

Phonak Field Study News.

Roger improves well-being for working adults with hearing loss

Roger™ technology brings psychosocial benefits for adults in the working population, across a wide range of hearing aid technologies, occupations, and degree of hearing loss.

Roh M., Ishida I., Voss S.C., Zhu X., & Qian J. May, 2026

Introduction

Adults with hearing loss suffer from known psychosocial conditions such as stress and anxiety, which interfere with their productivity, with a higher need for recovery from work and requests for sick leave (Kramer et al., 2006; Nachtegaal et al., 2012; Simpson et al., 2016). These facts place them at a greater risk of unemployment, earning lower wages, and retiring earlier than their peers (Jung & Bhattacharyya, 2012; Helvik et al., 2013)

About 8% of people in the workforce are living with hearing loss (NZIER, 2023). People with hearing loss rank hearing well in the workplace within their top 5 listening needs (Dobyan & Kihm, 2025). Yet even with well fit hearing aids, listening needs in some workplace environments are not met well. For example in the UK, only about 1/3 of hearing aid wearers believe their hearing aids help them to work longer (EuroTrak UK, 2025).

Remote microphone technology is designed to complement hearing aids and improve hearing over noise, distance, and

reverberation. Phonak Roger systems contain advanced signal processing that can greatly enhance performance in these areas, as well as other features to increase its versatility beyond basic remote microphone use. The audiological benefits of Roger technology have been proven to extend beyond hearing aids alone (Thibodeau, 2014), as well as outperform other traditional remote microphone technologies (Wolfe et al., 2015; Roh et al., 2025).

Despite these promising results, adoption of Roger technology for people with hearing loss has been relatively low. Possible reasons include unfamiliarity or not perceiving the benefit of these technologies for various environments that are important to the user, e.g., their workplace (Scarinci et al., 2022) or financial reasons (e.g. lack of funding). Some countries have legislation and programs that can help to provide funding for these devices so that the financial burden does not lie with the hearing aid user, however these options are often not explored.

Since little is known about the benefit of remote microphone technology at the workplace (e.g. in meetings, social gatherings, online calls), the objective of this study was to investigate the potential psychosocial benefits of using Roger in the working adult population with hearing loss during a 4-week trial with Roger On™.

Methodology

Participants

23 working adults (11 male, 12 female) with bilateral hearing loss and an average age of 52 (range of 33 – 74) years old were recruited from an independent clinic in Canada. All participants were experienced hearing aid wearers with good unaided word recognition scores and were novel to Roger remote microphone technology. Participants were actively working in settings such as offices, schools, construction sites, medical offices or hospitals, shops, and home care.

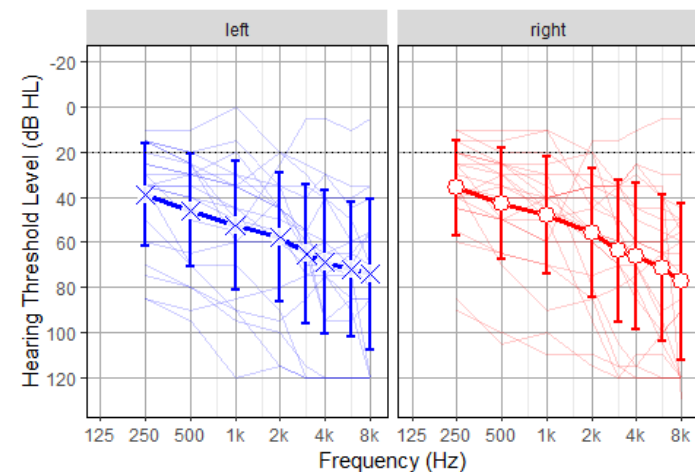


Figure 1. Grand average audiogram of the 23 participants from this study. The four-frequency pure tone average (4PTA) was 55dB HL.

Devices

Participants used their personal hearing aids during the trial to ensure minimum disruption to their day-to-day routine. All hearing aids were either Premium or Advanced level technology across various form factors equipped with RogerDirect, allowing a direct connection to Roger technology without requiring any intermediary devices.

