THE UNIVERSITY OF MELBOURNE HUMAN RESEARCH ETHICS COMMITTEE

APPLICATION SUMMARY FOR APPROVAL OF HUMAN RESEARCH



1. ADMINISTRATION DETAILS

ETHICS ID: 1749270.2

TITLE: Decision-Making in Source Memory

APPLICATION TYPE: Minimal Risk RESPONSIBLE Smith, PROF Philip Leigh

RESEARCHER:

RESPONSIBLE HEAG: Psychological Sciences HESC: Psychology Health and Applied

Sciences

ADMINISTERING 5120 - Melbourne School Of ADMINISTERING

DEPARTMENT: Psychological Sciences **CENTRE**:

(if applicable)

2. REQUEST FOR AMENDMENT DETAILS

DATE OF SUBMISSION: 26-Jul-2019

1.1 Nature of and Reason for Amendment

Change in recruitment method is requested to allow for recruitment of Research Experience Program (REP) participants in addition to paid participants. The reason for this change is to lessen the financial cost of participant recruitment in subsequent experiments.

1.2 Impact on Documentation

Changes are required to the plain language statement, debriefing statement and ethics application form to include the alternate method of participant recruitment and incentives for participation (REP credit).

1.3 Possible Inconvenience or Risks to Participants

Participating in this experiment through REP will constitute a time commitment for undergraduate students. No other changes to participant inconveniences or risks.

1.4 Actions to be taken by Researchers to Reduce Risks

The duration of each experimental session will be limited to a maximum of 60 minutes, with an expected completion time of between 45 to 60 minutes.

1.5 Expected Date of Implementation of Amendment to Research

19-Aug-2019

1.6 Possible Affect on Funding Arrangements

1.7 Possible Implications for Compliance with Legislative Requirements

3. MINIMAL RISK CHECKLIST REVIEW

The responses to the Minimal Risk Checklist are summarised below.

| Risk Assessment Topics | None identified |
|----------------------------|-----------------|
| Risk Assessment Procedures | None identified |
| Risks to Researchers | None identified |

| Vulnerability Assessment | None identified |
|--------------------------|-----------------|
| Overseas Research | None identified |

4. PROJECT DETAILS

PROJECT TYPE: Supervised Student Research Project - Honours

RESEARCH INVOLVES: Funded Research (internal or external funding)

BRIEF DESCRIPTION: A source memory task in one in which a participant is asked to recall the context in which an item was

remembered. In this project, this context is the physical location along a circle where a word is presented. This paradigm has been used in the past to distinguish between two competing models of how source memory works, one where people sometimes guess at random and another model where responses do not involve guessing at all (Harlow & Donaldson, 2012). By looking at response time data in addition to accuracy, this study aims to bring new information into this ongoing discussion.

PROPOSED DURATION OF WHOLE RESEARCH From: FEB-2019 To: OCT-2021

PROJECT:

PROPOSED DATE TO COMMENCE DATA COLLECTION: 19-Aug-2019

5. PERSON DETAILS

Responsible Researcher

| Name | Smith, Prof Philip | | Department | 5120 - Melbourne School Of Psychological Sciences |
|------------------------------------|------------------------------|---|---------------|--|
| Person Type | Staff | | Centre | |
| Phone Number | 8344 6378 | | Email Address | philipls@unimelb.edu.au |
| | | nelors Degree, Adelaide University , Adelaide University | | |
| Experience & Sk | ills Relevant to the Project | Project Professor, has supervised honours research projects in the past, content is in field of academic expertise. | | onours research projects in the past, content is in |
| Additional Training Required | | | | |
| Ethics Training Already Undertaken | | | | |

Student Researcher

| Name | Zhou, Jason | | Department | |
|--|-------------|--|--|--------------------------------|
| Person Type | Student | | Centre | |
| Phone Number | | | Email Address | jasonz1@student.unimelb.edu.au |
| Qualifications | | | a student currently undertaking PSYC40006: Theories and Professional ctice, which covers material pertinent to ethical research. | |
| | | Student, will defer any emergencies, unexpected outcomes, or contingencies to esponsible researcher. | | |
| Additional Traini | ng Required | | | |
| | | eted Melbourne undergraduate subject PSYC30021: Psychological e: Theory & Practice in 2016. | | |
| Student Supervisor(if applicable) Philip Smi | | nith | | |

Co researcher

| Name | Osth, Dr Adam | Department | 5120 - Melbourne School Of Psychological Sciences |
|--------------|---------------|---------------|--|
| Person Type | Staff | Centre | |
| Phone Number | +61383440884 | Email Address | adam.osth@unimelb.edu.au |

Page 2 Date: 12-AUG-2019 00:54:32

| Qualifications | Bachelors Degree (Honours), University of California - Santa Cruz PhD, The Ohio State University Masters (Coursework & Research), The Ohio State University |
|---|---|
| Experience & Skills Relevant to the Project | Has expertise in the field of memory and memory function, as well as the modelling techniques which will be used in this project. |
| Additional Training Required | |
| Ethics Training Already Undertaken | |

6. ADDITIONAL QUESTIONS

6.1 **Sponsored Projects**

Source of Funding: Internal

External Sponsors Identified:

Sponsors:

Participants Informed of Funding

Yes - Participants will be informed of the source of funding (ARC Grant) through the benefits section of the attached Plain Language Statement.

