

Participants Needed for Visual Perception and Movement

Our project aims to explore the fascinating intersection between movement and visual perception through the lens of visual illusions. This research has the potential to significantly advance our understanding of how physical activity influences visual motion processing.

Study Overview:

We study whether human visual motion perception is stronger during movement, indicating a profound interaction between visual processing and physical activity. It has been found that rodent perception exhibits this behavior, and our research seeks to investigate whether a similar phenomenon can be observed in humans. We use visual psychophysics as tools, specifically visual illusions. Your participation could help uncover groundbreaking insights into the human brain.

What Will Participation Involve?

Participants in this study will experience two sets of conditions with head mount display (HMD) such as Meta Quest Pro:

Stationary Condition: You will experience a series of visual illusions while standing or sitting still. In the virtual world, your task will be to adjust the virtual settings until the illusion is no longer perceptible, indicating your threshold for that illusion.

Movement Condition: In this part of the study, you will walk comfortably on a treadmill while experiencing visual illusions similar to those in stationary conditions. Similarly, you will adjust the virtual settings until the illusion is no longer perceptible.

Who Can Participate?

We are looking for individuals aged 18. You must have no potential risk associated with using virtual reality products and no history of neurological disorders or vision impairments that cannot be corrected by spectacles. Previous experience with similar studies is not required.

Why Participate?

Contribute to Neuroscience Research: Your participation will directly contribute to our research to enhance our understanding of human visual processing.

Learn About Your Perception: Gain insights into how your visual perception operates under different conditions.

How participate?

If you are interested in participating the study, please feel free to contact us through email and we will negotiate your participation time for the study. This research will be conducted in Room 0110 of Brendan Iribe Center for Computer Science and Engineering (8125 Paint Branch Dr., College Park, MD). The entire experiment is expected to be 1 hour for each participant.

Safety and Confidentiality:

Your safety and the confidentiality of your data are our utmost priorities. We do not collect any de-anonymized data from participants. All study procedures have been designed with your well-being in mind, and any information collected during the study will be kept strictly confidential.

Thank you for considering participating in this important research. Your involvement could help unlock new understandings of the human brain and how it interacts with the world around us.

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