



***A comparative study on the effect of food odour on traffic noise evaluation in laboratory and field***

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Studies have proved that odour can affect the evaluation of traffic noise, but there are few studies on the comparison between laboratory and field research results. Therefore this study aims to provide more insights into the relationship between the two. In this study, the smell of bakery was selected as the odour source, and participants were asked to evaluate the perception of traffic noise with or without food odour in the laboratory and in the field. The results show that in both laboratory and field conditions, food odour improved the acoustic comfort of traffic noise and reduced its subjective loudness. In addition, the effect of food odour on acoustic comfort in the field was stronger than that in the laboratory, while the effect of the two experimental conditions on the subjective loudness had little difference.