Exploring narrative effects in hearing aid fitting

Presented at IHCON 2012

Background
Qualitative research between professional and patient affect healthcare outcomes [e.g., 1]. Why not in HA fitting? Bentler [2] and Chaves et al. [3] have demonstrated narrative effects in HA fittings. We aim to explore whether more general ‘narrative’ variables (the client’s perception of the sequence of actions taken in the clinic) may affect outcomes.

Relevance
If the narrative experienced by a HA client affects measured outcomes, then... Process may be an important factor in the success or failure of HA fitting Narrative effects will be present in research as well as practice This is not just an annoying ‘bias’ effect; narrative may be used deliberately.

Approach
Contrast divergent narratives in cross-over designs, eliminating acoustical differences Take self-report outcome measures after home time with each fitting, and preference at end Subjects think that the sequence of actions they have experienced leads to the HA settings they take home – in fact everyone uses prescribed settings.

Interactive (I) & Diagnostic (D): narratives, content & choreography

I

D

Both I and D have same duration (approx. 1 hour) to avoid time confounds.

Experiment 1

SUBJECTS

\(N=24\) experienced bilateral HA users recruited from an ear clinic.

I

D

Hearing aid (NAL-NL1) programmed to the subject’s audiograms.

D

I

Post-fit self-report measures according to the prescribed settings.

I

D

Post-fit self-report measures according to the preferred settings.

DESIGN

Completely randomized crossover design. 3 visits.

Outcome measures:

• Subjective
• Objective

Hearing Aids.

Results Experiment 1

D

I

New users

SUBJECTS

\(N=16\) new HA users, recruited from a normal flow at university hospital clinic.

I

I

Post-fit self-report measures according to the prescribed settings.

I

D

Post-fit self-report measures according to the preferred settings.

DESIGN

Similar to Experiment 1.

Outcome measures:

Subjective

Discomfort Post-fit

Experiencing & implications

Dispensing practice

Narratives are powerful

May affect peripheral outcomes

Select narrative for each client? How?

Can we rely on client statements about HA sound?

What do hearing aids really do?

New users respond differently

A new user narrative?

“Trial fitting” (to be discarded)

Client engagement

Do you want your clients to remember what happened? Then engage them!

Research

Blinding process, not just technology

HAs for comparison may require different fitting processes – take care!

Limitations of this study

Not big enough to examine predictor variables

We don’t know what narratives the subjects actually perceived.