Human Ethics Application

Application details

Is this an amendment? *

*An amendment is any change to a previously approved application. This question should **only** be answered 'No' if this is a new application. See here for information regarding amendments and management of ethics approvals.*

- ○ Yes, this is an amendment to an existing ethics approval
- ◉ No, this is a new application that has not received approval

Is this application linked to another ethics approval?*

For example, an approved application that has reached its expiry date.

- ○ Yes
- ◉ No

Application Type: *

Select the application type that is most relevant to this application. See here for information regarding the different application types.

- ◉ Project Application
- ○ Program Application (Student Coursework)
- ○ Transfer Application

Project title *

Effects of Hedonic Information System Breaks on Problem Solving

Project type: *

Select one or more of the following that best describe the project for which you are seeking ethics approval.

- ☐ Staff Research Project
- ☐ Practical Class (student learning skills)
- ☐ Funded Consultancy
- ☑ Supervised Student Research Project (research activity with research outcomes)
- ☐ Other

Select type of Supervised Student Research Project *

- [x] PhD
- [ ] Masters by Research
- [ ] Masters by Coursework
- [ ] Honours
- [ ] Postgraduate Diploma
- [ ] Advanced Medical Science
- [ ] Doctorate
- [ ] Undergraduate course with Research component
- [ ] Other

When do you propose to commence this research project?*

- (•) As soon as ethics approval and any other relevant approvals have been received
- ( ) I have a specific start date

Proposed end date for the data collection phase of the project* 01/06/2024

Project overview

Summarise your research project in plain language *

Briefly describe the broad aims, methods, participant groups, risks and benefits of this project.

Broad Aims
Hedonic information systems (HIS) are entertainment and pleasure focused technology systems such as video games and smartphone applications. We wish to investigate the impact of using hedonic information systems (HIS) on problem solving. Specifically, we explore problem solving in non-routine problems. Non-routine problems may not be straightforward, requiring knowledge application and creativity. Examples of these problems include those encountered in writing, programming, and puzzles. Ultimately, the goal of this research is to explore whether or not taking HIS breaks (such as going on smartphones) affects performance on typical real world problem solving.

Methods
We use a puzzle task to study whether or not HIS breaks lead to performance changes. Specifically, we have participants play Sokoban. Sokoban is a game where the player has to push boxes into specific locations in a warehouse. It is a very simple game in the sense that the only controls are movement in the four directions. However, the puzzle can be extremely difficult because of the many moves that are possible, such as in games like Chess. Players naturally will get stuck when working on the puzzles.

At some point during the task, participants will be given breaks. We plan to randomly give participants one of three conditions. In the first condition, the player continues to work without a break. In the second condition, the player works on a very simple task during the break. In the third condition, the player will browse short form videos, stimulating the use of HIS. After this break, players return to the puzzle.

We plan to use multiple puzzles to see if the effects generalize across problems. We can compare completion rates and completion durations across conditions. Player keystrokes are also recorded, allowing us to see if people significantly change their strategy after their breaks.

Participant Groups
We plan to recruit participants online using Prolific or a similar online crowdsourcing platform. Participants will be 18 or older and from the United States. We do not plan to restrict the study by gender, cultural background, or other demographic characteristics. All participants will be assigned to all three conditions.

Benefits
In today's world HIS are often mixed in between non-routine problems. For example, at school and at work, individuals often use their smartphones during breaks. How this affects subsequent performance on their usual tasks is important to study. So far, research has shown that individuals often suffer performance drops when multitasking or being interrupted for typical problems. However, it is unclear whether this extends to non-routine problems. For problems requiring creativity, breaks and interruptions may actually lead to increased performance. Anecdotally, people often talk about interesting ideas that come about in the shower or when going on walks. Creativity may require a person to not be focused on the task.

Our experiment tests this idea in the context of HIS. Billions of individuals now take breaks with HIS compared to the past, where breaks often were less technology focused. It is important to find out whether HIS breaks lead to beneficial effects and if so, through what process.

Risks
There are no physical risks in our study. Participants may be frustrated or feel pressured to complete difficult puzzles. However, the total time for the study is short (30 minutes) and participants are free to exit at any time if they wish. We do not collect any identifiable information.

Conflict of Interest

This may be potential, real, or perceived; or will the researcher(s) have dual roles in relation to the participants?

Please refer to:

- *Chapter 5.6 Disclosure of interests and management of conflicts of interest of the National Statement on Ethical Conduct in Human Research*
- *University of Melbourne Research Integrity and Misconduct Policy (MPF1318)*
- *Australian Code for the Responsible Conduct of Research*
- *Legal and Risk: Conflicts of interest*

Does your research present or involve any conflict of interest? *

○ Yes ◉ No

Funded projects

Is this a funded research project? *

○ Yes ◉ No

Click next to move to the next page.

Project Supervisor

Provide details of the Project Supervisor. The Project Supervisor is the Responsible Researcher for the project.

Note:

- *A student researcher should not be named as the Project Supervisor on the ethics application*
- *Student researchers should list themselves as Other Internal Personnel*
- *Fields not greyed out can be modified*
- *Use Roles function in left-hand action menu to provide form access to those listed on the project*
- *The symbol  indicates that the information will be automatically populated into the Incident Report when and if you create one.*

Project Supervisor

Title PROF

First Name * Ofir

Surname * Turel

Department 4180 - Computing and Information Systems

Faculty 4000 - Engineering and IT

Is this project conducted under a different department? * ○ Yes ◉ No

Phone * Unknown

Email * oturel@unimelb.edu.au

Personnel type Staff

Please summarise this person's role within the project

Briefly explain the activities this person will undertake as part of this research project.

Ofir Turel will provide guidance to Mike Zhuang in planning and implementing the experiment. Ofir will also provide support during the data analysis and writing process. Ofir Turel and Mike Zhuang meet fortnightly to discuss this project.

Experience and skills relevant to this person's role within the project *

Please outline the experience and skills relevant to this project (describe in particular experience that the researchers and any supporting staff have in conducting research of this type and in dealing with any emergencies, unexpected outcomes, or contingencies that may arise). Refer to Section 1.1(e) of the National Statement on Ethical Conduct in Human Research.

Ofir Turel has published many papers with similar themes, such as studies on Facebook addiction and habitual use. He is well versed in quantitative methods and familiar with similar experimental paradigms. He has ran many online experiments with human participants from the United States and is familiar with the process of recruiting individual off of crowdsourcing websites such as Prolific. For the study, we are recruiting participants with this same method.

Additional training planned for this person (relevant to the project)

If any additional training is required for this person to carry out this research, please provide details of how this will be provided.

Ethics training, experience already undertaken or other relevant clearances *

- ☐ Experience as a Human Ethics Committee Member
- ☐ Experience as a Research Ethics Advisor
- ☑ Familiar with the National Statement
- ☐ Familiar with Indigenous guidelines
- ☑ Working with children check
- ☐ Safe Radiation Practices - Ionising (if using ionising radiation)
- ☐ Safe Radiation Practices - Use Licence Holders (if using ionising radiation)
- ☐ Good Clinical Practice (GCP) training (required if conducting a clinical trial)
- ☐ Other

All personnel must be familiar with the National Statement on Ethical Conduct in Human Research.

