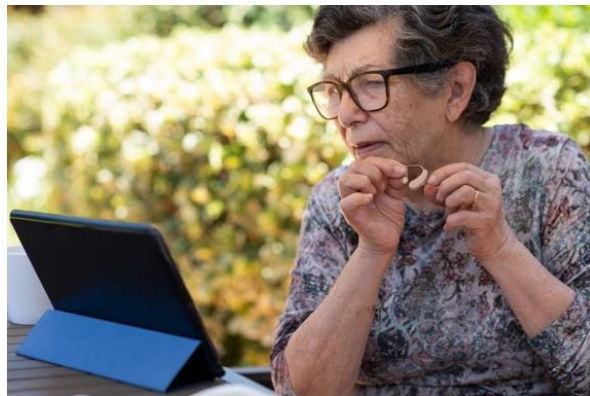


TechSAge Tips

Self-Report Questions to Assess Hearing Loss among Older Adults

Overview

Aging Concerns, Challenges, and Everyday Solution Strategies (ACCESS) is a mixed-method study that explores the everyday challenges faced by older adults with long-term disabilities, including a subsample of late-deafened older adults. During screening and data collection, we asked participants a variety of self-report questions about their hearing loss. Some questions measured the same variable but yielded inconsistent responses. We analyzed these responses to provide recommendations for descriptive, self-report measures, which are outlined below.



Late-Deafened Eligibility

- To determine if participants met the late-deafened criteria, they were asked:
 - “Did the hearing loss occur before or after you started to talk and learn language?”, and
 - “Did your hearing loss occur before or after learning to speak?”.
- Inconsistencies were likely due to participants being unaware of their communication timeline and the absence of newborn hearing screenings and early identification during their childhood.
- Because oral communication skills have typically emerged by age 3, future studies should only ask about the age of onset to determine if the hearing loss was pre- or post-lingual.

- Questions about the age of diagnosis and the age at which participants believe their hearing loss first occurred can offer better insights into their hearing history.
- Further questions regarding when the hearing became severe or profound will provide more information about their communication challenges.

Onset of Hearing Loss

- Some participants gave inconsistent responses to the following questions assessing age of hearing-loss onset:
 - “At what age did you first develop your hearing loss?”, and
 - “Approximately what age did you first experience hearing loss in both ears?”
- Future studies should ask about the age of onset in *each* ear to improve consistency and understanding of a possible asymmetric development of hearing loss.

Severity of Hearing Loss

- Participants were asked various questions assessing the severity of their hearing loss, including:
 - “How would you classify your degree of hearing loss without amplification (e.g., hearing aid or cochlear implant)?”. This multiple-choice question included descriptions of each degree (e.g., mild, moderate, severe).
 - “Do you know your hearing loss range in decibels?” This question provided checkboxes with decibel ranges for each ear.
- Many participants reported their hearing loss decibel range as “unknown”. Some reported decibel ranges indicating normal to moderate hearing loss, despite indicating a severe to profound hearing loss in the screening. Inconsistencies in decibel reporting were likely due to participants not understanding the decibel system.
 - Self-reported decibel ranges should be interpreted with caution.
 - Decibel ranges can be verified using the participant’s most recent audiogram.
- Inconsistencies regarding degree of loss were most likely due to the definitions being applicable to multiple degrees of hearing loss. For example, the definition of mild hearing loss was: “You may hear some speech sounds, but soft sounds are hard to hear.”

- Severity level definitions should be more specific, represent distinct degrees of hearing loss, and include more real-world examples.

Perceived Hearing Difficulty

- Participants experienced some challenges when responding to the following questions assessing hearing difficulty:
 - “Even with the use of a hearing aid or cochlear implant, do you experience hearing difficulties that affect your communication and daily activities?”
 - “Do you have serious difficulty hearing, even when wearing a hearing aid?”
- Some participants struggled with the U.S. Census Bureau’s question about “serious” difficulty due to its subjective nature and its focus only on hearing aids and not cochlear implants. Additionally, as these questions were asked on different days, participants’ perceptions of their hearing loss could vary daily.
 - Questions assessing hearing difficulty should account for all possible amplification devices, as there is diversity in their use (e.g., hearing aids, cochlear implants).
 - Self-report audiologic questionnaires, such as the Hearing Handicap Inventory for the Elderly (HHIE), which assess situational hearing challenges, may provide a more comprehensive evaluation.

Additional Resources

- [TechSAge User Needs Project](#)
- [Hearing Handicap Inventory for the Elderly \(HHIE\)](#)



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