# A model of soundscape for people with dementia living in nursing homes.

### Abstract

### Introduction

Soundscapes influences human behavorior and Quality of Life (QoL), which is also the case for people with dementia (PwD). Current models are based on three basic components: a sound can be pleasant, eventful and familiar. Due to disturbed cognition in dementia, it is not clear whether such a model is applicable in dementiacare.

## **Objectives**

To research the impact of sounds on PwD and to develop a valid model for enhancing QoL and modifying behavior in PwD in Nursing Homes (NH).

### Method

Ethnographic design employing 24/7 participatory observations in five NH (n=15). Data-analysis was characterized by an iterative process and a constant comparison. Peer-debriefing with professional caregivers ensured the credibility.

### Results

The influence of sounds on the behaviour and QoL of PwD is subject to two dimensions (1) the ability to correctly interpret the sound and (2) the ability to adequately react on it. These two dimensions are interrelated and lead to four different typologies of PwD; (1) the PwD who can interpret correctly and react adequately, (2) the PwD who can interpret correctly, but cannot react adequately, (3) the Pwd who cannot interpret correctly but reacts adequately and (4) the Pwd who cannot interpret sounds correctly and cannot react adequately.

### **Conclusions**

The results offer opportunities to understand the PwD's reactions on the sound environment. Further research should validate and refine the model. The final goal should be to use the model in everyday practice to enable caregivers to create an optimal soundscape for PwD.