

Perceptual Effects of Short Processing Delay in Open-Fit Hearing Aids

→ INTRODUCTION

Individuals with mild-to-moderate hearing losses are typically treated with open-fit hearing aids, as this ensures high comfort. However, in open fittings the direct sound and delayed processed sound interact, leading to comb-filtering and poorer sound quality. Recently, hearing aids with a short processing delay (~0.5 ms) were introduced to minimize these effects. Here, we provide an overview of three studies that investigated the perceptual consequences and user benefits of short processing delay in open-fit hearing aids.

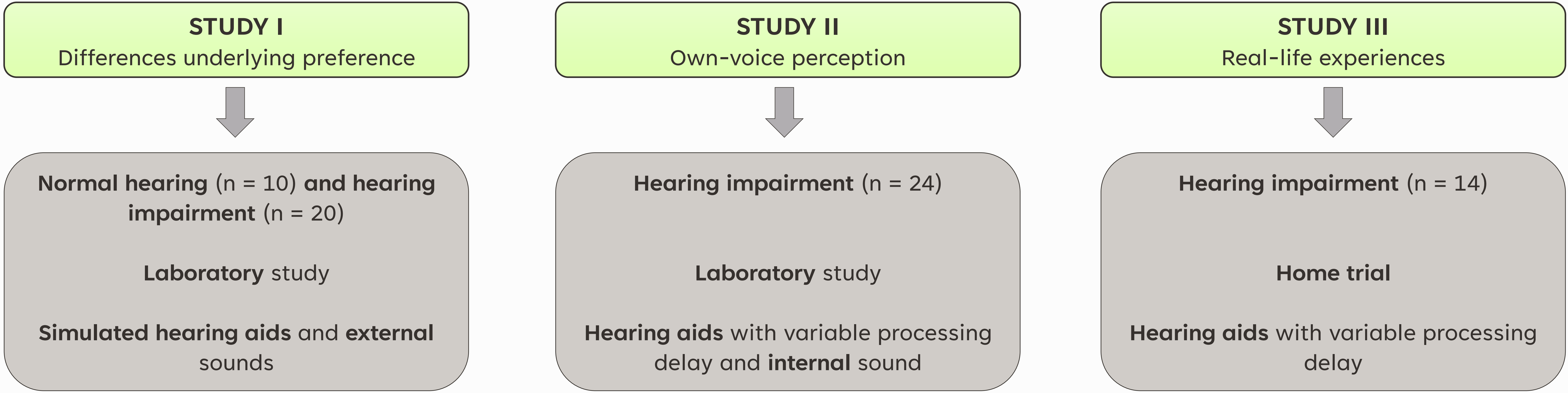


Figure 1. Conceptual overview of Study I, Study II, and Study III.

