LETTER

# The Hearing Test App for Android Devices: Distinctive Features of Pure-Tone Audiometry Performed on Mobile Devices [Letter]

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## **Dear editor**

This letter is intended to discuss the significant contributions and findings presented in the article entitled "The Hearing Test App for Android Devices: Distinctive Features of Pure-Tone Audiometry Performed on Mobile Devices" by M. Masalski, published in Medical Devices: Evidence and Research.<sup>1</sup> The article reveals the innovative use of mobile devices for home hearing tests, which represents a remarkable advance given the growing prevalence of hearing loss worldwide. The Hearing Test app for Android devices, developed by M. Masalski, offers a practical solution for the early identification of hearing loss, particularly in resource-constrained environments. The continuous development of the app since its release in 2013 and its impressive number of downloads of over two million demonstrates its importance to users around the world.

However, this paper also recognizes some limitations and weaknesses inherent to mobile audiometry. One of the primary concerns is the reliability of the calibration coefficients, which are of crucial importance for the generation of accurate test results. The paper notes that although pre-determined coefficients are the most reliable, there is a degree of variability that can affect the precision of the test. In addition, the testing environment, such as the background noise level, can significantly affect the results, potentially leading to an overestimated hearing threshold.

Based on these observations, it is recommended that future research and development in this area should explore more advanced calibration techniques that can adapt to the diverse devices and headphones used by consumers. It would also be beneficial to develop algorithms that can compensate for environmental noise more effectively, which would improve the accuracy of mobile audiometry tests.<sup>2,3</sup> Finally, it is recommended that user education on the proper use and interpretation of these tests be improved. This will help to reduce the risk of misdiagnosis and ensure that mobile audiometry serves as a reliable tool for professional audiologists.

## Disclosure

The author declares no conflicts of interest in this communication.

## References

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