



Exploring children's difficulties with language and literacy

Developmental disorders

Narr:

Maggie Snowling and Charles Hulme are both professors of psychology at the University of York, and are the joint authors of *Developmental Disorders of Language, Learning and Cognition*, the core text for Block 3 of ED841.

Charles:

We really wanted to write a text book that conveyed the broad range of developmental disorders of language learning and cognition and try and put them in a context of a unifying theoretical framework which traces mechanisms going from biological factors, particularly genetics, through brain mechanisms to the behaviour that we observe in children with various forms of learning difficulties.

Development is inherently a complicated thing to understand because development above all else involves change so you're really trying to map patterns of changes in children and why certain children show patterns of changes that are somewhat different and probably slower than those shown by typically developing children.

I hope teachers and psychologists, and other practitioners who deal with children with learning difficulties, will take from our book the view that these different forms of learning difficulties are very interesting, complex, but ultimately understandable in terms of a framework which we've tried to outline, which relates underlying predispositions to develop, or fail to develop, in certain ways with a range of environmental factors which impact on children's development, and I think above all else I'd like to hope that practitioners who read our book will get a kind of tool kit for thinking about what's going on in different children's heads in particular circumstances, how they can best understand what's going on in children's minds, and ultimately how they can help some children overcome the difficulties they undoubtedly have in mastering a range of critical educational skills such as learning to communicate, learning to read, learning to do arithmetic, and things of that sort.

Maggie:

Dyslexia is probably the best known of the learning difficulties that affect children, and dyslexia is primarily a difficulty in learning to read and spell, and ultimately in gaining reading and spelling fluency, or reading and writing fluency, and it's a fairly specific learning difficulty which affects the underlying processes that are important for reading acquisition, notably the phonological processes, that is the part of language which is specialised for processing speech. And so if we think about dyslexia it primarily affects written language development and it's characterised by specific language difficulties that affect speech sound processing or, as we call it, phonological processing.

Children with specific language impairment, like children with dyslexia, have specific problems in that their general cognitive ability is within the average range, but they have difficulties in the acquisition of oral language as well as written language, so their difficulties are evident in the pre-school years, many of these children are late talkers, and they go on to have persistent problems with vocabulary and grammar, as well as problems with phonological processing, so given these children tend to have problems with phonological processing they're at risk of difficulties learning to read or dyslexia, but their problem isn't just restricted to phonological processing, and reading, and spelling, it's a more wide ranging language problem that also affects some vocabulary and grammatical development.

Now the profile referred to as the poor comprehender profile, these are children who have specific difficulties with reading and comprehension, and they're quite an unusual group of children. They probably have some form of specific language impairment, but they don't have

the phonological processing difficulties. So they have problems with vocabulary, they have restricted vocabulary, they have problems with grammar and, because of those language difficulties, their comprehension of oral language is constrained, and so is their comprehension of written language. Now the point being because their phonological skills are normal they actually learn to read quite well, by which I mean learn to decode. So from the point of view of reading development, children with poor comprehenders are almost like the opposite side of the coin to dyslexia. They learn to read, to decode print, and to spell normally, but when it comes to understanding what they read they have difficulties, and those difficulties probably can be traced to problems in their vocabulary and grammatical development.

So these three disorders are very closely connected but really they all affect the language system, but they affect it in different ways.