Source:

7. ATTACHMENTS

PLEASE ENSURE YOU ATTACH A PAPER COPY OF EACH OF THE FOLLOWING ATTACHMENTS:

| Category | Description | Attached Via Themis | Hard Copy Only |
|-----------------------------|---|---------------------|----------------|
| Application | Revision to Application form to reflect REP participation | Yes | No |
| Consent Form | Revised Consent form with point for the emailing of research results. | Yes | No |
| Debriefing Statement | Second revision. | Yes | No |
| Miscellaneous | | Yes | No |
| Plain Language Statement | Second Revision of PLS | Yes | No |

8. SIGNATURE

RESPONSIBLE RESEARCHER

| Name | Signature | Date |
|-------------------|-----------|------|
| Prof Philip Smith | | |

HEAG/DEPARTMENT USE ONLY

Please tick ONE of the following:

| The HEAG/Head of Department recommends the amendment for approval by the HESC. | |
|--|--|
| The HEAG approves this amendment as the project was previously approved as a minimal risk project or as a project within a program and the amendment presents no additional risks. | |

Comments / provisos:

HEAG CHAIR

| Name of HEAG Chair | Signature | Date |
|----------------------|-----------|------|
| Dr Patrick Goodbourn | | |

[Note: If the HEAG Chair is also a researcher involved in this project, the Request for Amendment should be signed by another authorised member of the HEAG. If the Department does not have access to a HEAG the Request for Amendment should be signed by the Head of Department]

Page 4 Date: 12-AUG-2019 00:54:32

Human Research Ethics Project Application Amendment Changes

Ethics ID: 1749270

Project Application Form

| Section | 1.1 |
|--------------------|---|
| Subsection | Research Design |
| Page Reference | 2 |
| Original Wording | Participants drawn from the Melbourne School of Psychological Sciences paid SONA scheme will be asked to complete four sessions. Each session is estimated to take between 50 to 70 minutes to complete, and consists of 36 blocks, with 9 trials per block for a total of 324 trials per session. Each trial consists of seeing a word positioned on a circle, and then after a delay, participants will be cued with the word, and then indicate using a computer mouse where on the circle the cued word was located." There are two conditions: long delay (7 minutes) and short delay (2 minutes). The delay between study and test in the long condition will be occupied by two other blocks. |
| Amended Wording | Participants drawn from the Melbourne School of Psychological Sciences undergraduate REP system and paid SONA scheme will be asked to complete four experimental sessions. Each session is estimated to take between 45 to 60 minutes to complete. Each trial consists of seeing a word positioned on a circle, and then after a delay, participants will be cued with the word, and then indicate using a computer mouse where on the circle the cued word was located. |
| Summary of Changes | Included undergraduate REP in description of participants. Removed specific description of the experimental task, which no longer includes a delay manipulation |

| Section | 2.2 |
|------------|-------------|
| Subsection | Recruitment |

| Page Reference | 5 |
|--------------------|---|
| Original Wording | Recruitment will be conducted using the |
| | Melbourne School of Psychological Sciences paid |
| | SONA scheme. |
| Amended Wording | Recruitment will be conducted using both the Melbourne School of Psychological Sciences paid SONA scheme and the undergraduate REP program. |
| Summary of Changes | Included undergraduate REP as a means of recruitment. |

| Section | 2.2 |
|--------------------|--|
| Subsection | Participant Incentives |
| Page Reference | 5 |
| Original Wording | Participants will be paid \$12 for each session. Participants will complete 2 to 4 sessions. |
| Amended Wording | Research Experience Program (REP) participants will be granted REP credit. All other participants (recruited via the SONA system) will be paid \$12 for each session. |
| Summary of Changes | Added REP credit as an incentive for students participating through the REP |

| Section | 2.2 |
|------------------|---|
| Subsection | Participant Task(s) |
| Page Reference | 5 |
| Original Wording | In one trial, participants will be asked to remember a display consisting of a word positioned along a circle on a screen. After an experimental delay period, participants will be cued with the word, and will be asked to indicate using a computer mouse where on the circle that word was presented. Participants will complete 2 to 4 sessions, which are estimated to take between 50 to 70 minutes to complete. |
| Amended Wording | In one trial, participants will be asked to remember a display consisting of a word positioned along a circle on a screen. Trials will occur in blocks of 10 stimuli. After a two-digit arithmetic distractor task with a duration of 30 seconds, participants will be cued with words that either occurred in the study list or not, and will be asked to indicate if the words was |

| | studied in the preceding study phase, and if so, where on the circle that word was presented using a computer mouse. Participants will complete 2 to 4 sessions, which are estimated to take between 45 to 60 minutes to complete. |
|--------------------|--|
| Summary of Changes | Shortened duration of experimental task, added specific description of distractor task that occurs between study and response phase of the task. |

Plain Language Statement

| Page Reference | 1 |
|------------------|--|
| Original Wording | Mr Jason Zhou (Honours student) email: |
| | jasonz1@student.unimelb.edu.au |
| Amended Wording | Mr Jason Zhou (PhD student) email: |
| Ü | jasonz1@student.unimelb.edu.au |

| Page Reference | 1 |
|--------------------|--|
| Original Wording | You will be asked to memorise words and an associated location marked by a cross on the outline of a circle. After a short (2 minute) or long (7 minute) delay, words will be presented and you will have to indicate where on the circle that word was located using a computer mouse. |
| Amended Wording | You will be asked to memorise words and an associated location marked by a cross on the outline of a circle. Words will be presented in lists of 10. After performing two-digit arithmetic tasks for 30 seconds, you will be presented with 20 words. You will be asked to indicate if the presented word was previously studied, and if so, where on the circle that word was located using a computer mouse. |
| Summary of Changes | Removed experimental manipulation of delay duration. Added detail regarding distractor task and response tasks. |

| Page Reference | 1 |
|------------------|--|
| Original Wording | You will be paid \$12 per session for your |
| | participation. The results of this project will be |
| | diagnostic of two competing theories of source |

| | memory function, and how memory works in a more general sense. It is possible that these results may be published in a peer-reviewed journal. Funding for this project comes from the Australian Research Council Discovery (ARC) Grant awarded to Prof. Philip Smith. |
|--------------------|---|
| Amended Wording | As a paid participant, you will be paid \$12 per session for your participation. As a participant in the Research Experience Program (REP) you will be granted credit towards participation in the REP. The results of this project will be diagnostic of two competing theories of source memory function, and how memory works in a more general sense. It is possible that these results may be published in a peer-reviewed journal. Funding for this project comes from the Australian Research Council Discovery (ARC) Grant awarded to Prof. Philip Smith. |
| Summary of Changes | Added distinction between participants who are paid to participate in the experiment and undergraduate students receiving REP credit as part of coursework. |