Find Ethical guidelines for research with Aboriginal and Torres Strait Islander peoples here

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Other Internal Personnel

Are there other internal personnel? *

Other internal personnel includes any University of Melbourne staff or students working on the project.

◉ Yes ○ No

Provide details of the internal personnel

Note:

- *Click 'add another' below to add multiple internal personnel.*
- *Fields not greyed out can be modified.*
- *If you are unable to find a student in the search below, click here for information regarding when student information is updated.*
- *This information is populated from HR. If something is incorrect, please contact them on 8344 0888*

Internal Personnel

If the personnel is not found in the search, scroll to the end of the page and click 'Yes' to the question "Are there internal personnel not found in the search above?" and enter their details.

Title	DR
First Name *	Shaanan
Surname *	Cohney
Department	4180 - Computing and Information Systems
Faculty	4000 - Engineering and IT
Phone	Unknown
Email *	cohneys@unimelb.edu.au
Personnel type	Staff
Project role	Investigator

Please summarise this person's role within the project

Briefly explain the activities this person will undertake as part of this research project.

Shaanan Cohney will be providing guidance and support during all processes of the project, form planning to implementation to review. Shaanan Cohney and Mike Zhuang typically meet fortnightly in regards to this project.

Experience and skills relevant to this person's role within the project *

Please outline the experience and skills relevant to this project (describe in particular experience that the researchers and any supporting staff have in conducting research of this type and in dealing with any emergencies, unexpected outcomes, or contingencies that may arise). Refer to Section 1.1(e) of the National Statement on Ethical Conduct in Human Research.

Shaanan Cohney conducts research related to computer systems, privacy, and the law. He is well versed with different technologies and its interactions with society. Shaanan has a strong computer science background and will support the development of a strong online experiment.

Additional training planned for this person (relevant to the project)

If any additional training is required for this person to carry out this research, please provide details of how this will be provided.

Ethics training, experience already undertaken or other relevant clearances*

- ☐ Experience as a Human Ethics Committee Member
- ☐ Experience as a Research Ethics Advisor
- ☑ Familiar with the National Statement
- ☐ Familiar with Indigenous guidelines
- ☑ Working with children check
- ☐ Safe Radiation Practices - Ionising (if using ionising radiation)
- ☐ Safe Radiation Practices - Use Licence Holders (if using ionising radiation)
- ☐ Good Clinical Practice (GCP) training (required if conducting a clinical trial)
- ☐ Other

All personnel must be familiar with the National Statement on Ethical Conduct in Human Research.

Find Ethical guidelines for research with Aboriginal and Torres Strait Islander peoples here

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Internal Personnel

If the personnel is not found in the search, scroll to the end of the page and click 'Yes' to the question "Are there internal personnel not found in the search above?" and enter their details.

Title	MR
First Name *	Mike
Surname *	Zhuang
Department	4180 - Computing and Information Systems
Faculty	4000 - Engineering and IT
Phone	Unknown
Email *	zhuang.m@unimelb.edu.au
Personnel type	Student
Project role	Investigator

Please summarise this person's role within the project

Briefly explain the activities this person will undertake as part of this research project.

Mike Zhuang will be working on all aspects of the project, including literature review, experiment design and implementation, data analysis, and writing.

Experience and skills relevant to this person's role within the project *

Please outline the experience and skills relevant to this project (describe in particular experience that the researchers and any supporting staff have in conducting research of this type and in dealing with any emergencies, unexpected outcomes, or contingencies that may arise). Refer to Section 1.1(e) of the National Statement on Ethical Conduct in Human Research.

As part of the PhD program, Mike Zhuang has spent a significant time researching the correct experimental paradigm to implement. Mike has also taken a course in experimental methods prior to the start of this study, along with informal research seminars related to experimental design. Mike Zhuang is quite familiar with problem solving and video games as well. He taught high school math and science for several years. He also plays a wide range of video games including puzzle games. Thus, he is familiar with problem solving in a wide variety of environments.

Additional training planned for this person (relevant to the project)

If any additional training is required for this person to carry out this research, please provide details of how this will be provided.

Ethics training, experience already undertaken or other relevant clearances*

- ☐ Experience as a Human Ethics Committee Member
- ☐ Experience as a Research Ethics Advisor
- ☑ Familiar with the National Statement
- ☐ Familiar with Indigenous guidelines
- ☑ Working with children check
- ☐ Safe Radiation Practices - Ionising (if using ionising radiation)
- ☐ Safe Radiation Practices - Use Licence Holders (if using ionising radiation)
- ☐ Good Clinical Practice (GCP) training (required if conducting a clinical trial)
- ☐ Other

All personnel must be familiar with the National Statement on Ethical Conduct in Human Research.

Find Ethical guidelines for research with Aboriginal and Torres Strait Islander peoples here

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Are there internal personnel not found in the search above?

○ Yes ◉ No

External Personnel

Are there external personnel? *

○ Yes ◉ No

Click next to move to the next page.

Background

Background *

Provide a summary of the background of this research. What is the current state of research/knowledge/discourse in this area? You may include a few key references, but you do not need to provide your entire list of references here. Refer to Chapter 3.1 The elements of research, as well as sections 5.3.1 and 5.3.5, of the National Statement on Ethical Conduct in Human Research.

Research in Information Systems and related fields include interruptions (Puranik et al., 2020), breaks (Lyubykh et al., 2022), cyberloafing/cyberslacking (Tandon et al., 2022) and media multitasking (May & Elder, 2018). These different constructs refer to difference instances where digital technology such as smartphones interrupt our daily lives. Generally, the research has shown that task performance decreases when one is switching between a task and smartphone use. For instance, going on social media may result in work taking longer. Students may procrastinate by going on their phones. However, research has focused on more simple measurements such as time on task. Studies don't usually account for more complex tasks. For example, computer programmers may have difficult tasks that can not be solved efficiently with time alone. Perhaps taking short breaks may help them come up with more creative solutions to the problems they face.

In psychology, it is well known that when individuals get stuck on a problem, it is beneficial to take a break (Sio & Ormerod, 2009). Studies are structured similar to real world tasks. For example, participants may be asked to try to complete a remote association test. They are to find a word that is related to cottage, Swiss, and cake (answer being cheese). If they are unable to find the solution, they are given a short break. It seems as though individuals given this 'incubation' period perform better on this task then those who work continually on the problem. My research aims to extend these findings to the information systems literature. I would like to replicate the findings in the typical break contexts of today. For example, does taking smartphone breaks lead to improved problem solving?

