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**CAN YOUR CHILD
WHO HAS DOWN
SYNDROME LEARN
TWO OR MORE
LANGUAGES?**

BY MARY-PAT O MALLEY PH.D.

If you're a parent of a child with Down syndrome and you're raising your child using two languages or more, it's possible that somewhere along the way, you've been told to drop one of your languages or to focus on one language only. After all, children with Down syndrome struggle with language development so wouldn't it be easier to focus on just one language only? This is simply not true. **"Common sense" is wrong in this case.** The research tells us that health care professionals should support you in raising your child who has Down syndrome as a multilingual child. In fact, dropping a language can actually make things worse. It can end up limiting your child's participation in a range of situations. It can negatively affect their social, emotional, and educational progress.

If your child has Down syndrome and needs to use 2 or more languages in their everyday lives, then that is what they need. **While multilingual children with Down syndrome will of course vary in the degree to which they acquire their languages, they still need to use two or more languages to function effectively and fully in their day to day lives. Multilingualism isn't always a choice.** And if it is a choice, children with Down syndrome can and do become multilingual. (Remember multilingual does not mean fluent in listening, speaking, reading, and writing. Language abilities in these 4 modes vary across languages in multilingual children in general. And children with Down syndrome will have cognitive and language challenges but this still doesn't mean they can't acquire two or more languages. It's all about what languages they need to participate fully in their lives.)

So what does the research actually tell us? Now, compared with topics like being a late talker or having developmental language disorders, there isn't a lot of research involving multilingual children with Down syndrome. But here's what I found from 1993 - 2016. More research definitely needs to be done. Many of the studies only involve small numbers of participants. And what's true for someone in a study may not be true for your situation. And all research has limitations. Bearing all that in mind, let's have a look at what's out there.

One study in 1993 involved a 23 year old Italian woman with Down syndrome who had been exposed to English, French, and Italian since childhood. When her languages were tested, she was able to have conversations in all three languages and understand English television shows. Her French abilities were weaker because it was the language she spoke least often. Nothing to do with having Down syndrome then- that would be the same pattern for any multilingual person.

Another study involved twins with Down syndrome who were born to deaf parents. They learned both English and British Sign Language to the point where they could communicate effectively in both. Yes, they showed impairments in both languages compared with monolingual children but that's not that surprising. (And it's not meaningful really to compare monolingual children and multilingual children as that's not comparing like with like.) They also showed a preference for English even though BSL was the

home language. But most multilingual children show preferences for their different languages at different times and in different settings. And as English was their community language, that's not a surprising finding either as the community language can tend to dominate once children go to school.

A 2005 study by Kay Raining Bird (she's done a lot of the research), found that there wasn't a significant difference between monolingual and bilingual children with Down syndrome when it came to any of the tests of English that they did. Again the children with Down syndrome, whether they were monolingual or bilingual, did have language delays but not because of being raised with two or more languages. Now, there was considerable variation in 2nd language abilities in the children with Down syndrome. This means that some children with DS may have more difficulty learning two languages but it doesn't mean they can't learn two. And once again, it's important to think about what your child needs language-wise. **If they need two languages, they need two languages.** And there's a lot of individual variation in language development between individual multilingual children and groups of matched multilingual children who don't have Down syndrome. **Kay Raining Bird concluded that children with Down syndrome can be successful in acquiring two languages. And that bilingual children with Down syndrome perform in their stronger language at least as well as monolingual children with Down syndrome when the children are compared with children at a similar level of development.**

A 2008 Canadian study of vocabulary and grammar in children aged between 5 and 8 years old found that the **bilingual children with Down syndrome did show language delays in both languages but bilingualism was not the cause of these delays. Children who have Down syndrome do struggle with language development affecting expressive language in particular. However, being bilingual does not make these language problems worse. All of the four children with Down syndrome in the study were developing functional second language skills. Just like any child, the variations in their vocabulary was related to the input they were receiving in each language.** (English and French were the languages)

Next up is another Canadian study from 2014 also involving Kay Raining Bird. In this study, 14 children with Down syndrome (average age 12 years, 5 months) were involved. And the focus of the study was on word learning and again the researchers found that **being bilingual did not have a detrimental effect on the language development of children with Down syndrome.**

