

# Bilingualism benefits premature children, study finds

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Researchers from FIU have found that speaking more than one language can be beneficial for children born prematurely, counter to advice often given by health care professionals.

The study, published in [\*Advances in Neonatal Care\*](#), compared two groups who were born preterm: bilingual children and children who only spoke one language. The bilingual group performed better on a [cognitive test](#), showing better organization, accuracy and response time, compared to monolingual children—important skills for academic success.

"The conventional advice provided by [health care professionals](#) is not to speak more than one language with children born prematurely," said Caroline Gillenson, lead author and doctoral student in FIU Center for Children and Families (CCF) Clinical Science Program. "Our findings show that shouldn't be the case and that bilingualism could be an early intervention strategy to help strengthen preterm-born children's executive functioning."

Children born prematurely are often at increased risk for poor executive functioning—[cognitive processes](#) that include paying attention, planning, memory, decision-making, carrying out a task, among others. Researchers say this is one of the reasons misconceptions arose that speaking more than one language can interfere with [language acquisition](#) or cause delays.

The researchers followed a small group of 17 children, between the ages of 6 and 7, born very preterm (before 35 weeks) with [low birth weight](#) and long hospital stays in the neonatal intensive care unit (NICU). There were eight monolingual children and nine children who spoke English and Spanish.

To test their executive function, researchers gave the children a Creature Counting task—a test that had them counting the number of animals from top to bottom, starting with one, and then switching between counting upward or downward, according to arrows. The ability to switch from counting upward to downward or vice versa is key to measuring executive functioning. Correct responses and the time it took

to complete the task were recorded.

Preterm-born [bilingual children](#) performed significantly more accurately and with more total switches than the preterm-born [monolingual children](#).

The study's authors point out that although they had a [small sample size](#), their preliminary data has real-world implications and shines a light on the advantages bilingualism may give to preterm-born children's executive functioning abilities.

"This really shows speaking more than one language can be tremendously helpful for preterm-born children just as it is for children born full term," said FIU Psychology Professor and study author Daniel Bagner.

Next, the team hopes to also explore additional advantages that may arise when preterm-born children speak more than one language, including spatial reasoning (the understanding of how objects can move in a 3-dimensional world), and meta-linguistic awareness (the ability to consciously reflect on the nature of language and figure out rules and patterns).

"Unfortunately, many parents who have a child that was born prematurely have shared with us that their [pediatric provider advised them to stop using their native language](#) at home. They were told to use English only with their child," said Melissa Baralt, FIU psycholinguistics professor and one of the study's authors. "We hope this research can serve as a call-to-action for parents and health care professionals to embrace the advantages of bilingualism in nurturing the developmental skills of preterm-born children."

## **Tips for parents to promote bilingualism in their**

## children

Melissa Baralt shared the following tips:

1. Read with your baby every day. Public libraries have books in many different languages! Interact with the book and with your child.
2. Learning can happen anywhere. You can turn everyday moments into learning opportunities for your baby by having conversations, asking questions, and narrating what you are doing together. These are the moments that matter.
3. Get the entire family involved! Grandparents are linguistic experts, and talking on Facetime or WhatsApp video gives them a great opportunity to have interactive conversations.
4. Try not to depend on television or tablets. Promoting bilingualism requires interactive conversations.
5. Help [children](#) associate positive feelings with the language. Sing in Spanish or the language of your choice, play together and listen to music.
6. Be enthusiastic when you speaking and have fun!
7. Focus on what your child has achieved rather than perfection. Interactive conversations and the creative use of [language](#) is more important than correct grammar.

**More information:** Caroline J. Gillenson et al, A Preliminary Study of Executive Functioning in Preterm-Born Children, *Advances in Neonatal Care* (2023). [DOI: 10.1097/ANC.0000000000001106](https://doi.org/10.1097/ANC.0000000000001106)

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