Lyubykh, Z., Gulseren, D., Premji, Z., Wingate, T. G., Deng, C., Bélanger, L. J., & Turner, N. (2022). Role of work breaks in well-being and performance: A systematic review and future research agenda. Journal of Occupational Health Psychology, 27(5), 470.

May, K. E., & Elder, A. D. (2018). Efficient, helpful, or distracting? A literature review of media multitasking in relation to academic performance. International Journal of Educational Technology in Higher Education, 15(1), 1-17.

Puranik, H., Koopman, J., & Vough, H. C. (2020). Pardon the interruption: An integrative review and future research agenda for research on work interruptions. Journal of Management, 46(6), 806-842.

Sio, U. N., & Ormerod, T. C. (2009). Does incubation enhance problem solving? A meta-analytic review. Psychological bulletin, 135(1), 94.

Tandon, A., Kaur, P., Ruparel, N., Islam, J. U., & Dhir, A. (2022). Cyberloafing and cyberslacking in the workplace: systematic literature review of past achievements and future promises. Internet Research, 32(1), 55-89.

Key Question(s) *

What are the key question(s) the research project intends to examine?

The project wants to examine whether and how breaks with hedonic information systems affect problem solving.

Specifically, we wish to validate the presence of the incubation effect in typical settings. Most people take breaks with their smartphones; do they still perform better on creative problems?

In addition, we wish to see through which process this effect occurs through.

If unconscious processing during the break is responsible for improved problem solving, highly stimulating HIS (such as social media, TikTok, etc.) should impede problem solving ability. Breaks with lower cognitive demand, such as sitting quietly or checking emails, should still have the intended problem solving benefits.

However, if mental restructuring is the main process by which the incubation effect occurs, HIS should actually be highly beneficial to creative problem solving. That is, because these technologies are highly stimulating and distracting, they lead to more beneficial forgetting of the previous task, leading to a fresh look on resumption of the task and therefore greater problem solving success.

Significance of this Research *

Explain the significance of the proposed research project in light of existing research, knowledge or understanding. How will your research help fill the gap? You may include a few key references, but you do not need to provide your entire list of references here. Refer to Chapter 3.1 The elements of research, as well as sections 5.3.1 and 5.3.5, of the National Statement on Ethical Conduct in Human Research.

A significant portion of the world population has access to smartphones or other digital technologies to use during breaks. Compared to the past, breaks are becoming more and more mentally simulating. Take infinite scrolling feeds for example. Hedonic information systems are designed to keep users engaged and focused. It is important to investigate whether or not this passive attention grabbing process may impact problem solving ability. Past studies have consistently shown that breaks lead to improved performance, but typical breaks in the past did not include HIS. Similarly, past studies usually investigate task efficiency in routine tasks rather than creative, knowledge work. In this age of automation, a worker's knowledge may be an organization's biggest asset (Sokół & Figurska, 2017). This research thus expands psychological findings, providing relevant findings that can be beneficial for policy making in work and education.

In addition, our experimental design helps lend fine grained support towards one of two competing hypotheses for how the incubation effect occurs. We collect behavioral data through our online study which allows us to see if people really do change their strategy after a break. Compared to past experiments, this fine tracking of behavior allows us to look closely at the process of mental restructuring.

Sokół, A., & Figurska, I. (2017). Creativity as one of the core competencies of studying knowledge workers. Entrepreneurship and Sustainability Issues, 5(1), 23-35.

Location

Where will the research team be physically located? *

Indicate where the research will be carried out. For example, consider where the researcher and/or research team be located while the project is underway. Where research is being undertaken at locations additional to or other than the University of Melbourne, it is possible that additional approvals will be required and/or ethics clearances sought from other review bodies. Select multiple check-boxes where applicable.

- [x] On site - The University of Melbourne
- [ ] Off site - External Sites within Victoria
- [ ] Off site - External Sites within Australia
- [ ] Off site - External Sites within Australia (outside Victoria)
- [ ] Off site - Outside Australia
- [ ] Not finalised at this stage/other

Where will the participants be located?*

Indicate where participants will be located while research is being carried out. Where research is being undertaken at locations additional to or other than the University of Melbourne, it is possible that additional approvals will be required and/or ethics clearances sought from other review bodies. Select multiple check-boxes where applicable.

- [ ] On site - The University of Melbourne
- [ ] Off site - External Sites within Victoria
- [ ] Off site - External Sites within Australia
- [ ] Off site - External Sites within Australia (outside Victoria)
- [x] Off site - Outside Australia
- [ ] Not finalised at this stage/other

If outside Australia, select if the research project involves any of the following *

- [ ] Research involving sensitive cultural issues
- [ ] Research where criticism of government is dangerous
- [x] None of the above

In what environments will the research be conducted? *

Select the category of location at which the research is to be undertaken. For example, consider the location in which data is being collected. Select multiple check-boxes where applicable.

- ☐ Clinic(s)
- ☐ Community centre(s)
- ☐ Cultural/religious organisation(s)
- ☐ Educational settings (Early Childhood / Primary / Secondary)
- ☐ Higher education (University / TAFE)
- ☐ Hospital(s)
- ☑ Online
- ☐ Private residence(s)
- ☐ Professional organisation(s)
- ☐ Public place(s)
- ☐ Research institute(s)
- ☐ Workplace(s)
- ☐ Studio(s)
- ☐ Other

Methods

With whom or with what will the research be conducted? *

- ◉ Human beings
- ○ Human beings and biospecimens
- ○ Existing biospecimens only
- ○ Existing data only

Does your research study involve the prospective assignment of human participants or groups of humans to one or more health-related intervention?*

As per the WHO, a health-related interventions is an act performed for, with or on behalf of a person or population whose purpose is to assess, improve, maintain, promote or modify health, functioning or health conditions. Health-related interventions can include the use of a drug, biological or device (marketed or investigational), consumption of a food or vitamin supplement, screening test, surgical procedures, processes of care as well as exercise, education and behavioural therapies.

- ○ Yes
- ◉ No

Select all of the methods that you plan to use in the research project *

This checklist will help determine if you need to complete other section(s).Select multiple check-boxes where applicable. The definition of each method will appear when you select a checkbox.