Participants were provided with a Roger On 3 remote microphone. The Roger On 3 features multiple microphone modes that automatically adjust based on its usage and in particular a mode where the transmitter can be used as a boom microphone for online calls.

Questionnaire

The Psychosocial Impact of Assistive Devices Scale (PIADS) is a 26-item self-reported questionnaire designed to assess the

effects of an assistive device (i.e. Roger On 3) on the following self-perceived domains:

- **Competence** (measuring how Roger affects feelings of capability, productivity, and independence)
- **Adaptability** (measuring aspects of how Roger might encourage liberating and enabling aspects, enhancing participation, willingness to try out new things and take risks)
- **Self-esteem** (indicating the impact of Roger on self-confidence and emotional well-being)

The PIADS, which uses a Likert scale varying from -3 (deterioration) to +3 (improvement), has been used on previous occasions to assess the amount of perceived psychosocial benefits of hearing aids as an intervention (Saunders & Jutai, 2004; Jiménez-Arberas & Díez, 2021). Scores above 0.3 suggest a noticeable change whereas scores around 1 suggest a clear and meaningful improvement. Scores closer to zero suggest the device does not have an impact to daily life, and scores below 0 would suggest the device has a negative impact on the particular item.

Procedure

At the initial appointment, the clinician paired the Roger On 3 with the participant's personal hearing aids and provided instructions on using the Roger On 3. Participants went on a 4-week home trial, after which they returned to the clinic and rated their abilities on the PIADS with the Roger On 3 while comparing it to their lived experience without a remote microphone.

To avoid any biases arising from participants keeping the devices, the Roger On 3 devices were returned to the clinic at the end of the study.

Results

PIADS results by sub-scale

All three sub-scales had mean scores significantly greater than 0 ($p < 0.0001$) indicating that participants experienced significant improvements in adaptability, competence, and self-esteem after using Roger with their hearing aids. (Figure 2).

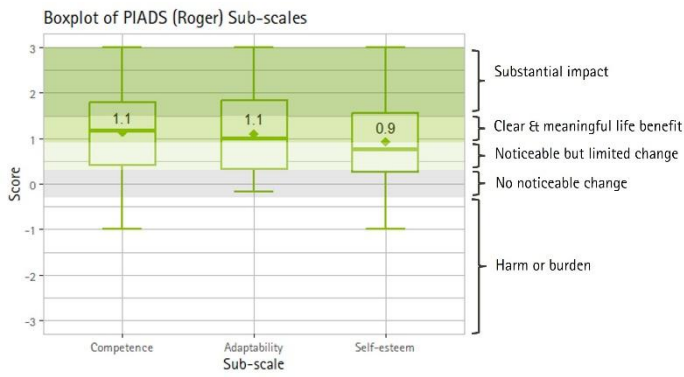


Figure 2. PIADS results after the intervention (Roger). Numbers show the average PIADS score obtained for each subscale. Scores ranged from -3 (minimum benefit) to +3 (maximum benefit).

Individual responses by domain (Figure 3) showed a general trend for benefit across all questions asked, suggesting that Roger provides a broad benefit across multiple domains and sub-domains. The questions showing a negative value are consistent with a benefit in this domain (i.e. less confusion, less frustration, less embarrassment).

