral roll
- ☐ Held by a law enforcement agency
- ☐ Publicly held database (Commonwealth)
- ☐ Publicly held database (State or local)
- ☐ Privately held database

Q3.7 Describe any ethical considerations relating to the source of information/data as indicated in the response to the previous question.

There should be no ethical concern regarding the data collecting from participants. Participants will understand the nature of the responses that they will be providing, and will convey consent before providing any responses. Responses are made in response to arbitrary, non-sensitive, perceptual stimuli.

Q3.8 Was the information/data that you are using previously collected for a purpose other than research?

No

Activities Planned for/with Data

Q3.9 Do you plan to disclose any personal information/data in this project to a third party?

Yes

Q3.9.1 To whom do you plan to disclose the personal information/data?

See 'Data Management' in the project description. Once the study has been completed, the data will be available, free of charge, to anyone interested in the research or who wants to analyse these data themselves.

Q3.9.2 Describe how you will protect the privacy of the participants and the security of the personal information/data that you will be disclosing?

Individual's participating in the study cannot be connect to particular datasets or responses. Third party individuals who wish to access the data will have no information about them asside from their age, gender and perceptual judgements.

Q3.10 How will you protect the privacy of participants and non-participants in any notes and/or publications arising from your research.

Individual's participating in the study cannot be connect to particular datasets or responses. Third party individuals who wish to access the data will have no information about them asside from their age, gender and perceptual judgements.

Q3.11 Are there any restrictions on your ability to assure the confidentiality of participants?

No

Q3.12 Do you plan to share any individual research results obtained during this research to the participants?

No

Q3.13 Describe how you will handle any secondary or incidental findings that arise from the analysis of personal information/data.

There will be no personal information/data analysed.

Q3.14 Describe how the information/data will be stored, accessed, archived and/or destroyed.

See 'Data Management' in the project description. Data will be stored in an anonymised manner and all identifying information about the participant will be removed. Data will be stored in files accessible only to those of the research team for mathematica modelling. When the project is complete, data will be available to those interested in analysing it upon request. We will not have control over the data management procedures of these third parties. Prior to becoming 'open data' however, the data will not be able to be connected to any individuals.

Q3.15 Describe any ethical considerations relating to the storage of, access to or destruction of information/data in this project.

Since the data is not connected to any individuals, and is not sensitive in nature, there should be no significant ethical concerns regarding the data storage procedures described above.

Q3.16 Will the outcomes of this project be disseminated to the participants?

Yes

Q3.16.1.1 Describe how the outcomes of the project will be disseminated to the participants, or refer to the relevant section/s of your Project Description/Protocol which deals with this matter.

Participants will be given contact details of the experimenters in a debrief sheet. They are informed that if they are interested in the study and would like to know about the findings/outcome, they can contact the experimenters to receive an abstract of the study when it becomes available.

Q3.16.1.2 Describe any ethical considerations relating to any dissemination of outcomes to the participants.

There are no concerns regarding the provision of study findings to participants, as the data they provide for the study is not personally significant or sensitive.

Q3.17 Describe any foreseeable future activities for which information/data collected and/or used in this project may be made available.

As described, other researchers who wish to analyse the data will be free to do so. In this case, de-identified data files will be provided on request.

Q3.18 Describe any ethical considerations relating to the planned or possible future use of information/data in this project.

No data collected from this project is identifiable, personally significant, or sensitive. Therefore, there are no ethical concerns for sharing the data with other researchers for use in their own analyses or studies.

Section 4 – Attachments and Declarations

Attachments

The following documents have been attached to this HREA.

Project Description/Protocol

See attachment *ProjectDescription_SAT.docx*

Other attachments

Attachment File Name	Attachment Description
<i>Consent&DebriefForms.docx</i>	Consent form and debrief sheet

Investigator Team Declarations

The research team has certified that:

- All information in this application and supporting documentation is correct and as complete as possible;
- I have read and addressed in this application the requirements of the National Statement and any other relevant guidelines;
- I have familiarised myself with, considered and addressed in this application any relevant legislation, regulations, research guidelines and organisational policies;
- All relevant financial and non-financial interests of the project team have been disclosed; and
- In the capacity of a supervisor, as applicable, I have reviewed this application and I will provide appropriate supervision to the student(s) in accordance with the arrangements specified in this application and those associated with the student's educational program.

Dr Timothy Ballard

See attachment *ElectronicSignature.gif*.