P455

SCREENING AND DIAGNOSTIC

Behavioral tasks to probe listening difficulties (LiD) in children

Hanne Falcone[1], Sam Denys[1,2], Nicolas Verhaert[1,2], Astrid van Wieringen[1]

[1] Department of Neurosciences, ExpORL, KU Leuven, Leuven, Belgium
[2] Department of Otorhinolaryngology-Head and Neck Surgery, University Hospitals Leuven, Leuven, Belgium

Background

Children with LiD experience difficulties in various domains. Comprehensive assessment including behavioral tasks is key, however there is **no gold standard to diagnose LiD**. A systematic review aims to determine which tasks best differentiate children with LiD from children without LiD.

Research question

Which **behavioral tasks** are desirable to probe listening difficulties in normal or near-to-normal hearing children up to fourteen years old?

Method

Preferred Reporting Items for Systematic reviews and Meta-Analyses guidelines
(PRISMA 2020; Page et al., 2021)

Covidence • two reviewers per study • conflicts resolved through discussion
Study protocol: PROSPERO CRD42024521055

Eligibility criteria

- 6 – 14 year old children with normal or near-to-normal hearing
- Listening difficulties [LiD], (central) auditory processing [(C)APD]
- With and without comorbid developmental disorders

- Auditory processing
- Speech processing
- Language processing
- Cognitive tasks

IDENTIFICATION
n = 11.000
9 databases: Pubmed, Embase, Scopus, Web of Science, etc.
Removed: n = 5.895

SCREENING TITLE / ABSTRACT
n = 5.105
Removed: n = 4.908

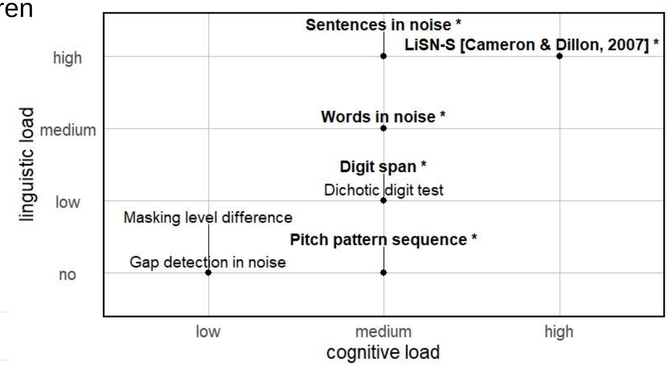
SCREENING FULL TEXT
n = 197
Removed: n = 149
Exclusion reasons: questionnaire, main diagnosis not LiD, no LiD vs nonLiD, etc.

STUDIES INCLUDED
n = 48

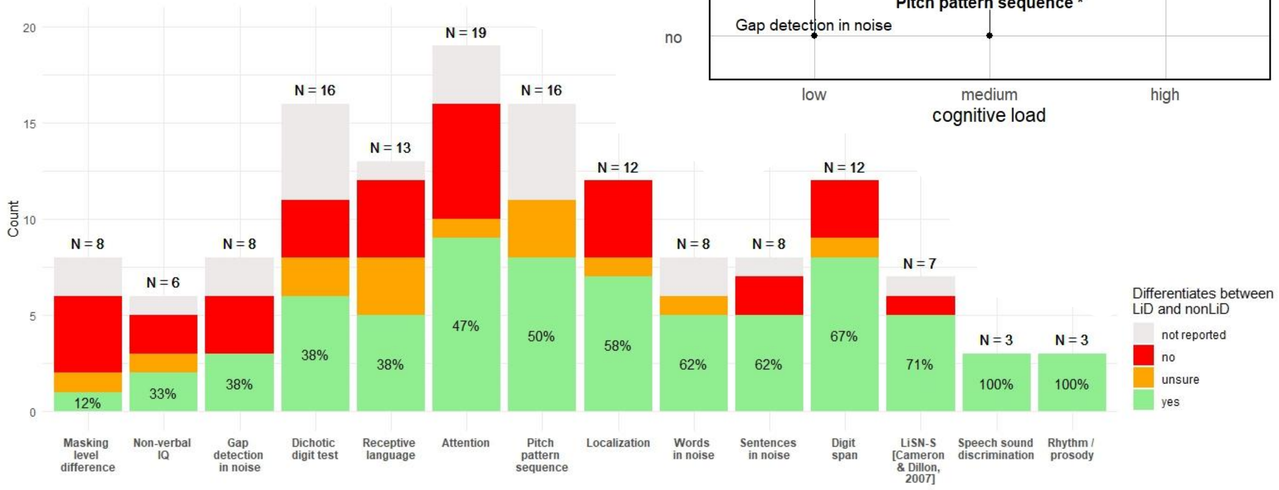
Preliminary results

- In total **238** behavioral tasks in **48** included papers
- ASHA's levels of evidence (Mullen, 2007) : 90% of included papers had a poor quality of evidence

Categorisation of a sample of behavioral tasks reported for differentiating children with LiD from children without LiD



A sample of behavioral tasks reported for differentiating children with LiD from children without LiD



Conclusion

- Studies report a **heterogeneous pool** of behavioral tasks used to probe LiD
- Confirmed **complexity** of LiD: auditory, memory, attention, spatial, and language tasks contribute to framing LiD.

References

Get in touch or share your thoughts with me: hanne.falcone@kuleuven.be

19›22 September 2024
Paris, France
CNIT Paris La Défense