PARTICIPANT INFORMATION SHEET

Non-Verbal Interaction with Virtual Home Assistants for People with Dysarthria

You are being invited to take part in a research project. Before you decide whether or not to take part, it is important for you to understand why the research is being undertaken and what it will involve. Please take time to read the following information carefully and discuss it with others, if you wish.

Thank you for reading this.

1. What is the purpose of this research project?
This research proposes a new technique for people affected by dysarthria- type of speech impairment- to interact with virtual home assistants. The proposed technique overcomes dysarthric users’ communication difficulties and enables them to use a theses device with non-verbal sound cues. Our goal is to measure the usability of our proposed system and compare it with the virtual home assistants in the market.

* Dysarthria is a complex disorder that causes a disturbed speech process; it is one of the most severe communication problems, causing some of the highest levels of unintelligible speech.
* Non-verbal voice cues are any sounds a person produces other than speech, for example, humming.
* This study is a doctoral research study.

2. Why have I been invited to take part?
You have been invited because you are:
- Diagnosed with dysarthria.
- You do not have any other condition or syndrome that affects the functions of the brain—for example, Dementia.
- Have an internet connection, computer, or any alternative to be able to have online meetings.

3. Do I have to take part?
No, your participation in this research project is entirely voluntary and it is up to you to decide whether or not to take part. If you decide to take part, we will discuss the research project with you and ask you to sign a consent form. If you decide not to take part, you do not have to explain your reasons and it will not affect your legal rights. You are free to withdraw your consent to participate in the research project at any time, without giving a reason, even after signing the consent form.

4. What will taking part involve?
Taking part of this study involves, interviews, voice recording sessions and system testing.
**Interviews**: Will be online or offline. Interview will be recorded.
**Voice recording sessions**: We will ask you to record different sound for us. Recordings will be done online.
**System testing**: video recording (in case study is done remotely) before and during testing the system. In addition to answering questionnaire.

5. **Will I be paid for taking part?**
No. You should understand that any data you give will be as a gift and you will not benefit financially in the future should this research project lead to the development of a new treatment/method/test/assessment.

6. **What are the possible benefits of taking part?**
There will be no direct advantages or benefits to you from taking part, but your contribution will help us improve how people with dysarthria can interact with virtual home assistants.

7. **What are the possible risks of taking part?**
There are no medical risk or danger. If you feel fatigued or tired during the sessions, you can ask us to stop the session whenever you want and continue after feeling better or in another time.

8. **Will my taking part in this research project be kept confidential?**
All information collected from (or about) you during the research project will be kept confidential and any personal information you provide will be managed in accordance with data protection legislation. Please see ‘What will happen to my Personal Data?’ (below) for further information.

9. **What will happen to my Personal Data?**
Cardiff University is the Data Controller and is committed to respecting and protecting your personal data in accordance with your expectations and Data Protection legislation. Further information about Data Protection, including:

- your rights
- the legal basis under which Cardiff University processes your personal data for research
- Cardiff University’s Data Protection Policy
- how to contact the Cardiff University Data Protection Officer
- how to contact the Information Commissioner’s Office

may be found at https://www.cardiff.ac.uk/public-information/policies-and-procedures/data-protection
* printed/digital copies of the above-mentioned documentation and privacy notices will be readily available.

After a month from collecting the data, the research team will anonymise all the personal data it has collected from, or about, you in connection with this research project, identifying
information will be removed and replaced with a random ID number. Your consent form including details of any other personally identifiable information which must be retained will be retained for 5 years after the end of the project according to the University Records Retention Schedules and may be accessed by members of the research team and, where necessary, by members of the University’s governance and audit teams or by regulatory authorities. Anonymised information will be kept for a minimum of 5 years after the end of the project according to University Records Retention Schedules but may be published in support of the research project and/or retained indefinitely, where it is likely to have continuing value for research purposes.

Note that it will not be possible to withdraw any anonymised data that has already been published or in some cases, where identifiers are irreversibly removed during the course of a research project, from the point at which it has been anonymised.

10. What happens to the data at the end of the research project?
The collected data will be preserved in Cardiff university Archive kept for a minimum of 5 years after the end of the project according to University Records Retention Schedule. We assure that any personal data will be removed before any form of sharing takes place.

11. What will happen to the results of the research project?
It is our intention to publish the results of this research project in academic journals and present findings at conferences. Participants will not be identified in any report, publication or presentation. Verbatim quotes from participants may be used.

12. What if there is a problem?
If you wish to complain or have grounds for concerns about any aspect of the manner in which you have been approached or treated during the course of this research, please contact Dr Fernando Loizaiades (loizidesf@cardiff.ac.uk). If your complaint is not managed to your satisfaction, please contact the computer science’s school research ethics committee (comsc-ethics@cardiff.ac.uk).

If you are harmed by taking part in this research project, there are no special compensation arrangements. If you are harmed due to someone's negligence, you may have grounds for legal action, but you may have to pay for it.

13. Who is organising and funding this research project?
The research is organised and funded by Computer Science and Informatics School at Cardiff University.

14. Who has reviewed this research project?
This research project has been reviewed and given a favourable opinion by the Computer Science and Informatics School Research Ethics Committee, Cardiff University/external ethics committee.

15. Further information and contact details
Should you have any questions relating to this research project, you may contact us during normal working hours (8:00 AM-5:00 PM):
Thank you for considering to take part in this research project. If you decide to participate, you will be given a copy of the Participant Information Sheet and a signed consent form to keep for your records.