

## 14th ICBEN Congress on Noise as a Public Health Problem



## Children's Effortful Control Skills, but Not Their Prosocial Skills, Relate to Their Reactions to Classroom Noise

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## **ABSTRACT**

Environmental noise is one of the main sources of pollution in today's modern world. Health effects associated with noise depend on both environmental exposure and individuals' noise sensitivity. However, still little is known as to why some children are more noise sensitive than others. Studies to date have focused on adult populations and have not considered both cognitive and personality factors when explaining noise sensitivity. The current research investigates individual differences in noise sensitivity among elementary school children, with the aim of shedding light on its underlying mechanisms. Study 1 (n = 112) validated a novel questionnaire assessing children's reactions to classroom noise against two measures of noise sensitivity that are commonly used in adult populations. Study 2 (n = 237) investigated how children's reactions to classroom noise covaried with their effortful control and prosocial skills, both measured through a teacher report. Prosocial skills were not related to children's reactions to noise. However, children with lower effortful control skills reported more negative reactions to classroom noise. Given the importance of effortful control skills to succeed at school, children at risk of school difficulty might also be the ones who are particularly vulnerable to noise.

Keywords (3-6): Noise, Noise Sensitivity, Health, Classroom, Children, Attention