# Literature Review

Adam Kumar 12/06/2023

## **Literature review:**

The effects of noise levels on human cognitive function are examined in the 2015 research study "Effects of Noise on Cognitive Performance: A Systematic Review" by Stansfeld et al. The major goals of this study were to increase knowledge on this subject and provide a better understanding of the relationship between noise levels and cognitive functioning. Studies were carried out in a variety of locations, including businesses, schools, and public transit systems.

The results of this systematic review suggest that exposure to noise can have negative impacts on the cognitive functions of humans. Exposure to loud environments has been linked to decreased performance on memory, attention, and complex cognitive tasks. The review emphasizes how distracting and disruptive noise can be to memory retrieval, information encoding, and concentration.

The study also emphasizes the importance of a person's susceptibility to noise, the characteristics of the noise, and the demands of the task in regulating the effects of noise on cognitive performance. Variations in individual sensitivity to noise can result in differential cognitive impairments.

### **Summary:**

In conclusion, the systematic review provides compelling evidence that suggests there are negative impacts on cognitive performance and thinking caused by greater noise levels. This study then suggests the importance of understanding your susceptibility to noise pollution and practicing strategies to reduce the negative effects of noise levels on your cognitive thinking. Finally, it states that more research is necessary for better understanding and developing interventions aimed at reducing the negative impacts of an elevated noise level.

This literature review covers the basics of the research paper "Effects of Noise on Cognitive Performance: A Systematic Review".

#### **Source:**

Dohmen, M.; Braat-Eggen, E.; Kemperman, A.; Hornikx, M. The Effects of Noise on Cognitive Performance and Helplessness in Childhood: A Review. Int. J. Environ. Res. Public Health 2023, 20, 288. <a href="https://doi.org/10.3390/ijerph20010288">https://doi.org/10.3390/ijerph20010288</a>

#### **Correlation to project:**

This research knowledge is useful for our project as it provides compelling evidence of the negative impacts on cognitive performance of elevated noise levels. This information gives us assurance on the need for a quiet place, so this app would be useful for those who need it.