

A Study of Movement Variability in Human-Humanoid Interaction Activities

*Required

Introduction

The aim of this study is to explore how participant's performance of simple movements affects the movement variability in the following conditions: a) following an image while not hearing a beat and while hearing a beat; and b) following a humanoid-robot while not hearing a beat and while hearing a beat.

The estimated time for the study is between 40 to 45 minutes.

Miguel P. Xochicale [<http://mxochicale.github.io/>]
Doctoral Researcher in Human-Robot Interaction
School of Electronic, Electrical and System Engineering
University of Birmingham, UK

1. Online Participant Information Sheet

Who will conduct the research?

The study is conducted by Miguel P. Xochicale as part of his PhD degree in Electronic, Electrical and System Engineering at the University of Birmingham. The research is supervised by Professor Chirs Baber and Professor Martin Russell in the Electronic, Electrical and System Engineering department at the University of Birmingham.

What is the purpose of the research?

The aim of this study is to explore how participant's performance of simple movements affects the movement variability in the following conditions: a) following an image while not hearing a beat and while hearing a beat; and b) following a humanoid-robot while not hearing a beat and while hearing a beat.

What will happen during the experiment?

During the experiment you will be asked to wear two inertial sensors in your right hand and you will perform 10 repetitions for horizontal and vertical arm movements in six conditions:

- Condition 1. Following an image while NOT hearing a beat
- Condition 2. Following an image while hearing a slow beat rate
- Condition 3. Following an image while hearing a fast beat rate

(a 5 minutes break will be given at this point)

- Condition 4. Following a humanoid-robot while NOT hearing a beat
- Condition 5. Following a humanoid-robot while hearing a slow beat rate
- Condition 6. Following an image while hearing a fast beat rate.