- ☐ Action research
- ☐ Biospecimen analysis
- ☐ Data linkage
- ☐ Epidemiology
- ☐ Ethnographic methods
- ☐ Human Body Donor Research
- ☐ Interventional / Clinical Trials
- ☐ Ionising radiation
- ☑ Observation
- ☑ Surveys / interviews / focus groups
- ☐ Textual analysis
- ☐ Usability study
- ☐ Other

Observational research

- *Observational research involves the researcher observing participant/s in their own environment, or in the environment being studied. Data collection through observation can be structured or unstructured, with the observer as a collaborative participant (participant observation) or external to the environment.*

If your method substantially varies from the description(s) provided, describe your method in more detail to articulate the variations

Survey/Interview/Focus Group research

- *Interviews involve researchers talking to one or more participants, where the categories of response are focused but not necessarily pre-determined. Interviews are usually recorded by audio- or video-tape, or notes. These records are research data in themselves, but also may be transcribed. Interviews are usually conducted in locations mutually acceptable to participants and interviewers.*
- *Focus groups of participants discuss a set of research questions or topics. This may entail the researcher acting as a moderator for the discussion.*
- *This method includes research using oral history.*

If your method substantially varies from the description(s) provided, describe your method in more detail to articulate the variations

Participants

Will your research specifically target any of the following participant groups? *

- *Please select all groups that apply.*
- *The inclusion of some of the groups below will make your application ineligible for a low and negligible risk review. Please refer to Section 4 Ethical considerations specific to participants of the National Statement on Ethical Conduct in Human Research*
- *Select 'Other participant group' if your research does not target any of the specific groups listed.*

- ☐ Women who are pregnant or the human fetus [P1]
- ☐ Children and young people [P2]
- ☐ People in dependent or unequal relationships [P3]
- ☐ People highly dependent on medical care who may be unable to give consent [P4]
- ☐ People with a cognitive impairment, an intellectual disability, or a mental illness [P5]
- ☐ People who may be involved in illegal activities [P6]
- ☐ Aboriginal or Torres Strait Islander Peoples [P7]
- ☑ People in countries other than Australia [P8]
- ☐ Other participant group [P9]

Does the research involve recruitment of adult research participants who do not have decision making capacity to consent? *

○ Yes ◉ No

Consent and information - all participant groups

You can download generic form templates from the forms, templates and examples page. You may modify the forms or design your own to reflect the needs of your project.

Obtaining Informed Consent

How will you obtain informed consent? *

Please refer to Chapter 2.2 General requirements for consent and Chapter 2.3 Qualifying or waiving conditions for consent of the National Statement on Ethical Conduct in Human Research for guidance.

For an opt-out approach or waiver of consent, please also refer to the Privacy Act 1988.

- ☑ Written consent will be sought from (or on behalf of) participants.
- ☐ Verbal consent will be sought from (or on behalf of) participants.
- ☐ Consent will be implied, rather than explicitly obtained.
- ☐ Third parties (e.g. parents/guardians/carers) will provide consent on behalf of participants.
- ☐ Third parties (e.g. community elders, school boards) will be involved in whole of community participation decisions.
- ☐ This application proposes to use opt-out approach.
- ☐ This application seeks a waiver of consent.

Consent form

Ensure any participant-facing documentation includes your project ID and acknowledgement that it has University of Melbourne human ethics approval.

Documents

Type	Document Name	File Name	Version Date	Version	Size
Consent form	consent-form-1.2	consent-form-1.2.docx	25/01/2024	1.2	177.0 KB

Plain Language Statement

Ensure any participant facing documentation includes your project ID and acknowledgement that it has University of Melbourne human ethics approval

Documents

Type	Document Name	File Name	Version Date	Version	Size
Plain Language Statement (PLS)	plain-language-statement-1.2	plain-language-statement-1.2.docx	25/01/2024	1.2	184.7 KB

Data Collection and Analysis

What data/materials will be collected? Where will the data be collected? *

1. Demographics data such as age, sex, handedness
2. Specific questions related to our study such as familiarity with technology, familiarity with Sokoban-like puzzles
3. Puzzle start time, puzzle end time, break duration, mind-wandering, absorption, resources (energy, motivation, concentration), moveset (keystrokes of moves during puzzle)

We measure handedness, familiarity with technology/Sokoban-like puzzles as controls. Handedness has been associated with problem solving and creativity.
Mind-wandering, absorption, and resources are measured to substantiate the unique effects of different types of breaks.

Data is collected through the online website where we run the study. Data will be stored on MongoDB Atlas, a database management application. Participants will be recruited through a crowdsourcing platform such as Prolific. This allows us to obtain a much more diverse pool of participants.

How will data/materials be analysed? *

What methods/techniques/theories will be used?

For our initial phase, we plan to use a one-factor (type of break: no break, low demand break, HIS break) repeated measures experimental design. We measure the duration users spent completing the puzzle and the proportion of success on various puzzles. We will attempt to find correlations between constructs of interest (such as mind-wandering, type of break, and absorption) and solution rates/time.

In followup phases, we plan to repeat the experimental design but add in different factors (break time, type of task). We measure the same variables but look for causation between our variables of interest and solution rates/time.

How will relevant information about the research project be provided to potential participants?*

Explain how participants will be informed about the research project. If applicable, explain what arrangements will be made for informing participants with low literacy skills, and/or for translation/interpreting of these materials for participants who are speakers of languages other than English.

Please refer to Chapter 3.1 (Element 2: Recruitment and Element 3: Consent) and sections 5.2.15-5.2.16 of the National Statement on Ethical Conduct in Human Research.

After participants are recruited from a crowdsourcing platform, they will receive a link to our website. Relevant information about the project, such as that mentioned in the plain language statement, will be provided to participants on the first page of the online website.

Attach a copy of any advertisement (print or online), letter, email, telephone script to be used.

Documents

Type	Document Name	File Name	Version Date	Version	Size
Recruitment materials	prolific-ad	prolific-ad.png	07/12/2023	1.1	53.8 KB

Limited disclosure

Do you propose to use limited disclosure for this research project? *

○ Yes ◉ No

P8 - People in countries other than Australia

Please refer to Chapter 4.8 People in other countries of the National Statement on Ethical Conduct in Human Research.

If the research activity involves any residents of the European Union, then ensure consent complies with the EU General Data Protection Regulation (GDPR).

How will local cultural values be acknowledged and reflected in both the design of the research and the conduct of researchers?*

We use plain language throughout our study to avoid any potential biases or offenses. We do not limit our study to certain groups. The responsible researcher was raised in the United States and is familiar with its customs and language conventions. The project supervisor (Ofir Turel) also has considerable experience conducting research with crowdsourcing platforms in the United States.

How will the design of the research take into account local power relations, inequalities and divisions?*

Our study is not limited to any certain group. We make sure to collect some demographic information to make sure we do not generalize results incorrectly. We also plan to compensate participants adequately regardless of the minimum wage laws in any given US state.

Provide the following details for each country in which the research project will be conducted

Name of the country* United State of America

Is there an ethics review process?*

○ Yes ◉ No

Identify the local ethics guidelines that will be used for reviewing the research in this country*

The United States uses the Federal Policy for the Protection of Human Subjects. The requirement only applies to institutions located in the United States that are engaged in research conducted or supported by a federal department/agency. Although we are not required to obtain IRB approval from the United States, we adhere to the local guidelines to the best of our ability. The informal guidelines is the Belmont Report (which the federal policy is based off), and it is similar to the Australian National Statement. For example, applications of the three principles (respect for persons, beneficence, and justice) requires informed consent, assessment of risks and benefits, and the proper selection of subjects. We follow these in addition to proper selection of subjects, which requires that disadvantaged populations from the United States be protected from poor research practices. For example, we do not prevent any group from participating in our study and we pay our subjects well above the minimum recommended wage on Prolific.

