

Are Two Languages Better Than One?

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What happens when a toddler is exposed to two languages instead of one? Does he get confused? Does he find it harder to learn to talk?

A new study out of York University in Toronto suggests that exposure to two languages may actually give toddlers a cognitive *advantage* over young children who use only one language[1].

About the Study

This study involved 63 monolingual (single language) and bilingual children who averaged 24 months of age. The bilingual children had been exposed to both of their languages since birth. The toddlers underwent a variety of tests designed to assess levels of self-control in thought and action (technically referred to as "executive functioning").

While most of the tests showed no difference between the abilities of bilingual and monolingual children, there was one test in which the bilingual toddlers showed remarkably better results.

The Shape Stroop Test

The toddlers in the study were shown pictures of large fruits containing smaller fruits - for example, a large banana with a small orange inside it. They were then asked to point to the *small* fruits. Selecting the smaller fruit is challenging for a young child because of the natural instinct to pay more attention to the larger fruit. The toddlers had to exercise self-control or "executive functioning" to suppress the natural response of pointing to the larger fruit, and to pay attention to the smaller fruit instead.

Results

While bilingual children scored correctly 50 percent of the time on the Shape Stroop Test, the monolingual children scored correctly only 31 percent of the time.

These results suggest that bilingual children may have a superior ability to:

- focus on the one important thing, not allowing other stimuli to distract him this requires what is called "selective attention"; and
- change their response according to the demands of the situation this shows "cognitive flexibility".
- Selective attention and cognitive flexibility are both important aspects of executive functioning.

Why might bilingual children have these advantages?

When a bilingual toddler wants to say something, both of his languages become activated in his brain and they compete internally with each other (it's as if both languages are saying "Pick me, pick me!"). In order to communicate, the toddler has to select the language he needs and actively suppress the other language to prevent it from intruding. This requires both selective attention and cognitive flexibility. These skills may be stronger in bilingual children simply because they've been exercised more.

Our Views on the News

One of the implications of this study is that bilingual toddlers may be starting school with a significant cognitive advantage in the area of self-control or "executive functioning". This can have an important impact on both their academic and social future.

For example, if a child has good self-control, he'll find it easier to focus his attention on what's important and he'll be less likely to become distracted while trying to listen to a teacher or complete a task. In social situations, he may have greater ease in tailoring his behaviour to a specific context. And when his peers suggest a potentially harmful activity, his self-control may make it easier for him to refuse.

So if you're wondering whether exposing a young child to a second language early in his development is a good idea, the answer is yes!

1. News article: "Bilingual toddlers have edge over unilingual kids: Canadian study" http://www.ottawacitizen.com/life/food/Nobody+bothered+report+missing/2761441/
Bilingual+toddlers+have+edge+over+unilingual+kids+Canadian+study/4135298/story.html