

Information Sheet for Participants

Project Details

Title of project: Embodied AI Companions and Cooperative Problem Solving: A Study on Social Presence and Cognitive Engagement

Ethical clearance reference number: [to be added once provided]

Information Sheet version: 1.0 – [DD/MM/2025]

Invitation

You are being invited to take part in a research project which forms part of my MSc Applied Neuroscience dissertation at King's College London. Before you decide, it is important for you to understand why the research is being done and what your participation will involve.

Please take time to read this information carefully and discuss it with others if you wish.

Feel free to contact me if anything is not clear or you would like more information.

What is the purpose of the project?

The project aims to understand how people experience working with an AI 'teammate' during a short reasoning task.

In particular, it investigates whether interacting with an AI presented as a 3D animated avatar, compared to a text-only chat interface, changes how socially 'present' the AI feels, how engaged participants feel, and how they perform on the puzzles.

The results may help inform the design of future AI-based learning and support tools.

Why have I been invited to take part?

You are being invited because you are an adult (18 years or older) who is able to complete an online task in English using a desktop or laptop computer with internet access and audio output.

We are looking for volunteers from the general population, including university students and other adults recruited via online and university channels.

To take part, you should:

- Be 18 years of age or older
- Be fluent in English
- Have normal or corrected-to-normal vision and hearing
- Use a desktop or laptop computer with internet access and audio (mobile phones and tablets are not supported for this study).

There are no specific requirements regarding gender, ethnicity, or nationality, and no clinical populations are being specifically targeted.

What will happen if I take part?

If you choose to take part, your participation will take place fully online via a study website and will involve the following steps:

- You will read this Information Sheet and complete an online consent form confirming that you have read the information and meet the eligibility criteria.
 - You will complete a brief pre-task questionnaire asking for basic information (such as your age and gender) and a few questions about your experience with AI tools and how you are feeling.
 - You will complete a short, timed puzzle task (around 8 minutes) together with an AI teammate. You will be randomly allocated to either a text-only chat interface or a chat interface with a 3D animated avatar that speaks the AI's messages.
 - You will see a small set of reasoning puzzles (for example, short riddles) and will type your answers into a text box. The AI will respond with hints, encouragement, and follow-up questions. During this task, the system will record your answers, response times, the number of hints used, and the content of the chat for research purposes.
 - After the puzzles, you will answer a short post-task questionnaire about your experience (for example, how engaged you felt, how difficult the task was, and how you experienced the AI teammate).
 - At the end, you will see a debrief page explaining the purpose of the study in more detail and giving you contact details if you have further questions.
- In total, participation will take approximately 15–20 minutes. No audio or video of you will be recorded; only your interactions with the task and questionnaires will be stored.

Do I have to take part?

No. Participation is completely voluntary. You should only take part if you want to, and choosing not to take part will not disadvantage you in any way. You can close your browser at any point before submitting your final responses if you decide you no longer wish to participate.

Incentives

There is no payment or material incentive for taking part in this study. Some participants may take part as a way of contributing to psychological research and to support student projects.

What are the possible risks of taking part?

This project is considered minimal risk. The puzzles are designed to be mildly challenging but not distressing. You are free to skip any question you do not wish to answer and can stop the task at any time before submitting your responses. The main inconvenience may be a small amount of time and effort in concentrating on the puzzles.

What are the possible benefits of taking part?

There are no direct personal benefits to you from taking part. However, you may find the puzzles and interaction with the AI interesting or enjoyable.

Your participation will help improve understanding of how people experience different forms of AI interfaces, which may contribute to designing better AI-based learning and support systems in the future.

Data handling and confidentiality

King's College London is the Sponsor of this research and is responsible for looking after your information and using it properly.

Your data will be processed in compliance with UK data protection laws, including the UK General Data Protection Regulation (UK GDPR) and the Data Protection Act 2018.

Categories of personal data collected include:

- Age (in years, to confirm you are 18 or over)
- Basic demographic information (e.g. gender)
- Your responses to questionnaires about your experience of the task
- Your puzzle performance data (answers, response times, hints used) and the text of the chat between you and the AI

We will not collect your name, email address, full postal address, IP address, or social media handles, and we will not record any images or audio/video of you.

Your data will be stored under a randomly generated participant ID, not your name.

Electronic data will be stored in a secure, encrypted Firebase database and backed up to King's College London–approved storage with appropriate access controls.

Only the student researcher and project supervisor will have access to the pseudonymised research data.

Data sharing and international transfers

Fully anonymised data (for example, summary statistics and non-identifying example excerpts from chat or responses) may be included in the MSc dissertation and in any academic publications or conference presentations that arise from this work.

These outputs may be read or accessed by people inside and outside the UK. No identifiable or pseudonymised data about you will be shared outside King's College London.

How long your data will be kept

Pseudonymised research data (linked to a participant ID rather than your name) will be kept for the period required by King's College London research data policies, which is normally up to 5 years after assessment of the dissertation or after any publication that relies on the data.

After this period, the data will either be securely deleted or fully anonymised so that no individual can be identified.

Anonymity in research outputs

You will not be named or otherwise directly identified in any report, dissertation, publication, or presentation.

If example quotations from the chat are used, they will be selected and edited to ensure they do not contain any information that could reasonably identify you.

What if I change my mind about taking part?

You are free to withdraw from the project at any time before you submit your final responses, without giving a reason.

If you withdraw before submission, your data will not be included in the study.

Because we do not collect names or contact details and your data are stored only under a random participant ID, once you have submitted your responses it will no longer be possible to identify which data belong to you.

This means that after submission it will not be possible to withdraw your individual data.

How is the project being funded?

This project is a self-funded student dissertation project conducted as part of the MSc Applied Neuroscience at King's College London.

There is no external commercial funding.

What will happen to the results of the project?

The results will be summarised in a dissertation submitted in partial fulfilment of the requirements for the MSc Applied Neuroscience at King's College London.

Findings may also be written up for submission to academic journals or for presentation at conferences.

Any such outputs will use only anonymised data and will not identify individual participants.

Who should I contact for further information?

Student researcher:

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