

# Investigating the Placebo and Narrative Effect on Hearing Aid Fitting

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## Introduction

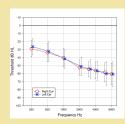
- A narrative is the story that a participant constructs in order to explain the sequence of actions involved in any social interaction.
- Previous investigations explored whether certain narrative labels impacted outcomes of a hearing aid (HA) fitting.
- The preference for one hearing aid fitting over another fitting condition with no actual differences in settings was observed in these studies

#### Purpose

- First, determine the placebo effect of different hearing aid fitting procedures.
- The Placebo Effect: explanation
- for the perceived (subjective) benefit or hinderance that was not confirmed by objective measures changes
- Second, to replicate the narrative effect described in previous research.
- The Narrative Effect: how a person's comprehension of the narrative can influence outcomes

#### **Participants**

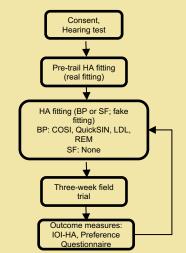
- 24 Adults aged 41-83
- Mild-to-moderate hearing loss
- Experienced hearing aid users (at least six months).



### Methods

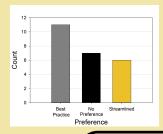
#### Patient Experience

- For this study, we are comparing two different methods of hearing aid fittings on the same pair of hearing aids. We will assess if fitting type has any impact on outcomes and preference.
- Best Practice Fitting (BP): This fitting aims to simulate how hearing aids may be fit by a practicing audiologist.
- You will complete an interview including an additional questionnaire, speech testing, and loudness judgements, to help guide certain aspects or features on the hearing aids (l.e., noise reduction)
- Streamlined Fitting (SF): The goal of this fitting is to simulate a more cost-effective, concise style of setting hearing aids.
- The hearing aids will be set for you based on you hearing test results, there will not be any additional test measures taken into consideration.

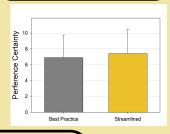


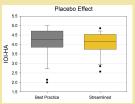
#### Results

- Hearing aid outcome was assessed primarily using the IOI-HA.
- A preference questionnaire assessed which hearing aid fitting was favored and the certainty of that preference.

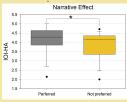


- Of the 24 subjects who completed the study, 11 preferred the BP Fitting, 6 preferred the SF Fitting and 7 had no preference.
- Preference certainty was high for both BP Fitting(6.91) and SF Fitting (7.42) cohorts.





- The Placebo Effect was assessed by comparing IOI-HA scores of the SF and BP fittings. The BP condition scores were **not** significantly higher than the SF condition.
- The Narrative Effect was assessed by comparing the IOI-HA scores of the preferred fitting versus nonpreferred fitting. Preferred fitting IOI-HA scores were significantly higher than the nonpreferred fitting. (paired t-test, p=.048)



### Conclusions

- Results from this study suggest that the placebo effect did not play a role in participants hearing aid
  preference as participants did not perceive that a more comprehensive hearing aid fitting was better.
- Findings also show that the narrative effect is present through the participants' better IOI-HA outcomes
  responses of the fitting they preferred.
- These results can be used to guide the broader sense of hearing aid fittings. This study's findings support consideration of the narrative of a hearing aid fitting in clinical practice as a contributing factor to the patients overall hearing aid satisfaction.

