

Focusing on Positive Listening Experiences Improves Hearing Aid Outcomes in First-Time Hearing Aid Users: A Randomized Controlled Trial

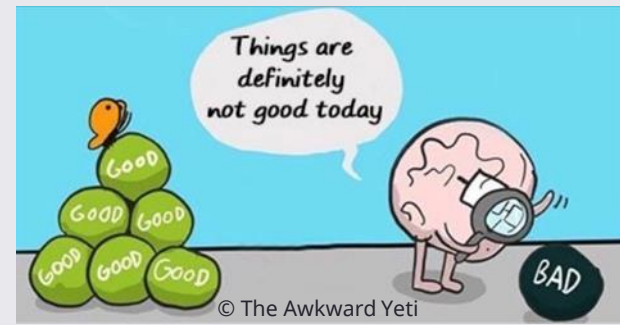
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Introduction

Negativity bias is a psychological phenomenon where negative events seem more significant than positive ones¹. In terms of hearing care, this means that hearing aid (HA) benefits can be affected by difficult experiences which can negatively influence one's HA outcomes.



Research has shown that sustaining focus on positive listening experiences can improve short-term HA outcomes for experienced HA users^{2,3}, and hence mitigate negativity bias.

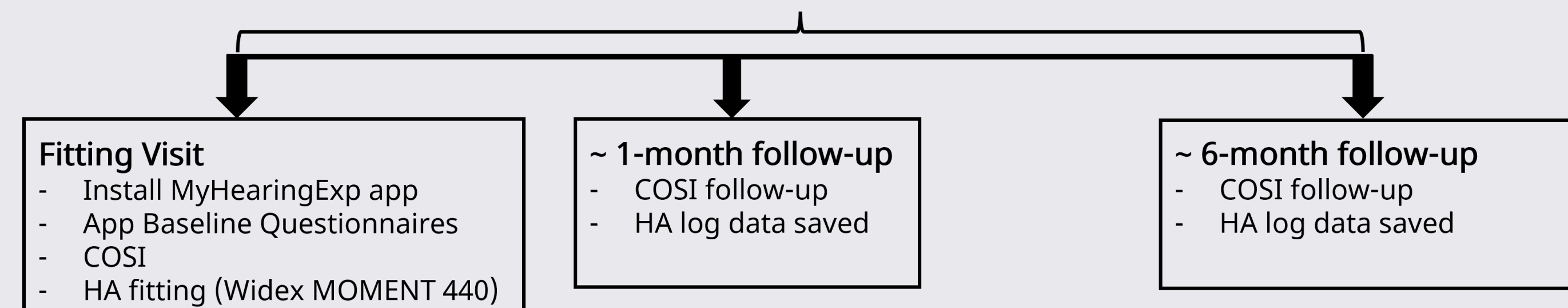
The purpose of the current study was to investigate whether focusing on positive listening experiences improves HA outcomes for first-time HA users, both in the short- and longer-term.

