

Study Information Sheet

Study Title: *NAO robot-Shopping Assistance*

PLEASE READ THIS SHEET IN ITS ENTIRETY

You are invited to take part in research taking place at the University of the West of England, Bristol. It is carried out as assignment for module UFMFHP-15-M Human-Robot Interaction. Before you decide whether to take part, it is important for you to understand why the study is being done and what it will involve. Please read the following information carefully and if you have any queries or would like more information please contact Haoming Huang, Keshava Shankar Nagu Koduru, Naresh Hemadri, Stefanos Lekanidis, Yi Li, , Faculty of Environment and Technology, Bristol Robotics Laboratory, University of the West of England, Bristol, haoming2.huang@live.uwe.ac.uk, keshava2.koduru@live.uwe.ac.uk, Naresh2.Hemadri@live.uwe.ac.uk, stefanos2.lekanidis@live.uwe.ac.uk, Yi3.Li@live.uwe.ac.uk.

Who is organising the research?

The project is led by Haoming Huang, Keshava Shankar Nagu Koduru, Naresh Hemadri, Stefanos Lekanidis, Yi Li, University of the West of England. Manuel Giuliani is the supervisor for this research. Please find their details at the end of this document.

What is the aim of the research?

The overall aim of the research is “Does assistance of the robot for product finding in a supermarket improves the shopping experience of the customer or not? “

The purpose of this study is to help the people in the supermarket. Not every salesman knows the allergen ingredients in a product, and it is time consuming to find a product in a big supermarket. During the pandemic, the queue is very big standing outside the supermarkets for a long time as the number of people in the shop is reduced. This experiment may provide an insight whether the usage of the robot is beneficial or not to find a product and the shopping time could be reduced or not for the customers. Even the salesman in the shop is changing it is even difficult for the salesman to remember all the products location and ingredients.

Why have I been invited to take part?

We are recruiting participants who are already working at the University of the West of England and are aware of the current risk and safety procedures due to COVID-19 restrictions.

Do I have to take part?

You do not have to take part in this research. It is up to you to decide whether you want to be involved. If you do decide to take part, you will be given a copy of this information sheet to

keep and will be asked to sign a consent form. If you do decide to take part, you are free to stop and withdraw from the study at any time without giving a reason.

What will happen to me if I take part and what do I have to do?

You will first be asked to sign a consent form, read a privacy notice, and provide some basic demographic information. You will then

They will be asked to make a role play interaction with the robot as a shopping assistant and where the robot will help them to find the products and then get suggestions on a product if required.

They will be asked to fill a questionnaire to get feedback and the experiment gets completed.

The study will take approximately 15 minutes.

Data will be gathered using the following methods:

Questionnaires

They will be asked to fill a questionnaire form after completing the role-play task. This will be used to evaluate the experience of the robot interaction.

Written Feedback/Comments

How satisfied are you with the robots' feedback and products recommended by the robot from 1 to 10?

Task Performance

- Relevancy of the robot recommendation.
- Time taken to do the shopping.

What are the possible risks of taking part?

There are no risks involved with this experiment.

In addition to the normal risk assessments, care has been taken to ensure the experiment is COVID-19 safe. You and the experimenter will be required to wear a mask and sanitise hands before the study, and safe distancing will be observed. All participants will be drawn from staff and students already complying with UWE Covid-19 safety rules. The robot and any other surfaces touched by the participants will be sanitised after each use.

What will happen to your information?

All the information we receive from you will be treated in the strictest confidence.

All the information that you give will be kept confidential and anonymised. You will be assigned a participant ID that you can use to request the removal of your data from the study up to 7 days after completion of the experiment. After this point, the anonymised data will be analysed, and we will ensure that there is no possibility of identification or re-identification from this point.

Hard copy material (the consent form) will be kept in a locked and secure setting to which only the researchers will have access in accordance with the University's and the Data Protection Act 2018 and General Data Protection Regulation (GDPR) requirements.

Where will the results of the research study be published?

The results of this usability study will be reported in the coursework report for UWE module UFMFHP-15-M Human-Robot Interaction.

Who has ethically approved this research?

The project has been reviewed and approved by University of the West of England University Research Ethics Committee. Any comments, questions, or complaints about the ethical conduct of this study can be addressed to the Research Ethics Committee at the University of the West of England at: Researchethics@uwe.ac.uk

What if something goes wrong?

If you have any questions about the ethical conduct of this research, have any complaints or concerns, or are uncertain about any aspect of your participation please contact the project supervisors or the University's research ethics committee.

Project Supervisor:

Professor Manuel Giuliani manuel.giuliani@brl.ac.uk

What if I have more questions or do not understand something?

If you would like any further information about the research, please contact in the first instance:

Haoming Huang, Keshava Shankar Nagu Koduru, Naresh Hemadri, Stefanos Lekanidis, Yi Li, - haoming2.huang@live.uwe.ac.uk, keshava2.koduru@live.uwe.ac.uk, Naresh2.Hemadri@live.uwe.ac.uk, stefanos2.lekanidis@live.uwe.ac.uk, Yi3.Li@live.uwe.ac.uk.

Thank you for agreeing to take part in this study.
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You will be given a copy of this Participant Information Sheet and your signed Consent Form to keep.
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