## Relationship between language experience, language use and memory

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Delayed exposure to a first language, such as that experienced by deaf children with hearing parents, impedes the development of linguistic expressions, persisting into adulthood. There is limited understanding regarding the immediate language development post-exposure and whether late exposure affects all language domains in both children and adults. In my talk, I will talk about our studies comparing late-signing adults and children (with an average age of 8 years and 5 months) two years after being introduced to Turkish Sign Language (TID), with their age-matched native-signing peers. Our investigation focused on expressions of two types of locative relations: view-independent (e.g., in, on, under) and viewpoint dependent (e.g., left, right). Our results indicate that late-signing adults and children were similar to early signers in how frequently they encoded spatial relations in TID, but late-signing adults, not children, differed from early signers in the type of spatial language they used. Furthermore, these effects were influenced by morphological complexity.

Moreover, previous research with hearing children acquiring spoken language as their first language has shown a connection between spatial language and cognition, where spatial language use predicts spatial memory. In the second part of my talk, I will also talk about our research in which we have extended this inquiry to signing deaf children and adults and examine whether delayed sign language exposure, as well as the frequency and type of spatial language use affected by late exposure, impact subsequent memory for spatial relations. Our findings indicate that neither late sign language exposure nor the frequency and type of spatial language use affected spatial memory accuracy. Thus, although delayed language exposure appears to influence the type of spatial language use, it does not predict subsequent memory for spatial relations.