

Phonak Field Study News.

Phonak has more freely accessible evidence than competitors

An independent analysis of the number of research papers across hearing aid brands' professional websites plus two trade journals, *Audiology Online* and *Hearing Review* was performed by an external partner. The analysis indicated that Phonak had more papers available via these channels, than other hearing aid brands.

Appleton-Huber, Jennifer. November 2022.

Key highlights

- Evidence-based information is crucial to substantiating claims by hearing aid brands regarding technology. The aim of providing information is to give Hearing Care Professionals (HCPs) confidence in the technology they fit to clients.
- The total number of research papers identified across the brands' professional websites, plus the two trade journals, *Audiology Online* and *Hearing Review*, was 229. Over one third of these were available from Phonak.
- Phonak had the highest number of independent peer-reviewed journals, as well as other research paper types, grouped together, available to HCPs.

Considerations for practice

- It is important that the claims made by hearing aid brands, about the technology you provide your clients with, is backed up by satisfactory evidence.
- The hearing aid brands' website is a good source of current evidence for the technology you are fitting, as are articles in Trade Journals.
- Independent peer-reviewed journals provide the most credible source of research evidence. Although many of these journals require a subscription, the article titles and links to an abstract are often found on the hearing aid brands' website.

Introduction

Research is a key element of innovation and thought leadership. Clinical studies and technical measurements provide the necessary proof for claims made by hearing aid brands. This evidence also aims to give confidence to HCPs in the products which they are fitting to clients.

A common resource for obtaining research papers is the professional websites of hearing aid brands. They provide quick and easy access to some of the latest findings about their technology, and clinical best practices.

Whilst easy access is very important, the quality and credibility of scientific research should also be considered. Articles published in independent journals are generally considered by the scientific community to have greater weighting or credibility than white papers, which are typically researched, edited, and published by the hearing aid brand themselves.

The objective of this data analysis was to analyze the number of research papers that are freely available from each of six hearing aid brands (Phonak and five competitors) by looking at the hearing aid brand's professional websites and other research-related literature such as trade journals and independent peer-reviewed journals. The period reviewed was from August 2019 to October 2022 inclusive.

Methodology

The search strategies used for data collection were:

1. Access each of six major hearing aid brand websites and review and record the details (article type, author, date, and title) of research evidence published on the website.
2. Access the trade journals Audiology Online and Hearing Review and record the evidence published (as above) specifically noting the brand that the author/s were affiliated with at the time of publication.

It was also planned to access several issues across the review period (2019 - 2022) of the professional society magazines: Acoustics Today, Audiology Now and Canadian Audiologist, which are the official publications of the Acoustical Society of America, Audiology Australia, and the Canadian Academy of Audiology, respectively. However, hearing aid brand contributions to Audiology Now and Canadian Audiologist appeared to be limited to product advertising materials. Most contributors of Acoustics Today articles work in the science/academic sector and no contributions from manufacturers in the volumes examined were identified. Therefore, this search strategy was excluded

from the analysis. Anecdotally, it is likely that many HCPs either do not have free access to, or do not regularly access independent peer-reviewed journal publications, so counting of these was restricted to search strategy 1.

Research papers were divided into two main categories. Firstly, articles published in independent peer-reviewed journals and secondly, other research-related documents. The hearing aid brands' website format was used to inform the classification of documents into the six minor categories listed:

- a) Conference posters
- b) Conference proceedings
- c) Field studies
- d) Technical papers
- e) Trade journals
- f) White papers

Results

The total number of research papers identified across the hearing aid brands' professional websites plus the two trade journals, Audiology Online and Hearing Review, was 229. Significantly, 78 (34.1%) of these were available from Phonak. In comparison, the research papers available from brands A – E were moderately uniformly distributed, ranging from 22 – 37 papers, as shown in Figure 1.

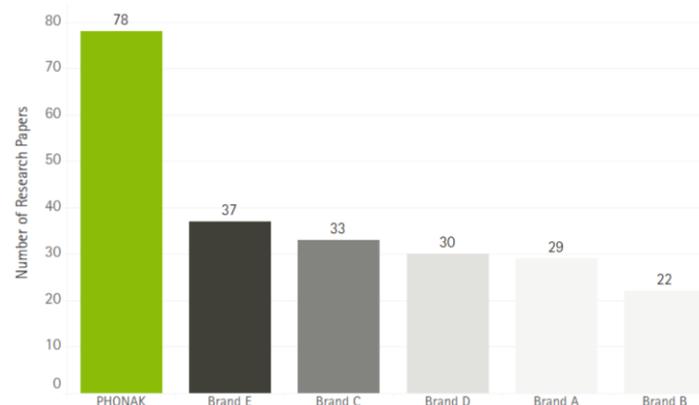


Figure 1. Research papers available by hearing aid brand (2019 - 2022).