Federal Policy for the Protection of Human Subjects: https://www.hhs.gov/ohrp/regulations-and-policy/regulations/45-cfr-46/revised-common-rule-regulatory-text/index.html
Belmont Report: https://www.hhs.gov/ohrp/regulations-and-policy/belmont-report/read-the-belmont-report/index.html

Describe any factors that may make it problematic to conform to ethical standards expressed in the National Statement on Ethical Conduct in Human Research and what steps will be taken to address these matters*

There should be no problems pertaining to the National Statement.

Do you plan to engage individuals from any country in which the research will be conducted to help conduct the research?*

○ Yes ◉ No

To whom will participants direct any questions, concerns or complaints about the research?*

These names are also provided in the consent form and plain language statement.

University of Melbourne, Department of Computing and Information Systems

Name of Investigator(s):
Mr. Mike Zhuang (mike.zhuang@unimelb.edu.au)
Prof. Ofir Turel (oturel@unimelb.edu.au)
Dr. Shaanan Cohney (cohneys@unimelb.edu.au)

How will you engage with participants and their communities with respect to their expectations of the research project?*

Expectations are listed in both the plain language statement and consent form. Several attention check questions are used to make sure participants understand the instructions of the research. It is important that participants don't get the wrong idea for payment for example. We emphasize that individuals are being studied only for their behavior and not for the final solution to the problems. We also inform participants that they may receive extra compensation ($1 USD) if they remain active participants (this compensation is provided regardless of actual performance).

How will you manage these expectations in light of any resource limitations of the research project?*

Our instructions are provided online and can be viewed for as long as the participant needs. At any time where they may have issues, they are free to contact us through the emails listed in the plain language statement and consent form. Additionally, there is an optional form field at the end of the study to provide comments and feedback for the study. We do not expect any significant research limitations, having done pilot studies to test the efficacy of the online platform.

Do you propose to incentivise and/or reimburse participants in any way? *

◉ Yes ○ No

Give details here and comment on the special considerations discussed in sections 2.2.10, 2.2.11 and 3.1.21 of the National Statement on Ethical Conduct in Human Research:*

Our experiment is expected to take anywhere from 10 to 30 minutes. The wide variance is due to individual differences in problem solving ability. Some groups may work on problems continuously and thus finish or meet the time limit quite fast. We plan to reimburse individuals using the median minimum wage of the United States, as there are considerable differences in wage laws in the 50 states. We expect that most participants should complete the study in about 20 minutes and so we plan to reimburse participants $4 USD plus a $1 bonus (always given) which is approximately $7.5 AUD (the median hourly minimum wage in the US as of 2023 is around $10 USD).

Monetary compensation is sent through the crowdsourcing platform upon completing of the project. Individuals who go idle or withdraw/exit the site will not be reimbursed, which is standard for crowdsourced online studies.

Describe how recruitment will occur *

Describe the research sample and explain the basis upon which this sample was chosen. Include any relevant demographic characteristics of participants, as well as any eligibility constraints (i.e. inclusion/exclusion criteria). Explain how potential participants will be identified and approached. Who will do this?

Please refer to Chapter 3.1 (Element 2: Recruitment) of the National Statement on Ethical Conduct in Human Research.

We do not exclude any particular demographic characteristics or propose any inclusion criteria. Prolific has a participant pool that is diverse in demographics, although it is biased towards the WEIRD (western, educated, industrialized, rich, and demographics) group. The sample is chosen through convenience sampling. In prolific, people online during the launch of our study do have priority in starting the study. We plan to limit these issues by picking a time in which most people can participate (outside of work hours).

Provide your estimated sample size*

How many members of this group do you aim to recruit?

350

Provide a clear justification for the sample numbers required to meet the aims of the study. If necessary, provide statistical details.*

We ran a G* Power analysis to determine the sample size needed to detect a significant effect if it exists. The analysis takes in the estimated effect size, significance level, and power. Our effect size is unknown, so we use a conservative effect size of 0.3. A meta-analysis for similar incubation studies found a median effect size of 0.26 across 117 independent studies (Sio & Ormerod, 2009). We use standard values for significance (0.05) and power (0.95).

With a modest effect size of 0.3, power of .95, and significance at 0.05, we need a total sample size of 172. This would provide a 95% chance of finding a significant result if a true effect exists.

For our study design, the number of participants will need to be much larger than the recommended sample size. This is because individuals who complete the puzzles are not considered in further analyses. We are aiming for a 50% dropout, which suggests we need double the recommended sample size. We also expect a few individuals to fail attention checks, go idle, or exit the website on accident. Therefore we use a little more than double the base sample size recommended by the analysis.

Sio, U. N., & Ormerod, T. C. (2009). Does incubation enhance problem solving? A meta-analytic review. Psychological bulletin, 135(1), 94.

Recruitment materials - attach a copies of any advertising material, emails, letters, telephone scripts, specific for this participant group.

Documents

Type	Document Name	File Name	Version Date	Version	Size
Recruitment materials	Puzzle Problem Solving Advertisement	Puzzle Problem Solving Advertisement.pdf	02/11/2023	1	45.9 KB

What will participants be asked to do? *

What is the approximate time commitment required of each participant? If your research will be conducted in schools during class time, give details of the alternate activity arranged for students in the class who will not be participating in the research.

The exact procedure and time estimates are detailed:
1. Redirected from crowdsourcing platform to website.
2. Read plain language statement and consent form. (2 minutes)
3. Read instructions of experiment and answer attention check questions. (1 minute)
4. Work on 4 easy Sokoban problems that serve as attention checks, training, and acclimation to the environment. (2 minutes total)
5. Work on 3 trial Sokoban problems along with some survey items. (MAX 4 minutes, 10 minutes, 10 minutes)
6. Complete demographics survey. (1 minute)

Total time (up to 30 minutes, but likely to average to be around 20 minutes)

Obtaining Informed Consent

Will you be obtaining consent from this participant group in a different manner than described on the "Consent and information - all participant groups" page? *

○ Yes ◉ No

Data Collection and Analysis

Will data/materials be collected and analysed for this participant group in a different manner than described on the "Consent and information - all participant groups" page? *

○ Yes ◉ No

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? Please refer to Chapter 2.1 Risk and benefit of the National Statement on Ethical Conduct in Human Research.

Note that the risks you identify here should also be described in your Plain Language Statement (PLS).

Potential risks to this participant group *

Identify, as far as possible, any potential risks to this participant group associated with the research project. Risks may arise from the nature of questions that participants are asked (such as discussing sensitive or distressing topics), or the tasks that participants will do, or the procedures that they will undergo. Potential risks might be physical, psychological, emotional, social, legal, reputational or economic in nature (this list is not exhaustive). Risks also may be associated with the research setting (e.g. outdoors, in unsecure housing, or in countries other than Australia). If you believe that any potential risks are minimal, please state this and explain why.

