

Microsoft Research – Participant Consent Form

Project Title: Imagery: Leveraging Large Language Models (LLMs) and Multi-Modal User Signals to Create Personalized Interactive Experiences for Relaxation

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Invitation: Thank you for taking the time to consider volunteering in a Microsoft Research project. The purpose of this research is to investigate the usability and efficacy of an AI-driven interactive experience and multi-sensory feedback in increasing relaxation.

Procedures: If you choose to participate, you will be asked to sit in a comfortable chair or recliner and wear a headband and a wristband to monitor your physiology. If you are assigned to the experimental group, you will also wear a pair of noise cancelling headphones and a sleeping mask with lavender essential oil. The study will take place on the M Floor, 1 Memorial Dr, Cambridge, MA 02142. In total, your participation will take around 30 minutes. During the study, we plan to collect your age and gender as well as physiological information such as heart rate and brain activity.

The study tasks are as follows:

- 5-minute introduction to study and sensor setup
- 5-minute baseline measurements and questionnaires
- 10-minute relaxation exercise, with participants randomly assigned to Group A or B:
 - A) Control Group: No intervention, simply rest. You have the option to close your eyes.
 - B) Experimental Group: A multi-sensory AI-based guided imagery intervention. You will wear a pair of noise cancelling headphones and a sleeping mask with lavender essential oils. Through the headphones, you will hear calming sounds of your choice, your own heartbeat, and a voice providing a guided imagery narration based on your preferred scenery.
- 5-minute questionnaire & feedback

The questionnaires will measure your mood, sleep, imagery, your overall experience during the study, and preferences when interacting with AI systems. The data will not be retained more than 2 years.

Compensation: \$25 AMEX Gift Card (physical card provided to you in person at the end of the study)

Benefits:

To participant: A possible benefit you may experience from this study includes a calm, deeply relaxed state, which might help you reduce your anxiety or help unwind and fall asleep in comparison to the control condition. However, there is no guarantee that you will benefit from being in this research.

To others: We hope that findings from this research will help us understand how to better design user experiences driven by AI and wellbeing outcomes across the board. We aim to apply the findings from this study to better understand how this could be applied to clinical settings and populations that may be more likely to suffer from chronic stress, or post-traumatic stress disorder, such as content moderators, or helping patients cope with pain, anxiety, and poor sleep.

The overall study has the potential to benefit others by establishing feasible, accessible, and cost-effective methods to reduce anxiety and reduce sleep latency.

Risks: The risks of participating are similar to what you might experience while performing everyday tasks.

For example, you might feel bored, tired, sleepy or restless during the study. You might also have some mild discomfort from wearing the headband or wristband. You can let the investigators know if you need a break or want to adjust the equipment. If you feel any discomfort at any point in time, you can simply remove the devices or let the investigators know and we will immediately remove it. You might feel uncomfortable or vulnerable about falling asleep or relaxing. To minimize these feelings, we will not be video or audio recording. You also have the right to refuse participation at any time. Another potential risk is the loss of privacy or confidentiality. However, we have made a concerted effort to minimize the risk of a loss of privacy or confidentiality of personal or physiological information.

Additionally, if you are in the experimental group, you will be testing a prototype that uses AI, which might be associated with some additional risks. For example, the AI might narrate a story with content or sounds that you do not like or might find embarrassing and cause emotional discomfort. To minimize these risks, the AI experience will be tailored to a scenery of your choice, with a clear goal of helping you relax and fall asleep based on guided imagery techniques that are used in cognitive behavioral therapy. We will place safeguards and ensure that you can stop the experience at any time. The experimenter will review the content before it is played to you. If you feel any discomfort at any point in time, you can simply remove the headphones.

Privacy & Confidentiality: Researchers will keep your participation and the information you share as confidential as possible.

The information you share will be labeled in our records with a code instead of your name or other direct identifier. The key to this code will be stored separately and destroyed after the data collection is complete and we publish the paper.

Researchers may share the results of this study publicly, such as in journal articles or conference presentations, but your identity will not be disclosed.

Information collected during this study may be used for future research studies or to improve products or services at Microsoft. If that happens, researchers will remove any direct identifiers, like your name or email address, before sharing.

If you decide to withdraw from the study, you can do so at any time, you can just let the investigators know. If you want researchers to remove your study information, you can contact the team at judithamores@microsoft.com. However, after we remove any link to identifiers, it would no longer be possible to delete your data, but any results of the research will not identify you individually.

For questions about how Microsoft manages your privacy, please see the Microsoft Privacy Statement (<http://go.microsoft.com/fwlink/?LinkId=521839>).

Participation is your choice: Whether or not you participate is entirely up to you. You can decide to participate now and stop participating later. Your decision of whether or not to participate will have no impact on any other services or agreements you have with Microsoft outside of this research.

Questions or Concerns: If you have any questions or concerns about this study at any time, you may contact the research team at judithamores@microsoft.com. If you have any questions about your rights as a research participant, please contact the Microsoft Research Ethics Review Program at MSRStudyfeedback@microsoft.com.

Consent: Would you like to participate in this study as described above?

- ☐ Yes, I would like to participate.
- ☐ No, thanks.

Name:

Date:

Can researchers contact you in the future to invite you to participate in other similar studies?

Yes No

Best way to contact you:

If you would like to keep a copy of this consent form, feel free to take a picture and save one now.