It may be an alarming prospect, but the culture in which you grow up probably affects how your brain develops. It’s a theme that Lydia Krabbendam has dared to take on. For example, girls in the Netherlands are worse than boys at science subjects. The figures suggest a consistent difference in natural talent that we can do nothing about. But in the Netherlands, this difference between the sexes is greater than in other countries. And in countries like Tunisia, Kuwait, Russia and Kazakhstan it’s the girls who come out on top. Could it be that ideas communicated by teachers and parents about what boys and girls are capable of play a role here? In other words, is it all in our mindset? Can we do something about this difference after all?

The mindset is an intriguing phenomenon. Professor of Educational Neuropsychology Lydia Krabbendam unwittingly presents a perfect example of one during our interview: “I can only offer you girly tea,” she tells me apologetically, referring to the roosbos and mint tea bags in the box on her desk. They are certainly not my favourite flavours, even though I could be considered a “girly”. But then in some circles it’s seen as odd if men drink tea at all. Everyone has their own tea or coffee preferences. But it can have wider implications: on average boys perform slightly better than girls in science subjects. The figures suggest a difference between the sexes of 15 per cent. It could well be that such values are of no use to children from a collectivist culture, because they are accustomed to view the community as central. For these children, other forms of motivation might be more effective, such as rewarding group performance.

All this sounds rather abstract. Krabbendam gives some examples: “We’re going to translate culture in terms of behaviour. What role does the mother play in the family? How often do you see your family? Is visiting a sick aunt in Paris a natural thing to do? Who do you regard as family? Many Dutch people no longer see cousins as part of their family. In a more collectivist culture, that would be unthinkable.” She therefore analyses culture as a collection of mindsets, which manifest themselves in behaviour – a set of structured habits. By being part of a culture, you develop a model with predictions about the world, and they colour your perceptions and behaviour.

**EYE OPENER**

The neuropsychologist ran up against the limits of her field when she joined the education department as a psychologist. “I was confronted with the question of what knowledge about our brains is actually relevant. My insight makes you less likely to do it, what can we do with it? What should we do with it? This sparked the realization that we should not see the brain as the cause of everything, but that we should look more at the interaction between brain and environment.”

All that thinking about environment and culture had her skating on thin ice. She wanted to focus on adolescence, but adolescence turned out to be defined differently in different cultures. On a management course at VU University Amsterdam, she met anthropologist Sandra Evers. Krabbendam recalls: “What an eye opener! She has had a very formative influence on the direction of my research. We are sometimes knocked off our feet by the surprising differences between us. Take our measuring methods, for example. We take children out of their own environment to do tests. Sandra and her team sit on a chair in the corner and observe. If we observe behaviour at all, we still keep a tally. We want a number. Sandra and her team don’t. They look at the rich context of everyday life. Sandra could sometimes hardly believe her ears. ‘What? You stick kids in a scanner?’”

**MISSION**

Krabbendam feels right at home at VU University Amsterdam. “Universities don’t always encourage cooperation with other areas of research,” she says. “At VU University Amsterdam they do. Our research aims to provide concrete tools for teachers, and that’s part of the mission of our department. It’s an aspect that appeals to me.”

The icing on the cake is that the university also devotes special attention to students who are the first in their family to enter higher education. “They too have to deal with a huge cultural shift. It all fits together nicely.”

In her highly readable [inaugural speech](https://www.vu.nl/), Sandra Evers, anthropologist, addresses the students: “If you expect a child to do well, it more often turns out to be true.”

**IT STARTED WITH AN IDEA**

By Rianne Lindhout

Are you the same person at work as you are at home? Probably not. You switch between different mindsets, just like everyone else. All kinds of stimuli determine these changes; they happen unconsciously, you may be the boss at work, but not at home. And the culture a child lives in at home can be very different to the culture they encounter at school. If this switch between one culture and another works smoothly, it doesn’t seem like anything very special. But it can have wider implications: on average boys perform slightly better than girls in science subjects. The figures suggest a consistent difference in natural talent that we can do nothing about. But in the Netherlands, this difference between the sexes is greater than in other countries. And in countries like Tunisia, Kuwait, Russia and Kazakhstan it’s the girls who come out on top. Could it be that ideas communicated by teachers and parents about what boys and girls are capable of play a role here? In other words, is it all in our mindset? Can we do something about this difference after all?

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