Consent Form

| Page Reference | 1 |
|--------------------|---|
| Original Wording | Name of Additional Researchers: Dr. Adam Osth |
| | (Co-Researcher), Jason Zhou (Honours Student) |
| Amended Wording | Name of Additional Researchers: Dr. Adam Osth |
| | (Co-Researcher), Jason Zhou (PhD Student) |
| Summary of Changes | Updated student course status |

Debriefing Statement

| Page Reference | 1 |
|--------------------|--|
| Original Wording | Mr Jason Zhou (Honours student) email: |
| | jasonz1@student.unimelb.edu.au |
| Amended Wording | Mr Jason Zhou (PhD student) email: |
| | jasonz1@student.unimelb.edu.au |
| Summary of Changes | Updated student course status |

| Page Reference | 1 |
|------------------|---|
| Original Wording | You were asked to memorise the location of |
| | words around a circle, and after a short delay, |

| | indicate where on the circle a cued word was |
|--------------------|---|
| | located using a joystick. |
| Amended Wording | You were asked to study a list of words and |
| | memorise the words and the location of those |
| | words around a circle. After completing an |
| | arithmetic distractor task, you were then |
| | presented with a list of words and asked to |
| | indicate if the word was previously studied, and if |
| | so, where on the circle that word was presented. |
| Summary of Changes | Changed description of experimental task to |
| | more accurately reflect what participants are |
| | asked to do. |

HUMAN RESEARCH ETHICS

PROJECT APPLICATION FORM

How To Use This Form

1. Consider and refer to relevant guidelines and regulations.

References to specific guidelines are provided, with hyperlinks, throughout this form. The primary guide for human research ethics in Australia is the National Statement on Ethical Conduct in Human Research (2007) - Updated May 2015.

Human research ethics applications at the University of Melbourne are reviewed and approved under the warrant of the National Statement. References to the National Statement are abbreviated (e.g. NS §2.1.)

2. Use plain English.

Use clear, non-technical language in your application. Be concise. Spell out the first instances of acronyms and abbreviations. Avoid jargon. Do not repeat information. Following these directions ensures effective review of your application. It will avoid unnecessary delays which result if applications are not clear and concise.

3. Consider ethical principles.

Your application will be reviewed according to the principles of ethical research outlined in the National Statement, namely:

- Research Merit and Integrity (<u>NS §1.1 §1.3</u>)
- Justice (<u>NS §1.4 §1.5</u>)
- Beneficence (NS §1.6 §1.9)
- Respect (<u>NS §1.10 §1.13</u>)
- 4. Use the current version of the application form.

Ensure that you are using the current version by downloading this form each time you prepare a new application.

5. Detailed instructions for specific questions are available online.

If you are unsure about how best to answer a particular question, consult the Human Research Ethics <u>Guidance</u> <u>Document</u>. That document provides detailed guidance on how to answer specific questions in this form.

6. Where possible, avoid printing this form.

Consult your HEAG to find out if they still require hard copies of your application. If you must print this form, consider printing double-sided and in grayscale (black and white).

7. Save your completed application as a PDF and upload it to Themis.

Refer to your local Human Ethics Advisory Group (<u>HEAG</u>) for detailed instructions on how and when to submit your application.

ANSWER ALL OF THE QUESTIONS IN THIS FORM

| Ethics ID number: (assigned by Themis) | 1749270.1 | |
|---|----------------------------------|------------------|
| Project Title: (as recorded in Themis) | Decision-Making in Source Memory | |
| Responsible Researcher: (as recorded in Themis) | SMITH, PROF PHILIP LEIGH | |
| Application Type: | х | Minimal Risk |
| (mark with an "X") | | Standard Project |

1. Project Details

1.1 Project Summary

Summarise your research project in plain language.

[Limit: 300 words]

A) Aims and Objectives

By collecting response time and accuracy data from a memory task described in the design, this study aims to distinguish between a threshold or a continuous model of how people remember the context of memories (source memory).

B) Key Question(s)

Does source memory fail completely past a threshold, under which people guess at random, or is memory strength continuous?

C) Research Design

Participants drawn from the Melbourne School of Psychological Sciences undergraduate REP system and paid SONA scheme will be asked to complete four experimental sessions. Each session is estimated to take between 50 to 70 minutes to complete, and consists of 36 blocks, with 9 trials per block for a total of 324 trials per session. Each trial consists of seeing a word positioned on a circle, and then after a delay, participants will be cued with the word, and then indicate using a computer mouse where on the circle the cued word was located.

There are two conditions: long delay (7 minutes) and short delay (2 minutes). The delay between study and test in the long condition will be occupied by two other blocks.

Specific Guidelines Checklist

Type an "X" in the left-hand column beside all items that apply to your research project. Linked sections of the National Statement contain relevant quidelines and requirements that you need to address when completing your application.