The primary risk is psychological distress. Participants might feel compelled to complete each puzzle due to engagement in the activity. They may become frustrated when they are unable to solve the puzzle or are forced to take a break or move on from a puzzle. We believe this risk to be minimal since there is always the issue of becoming frustrated when doing any difficult activity. Our experience is no difference than common experiences in real life contexts.

Risk management strategy for this participant group *

Describe what measures you have in place to negate, minimise or manage the potential risks you have identified. Depending on the type(s) of risks involved, participants may also need additional support (e.g. external counselling) during or after the study. Attach or include a copy of any distress protocol or adverse event protocol which you have developed.

Participants are free to leave the study at any time by simply closing their browser. Participants are also told that their compensation does not depend on how many puzzles they complete. An attention check question must be required and participants must answer that they understand that their performance does not determine their compensation.

Information for this Participant Group

Will you be providing information about the research project to this participant group in a different manner than described on the "Consent and information - all participant groups" page? *

○ Yes ◉ No

Risks to non-participants and researchers

Identify how your research project may pose any potential risks to non-participants, researchers or independent contractors. If so, how will these risks be minimised? Please refer to Chapter 2.1 Risk and benefit of the National Statement on Ethical Conduct in Human Research.

Non-participants

Does your research project pose any potential risks to non-participants? *

First consider what additional groups outside of your participants may be affected by your project, such as family members, colleagues, individuals from the same community or area, etc. Risks to non-participants might include things such as potential breach of privacy, stigmatization of a particular group, or knowledge about familial genetics. If you believe that any potential risks to non-participants are minimal, please state this and explain why.

○ Yes ◉ No

Explain why you believe the project poses no risk to non-participants*

Outline the attributes of your project that mean there is no risk to individuals outside of your participant group.

The project does not request sensitive or identifiable information. The main puzzle task that participants would do is common outside of research. Many people play the puzzle or similar games online for fun. Similarly, during the break individuals will do tasks such as walking or browsing their phone. As such, the procedure entails typical activities that would not deviate substantially beyond the norm of what participants do outside of the study. Therefore we believe it will not impact those related to the main participants.

Researchers

Does the research project pose any potential risks to researchers or independent contractors? *

Risks to researchers or independent contractors might include things such as potential breach of privacy, stigmatisation of a particular group, knowledge about familial genetics or exposure to illegal activity. If you believe that any potential risks to researchers or independent contractors are minimal, please state this and explain why.

○ Yes ◉ No

Please explain why you believe the project poses no risk to researchers or independent contractors.*

Outline the attributes of your project that mean there is no risk to researchers or independent contractors.

Researchers will simply be evaluating the results of the puzzle task. The researchers will not be directly interacting with the participants.

Data and Privacy - Collection and/or Use

Collection and/or use of participants' information

See Australian Privacy Principles (APP), the Health Records Act (HPP) and the Office of the Victorian Privacy Commissioner for further guidance. Refer to the National Statement on Ethical Conduct in Human Research.

Does the project involve the collection and/or use of individually identifiable or re-identifiable information from sources other than the individual to whom the information relates?*
Note that access to identifiable records for the purpose of extracting non-identifiable data constitutes 'use' and 'disclosure' of identifiable data even if such data will not be 'collected'.

- ○ Yes
- ◉ No

Does the project involve the collection and/or use of information about individuals without the knowledge or consent of the individual to whom the information relates (or their legal guardian)?*

- ○ Yes
- ◉ No

What type of consent will be sought from participants to use the collected information?*
If data/materials/tissues collected for this research project may be reused in future research, it must be made clear in the Plain Language Statement and consent form. Please refer to sections 2.2.14-2.2.18 of the National Statement on Ethical Conduct in Human Research.

- ◉ Consent will be SPECIFIC to this project only. Data/materials/tissues will be used only for this research project (i.e. no future use).
- ○ Consent will be EXTENDED. Data/information used in this research project may also be used in future projects that are closely related to this project, the same general area, or could make valuable use of this data.
- ○ Consent will be UNSPECIFIED. Data/information used in this project may also be used in any future research.
- ○ NA - Waiver of consent

Explain why is consent being sought only for this project?*

We do not plan to use the data for future projects.

Information for individuals

Does your project have a Plain Language Statement or Consent Form?*

- ◉ Yes
- ○ No

Does the Plain Language Statement and Consent Form explain the following?

The information that is being collected	◉ Yes	○ No
The purposes for which the information is being collected	◉ Yes	○ No
The extent of future use of data	◉ Yes	○ No
If permission is being sought to enter the information into a databank	○ Yes	◉ No
The period for which the records relating to the participant will be kept	◉ Yes	○ No
The form in which the data will be stored (i.e. whether identifiable or not)	◉ Yes	○ No
The steps taken to ensure confidentiality and secure storage of data	◉ Yes	○ No

The types of individuals or organisations to which your organisation usually discloses information of this kind	◉ Yes	○ No
How privacy and confidentiality will be protected in any publication of the information	◉ Yes	○ No
The fact that the individual may access that information	◉ Yes	○ No
Any law that requires the particular information to be collected	○ Yes	◉ No
The consequences (if any) for the individual if all or part of the information is not provided	◉ Yes	○ No
The identity of the organisation collecting the information and how to contact it	◉ Yes	○ No

Give the reasons why this information has not been included in the plain language statement and consent Form*

No law requires this information be collected.
We do not plan to enter the data into a databank.

Collection of information from a third party

Are you seeking approval for collection of information from a third party?*

○ Yes ◉ No

Data and Privacy - Disclosure

See Australian Privacy Principles (APP), the Health Records Act (HPP) and the Office of the Victorian Privacy Commissioner for further guidance. Refer also to the National Statement on Ethical Conduct in Human Research

Disclosure of information

Does the project involve the disclosure of individually identifiable or re-identifiable information from sources other than the individual to whom the information relates?*

Note that access to identifiable records for the purpose of extracting non-identifiable data constitutes 'use' and 'disclosure' of identifiable data even if such data will not be 'collected'.

○ Yes ◉ No

Does the project involve the disclosure of information without the consent of the individual to whom the information relates (or their legal guardian)?*

○ Yes ◉ No

Data and Privacy - Dissemination

How will the results/outcomes of the research project be provided to participants in an accessible format? *

Please refer to section 1.5 and Chapter 3.1 (Element 6: Dissemination of Research Outputs and Outcomes) of the National Statement on Ethical Conduct in Human Research.

- ☐ Email
- ☐ Face-to-face contact
- ☐ Paper based printouts
- ☐ Website (project website, university website)
- ☑ Other
- ☐ N/A

Describe how participants will be given access to the results/outcomes of the research or why it is not applicable

The results will be provided through the crowdsourcing platform.

How will the results/outcomes of the research project be made public? *

Please refer to section 1.3 and Chapter 3.1 (Element 6: Dissemination of Research Outputs and Outcomes) of the National Statement on Ethical Conduct in Human Research.

