

Perception of Low-Level Sound Sources in Everyday Situations

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ABSTRACT

Noise research has focused on urban sounds like traffic or machine noise. The present paper, in contrast, investigates low-level sound sources that can affect human wellbeing and health and that are only perceived in specific situations. To address our research questions, we conducted an online survey with around 2000 participants representative for the German population. In the course of the survey, participants reported on situations in which they typically noticed low-level sound sources. They described the characteristics of the sounds as well as their frequency of occurrence. In addition, they reported on typical activities in situations when these sounds occur and personal strategies to cope with negative effects. Finally, they filled out questionnaires measuring the Big Five personality traits extraversion and neuroticism as well as noise sensitivity. The results include a ranked list of sound sources that people classify as being "low-noise" and that show a potential to affect humans in a negative way. They further constitute the basis for a multi-level prediction model on the effects of low-level sound sources including situational and person-related factors. Therefore, the findings contribute to a deeper understanding and to an improvement of low-level acoustic environments.

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