| Statement contain relevant guidelines and requirements that you need to address when | completing your application. |
|---|---|
| Children and/or young people (< 18 years old) will be recruited as participants. | → Refer to <u>NS §4.2</u> . |
| People in dependent or unequal relationships will be recruited as participants. (There are pre-existing relationships between participants and researchers, or between participants and others involved in facilitating or implementing the research E.g. student/teacher, patient/doctor, employee/employer.) | → Refer to <u>NS §4.3</u> . |
| People in countries other than Australia will be recruited as participants. | → Refer to <u>NS §4.8</u> . |
| One or more of the following describes the research project: it will be about Aboriginal and/or Torres Strait Islander individuals or peoples, their health, or their culture(s), language(s) or histories; it will be about the impact(s) or effect(s) of some phenomenon or | → Refer to NS §4.7. → Refer to Values and Ethics. |
| phenomena on Aboriginal and/or Torres Strait Islander individuals o peoples; it will specifically target Aboriginal and/or Torres Strait Islander peopl to be recruited as participants; it will be conducted in a geographic location where a significant number of the population are likely to be Aboriginal and/or Torres Strait Islander | r → Refer to GERAIS. → This application is ineligible for minimal risk review. |
| One or both of the following describes the research project: • it will specifically target women who are pregnant to be recruited as participants; • it will be focused on women who are pregnant and/or the human foetu (including human foetal tissue or human embryos). | → Refer to <u>NS §4.1</u> . → This application is ineligible for minimal risk review. |
| People who may be involved in illegal activities will be recruited as participants and the research project could potentially expose such activities. | → Refer to <u>NS §4.6.</u> → This application is <i>likely</i> ineligible for minimal risk review. |
| People with cognitive impairment, intellectual disability, or mental illness will be recruited as participants. | → Refer to <u>NS §4.5</u> . → This application is ineligible for minimal risk review. |
| People who are highly dependent on medical care will be recruited as participants. | → Refer to NS §4.4. → This application is ineligible for minimal risk review. |
| None of the above applies to this research project. | |

Additional Modules Checklist

Type an "X" in the left-hand column beside all items that apply to your research project. This checklist will help you determine if you need to complete any other modules in addition to this application form. Linked sections of the *National Statement* contain relevant guidelines and requirements that you need to address when completing this form and any applicable additional modules.

| | This research project will involve the creation of a databank (i.e. your stored data will be made available to other parties for secondary use in future research projects). | → Refer to <u>NS §3.2</u> . → Complete and attach the <u>Privacy and Databanks Module</u> . |
|---|---|---|
| | This research project will involve the collection of information for a databank (i.e. your stored data will be made available to other parties for secondary use in future research projects). | → Refer to <u>NS §3.2</u> . → Complete and attach the <u>Privacy and Databanks Module</u> . |
| | This research project will involve accessing information from an existing databank (i.e. you will be accessing and making use of stored data that was previously collected – not for this specific project – by other parties). | → Refer to <u>NS §3.2</u> . → Complete and attach the <u>Privacy and Databanks Module</u> . |
| | This research project will involve obtaining identifiable (or potentially identifiable) personal information (including health information) about individuals without their consent. | → Complete and attach the Privacy and Databanks Module. |
| | This research project will involve the collection and/or use of human tissue/biological samples or materials (e.g. blood, saliva, cheek swabs, hair, human embryonic or foetal tissue). | → Refer to <u>NS §3.4</u> . → Complete and attach the <u>Body Tissue and Genetic</u> <u>Research Module</u> . |
| | This research project will involve human genetics. | → Refer to NS §3.5. → This application is ineligible for minimal risk review. → Complete and attach the Body Tissue and Genetic Research Module. |
| | This research project will involve medical interventions, therapies or trials. | → Refer to NS §3.3. → This application is ineligible for minimal risk review. → Complete and attach the Interventions, Therapies and Trials Module. |
| | This research project will involve administration of ionising radiation. | → Complete and attach the <u>lonising Radiation Module</u> . |
| Х | None of the above applies to this research project. | |

2. Background and Method

2.1 Background and Significance

Provide a summary of background information. Explain the significance of the proposed research in the context of this background. **Refer to** <u>NS §5.2.5</u>.

[Limit: 500 words]

A) Background:

The debate between dual-process and single-process models of source memory is relatively new, but has a long pedigree in other related fields as part of a wider, ongoing discussion regarding the nature of memory in general. In the working memory literature, evidence for both discrete slot-based and flexible resource models of memory capacity has been found, through manipulations of item number and distinguishability (van den Berg, Shin, Chou, George & Ma, 2012; Zhang & Luck, 2008).

This dynamic is analogous between interpretations of source memory accuracy. The dual-process model

describes a threshold for memory quality, below which responses are based on no evidence and hence constitute a secondary "guessing" process when memory fails, mirroring the mechanics of slot-based models of working memory when item number exceeds a given limit. Harlow and Donaldson (2012) argued for this dual-process model of source memory using the word circle paradigm described above. The distribution of accuracy data was found to have a narrow peak close around the correct response, with high tails at the end that Harlow and Donaldson (2012) interpreted as evidence of an underlying guessing process, dismissing the competing single-process account.

B) Significance of This Research:

The present study responds to the findings of Harlow and Donaldson (2012) by replicating their study design, but rather than only record accuracy data, response time will also be recorded. The purpose of taking response time data is to assess fit with a circular diffusion model. Drawing from regularities in response time and accuracy in the simple diffusion model (Ratcliff, Smith and McKoon, 2015), this study aims to show that if variability in evidence quality (manifest in the diffusion model as 'drift rate') can account for the peaked, high-tailed distributions Harlow and Donaldson (2012) found, then there is no need for a dual-process model, when a single-process model suffices.

2.2 Research Design and Method

Provide details of your research design and your proposed method. Refer to <u>NS §5.2.5</u> - §5.2.6.

Attach a copy of any measures, scales, questionnaires, survey instruments (including online surveys), interview questions/themes, and/or focus group topics/questions to be used.

A) Participants (or Recruitment Targets, such as medical records):

No specific inclusion or exclusion criteria apply, and no specific population is targeted for recruitment.

B) Recruitment:

Recruitment will be conducted using both the Melbourne School of Psychological Sciences paid SONA scheme and the undergraduate REP program.

C) Participant Incentives:

Research Experience Program (REP) participants will be granted REP credit. All other participants recruited via the SONA system will be paid \$12 for each session.

D) Participant Task(s):

In one trial, participants will be asked to remember a display consisting of a word positioned along a circle on a screen. Trials will occur in blocks of 10 stimuli. After a two-digit arithmetic distractor task with a duration of 30 seconds, participants will be cued with words that either occurred in the study list or not, and will be asked to indicate if the words was studied in the preceding study phase, and if so, where on the circle that word was presented using a computer mouse. Participants will complete 2 to 4 sessions, which are estimated to take between 45 to 60 minutes to complete.