Methods

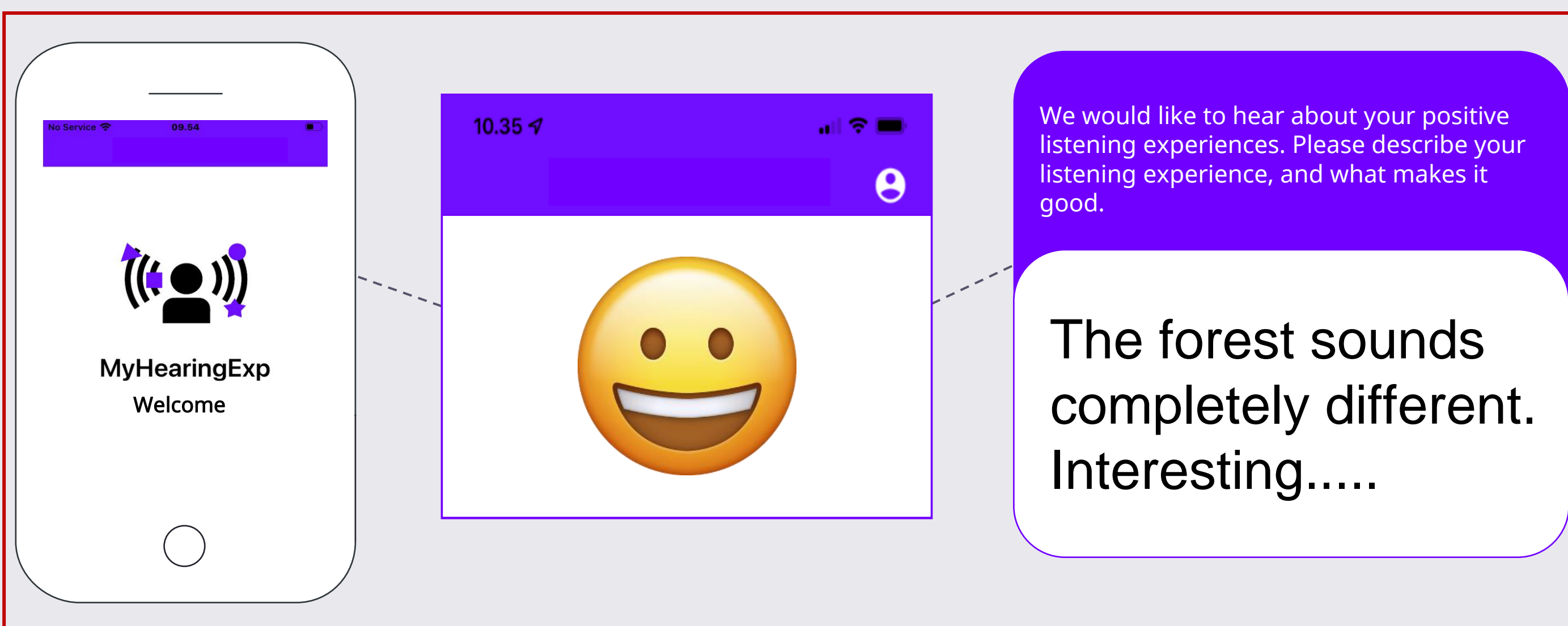
- 38 participants with hearing loss but without prior HA experience were randomly allocated to a control (N=20) or positive focus (PF; N=18) group.

6-month field trial

- App prompts: HA Satisfaction (overall and HEARLI-Q) and benefit (IOI-HA) at week 2, 4, 8, 12, 16, 20, 24 (both groups)
- Self-initiated: Focus on and report positive listening experiences via the app (PF group)

