

What About The Children?

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RESEARCH SUMMARY

Why *Choo-Choo* is Better than *Train*: The Role of Register-Specific Words in Early Vocabulary Growth

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In many languages the speech to which infants and young children are exposed, which is known as Infant Directed Speech (IDS), is different from adult-directed speech (ADS). IDS has slower speech rates, higher pitch ranges and longer pauses; sentences also tend to be shorter. Some of the characteristics of IDS facilitate language development.

Infants are provided with a language environment that is tailored for language learning. The subset of the later-used ADS vocabulary, along with the shorter sentences that infants use, are still part of adult language in both form and structure.

One feature of IDS that is unique is the set of vocabulary that is specific to it (known as its 'register'), such as 'choo-choo', 'tummy' and 'doggy'. These 'baby-talk words' are part of the language, rather than idiosyncratic words or expressions spontaneously produced by infants. These types of words are specifically related to speech addressed to infants and children, and are found across many languages of the world.

At first glance baby-talk words would seem to be an impediment to language learning. Introducing words that already have equivalents – such as 'bunny' as well as rabbit, 'tummy' as well as stomach – would present misleading exceptions to mutual exclusivity. However, there may be some benefits that these words bring to the context of learning. For example, it is thought that baby-talk words are more suited to the developing articulate skills in infants and young children, as such words tend to require the least amount of tongue movement. Onomatopoeic words, such as 'moo', permit sounds that are not part of the phonetic basis of the language but are pronounceable by infants.

It is possible that baby talk words may contribute to early language development because they are more likely to be extracted and learned from linguistic input than their adult counterpart words, and have characteristics that are in line with infants' predispositions. Features of these 'baby talk' words may help infants overcome initial difficulties in understanding meanings of words. The initial advantages offered by words like these can be leveraged to learn other words and promote further vocabulary development.

It has been speculated that characteristics of baby-talk words would accelerate word learning in the early stages of vocabulary development. This hypothesis was tested by

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examining whether the change of vocabulary size between 9 and 21 months was related to measures such as iconicity, diminutives and reduplication in the vocabulary input that infants receive. Iconicity is where words may, for example, be onomatopoeic, depicting sounds produced by animals or vehicles, such as 'baa-baa' or 'choo-choo'. Diminutives include words such as 'mummy' or 'doggy'. Reduplication involves repetition of syllables within a word. This may include words such as 'night-night' or 'bye bye' as well as partial reduplication such as 'tick-tock' or 'bow-wow'. The growth of vocabulary was related to measures of diminutive and reduplicated input but not specifically to measures of iconicity. This shows that certain properties associated with register-specific vocabulary used with young infants do facilitate general vocabulary development. This is particularly surprising given that the proportion of words identified as diminutive or reduplicated structures were not overwhelmingly large in the amount of overall speech addressed to the infants. It also highlights the potential impact a small section of linguistic input can have on early language development.

The association that is found between reduplication and vocabulary growth corroborates the evidence that reduplicated words are more easily segmentable than non-reduplicated words by infants at 9 months. However, no association was found between iconicity in the input and overall vocabulary growth. This outcome was not in accordance with most of the research evidence that has been produced from other studies and could be due to the methodological factors of this particular study.

Future research needs to address the question of whether the effects of diminutive or reduplicative lexica input continue beyond the age of 9 months. It is believed that the effects do not last over many years. Firstly, parents' use of certain baby-talk words diminishes after the first year and therefore their impact should decline too. As children get more experienced at word learning they will develop further strategies to segment or map novel words. Therefore, any advantages that baby-talk words may have in early vocabulary development should fade out with age, and thus the role of baby-talk words could be considered as a bootstrapping device whose contribution is to kick-start the process of lexical learning.

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