E) Data/Material Collection Technique(s):

Response accuracy and time will be collected by the computer on which the display is run. This will occur in the Redmond Barry building at the University of Melbourne.

F) Data Analysis:

Response time and accuracy data will be analysed using model fitting to the circular diffusion model.

3. Risks, Benefits and Monitoring

3.1 Potential Risks to Participants

Does your research project pose any potential risks to participants? What are those risks? How will they be negated, minimised or managed?

Refer to NS §2.1.

Note that the risks you identify here should also be described in your Plain Language Statement (PLS). Attach a copy of any distress protocol or adverse event protocol (if applicable).

A) Potential Risks

There is minimal risk posed to the participant by the study, which consists of a measurement task using a computer mouse and a visual display. As part of this task, participants could potentially suffer from postural strain from sitting in front of the display, eye strain from viewing the display or hand strain from operating the computer mouse for an excessive duration.

B) Risk Management Strategy

To address these potential risks, the study is designed with rest breaks in between periods of measurement to ensure participants do not engage in the task for long periods of time continuously.

3.2 Potential Risks to Non-Participants

Does your research project pose any potential risks to non-participants? (This could possibly include risks to researchers or independent contractors.) If so, how will these risks be minimised? **Refer to** <u>NS §2.1</u>.

The potential risks to non-participants are minimal due to the psychometric nature of the study, as the role of the researcher in collecting response time and accuracy data does not carry any foreseeable wider consequences.

3.3 Risks, Benefits and Justification

In light of the risks and expected benefits of the research project, explain how the expected benefits of the research justify any risks it may pose. Refer to NS §1.6 - §1.7 and NS §2.1.

A) Expected Benefits

The benefits to the participants arises primarily from the monetary reward for participation. The benefit of the research for society at large lies in the advancement of scientific understanding of the nature of source memory, and through this, the nature of memory as part of the wider literature.

B) Justification of Risks by Expected Benefits

The risks of the study to all parties are minimal, and do not exceed inconvenience for the participant, which is still balanced by the monetary benefit for participation. On a wider scale, the described benefits to society are not outweighed by any foreseeable risks.

3.4 Management and Monitoring

How will researchers manage and monitor conduct of the research project? **Refer to NS \$5.5.**

A) Management

The project will be managed by the responsible researcher and co-researcher to ensure compliance with regulations and legislation.

B) Monitoring

This research will be undertaken by a student. The student will be in close physical proximity while conducting research to the supervisor.

C) Independent Contractors

N/A

4. Consent

Type an "X" in the left-hand column beside as many of the following options as apply to your research project. Use the space provided below to explain how you will obtain informed consent from participants. If you seek a waiver of consent, or the use of opt-out 4.1 Obtaining Informed Consent consent, use the space provided to justify your request. Refer to NS §2.2, NS §2.3 → Refer to <u>NS §2.2.6</u>. Written consent will be sought from (or on behalf of) X participants. → Attach a copy of your consent form(s). → Refer to NS §2.2.5 - §2.2.6. \Rightarrow Explain why you have chosen this form of consent, and how an individual's consent to participate will be Verbal consent will be sought from (or on behalf of) participants. recorded. → Attach a copy of your consent script(s). → Refer to <u>NS §2.2.5 - §2.2.6</u>. Consent will be implied, rather than explicitly obtained. → Explain why you have chosen this form of consent. → Refer to NS §2.2.12. Third parties (e.g. parents/guardians of minors) will provide consent on behalf of participants. → Explain who will be providing consent on behalf of participants and why. → Refer to <u>NS §2.2.13</u>. Third parties (e.g. community elders, school boards) → Provide details of which third parties will be involved, will be involved in whole of community participation why they will be involved, and how this will be accomplished. decisions → Explain why you are seeking this option. Justify your request by referring to the conditions described in This application seeks a waiver of consent. NS §2.3.10 - §2.3.11. → Explain why you are seeking this option. Justify your request by referring to the conditions described in This application proposes to use opt-out consent. Consent will be obtained using written forms. Competence to give consent will be established through

| 4.2 Limited Disclosure | Do you propose to use limited disclosure, concealment or deception for this research project? (Answer Yes or No. If Yes, use the space below to explain.) Refer to NS §2.3. | | |
|------------------------|---|----|--|
| | YES or NO: | NO | |
| | | | |

participation in the SONA scheme from which participants are recruited.

| | Future Use of Data, Materials, or Tissues Do you intend for the data and/or materials and/or tissues collected for this research project to be reused in future research? Type an "X" in the left-hand column beside as many of the following options as apply to your research. Use the space provided to specify which data/materials/tissues will be reused, if any. Refer to NS §2.2.14. | | |
|--|---|--|---|
| х | Consent (or waiver of consent) will be specific. | | → Data/materials/tissues will be used <i>only</i> for this research project (i.e. no future use). |
| | Consent (or waiver of consent) will be extended . | | → Data/materials/tissues used in this research project may also be used in future projects that are closely related to this project, or in the same general area of research as this project. |
| Consent (or waiver of consent) will be unspecified. | | → Data/materials/tissues used in this project may also be used in any future research. | |

4.4 Conflict of Interest

Does your research present or involve any conflict of interest, whether potential, real, or perceived; or will the researcher(s) have dual roles in relation to the participants? (Answer Yes or No. If Yes, use the space below to explain.) Refer to NS §5.4, University of Melbourne Code of Conduct for Research §2.5, and Australian Code for the Responsible Conduct of Research §7.2.

YES or NO:

4.5 Information for Participants

How will relevant information about the research project be provided to potential participants? Attach a copy of any advertisement (print or online), Plain Language Statement (PLS), consent form, letter, email, telephone script, and/or debriefing statement to be used. Refer to NS \$5.2.23.

