# Online self-help via a controlled discussion forum

# Elisabet Thorén<sup>1,2</sup>, Monica Svensson<sup>3</sup>, Anna Törnqvist<sup>3</sup>, Gerhard Andersson<sup>4</sup>, Per Carlbring<sup>4</sup> & Thomas Lunner<sup>1,2</sup>

<sup>1</sup>Oticon A/S, Eriksholm Research Centre, Denmark <sup>2</sup>Department of Clinical and Experimental Medicine, Division of Technical Audiology, Linköping University, Sweden <sup>3</sup>Department of Clinical Sciences, Logopedics, Phoniatrics, Audiology, Lund University, Sweden <sup>4</sup>Department of Behavioural Sciences and Learning, Linköping University, Sweden

### Introduction

Recent studies on hearing rehabilitation with supervised group discussions show similar long-term benefits as conventional professional counselling (Abrams et al., 2002; Hickson et al., 2007). Studies in adjacent fields (tinnitus, anxiety and panic disorders) have shown promising results when using the Internet as a way of supervising and treating patients (Andersson, 2009; Carlbring et al., 2001). Inspired by those results, we created a controlled online discussion forum for self-help where 30 experienced hearing-aid users communicated for five weeks. The aim of the study was to investigate the impact on psychosocial health and the exchange of information between hearing-impaired adults on an online discussion forum.

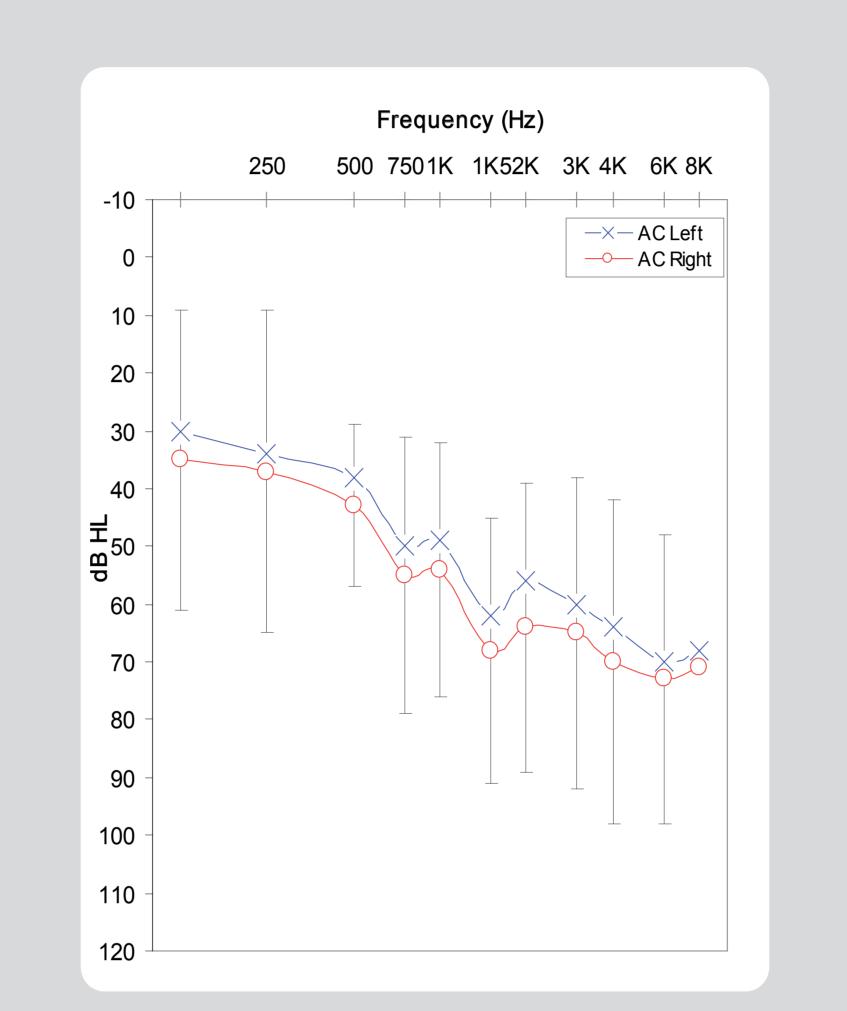
#### Method

## RECRUITMENT

Advertisements were published in national Swedish daily newspapers in order to reach possible study participants. The inclusion criteria were; hearing impairment with subjective, significant communication difficulties (defined as HHIE < 20), used hearing-aids for at least one year, were over 18 years old, had Swedish as mother tongue and had access to a computer and the Internet.

