

# Technology used to aid hearing in background noise: insight from people with hearing loss

Hearing in situations where there are high levels of background noise, such as in a noisy restaurant, bar or classroom, is a significant challenge for people with hearing loss. This report describes the findings of our research to discover what technologies people are using to aid communication in background noise, understand how well these technologies are meeting people's needs - and makes key recommendations for future focus.

Over 800 people completed our survey which was sent out to our research panel and promoted through our digital channels. 88% of the sample reported a hearing loss with 82% being hearing aid users and 4% being cochlear implant (CI) users.

Our findings support previous research showing that people with hearing loss find it challenging to hear in background noise. 96% of our sample struggle to hear in noise which was higher than the 88% of the sample who identified themselves as having a hearing loss, suggesting that a detectible hearing loss may not be the only reason for difficulties hearing in noise. People reported the biggest difficulties in noise were using phones and in social environments such as bars, cafes and restaurants.

There was a high level of dissatisfaction with the technology currently available to help in noise with only 12% of hearing aid users and 27% of cochlear implant users being satisfied. 98% of hearing aid users reported some level of difficulty in noise showing that hearing aids alone are not fully meeting the needs of users in challenging listening situations. None



Only

**12%**

of hearing aid users and

**27%**

of cochlear implant users are satisfied with the technology currently available to assist listening in noisy situations

of the technologies we identified completely solved the difficulties of hearing in noise.

Assistive technologies that are designed to work with hearing aids to improve the signal-to-noise ratio showed the most benefit in helping people hear in noise. However, take up of these technologies was extremely low. Only 48% of hearing aid users were using the loop, 12% Bluetooth streamers, 10% a remote microphone and 6% an FM system. The reason given by the majority of people for not using these devices was that they did not know what they were.

Hearing aids often feature a background noise programme to help the user hear more clearly in noisy situations. This feature did slightly reduce difficulty hearing in noise, but surprisingly was only used by 51% of hearing aid users in our sample.

Although a volume control is widely used by people with hearing aids (74% of our sample), we found no evidence that adjusting the hearing aid's volume benefited hearing in noise.

In comparison, cochlear implant (CI) users had a higher level of knowledge of assistive technology. 91% use a volume control and 100% use a background noise programme. However, only 36% use the loop, 18% use a remote microphone and 27% use a Bluetooth streamer. Even though they were more aware of technology, they found it be less useful due to poor quality of sound or because it wasn't available for a CI.

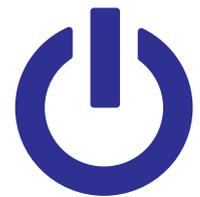
Despite the low awareness of technologies that can assist hearing in noisy situations, our respondents ranked access to information about technology as a low priority. Better hearing aid technology was rated as the highest priority. Further work needs to be done to address why knowledge about existing technology is so low and to understand how to improve the take up of assistive technology.



Only

**51%**

**of hearing aid users were using a specific background noise programme to help them.**



**Only 48% of hearing aid users were using the loop, 12% Bluetooth streamers, 10% a remote microphone and 6% an FM system.**

## Key recommendations

- **Investment in developing new solutions to aid communication in noise is needed.** Our research shows that existing technology does not fully meet user's needs.
- **Manufacturers can make improvements to existing technology.** Whilst the majority of people find today's technology easy to use, we have identified a number of simple improvements that would improve user experience. This includes the greater use of visual indicators of battery life and connection status on remote mics, FM systems, Bluetooth streamers and apps used to control hearing aids.
- **Better sharing of information about technology with those who could benefit from it is needed.** There is significant under use of technology that could help people communicate in noisy situations and the main reason for this is a lack of awareness of what is already available.



Only

**36%**

of cochlear implant users use the loop, 18% use a remote microphone and 27% use a Bluetooth streamer.