

# SOCIETAL WELL-BEING THROUGH SOUNDSCAPE DESIGN: AN INVESTIGATION INTO THE SONIC URBAN LANDSCAPE.

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## 1 Introduction

Soundscape Design in the architectural industry is overshadowed by ocular-centric design frameworks and guidelines. There is a significant gap in the market of urban planning that focuses on soundscape design. Research has shown that there has been a rise in noise pollution caused by urbanization and industrialisation which in turn affects mental health and well-being. This report aims to determine the relationship between sound in the built environment and the affects it has on urban communities and will focus on recommendations to soundscape design to improve the acoustic environment in urban areas.

## 2 Aims and Objectives

- Identify the typical factors of urbanization and what makes living in a city different from rural areas.
- Identify the key effects of sensory over-load due to urban landscapes
- Examine people's perception of soundscapes.
- Examine the acoustic environment within urban landscapes
- Explore ways to expand the acoustics within architecture
- Identify the significant impacts of well-being and the way we live
- Expand the study on sustainable acoustics
- Put more emphasis on soundscape design into a framework of architecture design and development

## 3 Methodology

A Questionnaire was created using Google Forms to collect empirical data from a random pool selection of participants referring to the designed digital soundwalk. Amongst these questions, participants were asked acoustic relating questions about the acoustic environment of five field recordings of different built environments and whether the perception of sounds within the acoustic environment affected their emotional attachment to the locations. The participants undertook a listening task to each location that lasted thirty seconds and was promoted to answer the questions around each location. Additionally, the aim of the digital soundwalk was to understand what sounds triggered different moods, emotions and feelings and how this data could be used to present recommendations on soundscape design.

## 4 Results and Analysis

The data from the questionnaire provided necessary answers to sounds that cause annoyance within the built environment. Noise is one of the most common factors linked to decreasing quality of life and having an adverse affect on mental health and wellbeing (Wendelyn A. Martz, 1990), (Abdel-Hadi 2010). From the results it was clear that knowing or having a connection to certain locations doesn't affect the perception of the soundscape in that giving location and that certain sounds have an annoyance rating.

Overall Participants that knew the location to those who didn't.

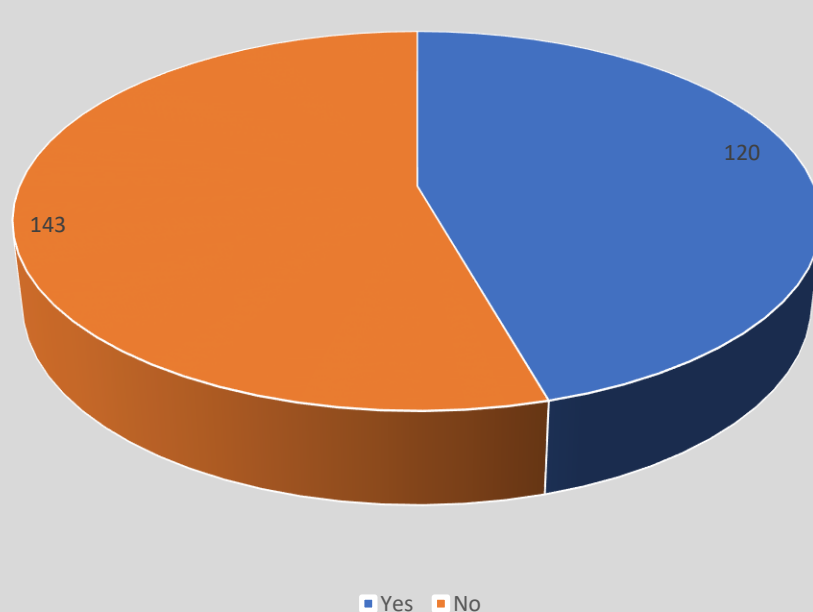


Figure 1: Overall Participants that knew the location to those who didn't.

The empirical data collected from the questionnaire is difficult to present due to using Google Docs. This turned out to be a less suitable option in collecting data to present. A link to the questionnaire results has been added to this poster to ensure the reader can analyse.

Link to Questionnaire results and Design recommendations below:

<https://forms.gle/X468qT4jAmpzFHM8>

[https://drive.google.com/file/d/136g0y\\_kF7qssFyaEISztect4q-tq\\_O47/view?usp=sharing](https://drive.google.com/file/d/136g0y_kF7qssFyaEISztect4q-tq_O47/view?usp=sharing)

## 5 Conclusion

This project has provided some discussion points, for future development into soundscape design and how soundscapes can improve the design, planning and longevity of urban areas and improve the quality of life in urban populations. It has led to identifying significant factors in existing literature and legislations that need to be improved and from an ocular-centric pathway to developing a multi-sensory experience focusing on soundscape design. Furthermore, investigations and testing should be carried out to creating recommendations for soundscape design in larger areas, the results still support the notion that society must strive to find balance between expanding urban environments and the natural world in order to be truly successful.

## 6 References

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