

How should we handle boys who can't read?

September 12 2017

Many people know that girls, on average, are worse at math than boys. But the gender difference is three times greater when it comes to reading. According to international studies, this is where boys struggle.

Why? And what can be done about it? For starters, children who struggle most with learning to read could be identified earlier than is currently done. And now, researchers are finding new ways to do this.

"Letter-sound knowledge is what best predicts how well students will be able to read later," says Professor Hermundur Sigmundsson at the Norwegian University of Science and Technology's (NTNU) Department of Psychology. He has based his research on major empirical studies and theory.

Young children who are good at recognizing their letters and sounds early often become the best readers later on, too.

Differences start at six years old

Sigmundsson and his colleagues are working to develop a method to identify children earlier who may eventually have trouble reading.

Special educator Greta Storm Ofteland developed a [letter](#) test that enables early identification of children's knowledge of letters and their sounds, and thus the children who are likely to struggle with reading.

First graders were tested on four literacy factors when they started

school: the number of upper and lowercase letters the children knew and the sounds associated with each of them.

The children's average age was just over six years old. The study included 485 students, of whom 224 were girls and 261 were boys.

"We found a significant difference between girls and boys in all four variables, in favor of the girls," said Sigmundsson.

Multifaceted cause

Already by age six, girls are best at recognizing letters and the sounds that correspond to them, and the boys lag behind. The study results are now being published in *Frontiers in Psychology*.

The explanation for this is probably multifaceted. Heredity is a factor, and most girls are already talking more than most boys from as early as the age of 10 months onward.

Environment also plays a role. Parents tend to talk more with girls from birth. Girls get more practice with letters and sounds than boys do. You don't learn letters and sounds without being exposed to them. You need to be stimulated and gain this experience.

You may also end up stuck in a downward spiral, at least when it comes to reading. When you first start lagging behind in reading, you become less interested in it as well. Then your reluctance to read increases.

Students are no longer required to read as much at school as they were before. This probably most affects those children who don't choose to read in their free time and can help explain why gender disparities increase.

High cost of special education

Although girls' mathematical scores have improved in recent years, gender differences in reading have continued to grow. There is an urgent need to address this problem.

In mathematics, the main reason for the perceived gender difference is that few girls rank among the very best. The big differences are thus at the top of the scale. Many girls are doing reasonably well and relatively few are actually bad at math.

The difference with reading is that many boys are struggling, and the big disparities lie at the bottom of the scale. The worst readers are really bad - and this has major consequences.

"Twenty-one per cent of 15-year-old boys in Norway have trouble understanding a text that is given to them, according to the PISA survey from 2015," says Sigmundsson. These are among the lowest results in the world.

This situation has a cost, first and foremost for the students themselves, but also for society. More than 50,000 primary school students in Norway receive [special education](#). Sixty-eight per cent of them are boys. Special education costs Norwegian society 12,000 FTE employees and several million dollars.

Too little too late

"One major problem is that a lot of the support efforts come too late. If we could catch children earlier who are struggling and give them the right training and follow-up, we might not have to do so much remedial work with them they get older," says Sigmundsson.

This approach could make school years much easier for a lot of students, and perhaps help prevent some from dropping out. It's a reality that the students who struggle the most are also at greatest risk of quitting school.

This would reduce the need for as many special educators, and allow them more time for each [student](#) who still needs support services.

Finding effective methods for all students

Sigmundsson doesn't buy the argument that the [gender differences](#) in school are primarily due to [girls](#) maturing earlier than boys. Although this difference exists, it doesn't adequately explain the discrepancy.

We now know that children develop skills mainly through experience and stimuli. Other recent research shows that we get good at exactly what we practice. We need to develop nerve connections in the brain through our actions.

Sigmundsson believes it is important to use evidence-based learning methods that are effective for both sexes.

He thinks that all students' reading skills should be checked when they start primary school. This assessment is easy and only takes a few minutes per child.

"We have to give the boys a boost by finding where each individual student stands. We can do that by emphasizing letters and the sounds that are associated with them. We need to make sure that all children have a good command of letter-sound relationships as early as possible once they start [school](#)," he said.

Make best method mandatory

When children learn to read, it is best to teach them single letters and their sounds first. Don't go straight to words. This is what the research literature indicates.

This approach is now so widely accepted that the United Kingdom and France are working to make the methodology mandatory.

Norway has not yet followed suit. Teachers in Norwegian schools are free to choose how they want to teach reading - as well as mathematics - to [children](#).

More information: Hermundur Sigmundsson et al, Letter-Sound Knowledge: Exploring Gender Differences in Children When They Start School Regarding Knowledge of Large Letters, Small Letters, Sound Large Letters, and Sound Small Letters, *Frontiers in Psychology* (2017). DOI: [10.3389/fpsyg.2017.01539](https://doi.org/10.3389/fpsyg.2017.01539)

Provided by Norwegian University of Science and Technology

Citation: How should we handle boys who can't read? (2017, September 12) retrieved 26 April 2024 from <https://medicalxpress.com/news/2017-09-boys.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.