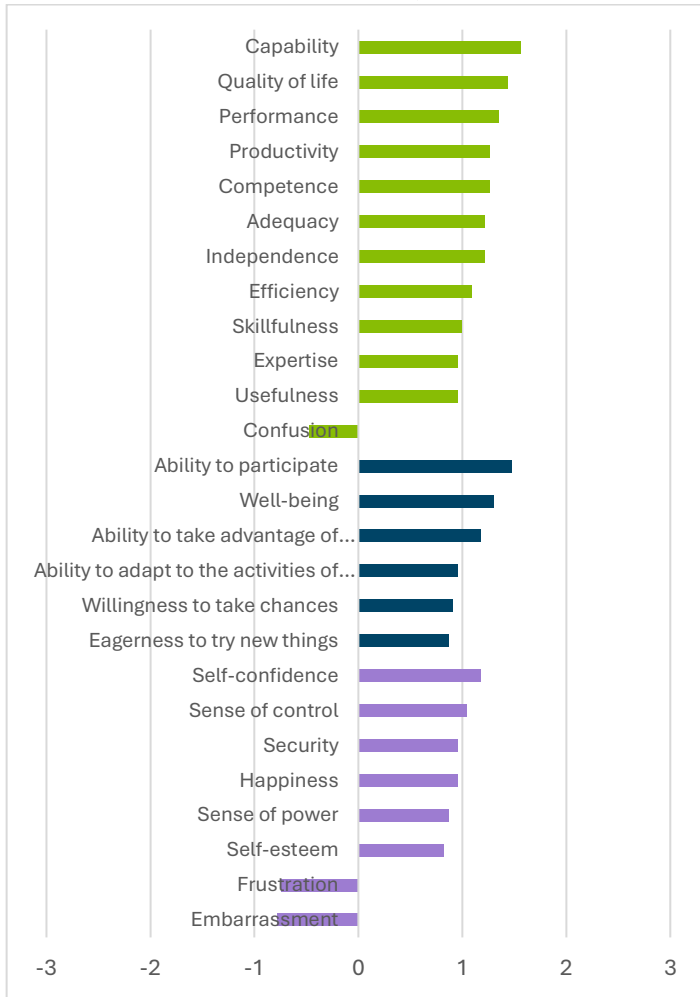


Figure 3. Average scores after intervention for each item on the PIADS subscale. Colors denote grouping of each item into its sub-scale. Scores ranged from -3 (minimum benefit) to +3 (maximum benefit).

PIADS results by participants

When looking at individual PIADS responses, most participants (83%) had positive scores across all PIADS sub-

scales, and results showed some variety across individuals (Figure 4). Many individuals who scored high in competence also tended to score high in adaptability and self-esteem, suggesting a broad, rather than isolated, perceived benefit.

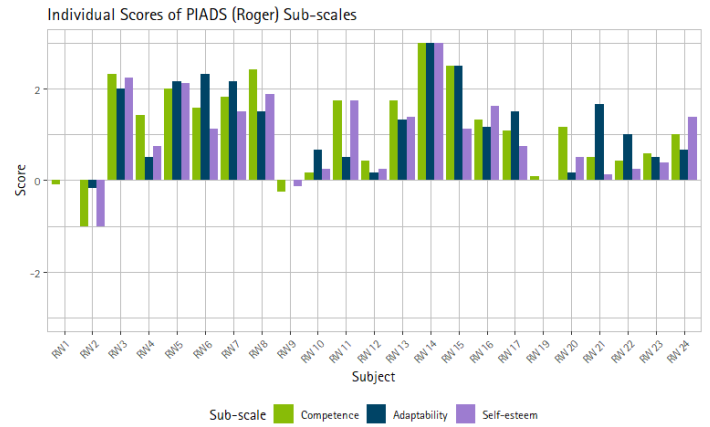


Figure 4. Individual participant PIADS scores segmented by sub-scale. Scores ranged from -3 (minimum benefit) to +3 (maximum benefit).

Discussion

This study demonstrated that Roger remote microphone technology can bring meaningful, real-world psychosocial benefits for adults in the workplace compared to hearing aids alone in terms of adaptability and competence, and noticeable changes in self-esteem, as well as suggesting a benefit across most individual items on the PIADS questionnaire.

Psychosocial benefits using the PIADS questionnaire have been well documented in previous studies and surveys for hearing aids alone (Saunders & Jutai, 2004; Dobyán & Kihm, 2025), and this is the first study to provide a similar magnitude of benefit when using remote microphone technology.

