

Investigating the Factors that Affect Hearing Aid Perception

Nicole Condor-Jativa*, Cathrine Jansson-Boyd & Srikanth Chundu School of Psychology and Sports Sciences, Anglia Ruskin University, Cambridge, UK

Introduction

- Hearing loss is one of the common chronic health conditions and hearing aids are considered as main treatment option.
- Despite the benefits hearing aids offer, the average delay in adopting hearing aids after hearing aid candidacy is 8.9 years¹.
- Previous findings suggest that factors such as stigma, cost and appearance, delay the uptake of hearing aids².
- These factors negatively affect consumer perception of hearing aids and have contributed to the lower use of hearing aids.
- There is limited research on the likeliness of buying and using a hearing aid based on appearance of the device, therefore, the findings of this study are important for hearing aid users, public and manufacturers.

Aim

The aim of this study was to find the factors affecting consumer hearing aid perception with particular focus on the attractiveness of hearing aids and the likeliness of purchasing a hearing aid.

Methods

Participants and data collection

- This study sample has 214 participants from three different age groups and varying educational qualifications (see Table 1).
- 40% were hearing aid users, 77 % knew someone who uses hearing aids and 44% had obtained a hearing aid for themselves or someone else.
- Participants were recruited via hearing aid forums, social media groups and Prolific.
- Data for the online survey was collected using Qualtrics.

Survey

- Participants were shown six images of hearing aids one by one with no details like manufacturer or model. They are required to rate the attractiveness, likelihood of purchase and cost they would pay for a pair of hearing aids.
- Following that, the manufacturer, model and price of the hearing devices was revealed to choose the hearing aid they would most likely buy
- Subsequently, participants were asked to give five reasons of why they chose the hearing device.
- Hearing aids used were Phonak Marvel 2.0 Audeo M90, Oticon Opn S Mini RITE R, Signia Styletto connect 3Nx rechargeable, Starkey Muse IQ i1000, Widex Beyond 110 Fusion, Resound LiNX Quattro 9

Key findings are presented below

Participants demographics (in %)

| Men | Women | Age group 18-35 | Age group 36-55 | Age group 56 + | Educated to Secondary school level | Educated to A-level degree | Educated to University degree level | Educated to University Post graduate level |
|-----|-------|--------------------|--------------------|-------------------|--|----------------------------------|---|--|
| 25 | 75 | 50 | 37 | 13 | 8 | 25 | 48 | 19 |

Table 1. Participant demographics in %.

Preliminary analysis was done using Repeated Measures ANOVA.

1. There was a statistically significant difference in terms of which hearing aid participants would be more likely to purchase (F(4.55, 409) = 2.80, p = .02) (see Figure 1).

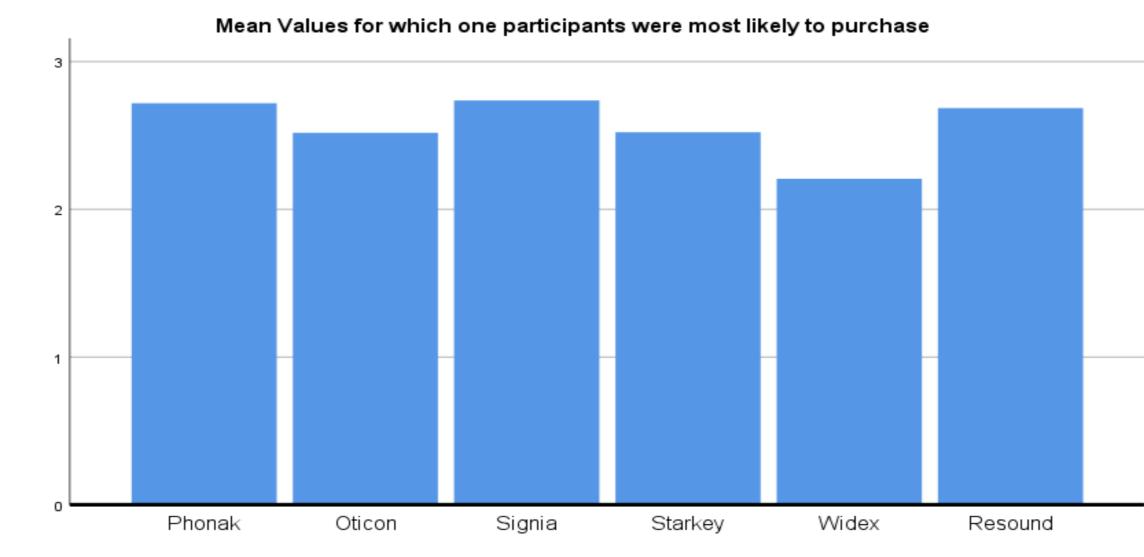


Figure 1. Average mean values among participants and their probability of purchasing hearing aids and hearing aid brands.

2. A significant result was also found in the perceived attractiveness of hearing aid (F(4.38, 749.99) = 3.87, p = .003) (see Figure 2).

