

# Phonak Field Study News.

## Enhancing adolescent's listening: myPhonak Junior's latest features.

Three features from myPhonak app, aimed at adults, were tested with children and adolescents. These features Split volume control, Custom programs, and Ambient/Streaming balance were found to be appropriate and useful for children and have therefore been incorporated in myPhonak Junior.

Nelson, J., Joseph, K., Harrison, K., Haque, A., Manirajan, M., Wilkinson, D. (2025)

#### Introduction

Remote support and child-directed control of hearing-aid settings are increasingly used to tailor listening experiences for adolescents with hearing loss. Early feasibility work at Hearts for Hearing in the United States using myPhonak app explored speech intelligibility, features usability, participant's preference when comparing AutoSense OS with programs based on settings they created, and the relationship between custom adjustments and listening outcomes in noisy environments. Results supported providing adolescents with a hearing aid app so they can personalize settings in particularly challenging situations. However, it was also discovered that adolescents could decrease their speech intelligibility when given access to all features in myPhonak. With this in mind, myPhonak Junior was developed with a reduced feature set. The features

chosen for myPhonak Junior were the ones that the participants in the Hearts for Hearing study indicated were the most beneficial and were the features that would not adversely impact speech intelligibility. (Neumann et al., 2022).

A subsequent study was undertaken at the University of Mainz in Germany with myPhonak Junior. It focused on speech intelligibility following adjustments to noise reduction (NR) and directionality through the speech focus (SF) slider. Results showed that adolescents can effectively adjust noise reduction and speech focus (SF) in myPhonak Junior, with potential benefits in real-world listening while maintaining speech intelligibility (Gazibegovi, Bohnert, & Laessig, 2025).

myPhonak Junior 2.0 includes three additional features aimed at providing adolescents with more control over their

listening experience in real-world situations. Prior to incorporating these features into myPhonak Junior a usability study was completed at Guys and St Thomas' National Health Service clinic in London. This Field Study News discusses the findings of the London study.

The London study investigated three features: split volume control (split VC), ambient balance, and custom programs. The primary objective of the study was to determine whether adolescents understand the concepts of the three features and can apply them appropriately. Secondary objectives included evaluating the adolescents' ability to use the features during set scenarios and collecting anecdotal feedback on usage in real-life contexts.

#### Methodology

Twenty-four participants, aged 9-17 years were recruited for this study. The hearing loss of the participants ranged from mild to severe, and they were all consistent bilateral hearing aid users. The participants were fit with Phonak Audéo™ Lumity 90 devices, with M or P receivers and domes based on the Phonak Target fitting software recommendations.

Participants were given access to the myPhonak app version 6.3 which was installed on a study mobile phone to use for the duration of the appointment.

This study included one visit to test three features of myPhonak. myPhonak was used as the features were not available in myPhonak Junior at the time of the study. The use and application of three features from myPhonak were demonstrated. Participants were shown:

- How to access and use the split volume control feature, including how to change between left and right hearing aids
- How to stream music through the mobile phone apps
- How to adjust the Environmental Balance control when streaming, increase or decrease the ratio of the streaming relative to the surrounding environment
- How to adjust the noise reduction and speech focus features
- How to create, name, save and delete a custom program
- How to change between programs in the app and on the hearing aid

Examples of when each of these features might be useful were also discussed as each feature was demonstrated. Once the demonstration was complete, the participants were given a short break between the demonstration and the assessment of how they would use the features. The

ability of the participant to use these features was assessed through presenting a variety of scenarios as outlined below. The demonstration and order of assessment of each feature was randomized for each participant.

#### 1. Split volume Control

- A manual calm situation program with ~10dB reduced gain in one ear was created to simulate unbalanced hearing
- This program was selected by the audiologist when the hearing aids were not worn. The participant did not know that the gain was reduced in one ear.
- Participants were asked to listen to a story from a sound field speaker presented at 70 dBA at 0 degrees azimuth.
- Participants were asked how the hearing aids sounded and were given the opportunity to improve the sound as required. Observations of the adjustments they made within the app to balance their hearing with the hearing aids were documented.

#### 2. Ambient Balance

Participants were asked how they would manage each of the following scenarios and their responses were recorded. For each scenario the hearing aids were streaming music through the phone or someone was speaking through Roger Touchscreen Mic.

Scenario 1. "You are on noisy public transport, but you want to hear your streaming (music/podcast) better"

Scenario 2. "You are on noisy public transport streaming (music/podcast) but you want to hear what your friend next to you is saying"

Scenario 3. "You are in a noisy classroom. Pretend I am your teacher and you want to hear me better"

Scenario 4. "Pretend I am your teacher. I am talking but your friend wants to tell you something and you want to hear them"

#### 3. Custom Programs

Participants listened to a story presented at 70 dBA at 0 degrees azimuth in the presence of background noise levels of 68 dBA presented at 180 degrees azimuth

Participants were instructed to make adjustments via myPhonak to improve their access to speech. They were directed to the Noise Reduction and Speech focus sliders where needed. Participants were asked to demonstrate how they would change programs on the app and on their

hearing aids. When the maximum number of programs was reached, participants were asked what they would do next and whether they were able to successfully delete a program recorded.