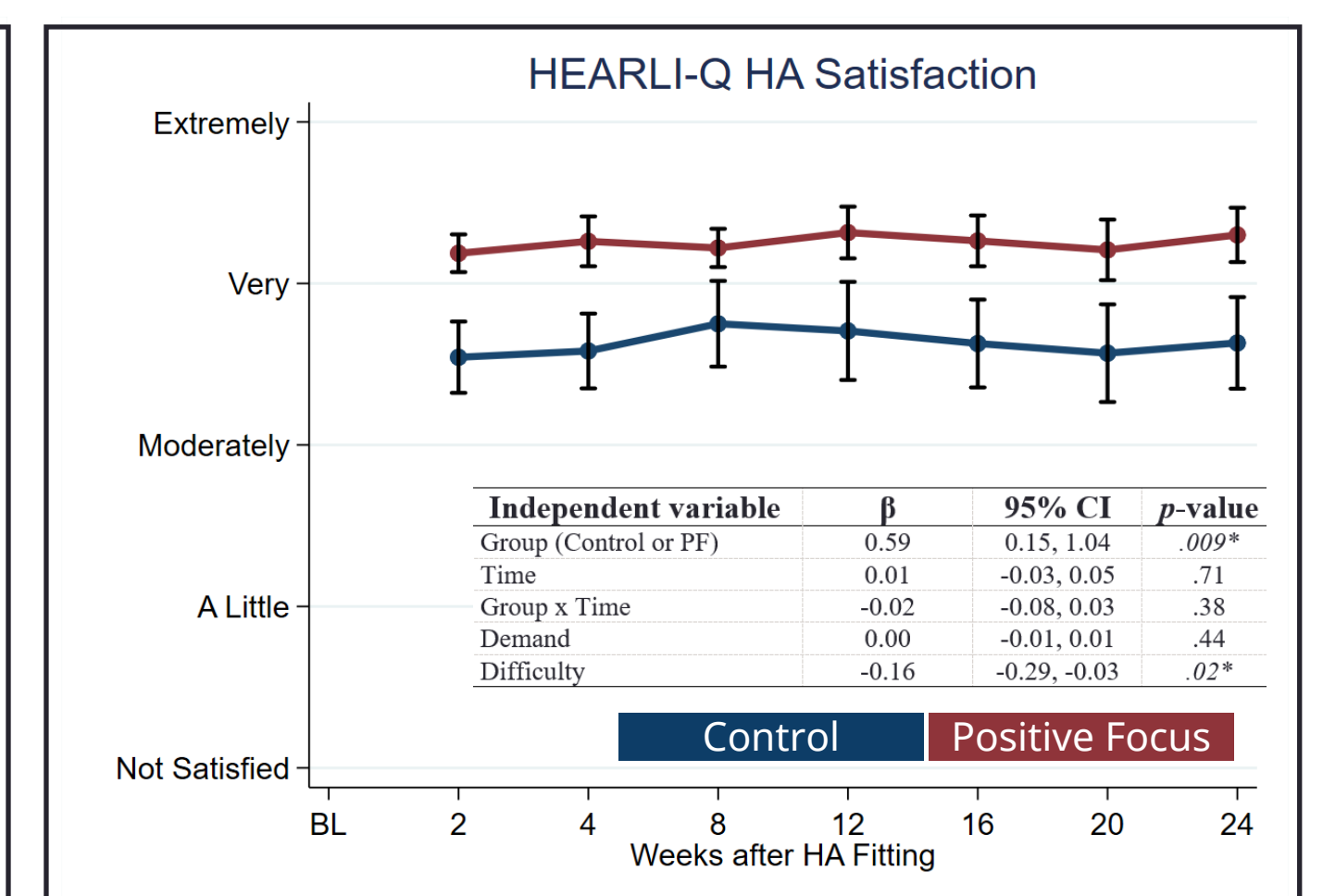