- ☐ Lay summary
- ☑ Presentation (conferences, seminars)
- ☑ Research project thesis
- ☑ Research publications (academic journal, discussion papers, reports, books, digital journals)
- ☑ Website (project website, university website)
- ☐ Other
- ☐ N/A

Data and Privacy - General Issues

Please refer to:

- *Section 1.11 and Chapter 3.1 (Element 4: Collection, Use and Management of Data and Information) of the National Statement on Ethical Conduct in Human Research*
- *University of Melbourne Research Integrity and Misconduct Policy (MPF1318)*
- *Australian Code for the Responsible Conduct of Research*

See Australian Privacy Principles (APP), the Health Records Act (HPP) and the Office of the Victorian Privacy Commissioner for further guidance.

Does the project involve the adoption of unique identifiers assigned to individuals by other agencies or organisations?*

○ Yes ◉ No

What measures, if any, will be taken to prevent the re-identification of participants?*

Describe whether the data will be identifiable. That is, will it be possible for researchers or others to match data to specific participants? If so, how will this be possible? If not, how will such matching be prevented? How will participants be referred to in publications? Could participants be identified even if not specifically named?

Demographic data will be collected (age, gender, etc.) but we do not ask for name or date of birth. Individuals will be given a unique randomly generated ID to match their data. Participants will not be identified in the study and their data will only be shown aggregated with others (summary statistics).

Which of the following will your research generate? *

- [ ] Non-digital data
- [x] Digital data

Security and Storage of Digital Data

How the data will be stored long-term and/or short-term and whose responsibility will it be to manage it.*

What short-term storage will you use during the data collection phase? Whose responsibility will it be to manage this? What long-term storage will you use after the data collection phase? Whose responsibility will it be to manage this?

The data will be exported and processed on excel. In the short and long term, data will be stored on One Drive which is managed by the University. The PhD student (Mike Zhuang) and Co-supervisors (Ofir and Shaanan) will have access to it and manage it.

Data will be stored according to the University's Research Data Management Policy (MPF1242) and the data management plan provided.

Who will have access to unprocessed (raw) data and what security measures will be in place to control access to data?*

The PhD student (Mike Zhuang) and other investigators have access to the unprocessed raw data. The raw data is located on MongoDB Atlas, which obtains data live from participants as they use the study website. The database can only be accessed on certain computers so even if someone knows the login details they would not be able to login on any computer. The site is password protected and mandates multi-factor authentication.

Databanks

Are data to be stored in a databank for future research?*

The NHMRC defines a databank as a systemic collection of data, whether individually identifiable, re-identifiable or non-identifiable. This could include an archive, a repository, an existing database of previously collected research data, or others.

Please refer to sections 2.2.15 and 3.1.56 of the National Statement on Ethical Conduct in Human Research.

- ○ Yes
- ◉ No

Trans-border data flow

Does the project involve trans-border (i.e. interstate or outside Australia) data flow?*

- ◉ Yes
- ○ No

Give details of how this will be carried out in accordance with relevant privacy principles (e.g. HPP9, APP 8).*

We use the crowdsourcing platform Prolific, which has a privacy policy to meet several regulations such as the General Data Protection Regulation. Prolific assigns a unique participant ID to fully anonymize participants.

Our screening questions or demographic questions do not include any personable identifiable information such as birthday or email. Therefore, the data flow does not include personable identifiable information which is the target of relevant privacy regulations.

Data retention

For how long will you keep the data generated by this research project? *

Retention and destruction of records and information must be in line with the University of Melbourne Records & Disposal Authority (RDA) requirements, supporting legislative and business needs.

Minimum data retention periods apply for certain types of research. Data and information may be of cultural, historical or other significance such that they should be retained beyond the minimum retention period. Disposing of these data or information without consideration of these factors violates the ethical principle of respect. These matters should be appropriately addressed below and in consent processes and documentation. Please refer to section 3.1.73 of the National Statement on Ethical Conduct in Human Research.

- ☐ Summary record of research data (Permanent - Retain as University Archives)
- ☐ Datasets of regulatory or community-wide significance (Permanent - Retain as University Archives)
- ☐ Datasets created from clinical trials (Temporary - Destroy 15 years after completion of research activity)
- ☐ Datasets related to research involving minors (Temporary - Destroy 15 years after the child reaches the age of 18)
- ☑ Datasets not involving clinical trials or minors (Temporary - Destroy 5 years after completion of research activity)
- ☐ Perpetuity
- ☐ Other

Do you have a Data Management Plan (if applicable)?

Please see the online [Managing Data @Melbourne] program for guidance.

◉ Yes ○ No

Please attach your data management plan.

Documents

Type	Document Name	File Name	Version Date	Version	Size
Other	data-management-plan	data-management-plan.pdf	03/11/2023	1	33.2 KB

Project management and monitoring

How will researchers manage and monitor conduct of the research project? Please refer to Chapter 5.3 Responsibilities of researchers and Chapter 5.4 Monitoring of the National Statement on Ethical Conduct in Human Research.

Project management *

Provide details of how and by whom the research project will be managed, throughout the life of the project, to ensure that it complies with the protocols set out in this application, and with all relevant legislation and regulations. Address cases where several people are or may be involved in recruiting, interviewing, obtaining data or data analysis.

The project is completed as part of a PhD program and is thus monitored heavily by the supervisors (Ofir Turel and Shaanan Cohney). Although Mike Zhuang will be directly responsible for much of the processes such as recruiting and data analysis, significant guidance will be provided by the supervisors.

Monitoring *

If the research will be carried out at some distance from the Project Supervisor (i.e. interstate or in countries other than Australia), describe the systems in place to ensure compliance with the research protocols you have outlined in this application. If the research will be undertaken by a student, junior researcher, research assistant and/or external researcher, describe how they will be supervised to ensure compliance with the protocols, including details of any local supervision to be organised for research conducted overseas or interstate.

The project is not carried out at distance from the project supervisor. The student communicates with the supervisors on average every two weeks. Most decisions are not made without group discussion.

Will independent contractors be involved? *

An independent contractor is a person not listed as a participating researcher on the application and who will provide services as part of your research project (eg: translators, transcription services, volunteers).

○ Yes ◉ No

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. Please refer to sections 1.6-1.9 and Chapter 2.1 Risk and benefit of the National Statement on Ethical Conduct in Human Research.

Describe the expected benefits of this research *

Include potential benefits to the community or society, and any specific potential benefits to participants, beyond general positive feelings that may arise from participating in research and having one's voice heard. Note that it is generally not necessary to demonstrate specific benefit to participants in order to show that research is ethically justifiable.

We do not expect any significant specific potential benefits to participants aside from the compensation. We would need group data to provide much more generalizable claims since individual problem solving behavior varies quite a bit.

We do believe that this and similar research does have the capacity to benefit society quite significantly. Particularly, knowledge of typical breaks and their effects on problem solving will be beneficial for users of technology.

