

Two are better than one

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This article was originally published in *Children in Scotland* magazine (January 2009, p.14-15). For further information, and to subscribe to this title, please visit www.childreninscotland.org.uk.

families

Two are better *than* one

Antonella Sorace explains how bilingualism might affect children and answers some questions about living and speaking with two languages

Do you want to raise your child bilingual but are not sure how to do it? Do you worry about how bilingualism might affect your child's school achievement? Are you concerned that your child has stopped speaking your language and wants to use only the other language? Do you worry that your child is not saying much in either language? Do you want to know more about how the mind of a bilingual child works?

Antonella Sorace, Professor of Developmental Linguistics at the University of Edinburgh, decided to set up *Bilingualism Matters*, a new information and advice service for families and educators with her research group because she noticed how growing up with more than one language is often regarded as 'special', and bilingualism is often still surrounded by false beliefs, misconceptions, or simply lack of information. Many people are ready to believe that handling two languages at the same time is too much of a burden for the infant's brain, or that the languages compete for resources in the brain at the expense of general cognitive development. These opinions often inform decisions – by parents, professional educators, policy makers – that end up affecting children's lives. Many new parents who want their children to speak two languages for family reasons are likely to have heard somewhere that exposure to two languages can cause problems, so they may abandon bilingualism before they even give it a try, or may plan to introduce one of the languages only after the other is 'well established' and then find to their regret that the second language never has a chance. If they successfully establish bilingualism in their pre-school children, they may well be made to feel that they've created a problem by well-meaning primary school teachers, who are often ready to blame bilingualism for any performance problems. In this situation the parents may abandon successful bilingualism and even make active efforts to re-establish monolingualism to 'cure' the problem. Given the sociological repercussions of these folk linguistic beliefs, it seems valuable to bridge the gap between the scientific approach to the study of bilingual cognition and what many people believe about life with two languages.

Research on bilingual language and cognition shows that the human brain is perfectly capable of dealing with two or more languages simultaneously from birth. In many parts of the world growing up multilingual is the norm: if children hear enough of both languages and have enough motivation and fun, they will pick them up. What many people don't know is that the experience of dealing with two languages seems to give bilingual children some general cognitive advantages in other domains. These advantages are particularly evident in tasks that involve cognitive flexibility and the control of attention: bilingual

children seem to be better at selectively paying attention, at inhibiting irrelevant information, and at switching between alternative solutions to a problem. In contrast, such children do not seem to have an advantage over monolinguals with respect to functions that depend on the way knowledge is represented. For example, they don't seem to be any better at encoding problems, accessing relevant knowledge, or drawing logical inferences.

What is the link between enhanced cognitive control and bilingualism? Bilingual speakers must develop a powerful mechanism for keeping the two languages separate, so that fluency in one language can be achieved without intrusions from the unwanted language. Therefore, the bilingual child's constant experience of having two languages available and inhibiting one when the other is activated enhances their ability to multitask in other domains. There is more good news for bilingual children: it's been suggested that some of these cognitive advantages are maintained in old age. If these results are confirmed by future research, it will be possible to conclude that bilingualism provides a defence against the decline of general processing functions that is a feature of normal cognitive aging.

A further spin-off of bilingualism is higher awareness of language and greater ability to think about it and talk about it. Bilingual children have a greater ability to focus on the *form* of language, abstracting away from meaning. Parents of bilingual children often report that their children engage in 'language play' that may take the form of 'funny accents' or impossible literal translations between one language and another. Many parents also report that bilingual children have more precocious reading skills, and this has recently been confirmed experimentally. Bilingual children recognize symbolic letter-sound correspondences earlier than monolingual children, although this does not appear to be related to greater awareness of the sounds themselves and it is also a function of the specific languages acquired as well as of the level of proficiency attained.

Because of their experience of selecting languages according to the perceived linguistic competence of the person they are addressing, bilingual children have also been said to have an enhanced 'awareness of the other'. This often goes under the heading of 'Theory of Mind', which is a term used to describe the ability to understand other people's mental states, and more specifically that other people may have beliefs, desires and intentions different from one's own. The cognitive abilities involved in Theory of Mind normally emerge around the age of

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4 years in monolingual children; they are permanently impaired in autistic children. It has been reported that bilingual children develop Theory of Mind, on average, a year earlier than monolingual children. It is remarkable that the experience of dealing with two languages may have such extensive repercussions in so many apparently unrelated domains of cognitive development.

Do bilingual children confuse their languages? A hopelessly mixed language is the thing that many parents in bilingual families typically fear, but recent research has completely discredited this idea.

First, using new techniques for studying whether babies can tell the difference between one outside stimulus and other researchers have learned that monolingual babies' perceptual abilities are remarkably fine-tuned very early on: they know a lot about what their language sounds like long before they start producing their first words, and even at the age of a few months will notice when someone who was speaking English switches to speaking, say, Japanese. This makes it very implausible that bilingual children do not realize that they are hearing two languages. Second, research on 'code-switching' – swapping back and forth between languages – shows that bilingual children, like bilingual adults, often switch from one language to another in order to achieve particular communicative effects. For example, even if they are talking in Language A, they may switch to Language B to report something that somebody said, if the speech they are reporting was originally in Language B. Or they may switch because of the topic they are talking about, or simply to play games with their languages. Naturally, this kind of code-switching

takes place most often when talking to other bilingual children. Moreover, code-switching is not random but generally obeys a remarkably strict grammar. For example, a Spanish-English bilingual child is much more likely to say 'La house' than 'The casa' (Spanish article + English noun, rather than 'English article + Spanish noun), apparently favouring the combination that is more informative in terms of grammatical features like gender and number. Far from producing random mixings due to confusion, in other words, bilingual children know when and how it is appropriate to mix their languages. There is also plenty of evidence that the grammatical rules of each of the languages are kept separate most of time in the course of development. While bilingual children usually are 'late talkers' who start speaking later than monolingual children, there is little evidence that bilingual languages affect each other – they neither speed up nor delay normal acquisition processes. Instead, children's development in each of the two languages follows the same milestones as in monolingual children.

Bilingualism Matters aims to raise awareness in schools and communities about the facts and benefits of bilingualism, so that more and more children have the opportunity to grow up with more than one language. At the same time, it aims to make parents aware that raising children with two languages requires a commitment. There is no single 'method' that works best and fits all families: the well-known 'one parent-one language' system is not the only one that could be adopted. But any system should ensure, first, that children are exposed to enough input in both languages in a variety of situations in which they feel involved and motivated to participate, and second, that both languages are valued by the family and the community.

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