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Dyscalculia

Does testing help?

Testing for dyscalculia is not always the best way forward, especially as some schools fail to acknowledge its very existence, says dyscalculia specialist Tony Attwood

As part of my work with The Dyscalculia Centre, I have the job of answering questions that are sent in by people who are either dyscalculic themselves or who know someone who is dyscalculic. The questions are very wide-ranging and cover everything from the genetic origin of the problem to remedial action for sufferers from the condition.

Of all the issues raised, there is one that so dominates the correspondence that a recent count revealed that over half of the emails and calls we receive focus on this one topic. It is best summed up by this simple question: “where can a person be tested for dyscalculia?”

Unfortunately for my correspondents, my answer is (I am sorry to say) generally not the one that people want to hear, as I often turn the question around and ask, by way of reply, “why do you want to be tested?”

To understand why I am seemingly so unhelpful, it is important to consider the wider context, and we can do this by comparing the situation of the dyscalculic student with that of the person who is dyslexic. When a pupil or student is diagnosed with dyslexia several things can happen

automatically. That individual gets support in the form of extra time to complete work, or in extreme cases, a reader who will read the pupil or student’s answer back during examinations. If the dyslexic person goes to university he/she will have a wide array of support ranging from help in exams to special arrangements over the borrowing of in-demand texts from the library. Additionally, some local authorities will supply a free laptop.

Meanwhile, at school the dyslexic pupil or student will have the right to specific teaching help in accordance with this special need, and virtually all schools are geared up to meet this requirement.

But with dyscalculia the world is different and diagnosis does not give one any extra time or support in examinations. While it is true that the dyscalculic child ought to get additional specialist help, there is some anecdotal evidence to suggest that this extra help is not always forthcoming.

Of course I have to be careful not to make sweeping statements; I must make it clear that the evidence I have comes simply from parents who are unhappy with the schooling provisions for their dyscalculic children, and a handful of teachers who have told me personally



Tony Attwood

that they do not accept the existence of dyscalculia as a genetic condition.

Additionally, there are some schools which I have visited in which the provision for children with dyscalculia consists of re-teaching the maths from the mainstream lessons in the same way as was taught in the original lessons, only more slowly. My view is that, by and large, this is not very helpful; the solution is not to teach maths more slowly, but rather to teach it in a different way, using the multi-sensory approach.

Overall, I am minded to feel that, while in some schools dyscalculia is recognised and dealt with using the proven multi-sensory method, there is

still a number of schools that respond to dyscalculia in the same way that some schools responded to dyslexia twenty years ago: suggesting that it is a middle class parents excuse for a child's failure (as the headteacher of the primary school attended by one of my daughters told me face to face).

For the child who attends a school that has a full understanding of dyscalculia everything is set fair; as long as there is a teacher available, remedial teaching can be undertaken at once whether or not the child is tested or stated. But for the child attending a school where there is denial of the existence of dyscalculia, or where the approach is to teach a slower version of the same lesson, the child is not going

to be helped, even if there has been some testing undertaken.

My point is that it is quite rare for a psychologist's report, or indeed any testing to prove that the child has dyscalculia, to be beneficial. Of course, there will be some cases where the statement helps the child get better provision, but the (admittedly) anecdotal evidence that I have suggests that this is not the norm.

My approach is to try and find out exactly where the individual's maths problems are by working through a handful of questions designed to find out which elements within the world of maths the child cannot understand. Is it addition, subtraction, multiplication and division, the entire concept of numbers

as a sequence, or perhaps something more complex?

Having found the problem, the solution is to use the multi-sensory method to overcome it, and then to return to the tests to see if any other area of maths gives a problem. The process can be repeated until all the basic maths (up to and including percentages, areas, decimals and fractions) are understood, at which point the child can return to mainstream lessons. In this way the issue of whether the child is dyscalculic, or has simply failed to understand some basic maths earlier on in his/her education, is by-passed. Formal testing is therefore unnecessary, and we move quickly to a solution. **S**

Dyscalculia Tests

For those who continue with the view that it would be helpful to have an insight into whether an individual is dyscalculic, without going to all the trouble of seeking out an educational psychologist, my colleagues have published a simple Quick Test which gives an approximate answer. It is not normed and no official body will take much notice of it, but as a rough and ready guide it can help. You can find such a test on www.dyscalculia.me.uk/testing.html - and then click on Quick Test.

If you want to go further, there is a comparative series of tests intended to be given by teachers to school children so that the teacher can spot any area in which a particular child is having unexpected difficulties. The volume is called **Tests for Dyscalculia** and is also listed at www.dyscalculia.me.uk

Finally, **Dyscalculia Screener** was published in 2004 and is a computer-based assessment for teachers that indicates dyscalculic tendencies by measuring pupils' response times as well as the accuracy of their answers. The tests were devised by Professor Brian Butterworth, professor of cognitive neuropsychology at University College London. Type "*dyscalculia screener*" into Google and you will find it.

Not all educational psychologists undertake tests for dyscalculia, so if you really do want to find one you will have to search for one that meets your needs in your area. **The British Psychological Society** (www.bps.org.uk) has a list of Chartered Psychologists as does the **Association of Educational Psychologists** (www.aep.org.uk).