

”I hear you! But conversing together is a bit different...!”: Interactional dynamics in children with cochlear implants

Chiara Mazzocconi

Aix-Marseille University, Marseille, France

Céline Hidalgo

La Timone Children’s Hospital, Marseille, France

Charlie Hallart

Aix-Marseille University, Marseille, France

Leonardo Lancia

Aix-Marseille University, Aix-en-Provence, France

Roxane Bertrand

Aix-Marseille Université, Aix-en-Provence, France

Stéphane Roman

La Timone Children’s Hospital, Marseille, France

Daniele Schön

Aix-Marseille University, Marseille, France

Abstract

Even when early implanted, children with cochlear implants show heterogeneous language skills and often struggle with pragmatic communication aspects. Research aimed at elucidating specific weaknesses at the interactional level has yielded inconsistent findings. We analyse dyadic interactions involving nine hearing-impaired children and fourteen normal-hearing children engaging with an adult during a referential (treasure-hunting) task, periodically alternated with role-reversal sub-tasks (e.g., child-led referential-tasks, child-storytelling). Our investigation employs a multi-level analysis approach, encompassing acoustic features (F0, intensity, speech duration, speech rate), turn-taking dynamics (duration, gaps, overlaps), laughter responsiveness and pragmatic functions, convergence of these features, dialogue acts, contingency, and task success. We compare interactional patterns across groups and conditions. The adoption of a multi-level characterization is grounded in the hypothesis that alignment at ”lower levels” serves a functional role and concurrently offers insights into alignment at a conceptual level, thereby facilitating mutual understanding and conversational success, giving insights on underpinning neuro-psychological processes.