



PARTICIPANT INFORMATION STATEMENT AND CONSENT FORM

Experience of presence and the perceptual experience of body ownership in Virtual Reality (VR)

A/Prof Juno Kim, Prof Branka Spehar, Mrs Leyla Haghzare
UNSW, School of Optometry and Vision Science

1. What is the research study about?

Virtual reality (VR) technology has provided us with the opportunity to explore virtual worlds throughout our senses (mainly vision). Participants in VR may feel that the animated representation of themselves (i.e., an avatar) moves synchronously with them and identifies with it as their real body. This perception is called illusory body ownership when feeling you are in the virtual environment. This feeling of being there in the virtual environment is known as 'presence'. In this study, we investigate how different aspects of VR might influence your perception of presence and body ownership.

2. Who is conducting this research?

This research will be conducted by the Sensory Processes Research Laboratory, which is the part of the School of Optometry and Vision Science at the University of New South Wales – Sydney.

Following researchers are carrying out the study:

Chief Investigator: Dr Juno Kim, School of Optometry and Vision Science, UNSW

Co-Investigator: Professor Branka Spehar, Faculty of Science, UNSW

Student Investigator: Mrs Leyla Haghzare, MPhil candidate, School of Optometry and Vision Science, UNSW

3. Inclusion/Exclusion Criteria

Before you decide to participate in this research study, we need to ensure that it is okay for you to take part. The research study is looking recruit people who meet the following criteria:

1. Over 18 years of age
2. Good visual acuity without glasses (can use contact lenses)
3. No known susceptibility to motion sickness
4. No known balance or gait disorders

And does NOT fit to any of the following conditions:

1. Women who are pregnant
2. People who have balance problems (e.g., vertigo)
3. People who suffer from back pain
4. People with any neurological disorder
5. People who are susceptible to motion sickness
6. People who are unwell in their general health



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4. Do I have to take part in this research study?

Participation in this research study is voluntary. If you do not want to take part, you do not have to. If you decide to take part and later change your mind, you are free to withdraw from the study at any stage.

If you decide you want to take part in the research study, you will be asked to:

- Read the information carefully (ask questions if necessary);
- Sign and return the consent form if you decide to participate in the study;
- Take a copy of this form with you to keep.

5. What does participation in this research require, and are there any risks involved?

If you agree to participate you will be asked to complete the following research procedures.

Screening: We will assess your vision to ensure your unaided or vision corrected with contact lenses is normal using a standard letter chart.

Questionnaire: You will be asked to fill out a questionnaire before the first exposure to provide baseline information about your previous experiences in virtual reality and relevant information about your experiences. Also, after each experimental simulation you will be asked to fill out two other questionnaires. The first one will be the Witmer and Singer Presence Questionnaire aims to assess your experience of being in the virtual world and the second one is a general questionnaire looking for information about your experience of having avatar (the virtual body) in virtual reality (VR) and your general health after exposure to VR. Filling out each questionnaire should take less than 2.5 minutes to complete. No additional questionnaires will be required to be completed outside the experimental procedure timeslot.

We will also record information about your age in years, height, weight and gender (and sexual identity separately). We will also measure your blood pressure, pulse rate and oxygen saturation in your blood.

Each exposure will last 90 seconds, and participants will be required to stand on a base plate and sway side to side on the spot. You will have the opportunity to take ample rest breaks (if required) between each exposure. During each exposure, you will engage with a virtual game (e.g., moving objects with your hands, moving in front of a virtual mirror, or playing music using virtual percussion). During each exposure, we will monitor your postural stability using a force plate and video camera. The camera will be used to track your posture for updating the virtual environment (no images will be recorded). Participation in total will be no more than 1 hour (5 minutes for each questionnaire + 30-minute testing + 20 minutes for briefing and de-briefing and clarifying information and instructions prior to consent).

Risks and risk mitigation

- Participants may be at risk of falling due to disorientation from the swaying motion and the HMD. A spotter will be present to catch or direct the participant as required.
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- Participants may experience mild cybersickness including nausea and/or vertigo. Sick bags, snacks, water, and seats will be provided for the participant to recover between exposures.
- Risk of infection may occur through shared equipment. To mitigate the risks, sanitation of all equipment and surfaces will occur between participants with 70% isopropyl alcohol. There will be a limit of 4 people in the room at any one time. Masks and hand sanitiser will be readily available for participants and researchers and masks will always be worn during the session by both parties.
- Perceived virtual body ownership and the experiencing of presence in virtual reality have potential risks of discomfort to the participants with the psychological disorders including Post Traumatic Stress Disorder (PTSD) and Somatoparaphrenia. To minimize the risk, participants are welcome to withdraw the experiment anytime.