Given these study results, adults in the working population who may suffer from psychosocial conditions such as stress and anxiety due to their hearing loss, could expect to see clear and meaningful benefits in this area using hearing aids, as well as remote microphone technology such as the Roger On.

Future directions for research could look into how data logging may be correlated the magnitude of psychosocial benefits, as well as where benefits are obtained in specific use cases of remote microphone technology.

Typical tests of speech intelligibility in noise to objectively validate the subjective reports were not completed, as the Roger product line has been subject to multiple technical and clinical studies since launch and has consistently shown

significant benefits in speech intelligibility in noise compared to hearing aids alone (Thibodeau, 2014; Wolfe et al., 2015) as well as in comparison to other remote microphone technologies (Roh et al., 2025).

Conclusion

Findings of this study suggest that use of Roger technology may provide psychosocial benefits for adults in the working population, across a wide range of hearing aid technology, occupation, and degree of hearing loss.

Raising awareness to clients about the potential benefits of using Roger in the workplace allows the opportunity to improve hearing in these situations. Furthermore, awareness of funding opportunities for workplace accommodations can be helpful to canvas, where Roger On could be recommended as a workplace solution for clients with workplace-related listening difficulties.

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Authors and Investigators

Internal investigators

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Ieda is a seasoned audiologist with over 25 years of clinical and research experience in humans throughout the lifespan. She earned her Ph.D. in Japan at Nagoya University, followed by post-doctorate research at The University of British Columbia in Vancouver, Canada. Her passion about

research and audiology has led her to volunteer in professional committees on both the clinical (British Columbia Early Hearing Program), and research (Speech-Language & Audiology Canada, Chair of the Clinical Research Grants committee) fields, and her current role with Sonova's R&D is a great match for her skills and interests.

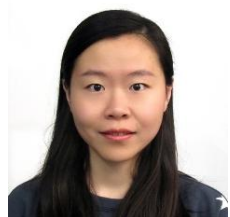
Solveig Voss, Senior Technical Lead at Sonova Audiology Research Centre Canada



Solveig Christina Voss is a master hearing aid acoustician and holds a BSc. in Hearing Acoustics from the University of Applied Sciences in Luebeck, Germany, along with a MSc. in Hearing Sciences from Western University in London, Ontario, Canada. Since 2014, she has been working at

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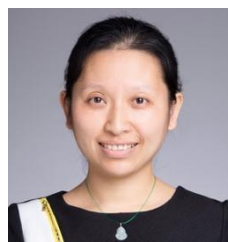


Xiuming joined Sonova Clinical Research Operation team in 2024 and works on clinical data management and analysis. She joined Sonova in 2018 and worked as research and development engineer, contributing to development of various innovative

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Jinyu Qian, Vice President of the Sonova Audiology Research Centre Canada

Jinyu has been leading the Audiology Research Centre Canada at Sonova since 2018. She received a dual degree from the State University of New York at Buffalo-Ph.D. in



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Min obtained his Masters of Audiology at The University of Auckland, New Zealand in 2017. He has held various roles in diagnostic and rehabilitative audiology, tertiary education, professional bodies, and in the Sales & Audiology team at

Phonak NZ, before joining as the Global Audiology Manager for Roger at Phonak HQ in 2024.

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One-page summary

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Key highlights

- Beyond speech intelligibility, Roger technology can have psychosocial benefits for adults in the working population, across a wide range of hearing aid technology, occupation, and degree of hearing loss.
- These psychosocial benefits include meaningful benefits in competence, adaptability, and self-esteem compared to hearing aids alone.
- 83% of the study participants reported a positive score on the PIADS scale, suggesting psychosocial benefits when using Roger On.

Considerations for practice

- On top of conventional hearing aid technology, it is important to consider remote microphone technologies as part of a whole hearing solution for working adults.
- Psychosocial aspects of hearing loss can be helped by using both hearing aids and Roger technology which provide clear and meaningful psychosocial benefits.
- Awareness of funding options for accessibility often available through state or country-wide funding streams may be helpful when recommending those accessories to clients.