



Investigating technological solutions to improve online communication for people with hearing loss

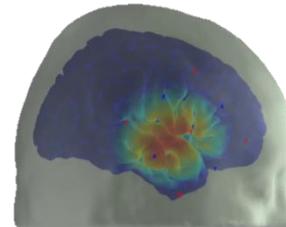
We invite you to take part in our research

- Before you decide whether to take part, it is important for you to understand why the research is being done and what it will involve.
- Please take time to read the following information carefully. Discuss it with friends and relatives if you wish.
- You are free to decide whether or not to take part in this study. If you choose not to take part, this will not affect the standard of care you receive.
- Ask us if there is anything that is not clear or if you would like more information.

Important things that you need to know

- We are looking for **adults who use a cochlear implant and/or a hearing aid**.
- Many people with hearing loss find it **challenging to communicate remotely via telephone and video call**.
- The Covid-19 pandemic has greatly affected social interactions, with face-to-face interactions increasingly being replaced by remote conversations. This increased reliance on telephone and video calls to communicate with family and friends, access essential services, and for work reasons, may impose an additional communication burden on people with hearing loss.
- We are conducting this online study to explore **which technological solutions** (such as live transcriptions) **may help to alleviate the challenges** experienced by individuals who use a cochlear implant and/or a hearing aid **during online conversations**.
- There are no risks or side-effects associated with any of the tests used in this study.
- You will receive a £5 gift voucher for your participation.
- You can stop taking part in the study at any time and without having to give a reason.

NIHR Nottingham Biomedical Research Centre



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If you have any questions about this study, please contact: **Ms. Francisca Perea Pérez**
Email: francisca.pereaperez@nottingham.ac.uk

1 Why are we doing this study?

- Many people with hearing loss find it challenging to communicate remotely via telephone and video call.
- The Covid-19 pandemic has greatly affected social interactions, with face-to-face interactions increasingly being replaced by remote conversations. This increased reliance on telephone and video calls to communicate with family and friends, access essential services, and for work reasons, may impose an additional communication burden on people with hearing loss.
- We are conducting this online study to explore **which technological solutions** (such as live transcriptions) **may help to alleviate the challenges** experienced by individuals who use a cochlear implant and/or a hearing aid **during online conversations**.
- In the future, this information could help us to provide reliable advice and solutions to make listening easier during online communication.

2 Why am I being asked to take part?

You are eligible to take part if you:

- are aged **18 or over**.
- speak **English fluently**.
- use at least one **cochlear implant and/or a hearing aid**.
- have **normal or corrected-to-normal vision** (for example glasses).
- are **able and willing** to take part in the study.
- **do not have** a cognitive impairment (for example, dementia or a brain injury)

If you are not sure if you are eligible please contact us and we can discuss this with you.

3 Do I have to take part?

Your participation is voluntary. It is up to you to decide whether you take part in this study.

You are free to withdraw at any time during the study without giving any reason and without your legal rights being affected. You can end the study by pressing the 'Exit' button or closing the browser before submitting your answers.

However, once you have submitted your responses it will not be possible to remove your answers because we will not be able to identify you. Therefore, please ensure you have fully understood the information presented here before completing the test.

4 What will I need to do if I take part?

If you are eligible to take part in the study, [please click on the link provided](#) to access the online test.

You will be asked to:

- Confirm your **consent** telling us that you understand the information and that you are happy to take part in the study;
- Fill out some **questionnaires** asking about your listening experiences in daily life;
- Complete a series of **listening tests** that involve watching some audio and video examples of different online communication scenarios and answering some questions about the content.

Additionally, we will request access to your webcam to allow us to record your responses while you perform the listening test. This is optional and you can participate in the study regardless your decision. If you allow access to your webcam, the audio and video recordings will only be accessible to the research team. They will be used solely to help us understand the results. We will ask you to perform the listening tests in a quiet and private room, to ensure that we capture your responses clearly and accurately, and do not capture anything else taking place within your environment.

The test will take you **approximately 30 minutes to complete**. However, you can take as much time as you need to answer the questions.

At the end, you will be given a code of completion that you will send to the researcher (see contact details below) in order to receive a £5 gift voucher.

5 What are the possible benefits of taking part?

There is no benefit to you from taking part in the study. However, your responses will help us understand which technological solutions can alleviate the challenges experienced by individuals with hearing loss during online conversations. It might also lead to improved advice and support for cochlear-implant and hearing-aid users in the future.

6 What are the possible risks of taking part?

You should not be disadvantaged in any way by taking part in this study. You may find some of the questions to be repetitive. If you no longer want to take part in the study, you can exit the webpage at any time.

7 Will my data be kept confidential?

Yes. All personal data that we collect including any audio and video recordings will be kept **strictly confidential**. The study results will be identified only with a study code assigned to each participant and will be stored within Hearing Sciences at the University of Nottingham.

