Author’s response to reviews

Title: How many words are Australian children hearing in the first year of life?

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We would like to thank the editor for approving our previous changes and have made the changes requested in the abstract. The abstract now reads:

Background: There is evidence that parents from more socioeconomically disadvantaged backgrounds engage in fewer verbal interactions with their child than more advantaged parents. This leads to the so-called, ‘30 million-word gap’. This study aims to investigate the number of words children hear and the number of vocalizations children produce in their first year of life and examines whether these aspects of the early language home environment differ by maternal education.

Methods: Mothers were recruited into a five-year prospective cohort study and categorized into either high or low maternal education groups. Data was derived from the first two waves of the study, when the children were six and twelve months old. At both waves, children were involved in day-long audio recordings using the Language Environment Analysis software that provided automatic counts of adult words spoken to the child, child vocalizations and conversational turns. Descriptive results are presented by maternal education groups.

Results: There was large variation within each maternal education group, with the number of adult words spoken to the child ranging from 2,958 to 39,583 at six months and 4,389 to 45,849 at twelve months. There were no meaningful differences between adult words, child vocalizations or conversational turns across maternal education groups at either wave of data collection.

Conclusions: These results show that a word gap related to maternal education is not apparent up to twelve months of age. The large variability among both maternal education groups suggests that universal interventions that encourage all parents to talk more to their child may be more appropriate than interventions targeted towards disadvantaged families during the first year of life.