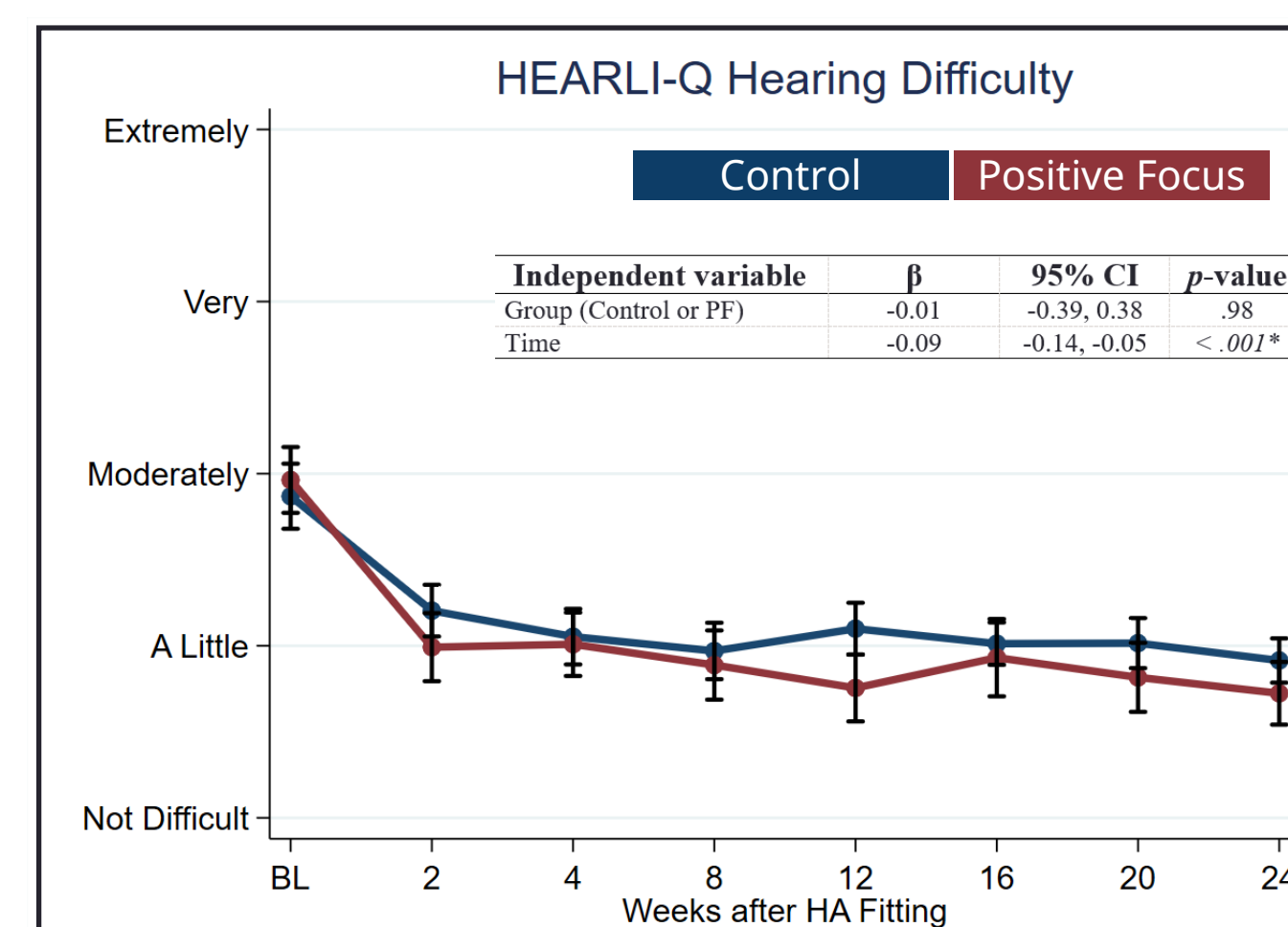