Participants will be made aware of information relevant to this study through the PLS (attached), which will be distributed through SONA.

Plain Language Statement (PLS): Your PLS must satisfy the requirements set out in the National Statement (NS §2.2.1 - §2.2.3, §2.2.6). The Research Ethics and Integrity's website has quidance on composing your plain language statement, as well as an example PLS template. A list of PLS requirements is also provided at the end of this form. Ensure that your PLS is written in plain language. Ensure that the information contained in your PLS is consistent with the information in your application.

Consent Form: Your consent form must satisfy the requirements set out in the National Statement (NS §2.2). The Research Ethics and Integrity's website has guidance on composing your consent form, as well as an example consent form. A list of consent form requirements is also provided at the end of this form. Ensure that your consent form is written in plain language. Ensure that the information contained in your consent form is consistent with the information in your application.

5. Dissemination and Data Management

5.1 Providing Results to Participants

How will the results of the research project be provided to participants in an accessible format? **Refer to** NS \$1.5.

Results of the project will be made available to participants upon potential publication of the study through the posting of results on the university Learning Management System. Participants may also elect to provide an email on the attached consent form to which a summary of results will be sent.

5.2 Reporting Project Outcomes

How will outcomes of the research project be made public? Refer to NS §1.3.

Outcomes of the research will be potentially made public upon publication through a peer-reviewed journal, as well as potential conference presentations.

5.3 Data Management

How do you propose to manage the data collected in this research project? Specify what types of data will be collected, how they will be stored and in what format. How will access to the data be controlled and by whom? Discuss retention, security, and data sharing plans. What measures will be taken to protect participants' privacy, and their data?

Refer to <u>NS §1.11</u>, the <u>Australian Code for Responsible Conduct of Research §2</u>, and the <u>University of Melbourne Code of Conduct for Research §2.1</u>.

A) Privacy and Confidentiality

All data collected will be de-identified and stored electronically on a password-protected computer accessible only to the named researchers. Data will be identifiable through physical forms which match participation numbers to identifies

B1) Security and Storage of Non-Digital Data

Short term-storage of the physical identification forms will be stored in a locked filing cabinet in the office of the responsible researcher.

B2) Security and Storage of Digital Data

Electronic data will be stored on a password-protected computer in the short-term, and moved onto a USB for long-term storage. Both of these responsibilities will belong to the responsible researcher and co-researcher.

C) Retention

Data will be kept for 5 years from the date of the last publication arising from the study, after which digital data will be electronically deleted, and physical identifying documents will be shredded.

6. Other Issues

6.1 Other Ethical Issues

Are there any other issues, not addressed above or in additional modules, which are relevant to the ethical review of your research project? Refer to the relevant sections of the *National Statement* identified in the Specific Guidelines Checklist, if applicable.

N/A

Commented [J1]: Dunno- how dispose?

Attachments Checklist

Review your answers above to determine which attachments (if any) are required for your application. **Type an "X" in the left-hand column beside all items that apply to your research project.** Attach a copy of the items you have selected.

| Х | Plain Language Statement (PLS) for Participants |
|---|--|
| Х | Consent Form for Participants |
| | Additional PLS(s) (e.g. for parents, teachers, schools) |
| | Additional Consent Form(s) (e.g. for parents, teachers, schools; or assent forms for children) |
| | Recruitment Materials (e.g. advertisement(s), posters, letter(s) or email(s) of invitation) |
| | Questionnaire(s) and/or Survey Instrument(s) |
| | Measure(s) and/or Scale(s) |
| | List of Interview Questions and/or Themes |
| | List of Focus Group Questions and/or Themes |
| | Participant Distress Protocol |
| | Adverse Event Protocol |
| Х | Debriefing Statement |
| | Approval(s) of research by an HREC external to the University of Melbourne |
| | Other External Approval(s) (e.g. schools, communities) |
| | Full Protocol (for Medical Research) |
| | Translations and/or Back-Translations (where languages other than English used) |
| | Privacy and Databanks Module |
| | Body Tissue and Genetic Research Module |
| | Ionising Radiation Module |
| | Interventions, Therapies and Trials Module |
| | Other Documents (e.g. contracts, agreements) – specify which: |
| | |

Plain Language Statement (PLS) Requirements:

- Clearly identify the University of Melbourne (i.e. by prominent placement of the University's logo) and the department(s)/ school(s)/faculty(-ies) involved. If printed, the PLS should be on University of Melbourne letterhead.
- Clearly identify the title of the project, and the name(s) and contact details of the Principal Researcher and Other Researchers.For student projects, specify the student's level of study.
- 3. Clearly explain the purpose of the research project.
- 4. Clearly explain what participants will be asked to do, and provide an estimated time commitment.
- 5. If participants will be photographed, audio- or video-recorded, clearly state as much.
- 6. Clearly explain any risks arising from participation, as well as any procedures or measures in place to minimise such risks.
- 7. Describe any expected benefits to the wider community. If applicable, also describe any expected benefits to participants.
- 8. List any payments, incentives or reimbursements to be made to participants.
- State that involvement in the project is voluntary and that participants are free to withdraw from participation at any time.Explain any implications of withdrawal, including whether it will be possible for participants to withdraw any data already collected from or about them.
- 10. Describe the likelihood and form of dissemination of the research results, including publication.
- 11. Describe the arrangements in place to protect the confidentiality of participants' data, and advise participants of any legal limitations to such confidentiality. If the sample size for the project is small, advise participants that this may make them identifiable.
- 12. The project HREC number (which is the ethics ID number assigned by Themis) and the date and version number of the PLS must appear on the PLS. If the PLS is printed, put this information in the footer.
- 13. Explain what will happen to participants' data after the research project ends (i.e. how long it will be retained, whether it might be used again for future research and if so who would have access.)
- 14. Include the following statement: "This research project has been approved by the Human Research Ethics Committee of The University of Melbourne. If you have any concerns or complaints about the conduct of this research project, which you do not wish to discuss with the research team, you should contact the Manager, Human Research Ethics, Research Ethics and Integrity, University of Melbourne, VIC 3010. Tel: +61 3 8344 2073 or Email: humanethics-complaints@unimelb.edu.au All complaints will be treated confidentially. In any correspondence please provide the name of the research team or the name or ethics ID number of the research project."
- 15. If the research is externally funded, state the amount(s) and source(s) of funding for the research.
- 16. If there are any potential conflicts of interest for any of the researchers, sponsors (if applicable) or institutions, disclose these potential conflicts of interest.
- 17. If any participants will be in a dependent relationship with any of the researchers, state that decisions about participation will not affect the dependent relationship. (E.g. students' grades will not be affected if they decline to participate or withdraw from the project at any stage).