Additional Costs and Reimbursement:

There are no additional costs nor will you be paid to participate in this study.

6. What will happen to information about me?

By signing the consent form, you consent to the research team collecting and using information about you for the research study. The research team will store de-identified data collected from you for this research project for a minimum of 5 years after publication of the research results. Collected information will be stored in a non-identifiable format where any identifiers such as your name, date of birth, email address will be replaced with a unique code ensuring your identity will remain unknown.

Information collected from you will be stored on a UNSW password protected OneDrive only accessible to the approved research investigators.

The information you provide is personal information for the purposes of the Privacy and Personal Information Protection Act 1998 (NSW). You have the right of access to personal information held about you by the University, the right to request correction and amendment of it, and the right to make a complaint about a breach of the Information Protection Principles as contained in the PPIP Act. Further information on how the University protects personal information is available in the [UNSW Privacy Management Plan](#).

7. How and when will I find out what the results of the research study are?

The research team intends to publish and present the results of the research in both scientific journal and research project presentation. All Information will be published in a way that will not identify you in anyway.



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If you would like to receive a copy of the results you can let the research team know by inserting your email in the consent form. We will only use these details to send you the results of the research.

8. What if I want to withdraw from the research study?

If you do consent to participate, you may withdraw at any time. You can do so by completing the 'Withdrawal of Consent Form' which is provided at the end of this document or you can email the research team and tell them you no longer want to participate. Your decision not to participate or to withdraw from the study will not affect your relationship with UNSW Sydney or any of the researchers involved in this study. If you decide to leave the research study, the researchers will not collect additional information from you. You can request that any identifiable information about you be withdrawn from the research project.

9. What if I have a complaint or any concerns about the research study?

If you have a complaint regarding any aspect of the study or the way it is being conducted, please contact the UNSW Human Ethics Coordinator:

Complaints Contact

Position	UNSW Human Research Ethics Coordinator
Telephone	+ 61 2 9385 6222
Email	humanethics@unsw.edu.au
HC Reference Number	HC210241

10. What should I do if I have further questions about my involvement in the research study?

The person you may need to contact will depend on the nature of your query. If you require further information regarding this study or if you have any problems which may be related to your involvement in the study, you can contact the following member/s of the research team:

Research Team Contact Details

Name	Leyla Haghzare
Position	Student investigator



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SENSORY PROCESSES
RESEARCH LABORATORY

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Email	l.haghzare@unsw.edu.au
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Name	A/Prof Juno Kim
Position	Chief investigator
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Name	Prof Branka Spehar
Position	Co-investigator
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Consent Form – Participant providing own consent

Declaration by the participant

- I understand I am being asked to provide consent to participate in this research study;
- I have read the Participant Information Sheet, or someone has read it to me in a language that I understand;
- I understand the purposes, study tasks and risks of the research described in the study;
- I provide my consent for the information collected about me to be used for the purpose of this research study only;
- I have had an opportunity to ask questions and I am satisfied with the answers I have received;
- I freely agree to participate in this research study as described and understand that I am free to withdraw at any time during the study and withdrawal will not affect my relationship with any of the named organisations and/or research team members;
- I understand that I will be given a signed copy of this document to keep;
- I would like to receive a copy of the study results via email. I have provided my details below and asked that they be used for this purpose only.

Name: _____

Email Address: _____

Participant Signature

Name of Participant (please print)	
Signature of Research Participant	
Date	

Declaration by Researcher*

- I have given a verbal explanation of the research study; its study activities and risks and I believe that the participant has understood that explanation.

Researcher Signature*

Name of Researcher (please print)	
Signature of Researcher	
Date	



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***An appropriately qualified member of the research team must provide the explanation of, and information concerning the research study.**

Note: All parties signing the consent section must date their own signature.

Form for Withdrawal of Participation

I wish to **WITHDRAW** my consent to participate in this research study described above and understand that such withdrawal **WILL NOT** affect my relationship with The University of New South Wales or researchers.

- I am withdrawing my consent and I would like any identifiable information collected about me which I have provided for the purpose of this research study withdrawn.
- I am withdrawing my consent to participate in further components of this research and provide my permission for the research team to retain and/or use information collected about me which I have provided for the purpose of this research.
- I am withdrawing my consent and I understand that any information already published and/or not linked to my identity cannot be withdrawn from the research.

Participant Name

Name of Participant (please type)	
Date	

The section for Withdrawal of Participation should be forwarded to:

CI Name:	A/Prof Juno Kim
Email:	juno.kim@unsw.edu.au
Phone	+61(2)93587474
Postal Address	Level 3, North Wing Rupert Myers Building Gate 14, Barker Street, UNSW SYDNEY NSW 2052 AUSTRALIA