

## ACOUSTICS2008/2409

### The use of communication device in background noise

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Communication devices are used more and more often in industrial premises. We have evaluated how the users experience these device in a call center (N=41), in a low noise warehouse (N=67) and in a noisy (L>80 dB) warehouse (N=25). For all subjects the same questionnaire was sent. The questionnaire contained questions were about the quality of communications device and self-evaluated hearing symptoms. The self-evaluated speech intelligibility was lowest in the high background environments. Still in the call center five persons and five in the silent warehouse had great difficulties with speech intelligibility. All these persons evaluated that they have always difficulties when communicating with people. In the noisy environments this relationship was not found. The need to rise the voice was highest in the warehouses and did not depend on the background noise. Tinnitus was more frequent among process industry workers.

The results suggests that lowered hearing function cause problems in low background noise. The self-evaluated nuisance depends on the complexity of the communication. The quality of the communication channel may also play a vital role in the communication problems especially for workers with hearing problems.