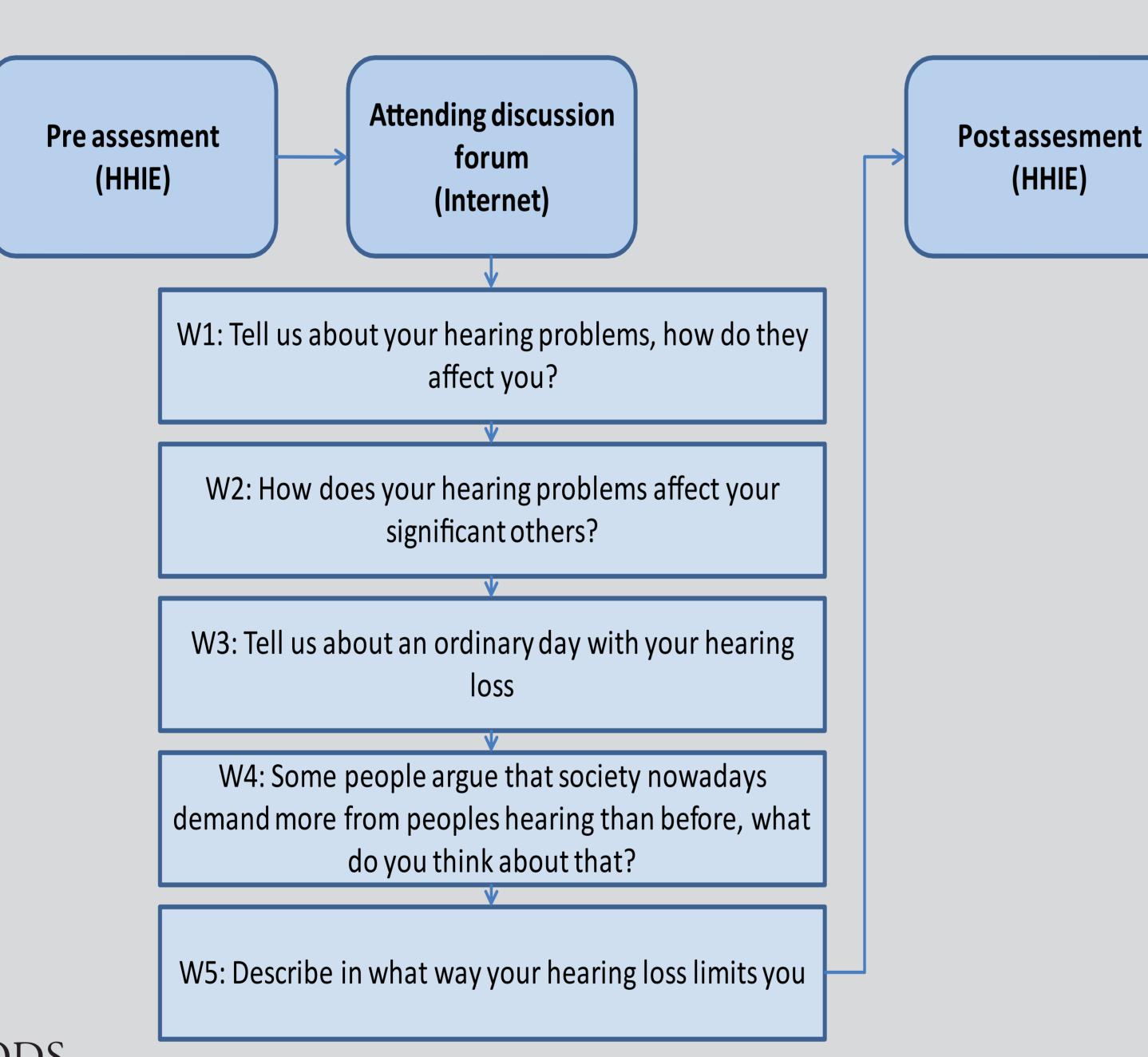
# PARTICIPANTS

N = 30, 16 men and 14 women Mean age: 61,2 years (range 24-76, SD 14.2 years) The average audiogram of the participants corresped to a moderate, typical sloping presbyacusis hearing loss.



# INTERVENTION

The participants were referred to a discussion forum built on the open source platform *phpbbb.com*. Each week the test leader posted a new topic to discuss. The test leader did not have any personal contact with the participants, but the online discussions were closely monitored.



