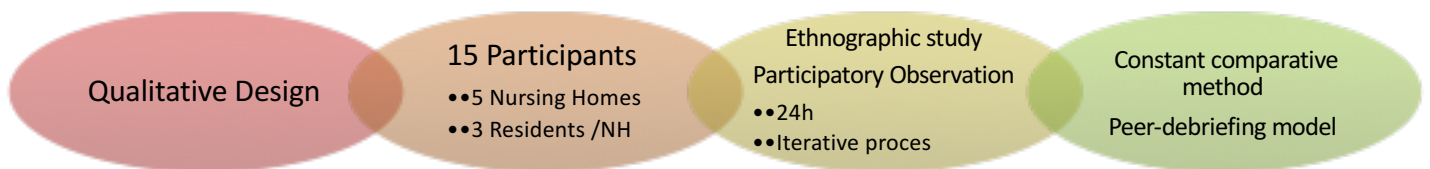


INTRODUCTION

Behavior- and Psychological Symptoms of Dementia (BPSD) occur very often in Persons with Dementia (PwD). Although BPSD are considered as a characteristic of dementia, environmental factors can activate them. The acoustic environment is considered to have an influence on BPSD but it is not clear how different sounds affect and trigger these symptoms. Therefore the aim of this study is (1) to research the acoustical factors that trigger the onset and progression of BPSD in PwD, who live in a nursing home and (2) to develop a valid soundscape-model for modifying behavior in dementia.

METHODS



RESULTS

ACOUSTICAL FACTORS ON THE ONSET OF BPSD



The NH as a complex sound environment with various (unknown) sounds sources at the same moment



The position of the PwD to the sound source

ACOUSTICAL FACTORS THAT PREVENT BPSD

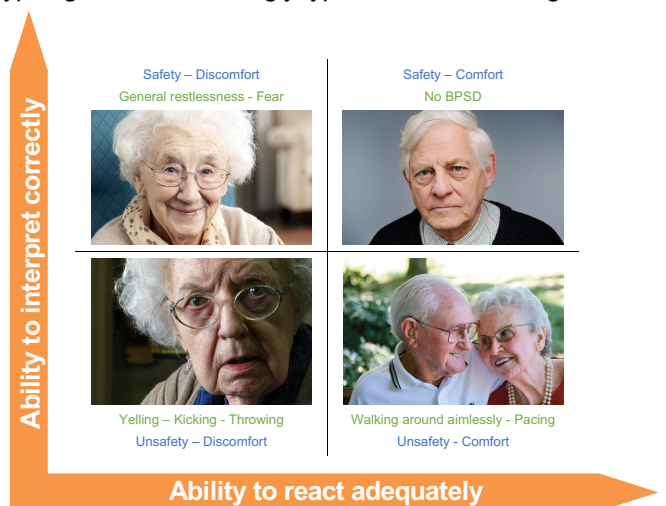


Human voices that are familiar



Importance of background noise

Two dimensions were identified: the ability to interpret correctly the sound (leading to safety) and the ability to adequately react on it (leading to comfort). These two dimensions are interrelated and lead to four different typologies with accordingly typical BPSD occurring.



CONCLUSION

The onset and progression of BPSD is highly individual (relying on personality and typical features of dementia) but also depends on the interaction between personal and acoustical environmental factors. It can be influenced by the caregivers (e.g. support a recognizable sound environment) or the design of the acoustical environment. The new model offers opportunities to understand the PwD's reactions on the sound environment and can be used to enable caregivers to create an optimal soundscape for PwD.