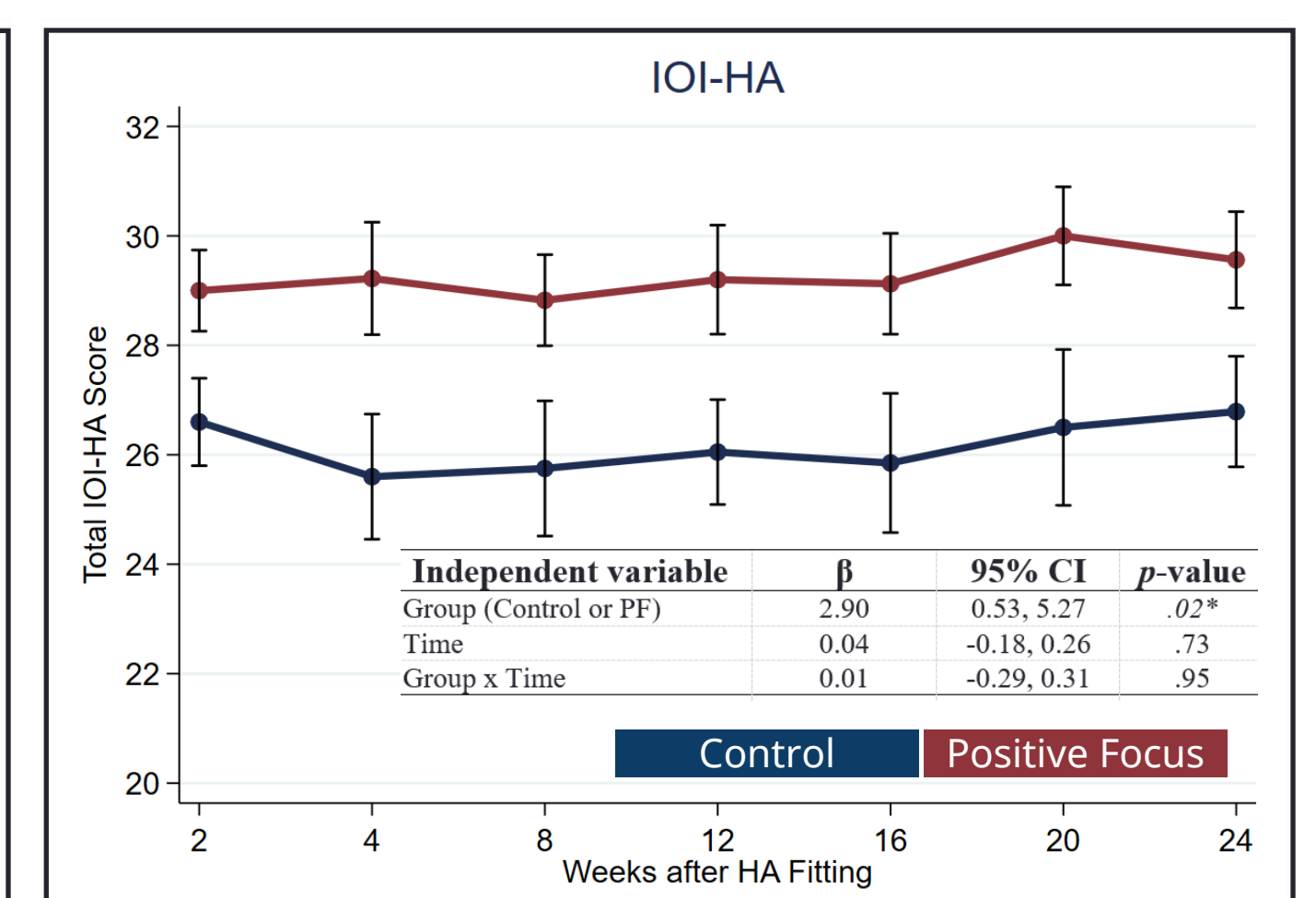
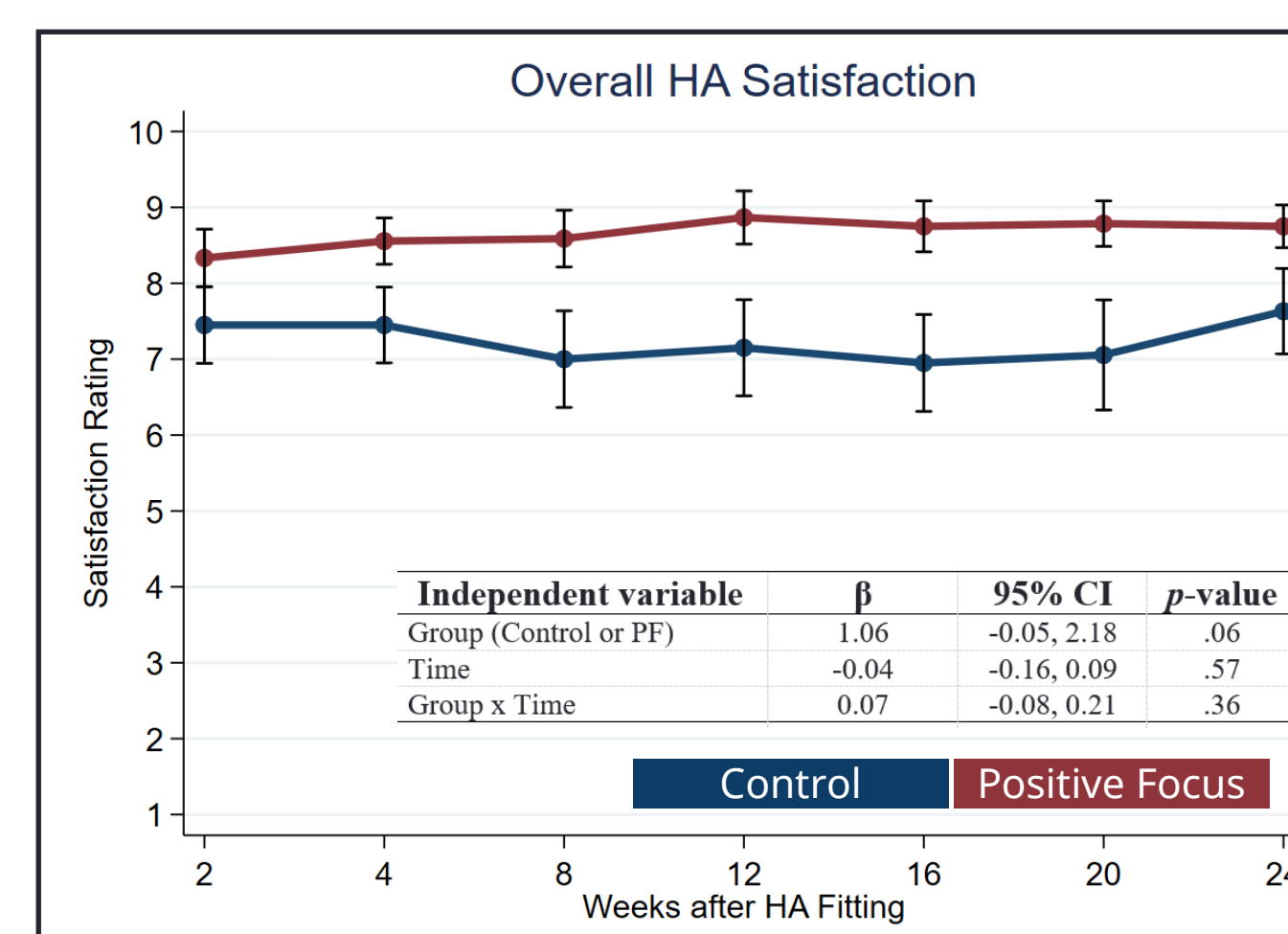