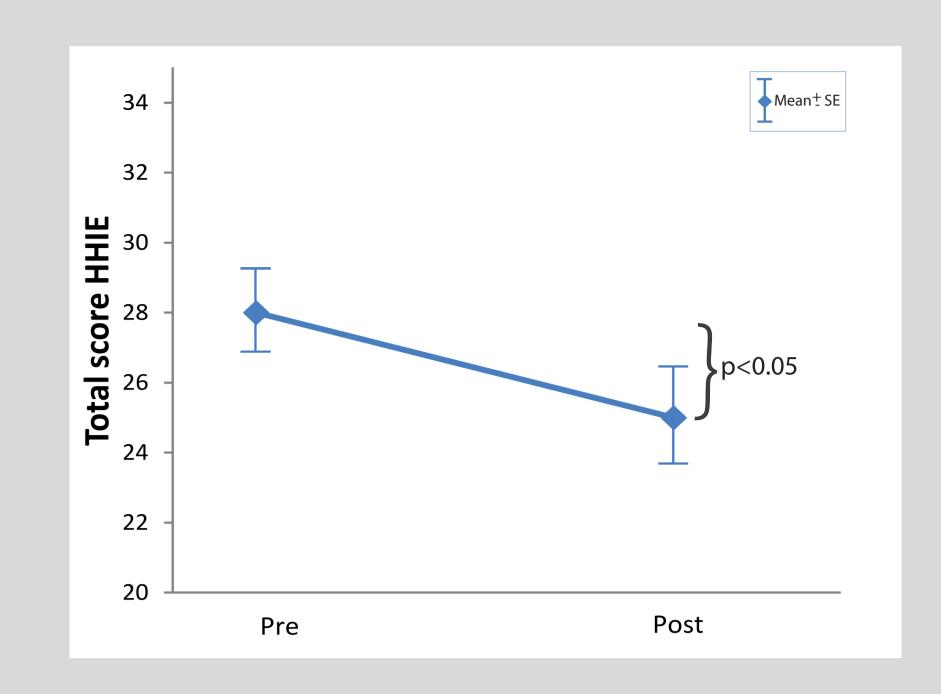
# EVALUATION METHODS

The outcome of the study was results from the standardised questionnaire Hearing Handicap Inventory for the Elderly (HHIE) which the participants filled out pre- and post intervention (Ventry & Weinstein, 1982). A qualitative analysis of the content in the communication between the participants was done after the intervention (Graneheim & Lundman, 2004).

#### Results

### HHIE

Results from the questionnaire HHIE showed that the participants decreased their subjective hearing related problems (p < 0.05) after the intervention period was finished by taking part in the online group discussions.

