Identifying the requirements of multimedia training on hearing loss and hearing aids for support workers in residential care

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Background

There is a high prevalence of hearing loss in people with complex needs. The most commonly cited figure for people with learning disabilities is 40%. As many people with complex needs live in residential care, the need for hearing training in the social care workforce is justified. However, the majority of paid caregivers (support workers) have no formal training, despite being required to detect and manage hearing loss, as part of their role in promoting good communication¹.

Training can occur via face-to-face or multimedia (e-health) delivery. The latter is more easily accessible, less expensive and can be disseminated more widely than face-to-face methods.

Aims

- To assess the feasibility of delivering two different training packages to paid caregivers.
- To identify the key elements of the two existing face-to-face and e-health training packages.
- To inform the design of a specification for a multimedia training package for non-audiological health and social care professionals.

Methods

All caregivers involved in this research were employees of Sense, a charity for people with dual sensory impairment. All supported individuals with additional needs in residential care settings. This mixed methods study had two phases:



Phase 1

12 Sense managers ("Champions") were trained by LM and asked to cascade this training to their colleagues (fellow caregivers; "participants"). They had access to two training packages: i) Hearing Champion Training (HCT) - delivered face to face, and ii) C2Hear —a multimedia training package², to use however they felt was most appropriate.







Champions completed quantitative questionnaires assessing knowledge and confidence before and after training. They were also interviewed about their experiences. These interviews were examined using thematic analysis.

Phase 2

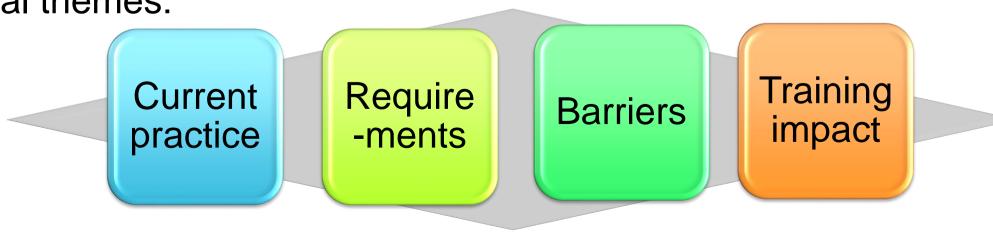
Quantitative methods were used to gather information on knowledge, confidence and opinions from Participants trained by Champions. Participants were asked to complete three questionnaires and return by post:

Questionnaire 1; Knowledge, 2; Confidence, 3; Opinions on training

Questionnaires 1 and 2 were also completed by 32 controls (Sense caregivers who had not received any hearing training).

Cascade training was feasible (Phase 1)

- 12 Champions trained 117 Participants (mean 9.75 / trainer; range 0-31).
- The majority (45%) were trained using HCT and C2Hear (HCT only; 32%, C2Hear only; 8%)
- A questionnaire assessing knowledge (HACK³) revealed a significant increase in scores between pre-post training (p<.001).
- Thematic analysis of the interviews generated 33 codes, condensed into 4 central themes:



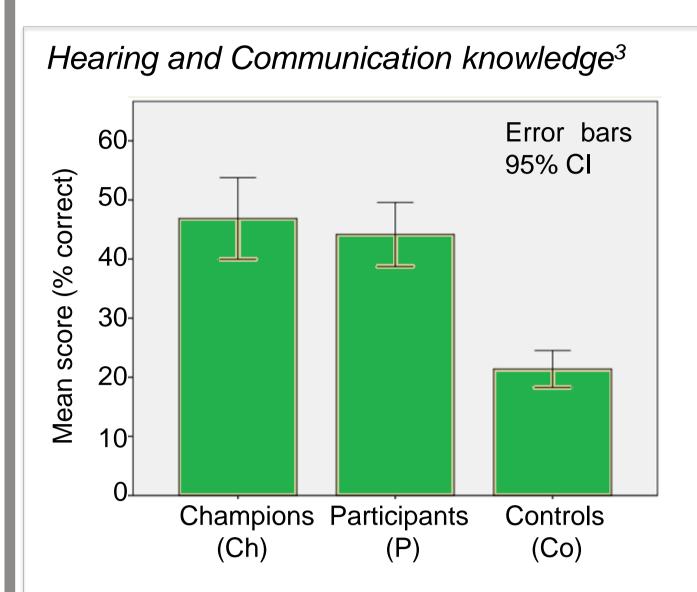
• Champions wanted training that is flexible, interactive and empowering.

