

Evidence for a 30-million-word gap across language environments of children with cochlear implants

Matthew Lehet

Michigan State University, East Lansing, Michigan, United States

Meisam K. Arjmandi

Michigan State University, East Lansing, Michigan, United States

Laura Dilley

Michigan State University, East Lansing, Michigan, United States

Abstract

Hart and Risley (1995) found evidence of a 30-million-word gap by the age of three between children experiencing the most and the least spoken input. In the present study, we investigated the magnitude of differences in amount of linguistic input in environments of a clinical population: children with cochlear implants. We identified a 30 million word gap over three years between children who received the most and the least spoken language input in their home environments. Further, we identified a 22 million word gap in numbers of infant-directed spoken words experienced by children hearing the most and the least input. Together, the results suggest that some children with cochlear implants may be doubly disadvantaged in acquiring spoken language, due to the degradation of the speech signal associated with electronic hearing, and due to the dearth of quality linguistic input in sufficient quantity in their language environments.