

Early Detection of Hearing Impairment to Prevent Impact on Overall Language Development

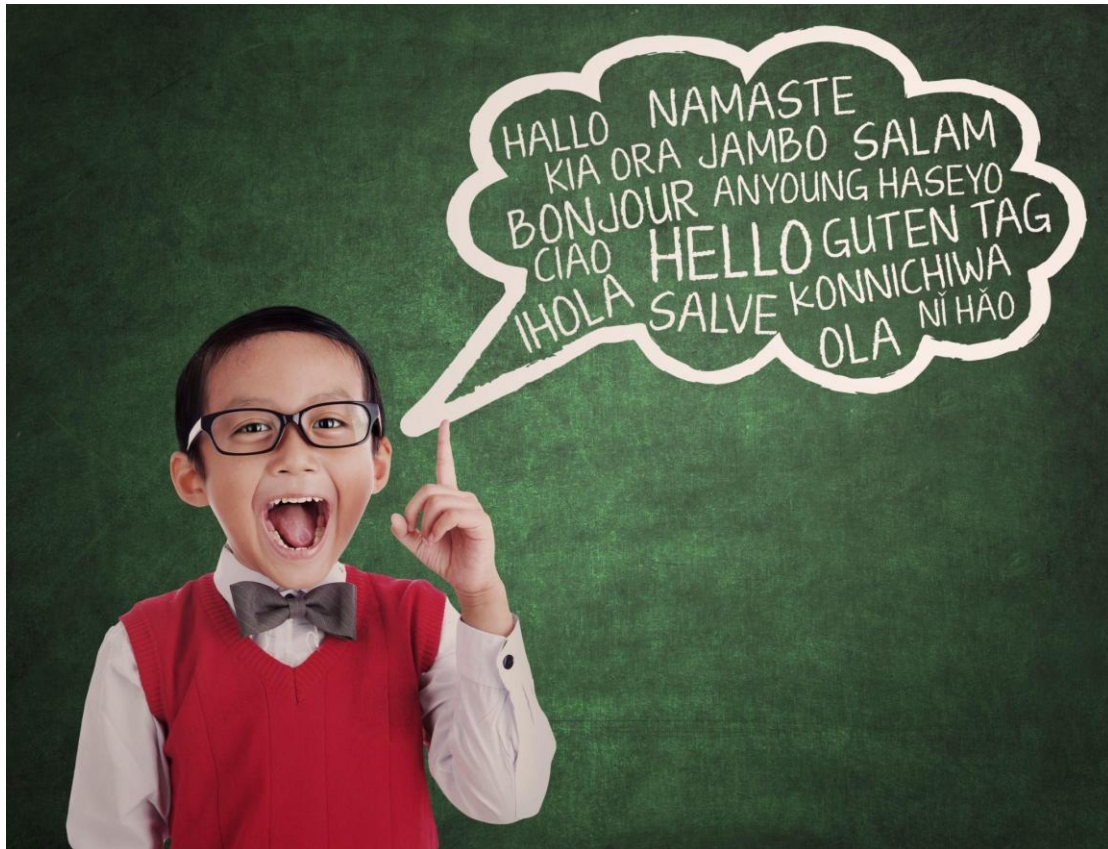
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I once encountered a 5-year-old child in my work. He appeared well-behaved and polite, just like other children his age. However, he had a distinguishing feature—he wore a hearing aid in his left ear. He was a child with hearing impairment. As the term suggests, hearing impairment refers to "disabilities caused by hearing loss, ranging from mild hearing loss to complete deafness." But does hearing impairment only affect a child's ability to hear?

Understanding Surrounding Sounds to Build Concepts

Think about it: before toddlers can articulate meaningful words, what ability do they first possess? It's the ability to "babble." So what is an essential step for toddlers before they learn to speak "baby talk"? It is learning to understand the sounds in their environment and establishing concepts through interactions with those sounds (including meaningful conversations from parents and nursery rhymes). They come to understand that different sounds represent different people, events, and objects, gradually comprehending words and building language. Consequently, children with hearing impairments receive less and weaker sensory stimulation in terms of "hearing" compared to their normally hearing peers, which can lead to delays in language development.



Reduced Listening Experience and Difficulty Following Instructions

Children with hearing impairments are unable to fully receive external information through their sense of "hearing," which reduces their listening experiences and opportunities for language exposure. As a result, they often exhibit inattentiveness, have difficulty following instructions, and struggle with understanding more complex sentence structures, impacting their learning. The process of language learning occurs through paying attention to and receiving external input, followed by repeated exposure to similar messages and connections to specific concepts, imitation, and application. Therefore, many children with hearing impairments tend to have weaker grammar usage, sentence expression, and vocabulary recognition as they grow, with research indicating that the gap in vocabulary recognition between them and their peers widens with age.

Impact on Phonetic Development and Difficulty Distinguishing Tones

Another more evident impact of hearing impairment on young children's language development is its effect on their phonetic development. Generally, children with hearing impairments have lower sensitivity to high-frequency sounds and low-intensity sounds, causing them to miss these phonemes. For instance, in Cantonese, words containing sounds like /f/, /s/, /ts/, and /tsh/ (e.g., "飛," "三," "吱," "車") may be mispronounced as "悲," "擔," "啲," and "爹," respectively. Such mispronunciations stem from the child's hearing impairment, leading to a lack of sensitivity to certain sounds, making it difficult for them to recognize their own pronunciation errors or the differences between their pronunciation and that of others.

Moreover, Cantonese is a "tonal language," typically having nine tones. The differences between these tones are subtle, so just as with pronunciation, children with hearing impairments may not perceive the distinctions between tones due to their reduced sensitivity, leading others to perceive their speech as foreign or singsong.

Early Intervention and Treatment

Of course, not every child with hearing impairment will face challenges with language development or pronunciation. I have also encountered many hearing-impaired children and adults with excellent language skills. Like other health issues, "early intervention" is key to addressing these problems. Therefore, if you suspect that your child has any hearing issues, it is crucial to seek evaluation from an ENT specialist and an audiologist as soon as possible to determine whether a hearing aid is needed or if other treatments are necessary. If a child does indeed have hearing problems, merely wearing a hearing aid may not fully resolve or prevent language development issues associated with hearing impairment. Thus, it is also important to receive appropriate speech therapy early on, so that the child's language development can catch up with their peers.

