

Forget colour overlays – dyslexia is not a vision problem

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What kind of visual problems are claimed to cause dyslexia?

A huge variety. They include difficulties in merging information from both eyes, problems with glare from white pages or the text blurring or "dancing" on the page. A host of products claim to relieve this so-called visual stress, especially products that change the background colour of the page, such as tinted glasses and coloured overlays.

Others advise eye exercises that supposedly help people with dyslexia track words on the page. Despite lack of evidence that these approaches work, some people with dyslexia say they help – [more than half of university students with dyslexia have used such products](#).

What are the new findings?

That there's no evidence visual stress is linked with dyslexia. Nearly 6000 UK children aged between 7 and 9 had their reading abilities tested as well as performing a battery of visual tests. About 3 per cent of them had serious dyslexia, in line with the national average. But in the visual tests, the differences between the students with and without dyslexia were minimal. In two of the 11 tests, about 16 per cent of the children with dyslexia scored poorly, compared with 10 per cent for children with normal reading abilities. But that small difference could be caused by the fact that they read less, says author [Alexandra Creavin of the University of Bristol, UK](#). And more importantly, the 16 per cent figure is so low, it can't be the main explanation for dyslexia.

So what does cause dyslexia?

We don't know. Various ideas have been put forward to explain why some children of normal or

above-average intelligence have difficulty learning to read, but none of these theories have become generally accepted. [Brendan Barrett](#) of the University of Bradford in the UK says it may be more helpful to regard the condition as an unexplained difficulty with reading that doesn't necessarily reflect someone's intelligence. Many in the field now prefer the term "reading impairment" to avoid the unproven claims about dyslexia. "The term has a lot of baggage," says Barrett.

But those affected by the condition may have been written off as stupid, so appreciate having dyslexia as their "diagnosis".

How should we be treating the condition?

Evidence suggests that the best methods for helping people with dyslexia are the [same as those that help anyone learn to read](#). The old-fashioned "phonics" method teaches individual letter sounds, then how to blend them together into words. People with dyslexia may just need a lot more of this kind of tuition than others. "But if you're spending time on eye exercises, that might be time not spent on phonics," says Creavin.

Who is pushing the coloured overlays?

There's a whole industry based on the visual stress theory, selling not only glasses and overlays but also consultations that can cost hundreds of pounds. "Families are very keen to help their children," says [Cathy Williams](#), who also took part in the study. "There's a belief that in order to do right by their children, they must get hold of these products."

But dyslexia charities also need to be more sceptical, says Williams. A survey last year found that [six out of eight UK dyslexia organisations were promoting such products on their websites uncritically](#) and some [general health websites](#) accept their value. In a review for the UK's College of Optometrists, Barrett found that coloured overlays were not supported by evidence. But he says he has seen enough people who find them helpful to keep an open mind.