#### Results

#### 1. Split volume Control

92% of participants, including those who were 9 years of age, were able to successfully navigate to and use the split volume control within the app. When trialing this feature within the scenario (where one hearing aid had lower gain), the majority of adolescents did not notice the volume difference between the ears. However, when prompted, 79% of participants made sensible decisions about how to use this feature.

#### 2. Ambient balance

While streaming, 94% of participants demonstrated appropriate use of the ambient balance to reach the desired outcome according to the scenario given. Participants were enthusiastic and positive regarding ambient noise balance with 75% reporting that this is a useful feature. Participants enjoyed the control the app allowed and felt the control of adjusting the dynamics would be useful in their day-to-day lives:

"it's like having noise cancelling headphones and you can focus on what you want to".

Having the ability to adjust the streaming balance empowers adolescents to control their streaming listening experience.

It was noted that the term 'ambient balance' was not meaningful for the adolescents and the researchers needed to explain what it meant. With this in mind, myPhonak Junior calls this feature 'Streaming balance' as this name was understood by the adolescents.

#### 3. Custom programs

92% of participants were able to successfully navigate to this feature. 100% of participants were able to create, save, delete and navigate to the custom programs both through the app and on their hearing aids. All participants were also to resolve the maximum number of custom programs being reached.

Participants commented that technology such as hearing aid apps could help break down some of the barriers between hearing aid users and non-wearers:

"I will be able to connect better with peers as the app is easy to use and interesting. My hearing aids may become less of an unknown thing and I would love to be able to show my friends the features."

Many of the adolescents who were previously not using the app downloaded it before leaving the clinic and were keen to know when these new features were being released!

#### Conclusion

Three features, split-volume control, custom programs, and streaming balance, were planned for myPhonak Junior. During this usability study the features were introduced to adolescents aged 9–17 to determine whether the participants could understand, navigate to, and use them in a clinic setting. In scenario-based tasks to assess their understanding, participants demonstrated a clear grasp of streaming balance and custom programs. In the split volume control scenario where the gain in one hearing aid had been reduced by 10 dB, the participants needed help recognizing that they weren't hearing as well in that ear.

As a result of this study, the three features have been incorporated into myPhonak Junior 2.0, released October 2025. To minimize the chance of the volume on one device being set lower or higher than required through accidental activation of 'split volume control', the feature has been located in myPhonak Junior behind the parental lock.

#### References

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#### Authors and investigators



Keiran Joseph, Clinical Lead, Pediatric Audiology, Guy's and St Thomas' NHS Foundation Trust

Keiran is a Consultant Clinical Scientist specializing in pediatric audiology. Outside of his primary role, he is a lecturer in pediatric audiology, an expert advisor to the NHS, and

an Executive Director of the British Academy of Audiology. Keiran is dedicated to ensuring that every child receives the audiology care they need, when they need it, driving this mission through his clinical practice, quality assurance, and research work.



Kirsten Harrison, Senior Pediatric Audiologist, Guy's and St Thomas' NHS Foundation Trust Kirsten is a Senior Pediatric Audiologist with extensive experience in hearing rehabilitation and the management of children and young adults with varying degrees of hearing loss. Kirsten is passionate about delivering the

highest standards of care, she has a strong interest in quality assurance and service improvement, continually seeking innovative approaches to enhance access to effective audiological support.



Abeda Haque, Advanced Audiologist, The Royal National ENT and Eastman Dental Hospitals

Abeda Haque is an experienced audiologist with over a decade of expertise in Pediatric audiology. Abby is committed to ensuring

each child receives the best hearing solution to support their development and connection with the world around them.



Dawn Wilkinson, Principal Audiologist, Pediatric Audiology, Guy's and St Thomas' NHS Foundation Trust

Dawn is an experienced senior audiologist with significant experience in the diagnosis and management of hearing loss in adults and children. She has championed regional

pediatric hearing aid care as past-chair of the regional habilitation peer review network and in her current role leads the services' cortical evoked potentials clinic, ensuring that babies diagnosed with hearing loss are optimally aided from the start.

#### Co-author



Jodie Nelson, Senior Audiology Manager Pediatrics, Phonak Jodie is a highly experienced Senior Audiologist with extensive expertise in managing hearing loss across both pediatric and adult populations. As the

Pediatric Audiology Manager at Phonak, she is dedicated to delivering the highest quality hearing solutions for children with diverse hearing needs. Driven by the belief that "every child matters", Jodie combines her deep clinical experience with her active participation in clinical research.



### Phonak Field Study News.

### One-page summary

## Enhancing adolescent's listening: myPhonak Junior's latest features.

Three myPhonak features, Split volume control, Custom programs, and Streaming balance, were tested with children. The children found them to be useful and they are now in myPhonak Junior.

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#### Key highlights

- Child-directed control through myPhonak Junior is feasible and beneficial
- Speech intelligibility is not adversely affected when changes are made to noise reduction and directionality
- Participants 9 years and over were able to use myPhonak Junior responsibility and demonstrated sound decision making.
- The three new features in myPhonak Junior 2.0 are easy for children to use, understand and apply appropriately in various listening scenarios.

#### Considerations for practice

- Introduce adolescents aged 10 years and older to myPhonak Junior to help foster hearing care independence. myPhonak Junior can be used for children aged 10 years and older.
- Advocating for myPhonak Junior use can empower adolescents when dealing with challenging listening environments.
- Split volume is a feature which can be used when appropriate for the child. Keeping it behind the parental lock provides security against accidental activation.