*Everyone knows – or thinks they know – what dyslexia is. But, says educational consultant **Janice Rolnick**, what about problems with numbers...*

THE TRUTH ABOUT DYSCALCULIA

what every parent (and every teacher) needs to know...

VERY FEW PEOPLE have heard of dyscalculia, and even if they have, often they don't really understand what it means. The sort of comments you might hear are *My child is poor at maths – he has dyscalculia!... Dyscalculia is the same as maths anxiety... Children grow out of dyscalculia... Children with dyscalculia cannot learn mathematics... You cannot test for dyscalculia.* None of this is true.

So what is the truth?

Dyscalculia is a specific learning difficulty for maths, mainly arithmetic. It is characterised by impairments in learning basic arithmetic facts, processing numerical magnitude and performing accurate and fluent calculations – although research is in its infancy, so definitions and diagnoses are not agreed. However, it is accepted that dyscalculia is a developmental neurological difficulty, which is not linked to intelligence, gender or environment. One thing is certain: people with dyscalculia are neither stupid nor lazy.

Dyscalculia may have a genetic link, and is thought to be on a spectrum – as common as dyslexia but much less well researched. About 5% of the population may suffer. It often occurs with other developmental disorders such as dyslexia and ADHD but it shouldn't be assumed that all dyslexics have problems with maths or that all dyscalculics have problems with reading and writing.

To be regarded as dyscalculic, a child is likely to have lower attainments in maths than would be expected without there being any obvious cognitive or environmental cause.

What to look for

The earlier a child is assessed, the sooner he or she can obtain the appropriate instruction and strategies to succeed in school, so it's vital to be able to recognise the signs and symptoms of dyscalculia.

Dyscalculic individuals might copy numbers down in the wrong order, or dial a phone number wrongly every time (and they can't remember even the numbers they use most often). 'I don't understand what fractions or percentages are about,' they say, and 'I can't remember what signs like + and – are called. If someone says divide I can't remember the symbol.' People with dyscalculia will tell you that they find adding up and taking away difficult, that they can't subtract large numbers, that they've never been able to learn their tables and that they don't understand 'odd' and 'even.' They'll confide that even when they use a calculator they can't get the right answer. Numbers with lots of digits confuse them; a sequence of noughts makes no sense. They may find it hard to tell the time ('24 hour clock? What's it all about?') – and have little sense of time, too. Money can be a problem: 'I could never work in a shop,' a dyscalculic will say, 'because I could never work out how much change to give.' When they try to solve a maths problem they forget what they're doing and can't finish it – or know the answer but can't explain how they got there. 'Maths frightens me,' they say, 'and I really don't understand it – when I'm faced with a question to do with numbers I become very upset and anxious...'

How to help

Remember that a child with dyscalculia is likely to be much more successful in other curriculum areas. However, they won't 'catch up' in maths without a structured, repetitive, sequential, cumulative teaching intervention that targets their specific needs. Active multi-sensory learning is more effective than listening. Use of concrete materials that they can see and touch will be far more effective than working in the abstract. And, of course, it will be important to start where the child is secure and move on in small steps.

The how and why of assessment

The only people who can diagnose dyscalculia are Educational Psychologists and Specialist Teachers, with additional qualifications and, preferably, a Practising Certificate from an appropriate body.

It's crucial to intervene early. When children do not understand the nature of their difficulty, they tend to blame themselves. They often end up feeling 'stupid', and may become stressed, anxious and even depressed. Getting a diagnosis helps them understand why they are struggling, that it is not their fault and that they can be helped.

With the right support, strategies and adjustments, dyscalculic people can do well at school and university and have successful and satisfying careers. Having a diagnostic label is a positive thing. It helps define the problems children face and allows for greater understanding – and it means that parents can acquire knowledge, seek help and take the necessary action to improve the situation.

about the author:

Janice Rolnick qualified to teach in 1977, and soon began to work 1-1 with dyslexic children. She has the RSA diploma in Teaching and Assessing Pupils with Specific Learning Difficulties and was awarded a Master of Education degree in Special Educational Needs from the University of Hertfordshire. In 2010 she was awarded the Certificate of Competence in Educational Testing. She holds a Practising Certificate from PATOSS, and has recently undertaken training into assessing for dyscalculia and for carrying out workplace needs assessments. She has been a SENCO in both state and independent schools for the past 20 years, was awarded the status of Advanced Skills Teacher and has wide experience of a range of SEN issues. She carries out dyslexia and dyscalculia assessments, both privately and for the British Dyslexia Association.

Janice offers: advice for parents concerned about their child's learning/behaviour • full diagnostic assessments for dyslexia and dyscalculia • recommendations for strategies for both home and school • advice for schools on how to implement recommendations arising from assessment • help to find a suitably qualified tutor • training for teachers and teaching assistants on dyslexia friendly teaching

www.janicerolnick.co.uk • 07768 875286