Your data may be reused in future research, either by the current research team or by other researchers or organisations. We will never share your data without first ensuring that it has been fully anonymised, so that you cannot be identified. No other people will be told information about your results.

Sometimes, authorised representatives from the University or other regulatory authorities ask to see the results so that they can ensure the research is being carried out correctly.

Please see section 12 for more information on how your data is handled.

8 What will happen to the results?

Results will be published as part of a doctoral thesis. The results of the study may also be published in scientific journals and presented at scientific meetings. In all such cases, data will be presented anonymously so that it is not possible to identify you or the other volunteers.

9 Who is organising and funding the study?

The research is organised by the University of Nottingham with additional infrastructure support provided by the National Institute for Health Research Nottingham Biomedical Research Centre (NIHR Nottingham BRC).

The research is funded by the charity Royal National Institute for Deaf People through a PhD studentship.

10 Who has reviewed the study?

All research in healthcare is looked at by an independent group of people called a Research Ethics Committee, to protect your interests. This study was reviewed and given a favourable opinion by North West - Greater Manchester Central Research Ethics Committee.

11 What if there is a problem?

If you have any concerns about any aspect of this study, please contact the researcher or chief investigator:

- Ms. Francisca Perea (researcher):
francisca.pereaperez@nottingham.ac.uk
- Dr Ian Wiggins (Chief Investigator):
ian.wiggins@nottingham.ac.uk

The researchers should acknowledge your concern and give you an indication of how they intend to deal with it. If we cannot fix your problem, or you wish to talk to someone who is independent from the Nottingham Biomedical Research Centre, then please contact:

- Nottingham University Hospitals NHS Trust Patient Advice and Liaison Service (PALS), on 0800 183 0204 or email PALS@nuh.nhs.uk

12 Additional information on how we use your data

Will my taking part in the study be kept confidential?

We will follow ethical and legal practice and all information about you will be handled in confidence.

If you join the study, we will use information collected from you during the course of the research. This information will be kept strictly confidential, stored in a secure and locked office, and on a password protected database at the University of Nottingham. Under UK Data Protection laws the University is the Data Controller (legally responsible for the data security) and the Chief Investigator of this study (named above) is the Data Custodian (manages access to the data). This means we are responsible for looking after your information and using it properly. The online test is implemented using a software called Labvanced who are a Data Processor for the study (process your personal data on behalf of the University). The data will be stored on Labvanced (Scicover) servers in Germany. The website is SSL encrypted and follows a "no tracking policy", meaning that they do not store personal information e.g. IP address, email, cookies or any other personal data in any form. Anonymized data stored on Labvanced servers is under full control of the researchers. This means that once data is deleted, they do not keep any long-term copies (only 7 days backup in case of un-intentional deletion). For more information on the protection of participant information, please see the 'Privacy Statement' on the Labvanced website: <https://www.labvanced.com/privacy.html>

Audio and video recordings are optional and would be stored only on your device and downloaded directly to the University of Nottingham servers, therefore no personal data is sent or stored on Labvanced. Once downloaded, audio and video recordings will be kept on a password protected laptop and only viewed by researchers on the project for data analysis purposes.

The researchers may also see your email address after sending them the code of completion. Your email address will be used to send you the £5 gift voucher and will be kept by the University of Nottingham during the study and for 6- 12 months after the end of the study. In this way, we are able to contact you about the findings of the study and possible follow-up studies (unless you advise us that you do not wish to be contacted). This information will be kept separately from the research data collected and only those who need to will have access to it.

Your rights to access, change or move your information are limited as we need to manage your information in specific ways to comply with certain laws and for the research to be reliable and accurate. To safeguard your rights we will use the minimum personally – identifiable information possible.

You can find out more about how we use your information and to read our privacy notice at:

<https://www.nottingham.ac.uk/utilities/privacy.aspx>

The data collected for the study will be looked at and stored by authorised persons from the University of Nottingham who are organising the research. They may also be looked at by authorised people from regulatory organisations to check that the study is being carried out correctly. All will have a duty of confidentiality to you as a research participant and we will do our best to meet this duty.

All research data, including audio and video recordings, will be stored securely for 7 years from the end of the study. After this time your data will be disposed of securely. During this time all precautions will be taken by all those involved to maintain your confidentiality, only members of the research team given permission by the data custodian will have access to your personal data.

In accordance with the University of Nottingham's, the Government's and our funders' policies we may share our research data with researchers in other Universities and organisations, including those in other countries, for research in health and social care. Sharing research data is important to allow peer scrutiny, re-use (and therefore avoiding duplication of research) and to understand the bigger picture in particular areas of research. Data sharing in this way is usually anonymised (so that you could not be identified) but if we need to share identifiable information we will seek your consent for this and ensure it is secure. You will be made aware then if the data is to be shared with countries whose data protection laws differ to those of the UK and how we will protect your confidentiality.