For example, we may gain insight onto:
1. In the classroom, should students swap from task to breaks over and over? Or work continuously? Do breaks make students more creative on subsequent problems?
2. At the office, should knowledge workers (those who don't have routine jobs such as researchers, writers, etc.) be allowed to go on frequent breaks? Does it improve creativity or problem solving?

Justification of risks relative to expected benefits *

Explain how the expected benefits of the research justify the risk(s). Pay particular attention to any risk(s) to participants that are greater than inconvenience.

The risks are very minor in relation to the benefits. Many individuals likely have played games like Sokoban or had to solve difficult problems in their daily life. We only expect participants to work for a maximum of around 30 minutes, with the average individual likely finishing the task in 20 minutes. What is more likely, based on informal trials with friends and colleagues, is that individuals get quite invested in the puzzles. While frustrating, figuring out the solution after working hard on the problem usually ameliorates the initial frustration, if any.

Other issues and approvals

Other ethics approvals

Do you require other ethics approval(s) to undertake the research? *

○ Yes ◉ No ○ Yet to be determined ○ Transferring my application

Other approvals or agreements

Do you require other approvals from external bodies to undertake the research, eg: participating organisations/individuals/local council arrangement/agreement? *

- ○ Yes
- ◉ No
- ○ Yet to be determined

Provide any other ethical issues not addressed elsewhere in this application, which are relevant to the ethical review of your research project

Documents

To upload the following documents, please go to the respective pages:

- *Consent Form – "Consent and information - all participant groups" page in Section D*
- *Plain Language Statement - "Consent and information - all participant groups" page in Section D*
- *Recruitment materials - "Consent and information - all participant groups" page in Section D*
- *Distress Management Protocols – all participant groups in Section D*
- *External HREC approvals – "Other issues and approvals" page in Section F*
- *Other external approvals - "Other issues and approvals" page in Section F*

If you have uploaded the above documents already, you are not required to upload it again on this page.

If there are additional documents that you did not upload against a specific question within the application, select the document category you want to upload and then click "Upload Document" to attach the document(s) to your application.

Refer to preparing documents for guidance.

Select the document category to upload

You may select more than one option.

- ☐ Focus group questions and/or themes
- ☐ Full protocol (for medical research)
- ☑ Measure(s) and/or scale(s)
- ☐ Interview questions and/or themes
- ☐ Questionnaire(s) and/or survey instrument(s)
- ☐ Responses to review documents
- ☑ Other documents

Measure(s) and/or scale(s) documents

Documents

Type	Document Name	File Name	Version Date	Version	Size
Measure(s) and/or scale(s)	measures-scales	measures-scales.docx	07/12/2023	1.0	14.8 KB

Other documents

Documents

Type	Document Name	File Name	Version Date	Version	Size
Other	Researcher's Response	Researcher's Response.docx	01/02/2024	1	15.8 KB

Project risk assessment

Complete the following Project Risk and Participant Vulnerability Assessment questions.

Tick all that apply. Note that omissions in this section may lead to delays in review as the application will not be aligned to the appropriate review pathway. If previous questions indicate that your application involves Greater Than Low Risk, this will also appear here with a green tick/circle.

Are any of the following topics to be covered in part or in whole? *

- ☐ Parenting
- ☐ Sensitive cultural issues
- ☐ Depression, mood states, anxiety
- ☐ Eating disorders
- ☐ Substance abuse
- ☐ Psychological disorder
- ☐ Gender identity
- ☐ Race or ethnic identity
- ☐ Fertility
- ☑ None of the above
- ☐ Sensitive personal issues
- ☐ Grief, death or serious / traumatic loss
- ☐ Gambling
- ☐ Illicit drug taking
- ☐ Self report of criminal behaviour
- ☐ Suicide
- ☐ Sexuality
- ☐ Any disease or health problem
- ☐ Termination of pregnancy

Are any of the following procedures to be employed? *

- ☐ Use of medical records where participants can be identified or linked
- ☐ Covert observation
- ☐ Recruitment via a third party or agency
- ☐ Administration of physical stimulation
- ☐ Infliction of pain
- ☐ Administration of other substances
- ☐ Genetic testing
- ☑ None of the above
- ☐ Deception of participants
- ☐ Concealing the purposes of the research
- ☐ Audio or visual recording without consent
- ☐ Psychological interventions or treatments
- ☐ Invasive physical procedures
- ☐ Administration of drugs
- ☐ Collecting body fluid
- ☐ Withholding from one group specific treatments or methods of learning, from which they may “benefit” (e.g., in medicine or teaching)

Does the research specifically target participants from any of the following groups? *

- [ ] Those experiencing/living with a psychological disorder
- [ ] Those experiencing/living with a physical vulnerability
- [ ] Minors without parental or guardian consent
- [ ] Residents of a custodial institution
- [ ] People unable to give free informed consent because of difficulties in understanding information statement (eg language difficulties)
- [ ] Members of a socially identifiable group with special cultural or religious needs or political vulnerabilities
- [ ] Participants able to be identified in any final report when specific consent for this has not been given
- [ ] Indigenous communities
- [x] None of the above

Declaration

I acknowledge that I am *

- ( ) The Project Supervisor, as listed in Section B of this form, and I am submitting the form
- (•) Not the Project Supervisor and would like to send the application for signature to the Project Supervisor

The Project Supervisor must electronically sign the application before:

1. It is sent for to the REA for pre-submission review (where the application has not been through the pre-submission review) OR
2. It is submitted for committee review.

By electronically signing this declaration, the Project Supervisor certifies that:

- 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's Research Integrity and Misconduct Policy (MPF1318), and with any other condition laid down by the University of Melbourne's Central Human Research Ethics Committee (CHREC), its Greater Than Low Risk committee (GTLR), or by the Low Negligible Risk committee (LNR) 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;
- 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;
- Start this research project only after obtaining final approval from the GTLR committee (if this is a greater than low risk project), or the LNR committee (if this is a Low and negligible 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, GTLR or LNR committees;
- Provide progress reports to the approving committee 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 (Privacy Act 1988);
- Submit an amendment if any modification to the research design or protocol is proposed (including any change of researchers) and to proceed with the research only after the amendment has been approved by the GTLR committee (if this is a greater than low risk project) or by the LNR committee (if this is a Low and negligible risk project);
- Notify the approving committee (GTLR or LNR) in writing immediately if any adverse event occurs during the course of the research;
- Notify the approving committee (GTLR or LNR) in writing immediately if any complaints are received about the research; comply with an audit of the research undertaken, if requested by the CHREC, GTLR or LNR committee;
- Use only the data/tissue samples collected for this research, and for which GTLR/LNR approval has been given.

I certify that all members of the research team have read this application and the National Statement on Ethical Conduct in Human Research and that they have agreed to comply with the provisions of the latter.

Request for Project Supervisor's signature *

Signed: This form was signed by PROF Ofir Turel (oturel@unimelb.edu.au) on 05/02/2024 10:50 AM