Next, from the UK, a case study of one girl aged 6 years 11 months when the study started and 9 and a ½ when the study ended. She was born in Belarus to multilingual parents who spoke Russian, English, and Belarusian. She moved to the UK when she was 6 months old. Russian was her home language with limited exposure to English until she started school at age 4 and became more exposed to English. Her parents read to her in Russian daily and extensively and started to teach her to read words in Russian when she was 30 months old. In this study they wanted to look at her speaking and word

level reading. They showed that when it came to spoken language, the little girl was as proficient in Russian as she was in English with slightly stronger word reading ability in English. Similar to monolingual children with Down syndrome, this little girl did struggle with aspects of reading such as understanding what she was reading. In fact, when it came to understanding what she was reading, the little girl performed similarly to monolingual children with Down syndrome suggesting that this may be an area of difficulty for children with Down syndrome in general. **They concluded that learning to speak and read two languages in the presence of having a learning difficulty, does not necessarily lead to a detrimental effect on a child's spoken language or word level reading.**

Hot off the press is a review of 50 research studies which revealed that there's little evidence to support view that being multilingual is harmful to the language or social development of children who live with developmental differences. The authors recommend that public policies should reinforce the fact that **there is no clinical, linguistic, or cognitive evidence to support recommendations that multilingual families drop any of their languages.**

Finally, a study that looked the potential cognitive effects on children with Down syndrome learning a second language. 41 children with Down syndrome aged 7-18 years of age took part. 28 were monolingual English speakers who also had Down syndrome. 13 children were bilingual and had Down syndrome. They were exposed to a language other than English for an average of more than 4 hours daily. The children were tested on things like navigating a virtual

arena using a joystick to find a hidden object, sequences of numbers generated by tapping fingers, and working memory. The researchers wanted to find out what effect learning a second language might have on these cognitive abilities. What they found was that there was no significant difference between the two groups of children on any of the tests they did. This means that **there were no cognitive costs to the children with Down syndrome who were learning a language other than English.**

So what does it all mean? Well, the available research indicates that **children who have Down syndrome can and do learn two languages.** Unfortunately though, this fact is not yet part of mainstream thinking. It's important to remember that multilingualism is rarely a choice. It's more a fact of life for your family. You need two or more languages to communicate at home, with family members, in your communities, at school, and so on. And your multilingual children with Down syndrome need to develop all of their languages. **There are no scientific grounds for saying that it's not possible and that families should stick to one language. That is wrong. And not supported by the best available evidence.** It's important to remember too that in some countries such as Canada where there are 2 official languages and Ireland where there are 3 (Irish, English, and Irish Sign Language), multilingualism is actually a legal right.

Of course, it's important to remember that for children with Down syndrome, the level of language proficiency they attain in all of their languages will be affected by their level of cognitive functioning and developmental levels.

Similar to any child, environmental factors such as the kind and amount of language input they receive and the opportunities to use their languages will also have an effect on the level of language skills they attain.

It's important to give high quality language input and opportunities to use their languages. **It's important to support home languages especially as they're vulnerable.** They may have a lower social status and opportunities to hear and use them may be restricted.

As for speech and language therapy, **recent research from Canada reports that the practice of language intervention in only one language (which is usually the language of the SLT/SLP) cannot be supported by the current research. Multilingual children with Down syndrome and speech and language challenges need intervention that takes all of their languages into consideration in order to help them achieve their potential and participate fully in society. So keep using all of your languages and ask your health care professionals to support you in doing so. And be reassured that there are no scientific reasons to restrict your child to one language.**

About Talk Nua & Dr. Mary-Pat O Malley-Keighran

I'm a speech & language therapist with over 20 years of experience working with children & their families. I'm a lecturer in speech and language therapy at NUI Galway & I'm passionate about supporting multilingual families to develop all of their child's languages while still having fun! Be sure to visit www.talknua.com for more



information. And I'd love it if you signed up there to get more tips from Talk Nua!

Here's what I read so you don't have to:

Kelly Burgoyne, Fiona Duff, Dea Nielsen, Anastasia Ulicheva, and Margaret Snowling. (2016) Bilingualism and biliteracy in Down syndrome: insights from a case study. *Language Learning* 66(4): 945-971.

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Elizabeth Kay Raining Bird, Erin Lamond, and Jeanette Holden (2012) Survey of bilingualism in autism spectrum disorders. *International Journal of Language and Communication Disorders* 47(1):52-64.

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