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A review of: "Back to Basics: A Bilingual Advantage in Infant Visual Habituation"

In "Back to Basics: A Bilingual Advantage in Infant Visual Habituation", Leher Singh and Charlene Fu examine the implications of bilingualism in preverbal infants. More specifically, they aim to show whether or not the infant bilingual advantage mirrors the specificity and scope of the adult bilingual advantage. There have been many studies that have shown a connection between bilingualism in adults and inhibitory control. It is largely believed that the process of suppressing one language when producing the other develops higher levels of inhibitory control, and this increased inhibitory control is largely considered the adult bilingual advantage. However, its clear that there is also a bilingual advantage in infants who have yet to produce any words, and this paper aims to clarify and classify that advantage.

A total sample of 114 infants (aged 173-189 days) were tested, of which 54 were monolingual and 60 were bilingual. These infants were given a visual habituation test to gauge their information processing abilities. Parents of the infant sat in a chair 60cm away from a monitor with their infant on their lap. They were presented with an habituation image, and the infant's fixation time, and attentional decrement (difference between first two and last two habituation trials), was recorded. A new image was then presented and the infants fixation time to the new stimulus was recorded. Larger attentional decrements are associated with more advanced performance in concept formation, non-verbal cognitive outcomes, expressive

language, receptive language, and standardized measures of IQ. The slope of the habituation function has also been positively correlated with language performance and cognitive measures later on in life. Results from the experiment reveals that bilingual infants had a larger attentional decrement, as well as a steeper habituation slope, than the monolingual infants.

So while there is a clear difference in performance between bilingual and monolingual infants, the specific implications are less clear. In other words, these findings suggest that bilingualism in infants lead to a fundamental cognitive advantage that has the potential to grow into something more specific, but at the current age of testing, its definitely less clear cut as the adult bilingual advantage.

Reflection on the Huffington Post article

Like all press articles, the main goal is to gain readers, so having a title that grabs people's attention is needed. After all, a true, accurate, and important summary of a research paper will do no good if no one bothers to read it. And as such, the Huffington Post article on the research done by Leher Singh and Charlene is titled with a very bold claim: "Bilingual Children Are, In Fact, Smarter Than Other Children". What qualifies as "smarter" is not defined in either the Huffington Post article, or the research paper, so making such a claim is definitely more of an attention grabber than a statement of truth. Also "other children" include trilingual children, which is was beyond the scope of the research, so thats another overgeneralization.

But while the headline of Huffington Post's press release of the research results does seem to be slightly mis-construed, the contents and tone of the article mostly stay true to the facts presented in the research paper. The article summarizes the process, the method, and the results in a clear, third-party point of view, and includes very little subjective additives.

Finally, in contrast with the headline, the conclusion paragraph of the article summarizes the take-away from the research paper with much more fidelity, concluding that the researchers believe bilingualism " gives babies the chance to develop skills… that will give them the upper hand when it comes to navigating early education" - which is much more closely aligned to the results of the paper than "Bilingual Children Are, In Fact, Smarter Than Other Children".