Further, for three of the four years in the period 2019 -2022, Phonak had more research evidence available compared to the other brands investigated. This was most marked in 2020 and 2021, as shown in Figure 2. However, this year in the period up to and including October 2022, Phonak had the second highest number of research papers freely available.

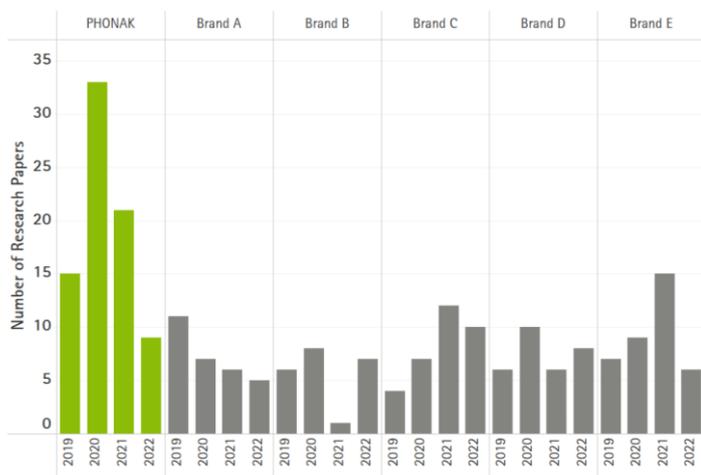


Figure 2. Research papers available per year from hearing aid brands (2019 - 2022)

Phonak had the highest number of independent peer reviewed journals linked on its website, available to HCPs, as shown in Figure 3. The distinction between independent peer-reviewed journal articles and other research-related papers is important in terms of quality. In the hearing sector, independent peer-reviewed journals publish novel scientific information, subject to high levels of scientific rigor. Hence, they are regarded as providing a superior quality of research evidence than the other document types identified and counted in this analysis.

Phonak also had the highest number of field study, and technical research papers available and the second highest number of research papers in trade journals available to HCPs. Further, Phonak provided documents in five of the six identified research-related paper categories. This suggests that in addition to greater volume of research papers, there is at least as much, if not more, diversity of scientific information available from Phonak than the other brands examined.

Considering all research papers that were NOT independent peer-reviewed journals, Phonak had more other research-related papers (6 categories grouped together) available than each of the other five brands investigated, as shown in Figure 3.

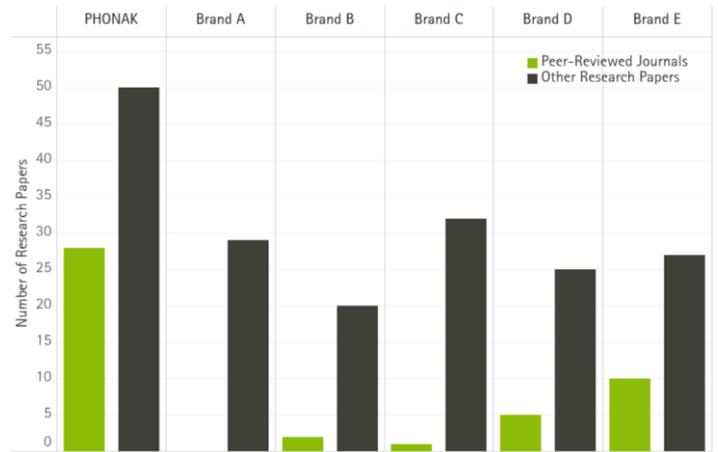


Figure 3. Independent peer-reviewed and other research-related papers (grouped) available by hearing aid brand (2019 - 2022).

Conclusion

Overall, Phonak does appear to have more total research evidence available to HCPs than brands A - E (through their website and two trade journals). Phonak also provides access on their website to the highest number of research papers published in independent peer-reviewed journals.

Disclaimer: this article is based on an investigation done for the period August 2019 - October 2022. It does not purport to be an exhaustive comparison of the evidence available to HCPs on hearing aid brands' websites and in trade journals.

Authors and investigators

External investigator

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Dr Ingrid Yeend has a background in biology and linguistics, Masters in Audiology and PhD from Macquarie University, Australia. She initially worked as a clinical audiologist serving paediatric and adults clients living with complex hearing difficulties. She has extensive experience as a research audiologist working on hearing device related projects and investigating the speech-in-noise listening difficulties experienced by 'normal-hearers'. Currently, she undertakes independent audiology consulting work.

Author

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Jennifer Appleton-Huber received her M.Sc. in Audiology from the University of Manchester in 2004. Until 2013, she worked as an Audiological Scientist mainly in the UK and Switzerland, where she worked with adults and pediatrics, in the areas of hearing aids

and cochlear implants. Her current role is Scientific Audiologist within Global Audiology at Phonak Headquarters.



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