Is that me? Self-voice identification in children with phonological impairment

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BACKGROUND
- In children with deviant speech, a discrepancy between internal and external discrimination is often observed [1].
- Suggestion: Strengthen the child's self-monitoring skills through the use of recordings [2].
- But do children with deviant speech recognize their recorded voice as their own...?

QUESTIONS
Do children recognize their recorded voice as their own, and is performance dependent on...
a) the age of the child?
b) the time passing between making the recording and listening to it?
c) the phonological competence of the child?
d) the phonological accuracy of the produced stimuli? (Easier to recognize words that are produced with deviant speech?)

METHOD
- 23 children, 7-8 yrs
- 25 children, 4-5 yrs
- 21 children nPI, 4-7 yrs
- 21 children w PI, 4-7 yrs
- 3 ref children, 6 yrs
- 24 stimuli /tV/ 12, /kV/ 12
- Immediate: Recording + Identification
- Delayed: Identification

RESULTS
Younger vs. Older
- No main difference between the age-groups.
- Significant drop from immediate to delayed playback
PI vs. nPI
- Lower average results, larger variation.
- No main difference between the groups.
- No difference between immediate and delayed playback
Within PI group
- Stimuli produced with deviant speech are not recognized any better (or worse) than stimuli produced with typical speech.

CONCLUSIONS
Children generally do recognize their recorded voice as their own. Closer to internal perception than to external.
No developmental leap in self-voice identification between 4 and 8 years => development before and after? Development in the strategies used in self-voice identification?
Having a PI does not affect a child’s ability to recognize his/her recorded voice as his/her own.

CLINICAL IMPLICATIONS
Support to the use of recordings in phonological intervention, as an intermediate step between external discrimination and exercises involving online self-monitoring.
Children with PI do not use their speech deviance as a cue. Assumably, this reflects the difficulties they have to judge their own speech production accurately, and indicates this as an important focus in intervention.

REFERENCES