Consent Form Requirements:

- Clearly identify the University of Melbourne (i.e. by prominent placement of the University's logo) and the department(s)/ school(s)/faculty(-ies) involved. If printed, the consent form should be on University of Melbourne letterhead.
- 2. Clearly identify the title of the project, the name(s) and contact details of the Principal Researcher and Other Researchers. For student projects, specify the student's level of study.
- 3. If participants will be photographed, audio- or video-recorded, clearly state as much.
- 4. State that involvement in the project is voluntary and that participants are free to withdraw consent at any time, and to withdraw any unprocessed data previously supplied. Also state that the purpose of the project is research.
- 5. Describe the arrangements in place to protect the confidentiality of participants' data, and advise participants of any legal limitations to such confidentiality. If the sample size for the project is small, advise participants that this may make them identifiable

Declaration by the Responsible Researcher

The information contained in this application is, to the best of my knowledge and belief, accurate.

I have read the University's current human ethics guidelines. I accept responsibility for the conduct of the procedures set out in the attached application in accordance with: those guidelines, with the University of Melbourne's Central Human Research Ethics Committee (CHREC), its Human Ethics Sub-Committees (HESCs), or by the Human Ethics Advisory Group (HEAG) which will review this application. I have attempted to identify all risks related to the research that may arise in conducting this research. I acknowledge our obligations as researchers and the rights of the participants stipulated in the National Statement on Ethical Conduct in Human Research (2007) - Updated May 2015. I certify that the research team has the appropriate qualifications, experience and facilities to conduct the research described in the attached application, and to deal with any emergencies and contingencies related to research that may arise throughout the life of the project.

If approval is granted, the project will be undertaken in strict accordance with the approved protocol and relevant laws, regulations and guidelines.

I, the Responsible Researcher, agree to:

- start this research project <u>only</u> after obtaining final approval from the HESC (if this is a standard project), or the HEAG (if this is a minimal risk project);
- carry out this research only where adequate funding is available to enable the research to be carried out according to good research practice and in an ethical manner;
- provide additional information as requested by the CHREC, HESC, or HEAG;
- · provide progress reports to the CHREC, HESC, or HEAG as requested, including annual and final reports;
- maintain the confidentiality of all data collected from, or about, research participants and maintain security procedures for the
 protection of their privacy;
- submit an amendment if any modification to the research design or protocol is proposed (including any change of researchers)
 <u>and</u> to proceed with the research <u>only after</u> the amendment has been approved by the HESC (if this is a standard project) or by
 the HEAG (if this is a minimal risk project):
- notify the HESC (if this is a standard project) or the HEAG (if this is a minimal risk project) in writing immediately if any adverse
 event occurs during the course of the research;
- notify the HESC (if this is a standard project) or the HEAG (if this is a minimal risk project) in writing immediately if any
 complaints are received about the research;
- comply with an audit of the research undertaken, if requested by the CHREC, HESC, or HEAG;
- use only the data/tissue samples collected for this research, and for which HESC/HEAG approval has been given.

I certify that all members of the research team have read this application and the <u>National Statement on Ethical Conduct in Human Research (2007) - Updated May 2015</u> and that they have agreed to comply with the provisions of the latter.

| Responsible Researcher Name | Signature | Date |
|-----------------------------|-----------|------|
| | | |
| | | |

Declaration by Human Ethics Advisory Group (HEAG)

| For HEAG use only. Enter the date the application was received, then type an "X" in the left-hand column beside each item as applicable. | |
|---|--|
| Date Application Received: | |
| Technical review has been completed by the HEAG. | The merit of the proposed research project set out in this application has been reviewed on technical grounds. Refer to NS §1.1. |
| Ethical review has been completed by the HEAG. | The HEAG has reviewed the proposed research project set out in this application for compliance with the principles of Human Research Ethics. |
| The Minimal Risk review process is appropriate for the proposed research project set out in this application. | → Complete Declaration A (below) |
| The Standard Project review process is appropriate for the proposed research project set out in this application | |

Declaration A (Minimal Risk):

The HEAG has reviewed this project. The HEAG considers the methodological/technical and ethical aspects of the proposal to be appropriate to the tasks proposed. The HEAG grants approval for this research project to commence. The HEAG considers that the researcher(s) has/have the necessary qualifications, experience and facilities to conduct the research described in the attached application in a manner that complies with the University's policy on the management of research data and records, and to deal with any emergencies and contingencies that may arise. [Note: If the HEAG Chair is also a researcher in this project, the declaration should be signed by another authorised member of the HEAG.]

| Name of HEAG Chair/Authorised Member | Signature | Date |
|--------------------------------------|-----------|------|
| | | |
| | | |

Declaration B (Standard Project):

The HEAG has reviewed this project and considers the methodological/technical and ethical aspects of the proposal to be appropriate to the tasks proposed. The HEAG regards this project as ready to submit to the HESC. The HEAG considers that the researcher(s) has/have the necessary qualifications, experience and facilities to conduct the research described in the attached application in a manner that complies with the University's policy on the management of research data and records, and to deal with any emergencies and contingencies that may arise. [Note: If the HEAG Chair is also a researcher in this project, the declaration should be signed by another authorised member of the HEAG.]

| Name of HEAG Chair/Authorised Member | Signature | Date |
|--------------------------------------|-----------|------|
| | | |
| | | |



Melbourne School of Psychological Sciences

Plain Language Statement

PROJECT TITLE: Decision-Making in Source Memory

Prof. Philip Smith

Tel: 8344 6378; email: philipls@unimelb.edu.au

Dr. Adam Osth (Co-Researcher) email: adam.osth@unimelb.edu.au
Mr Jason Zhou (Honours student) email: jasonz1@student.unimelb.edu.au

Introduction

We would like to invite you to participate in a project on decision-making in source memory. This research aims to investigate the precision and response times in a memory task to determine the nature of how memory fails.