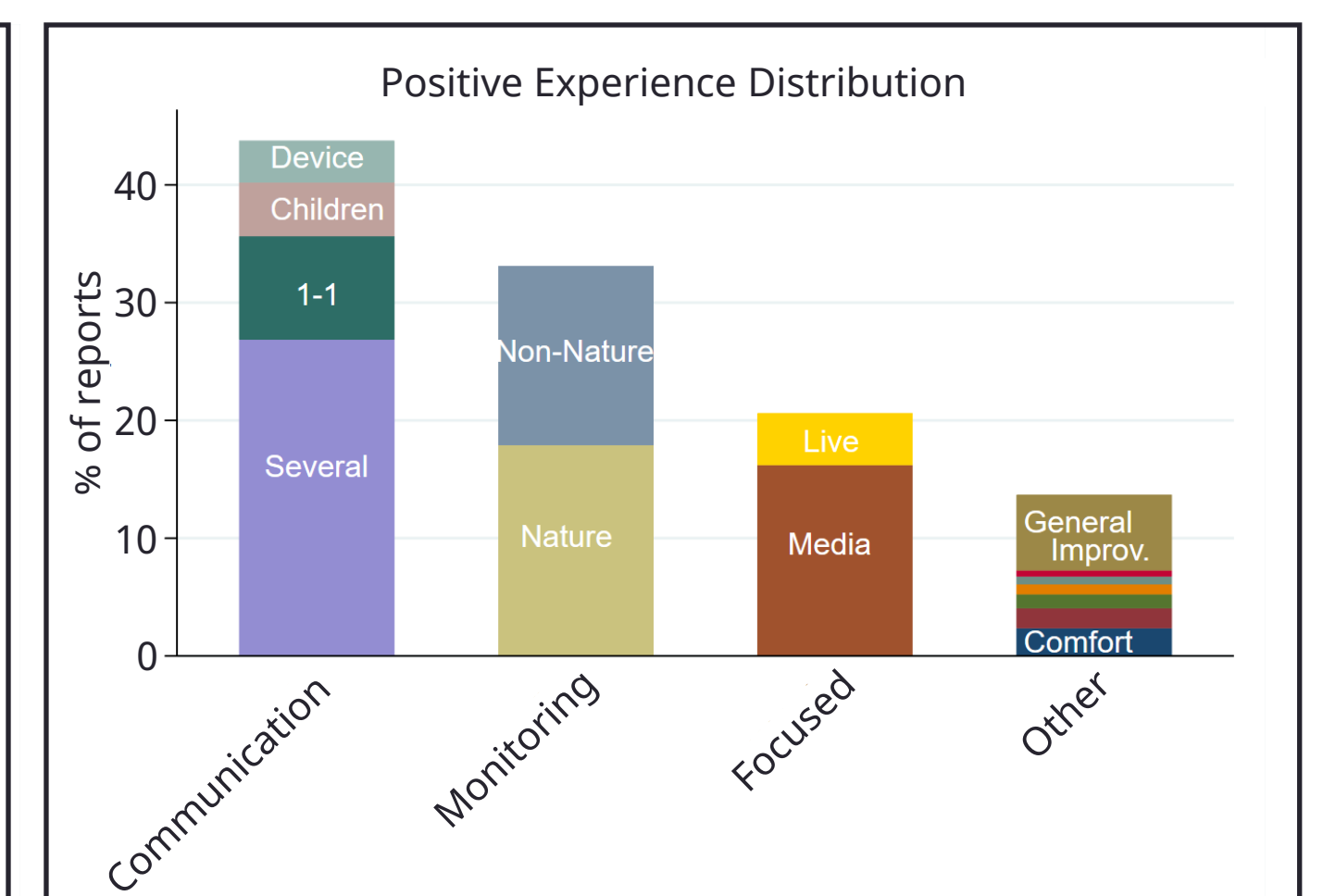
