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# Hearing Aid Attribute & Feature Importance Evaluation (HAFIE) questionnaire

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# Hearing Aid Attribute and Feature Importance Evaluation

## **Hearing History**

What is your age?		
Have you worn a hearing aid before?	Yes	No
How long have you worn a hearing aid for?		
Do you own a smartphone?	Yes	No
If you have worn a hearing aid before, did you connect it to your smartphone?	Yes	No



Hearing aids are complex devices consisting of many different technologies. The following sections will contain descriptions of these technologies and will assess your opinions towards them.

### **Section 1: Smartphone-based Technology**



Some hearing aids can connect to your smartphone via Bluetooth. Depending on the type of hearing aid, a specialized smartphone/tablet application app) can connect to your hearing aid and allow you to make changes to your hearing aid through your phone.

How important is this to you if deciding on a new hearing aid to use?

Not at all Slightly Moderately Very Extremely

The hearing aid can connect to my smartphone or tablet through a specialized application.

The app which connects my phone to my hearing aid is clear and easy to use.

Using my smartphone I can make the hearing aid focus on speech from a certain direction.

Using my smartphone I can adjust the hearing aid's volume and sound clarity through my phone.

### **Section 2: Multi-environment Functionality**



Hearing aids can come with different settings (called "programs") designed to improve your experience in different listening environments. An example of this is having a hearing aid program that lowers background noise when you are in a noisy environment. You can either change the settings based on your preference or the hearing aid can change them automatically by sensing the environment you are in.

How important is this to you if deciding on a new hearing aid to use?

Not at all Slightly Moderately Very Extremely

The hearing aid has a program to use when I am outside (e.g., for natural wind sounds).

The hearing aid has a program to use when I am listening to live music.

The hearing aid has a wide choice of programs which are specialized for different surrounding sounds.

#### **Section 3: Comfort and Appearance**



Hearing aids can differ in size and appearance.

This can change how they look cosmetically as well as how comfortably they sit in and on your ear.

Not at all Slightly Moderately Very Extremely

The hearing aid is easy to put in my ear.

The hearing aid is comfortable to wear with eyeglasses.

The hearing aid looks good aesthetically.

The hearing aid is small in size and width.

### **Section 4: Convenience and Connectivity**





Some hearing aids have features focused on convenience. This can include being able to communicate with your hearing professional through your smartphone app and allowing them to make changes to your hearing aids without having to visit the clinic in person.

How important is this to you if deciding on a new hearing aid to use?

Not at all Slightly Moderately Very Extremely

The hearing aid settings can be changed by the audiologist without needing to visit the clinic.

My hearing aid can connect to a TV streaming device that sends my TV audio directly into my hearing aid.

The hearing aid can connect to a remote microphone which sends audio directly into the hearing aid. This makes it easier to hear at a distance or in a crowd.

The hearing aid can count the number of steps that I take the day.

The hearing aid can connect wirelessly to a remote control which allows hearing aid volume change.

#### **Section 5: Ease of Use**



An important aspect of hearing aids is their ease of use. Some hearing aids have features focused on improving their simplicity and making them easy to use.

How important is this to you if deciding on a new hearing aid to use?

Not at all Slightly Moderately Very Extremely

The hearing aid does not have many accessories to use and maintain.

The hearing aid's volume and program buttons are easy to find and use.

## Section 6: Audibility and Speech Intelligibility



The hearing aid takes sound from your environment and modifies it based on your hearing loss. Certain hearing aid technologies are designed to improve the quality of the sound to be more comfortable to you and to make speech easier to hear and understand.

How important is this to you if deciding on a new hearing aid to use?

Not at all Slightly Moderately Very Extremely

The hearing aid has a feature to reduce the noise from wind.

The hearing aid sound quality sounds natural.

The hearing aid makes my own voice sound natural.

The hearing aid makes speech sound clear and of high quality.

The hearing aid can reduce background noise.

### **Section 7: Streaming**



Some hearing aids can connect to your smartphone with Bluetooth. This gives you the option to hear your phone calls or play music from your phone directly in your hearing aids rather than placing the phone over your ears.

How important is this to you if deciding on a new hearing aid to use?

Not at all Slightly Moderately Very Extremely

The hearing aid allows me to stream calls directly into my ear, including in the car.

The hearing aid allows direct music streaming from my phone into my ears.

#### **Section 8: Batteries and Charging**



Some hearing aids are powered by batteries which are placed inside the hearing aids and must be replaced upon consumption. Larger hearing aids have larger batteries which last longer and smaller hearing aids have smaller batteries with a shorter duration. Smaller batteries might also be more difficult to handle. Rechargeable hearing aids do not need batteries but can be recharged electrically by plugging into a power source (i.e., a wall socket or power bank). These must be charged for a short period every night when not in use.

How important is this to you if deciding on a new hearing aid to use?

Not at all Slightly Moderately Very Extremely

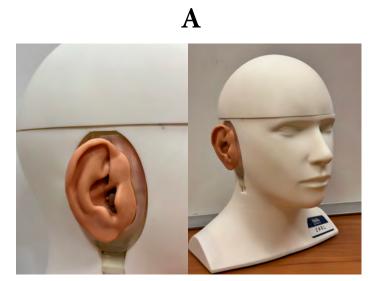
The hearing aid rechargeable (does **not** use disposable batteries).

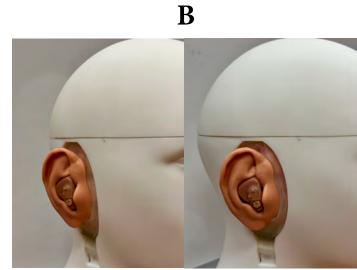
The hearing aid has a portable power bank to charge outdoors (if hearing aid is rechargeable).

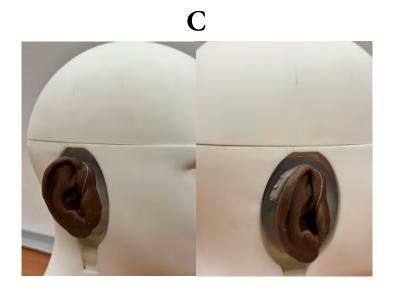
The hearing aid batteries are small in size (if hearing aid is **not** rechargeable).

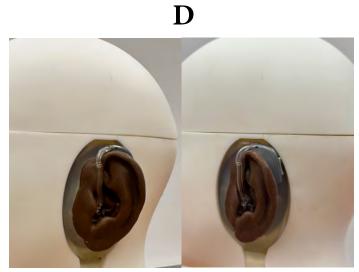
## **Section 9: Hearing Aid Styles**

**Consider these hearing aid styles:** 









Please rate these in order of your preference:  $1^{st}$  \_\_\_\_\_,  $2^{nd}$  \_\_\_\_\_,  $4^{th}$  \_\_\_\_\_

## **Subscale Scores (for clinician use):**

Each question is scored from a minimum of o (not at all important) to a maximum of 4 (extremely important).

Section 1: Smartphone-based Technology		Section 2: Multi-environment Functionality		
Average:		Average:		
Average (%):		Average (%):		
Range:	-	Range	-	
Section 3: Comfort and Appea	rance	Section 4: Convenience and C	onnectivity	
Average:		Average:		
Average (%):		Average (%):		
Range	_	Range:	_	
Section 5: Ease of Use		Section 6: Audibility and Spee	ech Intelligibility	
Average:		Average:		
Average (%):		Average (%):		
Range	-	Range	-	
Section 7: Streaming		Section 8: Batteries and Char	rging	
Average:		Average:		
Average (%):		Average (%):		
Range	-	Range:	-	