Discussion

• Children with mild to severe HL demonstrated weaker communication abilities than their NH peers in both clinical and real-world environments.

• Both the clinician-elicited measures of language and the AVA were sensitive to group differences in the communication abilities of children with NH and HL. However, the AVA may overestimate the communication abilities of children with HL, thus underestimating language delays in this group.

• For children with HL, engagement in conversational turns may be especially important for language development; even more important than the number of adult words spoken in a child’s speech production. Future investigations should further explore the relationships between children’s communication outcomes and the quantity of adult words spoken to the child versus words spoken to the child or directed to other children or adults.

• TV time may negatively impact the receptive language abilities of children with HL. Further work should examine whether this relationship is mediated by a relationship between TV time and conversational turns, as early analyses indicate a relationship between these variables.

Results: MSEL and AVA

- The receptive and expressive language scales of the Mullen Scales of Early Learning (MSEL) were sensitive to group differences in the communication abilities of children with NH and HL. However, the AVA may overestimate the communication abilities of children with HL, thus underestimating language delays in this group.

- For the HL group, conversational turn count was positively correlated with all three communication measures and television time was negatively correlated with receptive language, as seen in the table to the right. No other significant relationships were identified.

Results: Auditory-Linguistic Environments

- The auditory environments of children with NH and HL were similar; no significant differences were found between groups for LENA variables.

- For the HL group, conversational turn count was positively correlated with all three communication measures and television time was negatively correlated with receptive language, as seen in the table to the right. No other significant relationships were identified.