

## **Preschool teachers experience of sound-induced auditory fatigue: a qualitative content analysis of n852 free-text survey responses**

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### **ABSTRACT**

The aim was to study preschool teachers experience of sound-induced auditory fatigue. Previous studies have shown increased risk of sound-induced auditory fatigue, as well as other hearing-related symptoms, among female preschool teachers compared to women in general. Based on a sample of female preschool teachers who responded to a follow-up survey 2017 (n3277), we analysed open-ended free-text responses from n852 teachers who worked in preschool part- or fulltime, and experienced sound-induced auditory fatigue at least once a month or more often. We used qualitative content analysis to code and categorised the responses based on an interpretation of latent underlying meaning. The categories were then conceptualized into a model. We identified that the context relating to the sound-environment at the preschool was a contributing factor to the symptom sound-induced auditory fatigue, and many of the preschool teachers expressed a need for silence as a result of the noise exposure at work. The teachers expressed several negative health effects, which were interpreted as resulting from an unfulfilled need for auditory recovery. These effects were sub-categorised into 1) emotional effects (including annoyance), 2) cognitive effects (including mental fatigue), 3) physical effects (including hearing-related symptoms e.g., hyperacusis, and stress-reactions), and 4) social effects (including withdrawal). The teachers also described coping strategies adopted to meet the need for recovery or to handle the effects of the auditory fatigue. We conclude that the sound environment in preschool and the subsequent auditory fatigue and related negative health effects experienced by many preschool teachers require attention and prevention.

Keywords (3-6): Sound-induced auditory fatigue, Listening-related fatigue, Need for recovery, Coping, Preschool teacher, Occupational noise