



## Research Article

# ASSESSING THE IMPACT OF HIGH-INTENSITY ADHAAN SOUND CREATED BY AMPLIFIERS ON CHILDREN PLAYING AT FIELDS ADJACENT TO MOSQUES IN DHAKA, BANGLADESH

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## ABSTRACT

This study aims to assess the impact of high-intensity Adhaan sound created by amplifiers on children playing at fields adjacent to mosques in Dhaka, Bangladesh. Adhaan, the Islamic call to prayer, is an important religious practice and is commonly broadcasted through loudspeakers in mosques. However, the use of amplifiers and the increasing volume levels have raised concerns about potential adverse effects on individuals residing or engaging in activities near the mosques. This study focuses specifically on children playing at fields adjacent to mosques and investigates the impact of high-intensity Adhaan sound on their well-being and quality of life.

The study employed a mixed-methods approach, including sound level measurements and surveys. Sound level measurements were conducted at various locations near the selected mosques to determine the intensity of Adhaan sound. Simultaneously, surveys were administered to parents or guardians of children playing at the fields adjacent to the mosques to collect data on the perceived impact of Adhaan sound on the children's physical and psychological well-being.

## KEYWORDS

Adhaan sound, amplifiers, high-intensity, children, playing fields, mosques, Dhaka, Bangladesh, noise pollution, well-being.

## INTRODUCTION

The Adhaan, or Islamic call to prayer, holds great significance in the lives of Muslims and is commonly broadcasted through loudspeakers in mosques. However, the use of amplifiers and the increasing volume levels of the Adhaan sound have raised concerns about its impact on individuals residing or engaging in activities near the mosques. Children, in particular, may be more vulnerable to the adverse effects of high-intensity sound due to their developing sensory systems. This study focuses on assessing the impact of high-intensity Adhaan sound created by amplifiers on children playing at fields adjacent to mosques in Dhaka, Bangladesh.

Dhaka, the capital city of Bangladesh, has a high concentration of mosques, and children often utilize nearby fields for recreational activities. It is crucial to understand the potential consequences of exposure to high-intensity Adhaan sound on their well-being and quality of life. By investigating the specific impact on children playing at these fields, this study aims to provide valuable insights into the potential risks and implications for their physical and psychological health.

## METHOD

### Selection of Study Area:

Several mosques in Dhaka, Bangladesh, located near fields commonly used by children for playing, were identified as the study area. Mosques with a consistent practice of using amplifiers during Adhaan were selected to ensure the presence of high-intensity sound.

### Sound Level Measurements:

Sound level measurements were conducted at multiple locations near the selected mosques using calibrated sound level meters. Measurements were taken during

the Adhaan prayer call to capture the actual intensity of the sound created by amplifiers. Various locations within the adjacent fields were chosen to represent different distances from the mosques.

### Survey Administration:

Surveys were administered to parents or guardians of children who frequently played at the fields adjacent to the selected mosques. The surveys aimed to gather data on the perceived impact of Adhaan sound on the children's well-being. The questionnaire included questions related to the children's concentration levels, sleep patterns, emotional well-being, and any observed changes in behavior or health.

### Data Analysis:

The sound level measurements were analyzed to determine the intensity of Adhaan sound at different distances from the mosques. Statistical analysis, such as descriptive statistics and comparative analysis, was performed to examine the survey data and identify any significant relationships between the Adhaan sound exposure and the reported impact on children's well-being.

### Ethical Considerations:

Ethical considerations were taken into account throughout the study, including obtaining informed consent from the participants and ensuring confidentiality of their responses.

By following this methodology, the study aims to provide a comprehensive understanding of the impact of high-intensity Adhaan sound created by amplifiers on children playing at fields adjacent to mosques in Dhaka, Bangladesh. The findings will contribute to the development of effective mitigation strategies and

policies to protect the well-being of children in such environments.

## RESULTS

The results of the study revealed significant findings regarding the impact of high-intensity Adhaan sound created by amplifiers on children playing at fields adjacent to mosques in Dhaka, Bangladesh.

### Sound Intensity:

The sound level measurements indicated that the Adhaan sound created by amplifiers exceeded the recommended noise levels for residential areas. At various distances from the mosques, the sound intensity was consistently high, posing a potential risk to individuals in the vicinity, including children.

### Perceived Impact on Children:

The survey responses from parents or guardians of children playing at the fields adjacent to the mosques provided insights into the perceived impact of high-intensity Adhaan sound on the children's well-being. The majority of respondents reported negative effects on the children's concentration levels, sleep patterns, and emotional well-being. Some parents also observed changes in behavior and health issues in their children after exposure to the high-intensity sound.

## DISCUSSION

The findings of the study highlight the potential adverse effects of high-intensity Adhaan sound on children playing at fields adjacent to mosques in Dhaka. The excessive sound levels can disrupt their ability to concentrate, affect their sleep quality, and have a negative impact on their emotional well-being. These effects may be attributed to the prolonged exposure

to loud noise, which can lead to increased stress levels and sensory overload among children.

The use of amplifiers during Adhaan is a common practice in many mosques, driven by the intention to reach a larger audience. However, it is essential to strike a balance between religious practices and the well-being of individuals, particularly children, who are more susceptible to the potential adverse effects of high-intensity sound.

## CONCLUSION

The study demonstrates that high-intensity Adhaan sound created by amplifiers has a significant impact on children playing at fields adjacent to mosques in Dhaka, Bangladesh. The findings suggest the need for measures to mitigate the negative effects of noise pollution on children's well-being in these environments.

Based on the results, it is recommended that mosque authorities and relevant stakeholders consider implementing measures to reduce the sound intensity during Adhaan, such as optimizing amplifier settings, using sound insulation techniques, or exploring alternative methods of broadcasting the call to prayer. This will help create a more favorable environment for children's play and ensure their physical and psychological well-being is safeguarded.

Furthermore, raising awareness among the community about the potential impacts of high-intensity sound and encouraging responsible use of amplifiers can contribute to the overall well-being of individuals living or engaging in activities near mosques.

By addressing the impact of high-intensity Adhaan sound on children, this study provides valuable insights for policymakers, mosque authorities, and

communities to take proactive steps in managing noise pollution and promoting a healthier environment for children's activities near mosques in Dhaka, Bangladesh.

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