

## **Multisensory integration in speech production and perception: the case of French-speaking children and adults**

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Multisensory integration plays a key role in the development of speech skills. Despite the large body of evidence suggesting that children are sensitive to speech auditory, visual or somatosensory input, very few empirical studies have been conducted. In this talk, we present the results of three experiments carried out with 65 speakers of Quebec French (30 adults and 25 preschoolers) : a real-time auditory feedback manipulation experiment and two bimodal perception tests (audiovisual and audioproprioceptive). Results show developmental patterns of multisensory integration and suggest sensorimotor representations are still developing in preschool-aged children.

BIO :

Lucie Ménard is a Full Professor in the Department of Linguistics at the University of Quebec in Montreal. She is trained in experimental linguistics and her research interests focus on sensorimotor development of speech sounds from birth to adulthood. Her lab has used a combination of instrumental techniques (ultrasound imaging, optical and electromagnetic tracking of orofacial articulators), acoustic measures and modeling in sensory deprived young children and adults (blind, deaf) to investigate speech production during different developmental stages and under varying conditions of sensory feedback and speaking demands.