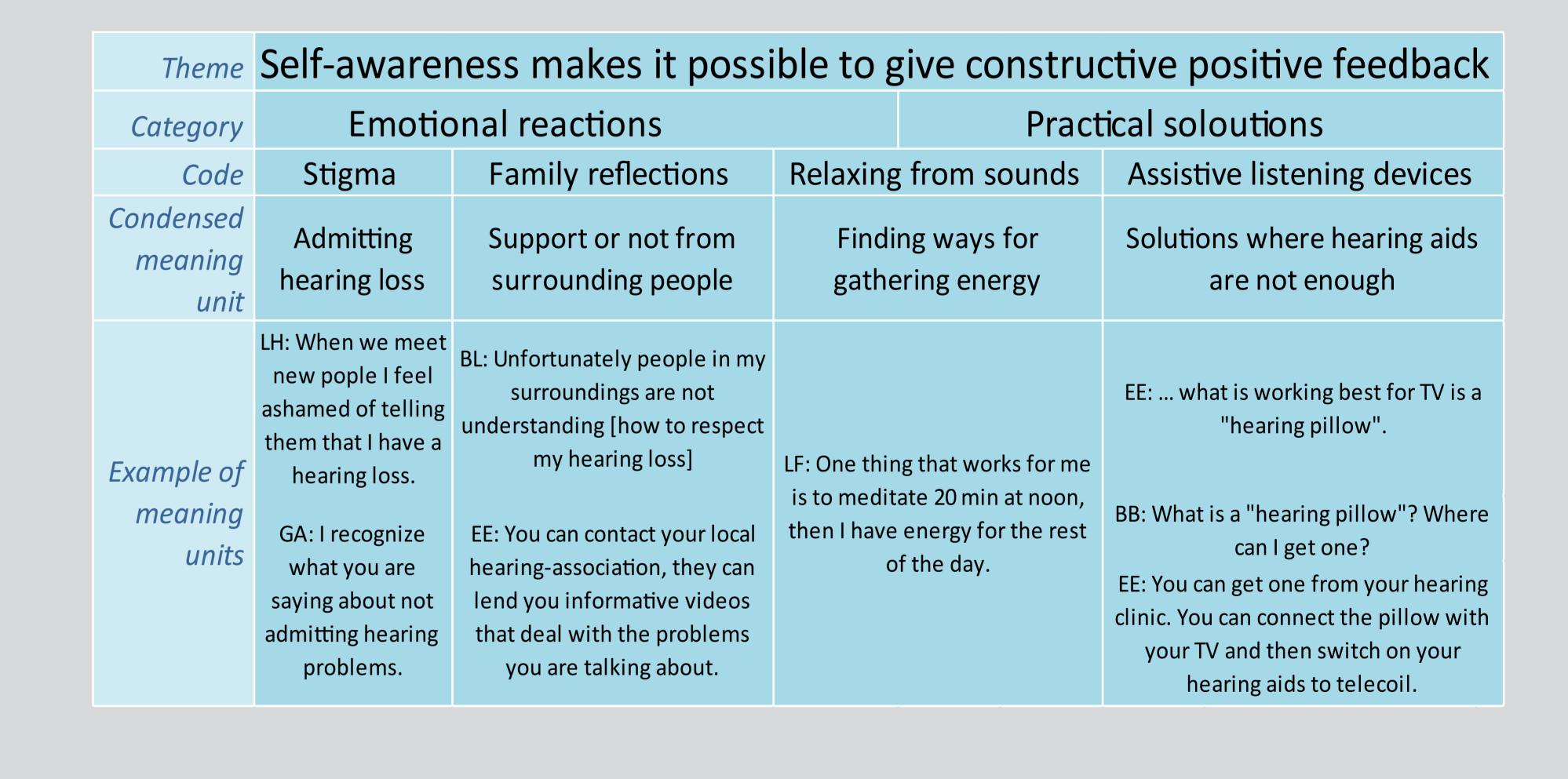


#### CONVENTIONAL CONTENT ANALYSIS

The transcribed text from the online discussions was analysed using the following steps according to Hsieh & Shannon (2005) and Graneheim & Lundman (2004):

- 1. Meaning units were selected
- 2. An initial analysis was performed
- 3. The text was condensed
- 4. An initial coding scheme was established
- 5. The codes were sorted into categories
- 6. The categories were sorted in one theme

The outcome of the analysis was a conceptual model of the hearing impaireds' communication with peers concerning subjective solutions to managing different daily communication situations.



# Discussion & Conclusions

- The findings indicate that online interaction with peers in a controlled research context has a positive significant effect on subjective hearing related problems when measured by HHIE.
- Results from a qualitative analysis of the online discussions show that hearing aid users that have high self-awareness of their hearing situation can give constructive feedback to peers in similar situations.
- There are good possibilities of using the Internet in the rehabiliation process of hearing aid users.

# References

- Abrams, H., Chisholm., T. H., McArdle, R. (2002). A cost-utility analysis of adults group audiologic rehabilitation: Are the benefits worth the cost? Journal of Rehabilitation Research and Development, 5, 549-558.
- Andersson, G. (2009). Using the internet to provide cognitive behaviour therapy. Behaviour Research and Therapy, 47, 175-180.
- Carlbring, P., Nilsson-Ihrfelt, E., Waara, J., Kollenstam, C., Burman, M., Kaldo-Sandström, V., Söderberg, M., Ekselius, L. & Andersson, G. (2005). Treatment of panic disorder: Live therapy vs. self-help via Internet. Behaviour Research and Therapy, 43, 1321-1333.
- Graneheim, U.H., Lundman, B. (2004). Qualitative content analysis in nursing resarch: concepts, procedures and measures to achive trustworthiness. Nurse Education Today 24, 105-112.
- Hickson, L., Worrall, L., Scarinci, N. (2007). A randomized controlled trial evaluating the Active Communication Education program for older people with hearing impairment. Ear and Hearing, 28, 212-230.
- Hsieh, H-F., Shannon, S.E. (2005). Three approaches to qualitative content analysis. Qualitative Health Research. 15 (9), 1277-1288.
- Ventry, I. M., Weinstein, B. E. (1982). The hearing Handicap Inventory for the Elderly: a new tool. *Ear and Hearing*, 3, 128-134.







Contact information