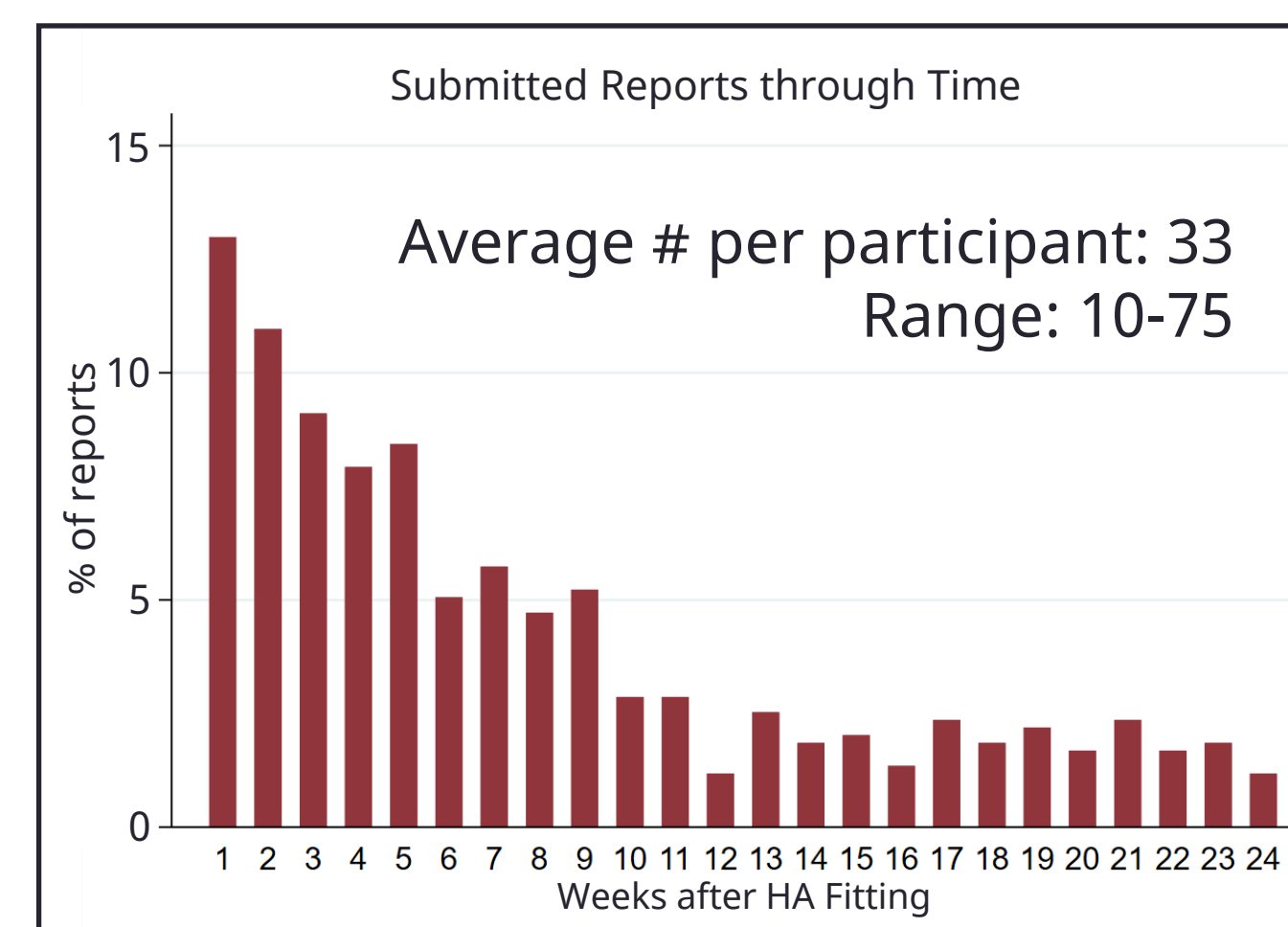