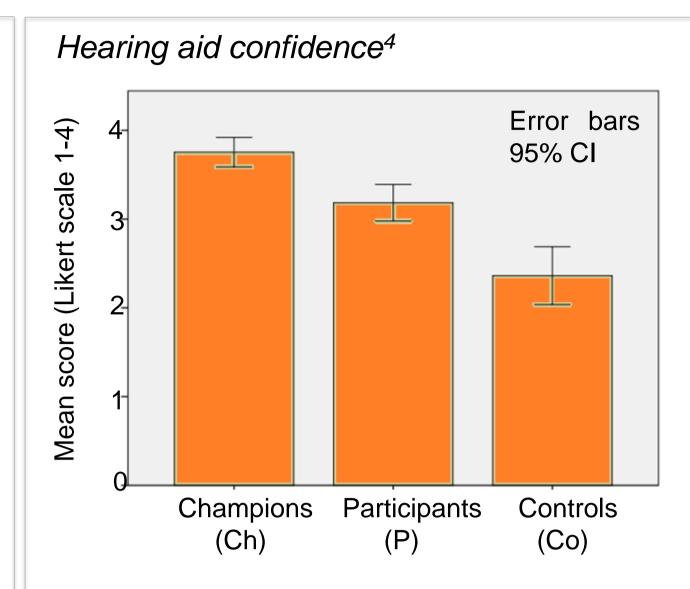
"This project has changed the things I'm doing and saying on a daily basis"

➤ It was feasible for Champions to deliver training to their colleagues (Participants). Both face-to-face and multimedia (e-health) training methods were successful.

Cascade training was successful (Phase 2)

A participant questionnaire return rate of 33% (39/117) was obtained.





- Ch and P had significantly higher scores than Co (p<.001)
- There was no significant difference between Ch and P (p=0.473)
- Ch and P had significantly higher scores than Co (p<.001)
- Ch had significantly higher scores than P (p=.016)
- > Training significantly increased knowledge, and cascade training resulted in successful transfer of knowledge.
- Champions may have been most confident as they had opportunities to put their learning into practice (i.e. the impact of experiential learning).

Caregiver insights into training

Questionnaire 3; Opinions on training

A 20-item questionnaire was designed using the "Requirements" theme of the semi-structured interviews thematic analysis from Champions in Phase 1.

- 14 of the questions focussed on training format, e.g. "I would rather watch several short training sections than one longer section"
- The remaining six questions asked about training content, e.g. "The training package should include information on different types of hearing loss"

Participants responded to each question using a Likert scale (1-Strongly disagree to 5-Strongly agree). If Participants had no preference, they answered with a score of 3-Neither agree nor disagree.

Analysis determined for which questions the median answer significantly differed from the "expected" median of 3, to indicate where participants had particular preferences. Several elements were thought to be important, with significant preferences for the following:



Participants wanted comprehensive training content, including information on types of hearing loss, referral guidelines, management of hearing aids and assistive listening devices.

Summary and Next Steps

- It was feasible to deliver hearing training using a cascade approach.
- Cascaded training significantly increased knowledge and confidence of those trained.
- The key elements of the training packages have been identified and will be used to develop an RLO specifically for caregivers.
- All training in this research was delivered with a facilitator providing some face to face input. It is not yet known to what extent this was important in the outcomes. Further research is planned to determine the value of the RLO delivered without facilitation, using a mixed methods approach.

References

- 1. Newsam H et al (2010) Journal of Policy and Practice in Intellectual Disabilities 7(3): 211-220.
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- 3. Ferguson M et al (2015) American Journal of Audiology 24: 329 332.
- 4. McShea L (2015) British Journal of Healthcare Assistants 9(3): 124-127.