Challenges switching between speech and music

More sustained engagement with awareness of functionality of HAs, and potential Live contexts frequently problematic

BSL interpretation

Affords greater levels of control (*Madsen & Moore, 2014*)

Adjusting to a different auditory input

The importance of increasing HA users’ control of auditory input

Flexible approach to fitting HAs for music listening required

Managing expectations of the outcomes of using HAs for music

Dependent on nature of social interactions

Mix of strategies to manage auditory input

"when I go to concerts with a full orchestra, it’s awful if it’s distorted, so I wait for the first loud bit, and adjust the volume to that, so I know I can ride the dynamics." (*M*, 73yrs)

Live music contexts

User knowledge of HA technology

“Doesn’t it sound silly when you don’t actually know about your HAs.” (*M*, 46yrs)

“all these extra things that have been added to improve speech recognition...have nothing to do with music and have actually got in the way” (*M*, 82yrs)

Study 2 themes so far...

Optimising HAs for music

“he played me music and asked me to bring my guitar into clinic, I sat and played and I described while he was tuning the HA.” (*M*, 73yrs)

“I will adjust the volume to get a comfortable level, I think you would do that without hearing aids...it’s not the hearing aids...it’s just too loud” (*M*, 30yrs)

Study 3 NATIONAL SURVEY

Online survey explore trends in listening behaviour of HA users in the general population

Participants

Inclusion criteria: confirmed hearing loss; uses HAs (incl. BAHA) for min. 1hr per day, Age 18-90

Survey topics

- Hearing, type of HAs, musical preferences, musical training and engagement, experiences listening in different settings
- Live music contexts
- Recorded music contexts
- User knowledge of HA technology

STUDY 1

CLINIC QUESTIONNAIRE

Aim to explore the prevalence of music listening problems and discussions with audiologists

Participants

176 HA users (mean age 60.56; 78F, 94M)

Results

- Music listening moderately problematic
- Awareness of functionality of HAs, and potential Live contexts frequently problematic
- Mixed responses about effectiveness of music programs

STUDY 2

INTERVIEW STUDY

Aim to explore how levels of hearing impairment and the use of HAs affect music perception

Participants

- 22 HA users (age range 24-82, mean=62.05)
- 10 mild, 10 moderate, 2 severe
- 9 musicians, 13 non-musicians

Data

- In-depth interviews
- Audiometric data

Topics covered

- Nature of hearing loss and its management
- Musical engagement and training
- Impact of HL and HAs on music appreciation

Implications and future directions

- Managing expectations of the outcomes of using HAs for music
- Flexible approach to fitting HAs for music listening required
- The importance of increasing HA users’ control of auditory input
- Consideration of the management of speech and music
- Results informed design of national survey [tinyurl.com/musicandhearingaids](https://www.tinyurl.com/musicandhearingaids)

Hearing Aids for Music International Conference

- September 14-15 2017, University of Leeds, UK
- Conference aims:
  - Bring together HA users, audiologists and manufacturers to share experiences
  - Programme will include personal testimonies, latest research findings, fitting protocols, emerging technologies

STUDY 1

AIMED TO EXPLORE THE PREVALENCE OF MUSIC LISTENING PROBLEMS AND DISCUSSIONS WITH AUDIOLGETISTS

PARTICIPANTS

176 HA USERS (MEAN AGE 60.56; 78F, 94M)

RESULTS

- MUSIC LISTENING MODERATELY PROBLEMATIC
- AWARENESS OF FUNCTIONALITY OF HAS, AND POTENTIAL LIVE CONTEXTS FREQUENTLY PROBLEMATIC
- MIXED RESPONSES ABOUT EFFECTIVENESS OF MUSIC PROGRAMS

STUDY 2

AIM TO EXPLORE HOW LEVELS OF HEARING IMPAIRMENT AND THE USE OF HAS AFFECT MUSIC PERCEPTION

PARTICIPANTS

- 22 HA USERS (AGE RANGE 24-82, MEAN=62.05)
- 10 MILD, 10 MODERATE, 2 SEVERE
- 9 MUSICIANS, 13 NON-MUSICIANS

DATA

- IN-DEPTH INTERVIEWS
- AUDIOMETRIC DATA

TOPICS COVERED

- NATURE OF HEARING LOSS AND ITS MANAGEMENT
- MUSICAL ENGAGEMENT AND TRAINING
- IMPACT OF HL AND HAS ON MUSIC APPRECIATION

STUDY 3

NATIONAL SURVEY

ONLINE SURVEY EXPLORE TRENDS IN LISTENING BEHAVIOUR OF HAS IN THE GENERAL POPULATION

PARTICIPANTS

INCLUSION CRITERIA: CONFIRMED HEARING LOSS; USES HAS (INCL. BAHA) FOR MIN. 1HR PER DAY, AGE 18-90

SURVEY TOPICS

- HEARING, TYPE OF HAS, MUSICAL PREFERENCES, MUSICAL TRAINING AND ENGAGEMENT, EXPERIENCES LISTENING IN DIFFERENT SETTINGS
- LIVE MUSIC CONTEXTS
- RECORDED MUSIC CONTEXTS
- USER KNOWLEDGE OF HAS TECHNOLOGY

"I REFUSE TO HAVE A PROBLEM, I HEAR IT IN A DIFFERENT WAY, BUT IF I LIKE IT, I WILL STILL CARRY ON" (*F*, 71YRS)

"THE BRAIN ADJUSTS TO WHAT THE HEARING AIDS PROVIDE ... YOU GET USED TO IT ... I’VE ACCEPTED, THAT IS WHAT THOSE NOTES DO NOW. IT’S TOUGH, YOU KNOW." (*M*, 67YRS)

"I WILL ADJUST THE VOLUME TO GET A COMFORTABLE LEVEL, I THINK YOU WOULD DO THAT WITHOUT HEARING AIDS...IT’S NOT THE HEARING AIDS ... IT’S JUST TOO LOUD" (*M*, 30YRS)

"I DON’T REFUSE TO HAVE A PROBLEM, I HEAR IT IN A DIFFERENT WAY, BUT IF I LIKE IT, I WILL STILL CARRY ON" (*F*, 71YRS)

"THE BRAIN ADJUSTS TO WHAT THE HEARING AIDS PROVIDE ... YOU GET USED TO IT ... I’VE ACCEPTED, THAT IS WHAT THOSE NOTES DO NOW. IT’S TOUGH, YOU KNOW." (*M*, 67YRS)

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