What I would be asked to do?

You will be asked to memorise words and an associated location marked by a cross on the outline of a circle. Words will be presented in lists of 10. After performing two-digit arithmetic tasks for 30 seconds, you will be presented with 20 words. You will be asked to indicate if the presented word was previously studied, and if so, where on the circle that word was located using a computer mouse.

What are the risks?

As the study involves measuring task accuracy and response times, the risks to the participant are minimal. The main foreseeable risk is strain resulting from sitting posture in the computer chair, or in the hand from operating the joystick. You will have opportunity to take rest breaks to further minimise these risks. The emotionally neutral words will be randomly selected from a pre-determined list.

What are the benefits?

As a paid participant, you will be paid \$12 per session for your participation. As a participant in the Research Experience Program (REP) you will be granted credit towards participation in the REP. The results of this project will be diagnostic of two competing theories of source memory function, and how memory works in a more general sense. It is possible that these results may be published in a peer-reviewed journal. Funding for this project comes from the Australian Research Council Discovery (ARC) Grant awarded to Prof. Philip Smith.

How would my confidentiality be protected?

Names and data will be stored separately, on password-protected computers in a secure building. The participant ID numbers required to match a participant to their data will be physically kept in a locked filing cabinet, also located in a secure building.

What if I want to withdraw from the Research?

Participation in this research is completely voluntary. You are free to withdraw at any time and to withdraw any unprocessed data previously supplied. This would have no effect on your relationship with any member of the School of Psychological Sciences. It would not affect your grades, assessment or any treatment that you would otherwise be eligible for.

Where can I get further information?

If you have not understood any of this information please contact any of the researchers listed above. This research project has been approved by the Human Research Ethics Committee of The University of Melbourne. If you have any concerns or complaints about the conduct of this research project, which you do not wish to discuss with the research team, you should contact the Manager, Human Research Ethics, Office for Research Ethics and Integrity, University of Melbourne, VIC 3010. Tel: +61 3 8344 2073 or Fax: +61 3 9347 6739 or Email: HumanEthicscomplaints@unimelb.edu.au. All complaints will be treated confidentially. In any

HREC Number: 1749270.1 Version Number: 1 Date: 11/04/2017

correspondence please provide the name of the research team or the name or ethics ID number of the research project.

How do I agree to participate?

If you wish to participate please read and sign the consent form that you will now be provided with.

HREC Number: Version Number: Date:



Melbourne School of Psychological Sciences

Consent form for persons participating in a research project

PROJECT TITLE: Decision-Making in Source Memory

Name of Participant:

Participant signature:

| | sponsible Researcher: Prof. Philip Smith ditional Researchers: Dr. Adam Osth (Co-Researcher), Jason Zhou (PhD Student) |
|----|--|
| 1. | I consent to participate in this project. The purpose of this research is to investigate the nature of source memory in continuous task. |
| 2. | I understand that this project is for research purposes only and not for treatment. |
| 3. | In this project I will be required to memorise the location of words around a circle and indicate where on the circle that word was located using a computer mouse. The details of this have been explained in the Plain Language Statement which I have been given a copy to keep. |
| 4. | I understand that there are risks involved in participating in this research project. Principally, postural or hand strain from sitting in front of the computer. These risks have been minimized by scheduled rest periods in the study. |
| 5. | My participation is voluntary and that I am free to withdraw from the project at any time without explanation or prejudice and to withdraw any unprocessed data I have provided. Withdrawing from the project will not affect my relationship with the Melbourne School of Psychological Sciences. Specifically, it will not affect any ongoing assessment/grades or treatment that I would otherwise be eligible for. |
| 6. | I have been informed that the data from this research will be stored at the University of Melbourne and will be destroyed five years from the date of the last publication arising from the study. |
| 7. | I have been informed that the confidentiality of the information I provide will be safeguarded subject to any legal requirements; my data will be password protected and accessible only by the named researchers. |
| 8. | I agree to have the findings of this study emailed to me. |
| 9. | I understand that after I sign and return this consent form, it will be retained by the researcher. |
| Му | email address is: |

Date:



Melbourne School of Psychological Sciences

Debriefing Statement

PROJECT TITLE: Decision-Making in Source Memory

Prof. Philip Smith

Tel: 8344 6378; email: philipls@unimelb.edu.au

Dr. Adam Osth (Co-Researcher) email: adam.osth@unimelb.edu.au
Mr Jason Zhou (PhD student) email: jasonz1@student.unimelb.edu.au

Thank you for participating in a project on decision-making in source memory. This research aims to investigate the precision and response times in a memory task to determine the nature of how memory fails.

You were asked to study a list of words and memorise the words and the location of those words around a circle. After completing an arithmetic distractor task, you were then presented with a list of words and asked to indicate if the word was previously studied, and if so, where on the circle that word was presented.

If you feel that your mood may have been negatively affected then you may contact a psychology counselling service such as LifeLine (13 11 14) or the University of Melbourne Psychology Clinic (Tel: 03 9035 5180; email: clinic@psych.unimelb.edu.au).

This research has been cleared by the Human Research Ethics Committee (HREC 1749270.1). If you have any concerns about this project please contact the Executive Officer, Human Research Ethics, The University of Melbourne (Tel: 8344 2073; Fax: 9347 6739).