→ RESULTS

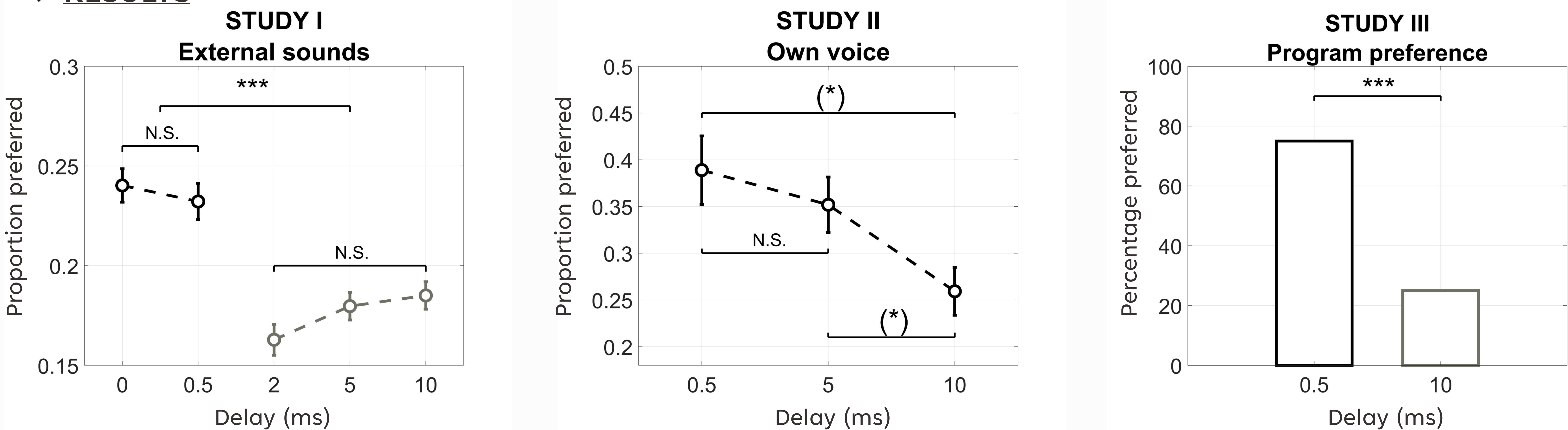


Figure 2. Results on preference for processing delay. Study I & Study II: Mean proportion preferred scores (ordinate) as a function of processing delay (abscissa). The error bars show ± 1 standard error. Study III: Hearing aid preference in percentages (ordinate) as a function of processing delay (abscissa). * = $p < 0.05$ before correction for multiple comparisons. *** = $p < 0.001$ after correction for multiple comparisons.

→ KEY FINDINGS

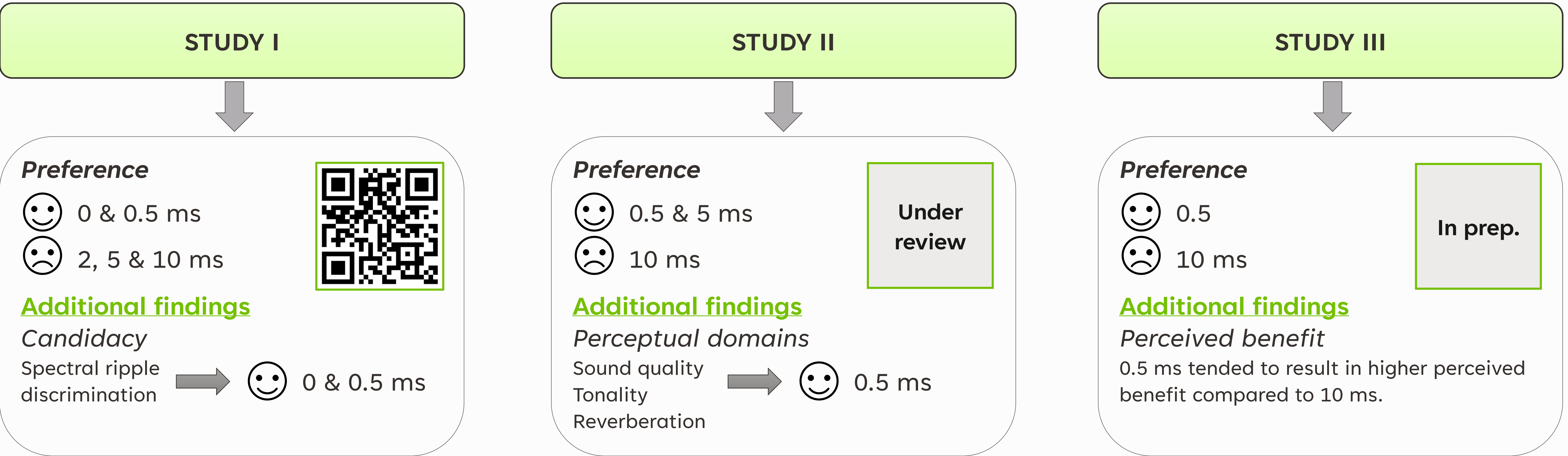


Figure 3. Visual overview of the key findings of Study I, Study II, and Study III.

Acknowledgements

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