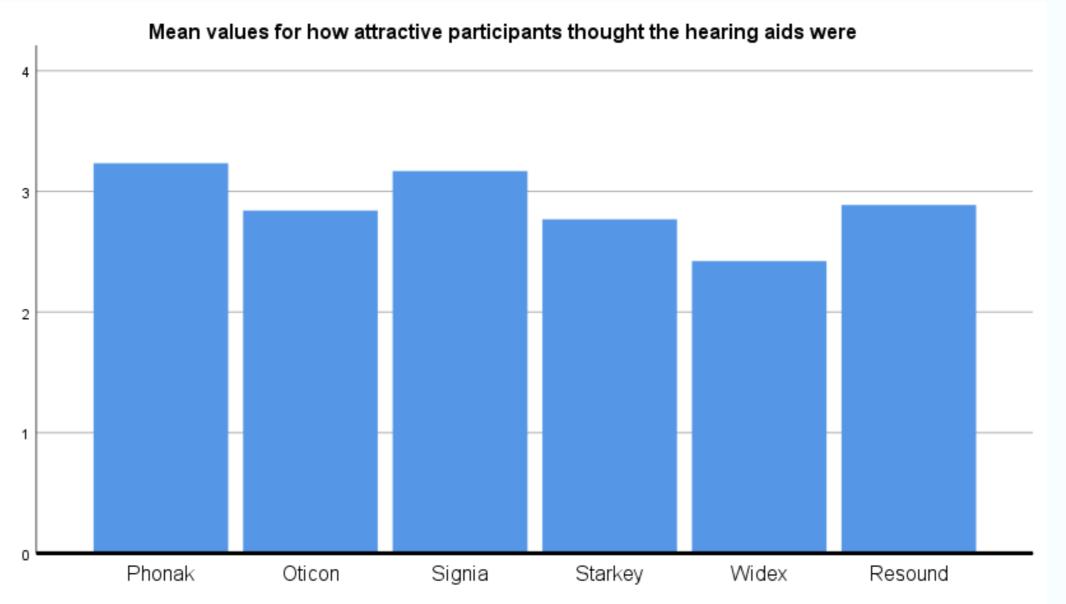


Figure 2. Average mean values among participants based on how attractive the hearing aids were for them.

Results

3. A significant difference was found on the attractiveness of the hearing device between hearing aid users and non-hearing aid users (F(4.38, 749.99) = 5.1, p = .000) (see Figure 3).

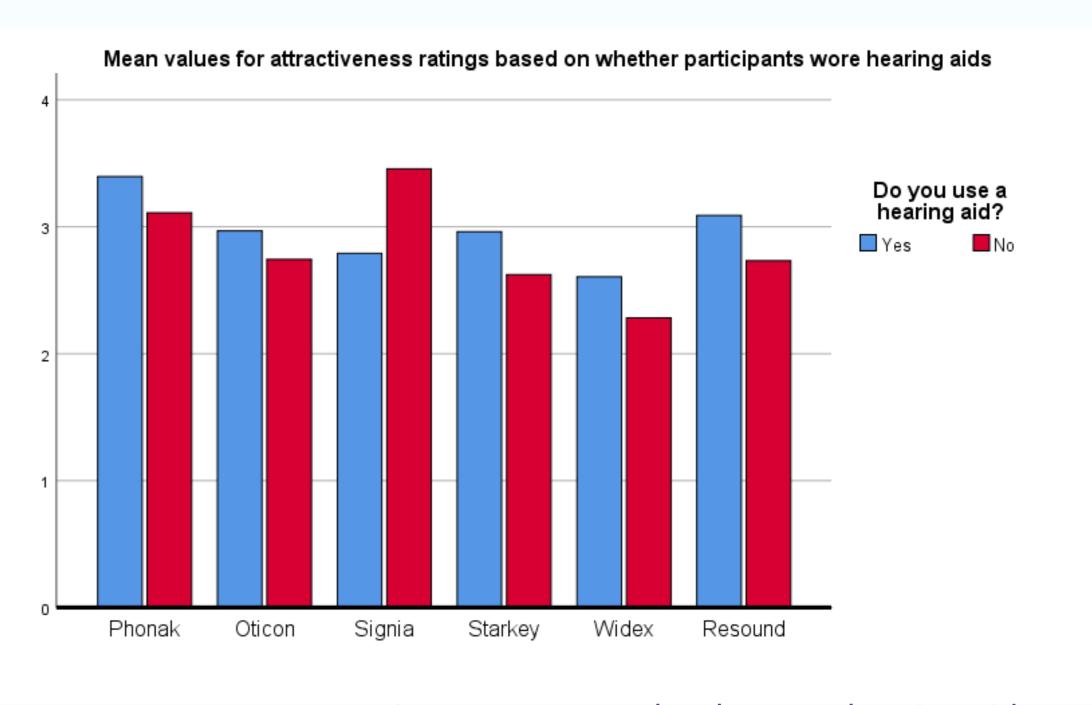


Figure 3. Average mean ratings among people who wear hearing aids

Conclusion

- The results show that the perceived attractiveness of hearing aids is not just based on visual aesthetics.
- It seems that those with <u>no previous experience</u> of hearing aids judge them on the <u>physical appearance</u>.
- However, for <u>hearing aid users</u>, the actual experience seem to influence the attractiveness ratings.
- Such findings provide useful insight for manufacturers and sales staff as it can be used to understand what 'potential' and 'actual' wearers of hearing aids prefer.

References

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- 2. Knudsen LV, Oberg M, Nielsen C, Naylor G, Kramer SE. Factors influencing help seeking, hearing aid uptake, hearing aid use and satisfaction with hearing aids: a literature review. Trends Amplif. 2010;14(3):127–154

Contact

- Inc118@student.aru.ac.uk
- Srikanth.chundu@aru.ac.uk
- Cathrine.Jansson@aru.ac.uk