- App baseline questionnaires: Big-Five Inventory (BFI), Hearing-Related Lifestyle Questionnaire (HEARLI-Q) and questions about HA expectation, reasons for help seeking and importance to improve hearing were administered to check whether the groups were balanced on these characteristics.
- Following the HA fitting, the PF group submitted self-initiated reports describing positive listening experiences in their daily lives.



Results

The two groups were balanced on age, gender, hearing loss, personality (BFI), hearing-related lifestyle (HEARLI-Q), reason for help seeking, importance to improve hearing and HA expectation.



- COSI degree of change ($p = .01$) and final ability ($p = .03$) were higher for the PF group.
- HA outcomes for the PF group were significantly correlated with the number of submitted positive listening experiences: Overall HA satisfaction: $\rho = 0.54$, IOI-HA: $\rho = 0.53$, HEARLI-Q: $\rho = 0.68$, COSI Degree of Change at 1-month follow-up: $\rho = 0.50$
- The control group wore their HAs 7.5 ± 5.2 hours per day and the PF group wore their HAs 10.0 ± 3.9 hours per day ($p = .08$).

Conclusions

- These results point to the importance of asking new HA users to focus on positive listening experiences and to reflect upon them. It can lead to improved short- and long-term HA outcomes.
- Importantly, the improved outcomes persisted on longer term, even if the reporting was primarily done within the first few weeks after HA fitting.
- This indicates that if the HA user focuses on and reports their positive listening experiences during the critical HA onboarding period, it may be enough to sustain a long-term effect of the PF intervention.

1. Rozin P., Royzman E. B. (2001). Negativity bias, negativity dominance, and ontogion. Personality and Social Psychology Review, 5(4), 296-320.

2. Lelic D., Parker D., Herrlin P., Wolters F., Smeds K. (2023). Focusing on positive listening experiences improves hearing aid outcomes in experienced hearing aid users. International Journal of Audiology, 1-11.

3. Lelic D., Nielsen L.L.A., Pedersen A.K., Neher T. (2024). Focusing on positive listening experiences improves speech intelligibility in experienced hearing aid users. Trends in Hearing, 28, 1-12.

*Line Louise Aaberg Nielsen was employed as a student assistant at WS Audiology at the time this study was conducted but is now employed at GN Group.