The Word Gap is a Language Skill Gap in Children’s Sources of Input

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ABSTRACT

Adults, both native and non-native speakers, differ in their language skills. These differences have consequences for their children’s language development because adults’ levels of language skill influence properties of their child-directed speech, which, in turn, influence their children’s language development. We support the foregoing assertions with evidence from the published literature and from new data on bilingual mothers and children in the U.S.

OVERVIEW

This poster proposes that one source of gaps between children from middle class, monolingual English homes and children with different socioeconomic and/or home language backgrounds is the language skill or proficiency of the people who talk to them. We propose that the child-directed speech of adults who have low levels of education or who are non-native speakers with limited proficiency is a less informative database from which to learn the vocabulary and grammar of language. The model assertions are listed below with published support cited, and the model is diagramed to the right. New data from our lab support the assertions that adult proficiency affects properties of child-directed speech and that effects of maternal education on child language may be mediated by effects of education on adults’ language skill.

MODEL ASSERTIONS

1. Among adults, language skill varies as a function of language background (i.e., native speaker status, years and contexts of exposure for non-native speakers) and level of education (Gleitman & Gleitman, 1979; Hakuta et al., 2003; Hartshorne et al., 2018).
2. Adults’ language skill level influences the richness of the vocabulary richness and the grammatical complexity of their child-directed speech (Hoff-Ginsberg, 1991).
3. Vocabulary richness, grammatical complexity, and grammatical diversity in input are positive predictors of children’s language development (e.g., Hoff, 2003; Hadley et al., 2017; Plante et al., 2014). We have termed these lexical and grammatical properties of child-directed speech the data-providing properties of input, and they are distinct from the social-pragmatic properties of input, which also support language development (Hoff & Naigles, 2002; Tamis-LeMonda et al., 2014).

MODEL ASSERTIONS, continued

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References provided on handout.

1. Providing opportunities and support for education to the individuals who are children’s sources of input should mitigate the SES- and language background-related gaps in adults’ language skills that lead to gaps in children’s language skill.
2. Direct intervention with parents aimed at the social-pragmatic features of interaction—responsiveness, contingency, turn-taking, while beneficial, may not be sufficient to close gaps that arise from gaps in the data-providing properties of child-directed speech.

IMPLICATIONS

1. Effects of Speaker Proficiency on Data-Providing Properties of Child-Directed Speech

Effects of Speaker Proficiency on Data-Providing Properties of Child-Directed Speech

Figure 1. Mean values for measures of child-directed speech properties by speaker proficiency group, with effects of covariates removed. These are residualized values in raw score units with a mean of zero for the entire sample, with variance attributable to maternal education level and child English vocabulary scores removed from MLUw, and with variance attributable to maternal education, child English vocabulary score, and duration of the recorded interaction removed from all other measures. Error bars indicate 1 standard error above and below the means. *** \( p < .001 \), ** \( p < .01 \), * \( p < .05 \) (Hoff, Core, & Shanks, under review)

Spanish-English bilingual mothers’ levels of education predicted their children’s English growth and their levels of education achieved in Spanish predicted their children’s Spanish growth, but not vice versa. (Hoff, Burridge, Ribot, & Giguere, 2018)

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