

# New dimensions

**Avril Nicoll**, editor of *Speech & Language Therapy in Practice*, reports on the take home messages from the Child Language Seminar 2011, 13-14 June, at Newcastle University.

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The Child Language Seminar is traditionally a haven for researchers and academics to share and debate their latest thinking. The uncertainty and caveats that are part of the nature and indeed the excitement of research can be off-putting for clinicians who have to make decisions about delivering therapy and then act on them in the 'real' world. In this National Year of Communication, and as part of the ongoing process of negotiating the space between research and practice, the organisers made a conscious decision to aim for a less rarefied event, with more of a clinical focus and participation by therapists.

Over the two packed days, I wondered just how a speech and language therapist could synthesise and translate the swirling mass of evidence, ideas, research methods and theories put before them. Now, with the benefit of distance, it is easier to make sense of it all and to recognise what [Maggie Snowling](#) described as the "take home messages" for therapists in clinical practice.

## Conceptualisation

Maggie was one of several speakers to talk about our changing conceptualisation of diagnoses such as specific language impairment and dyslexia. [Sheena Reilly](#) said it is "no longer appropriate" to talk about a "pure" disorder of language, while Maggie emphasised it is time to look at trajectories rather than categories. In relation to dyslexia, she said it "is a dimension... and what the person ends up with depends on a complex mix of factors." This theme of what [James Law](#)



Conference organisers Helen Stringer and Cristina McKean relax at the end of the event

called "flowing, ebbing groupings" is also reflected in selection of methods. [Liz Pena](#) explained how dynamic assessment uncovers "distributed knowledge" reflecting the "cultural context" of a child, particularly one who is being raised bilingually. In terms of intervention, [Lydia Morgan](#) found through focus groups that nominated experts offer therapy for receptive problems on a continuum, from assistive to impairment based work.

Our developing understanding of normal development and the natural history of speech, language and communication difficulties is largely thanks to the greater availability of longitudinal studies. These don't, however, always tell us what we want to hear. [Sheena Reilly's](#) work in Australia gives lots of food for

thought on early intervention and the way services are structured, as it suggests our ability to predict communication outcomes from risk factors in the early years is at best "modest" because of all the "noise". In other words, you cannot necessarily tell at 2 years old which children will have persisting communication difficulties and which will resolve or change. In addition, because of the pattern of accessing services, our clinical population is likely to be quite different from a community sample. In terms of intervention, the picture is not any clearer, as common sense approaches such as book promotion with children of low socioeconomic status are often simply not effective, even if they are enjoyed by those taking part. In

light of this, it is interesting that the Children's Communication Coalition, which includes the Royal College of Speech & Language Therapists, is calling for the government to "secure early years screening to detect SLCN [speech, language and communication needs]" (Children's Communication Coalition, 2010, p.10). Sheena is clear that surveillance is required instead and, if you choose to do screening, you "have to accept you will miss a lot of kids".

Sheena notes that, while language difficulties are highly prevalent and serious, the natural history is still not well understood, and many children have other developmental and social needs in addition to problems with communication. She says it is difficult to predict outcomes because there seems to be a "strong biological drive" in the first two years, unaffected by social, family and environmental factors.

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Maggie Snowling also mentioned the role of genetic make-up, as dyslexia "has a neurobiological basis" and reading ability is "highly heritable". Although we cannot change susceptibilities of our genes, or "markers of risk" such as poor phonology and language, we know the trajectory of an impairment is moderated by other risk and protective factors in the environment. Maggie is researching different intervention methods to see what might mediate the risk.

While variability adds uncertainty to clinical decision making, Sheena Reilly asks if there is an upside in that it may give us "a wider window for intervention"? Dosage – how much is enough – is another area where therapists may be able to take comfort. Although James Law said this is "quite a new question"



Conference organiser James Law (right) talks to Nick Riches, who argued that the role of long-term memory difficulties has been overshadowed and under-explored due to a preoccupation with short-term and working memory problems

and, as always, "it depends", Maggie Snowling reported that, in a phonological awareness study, effects were diluted beyond 12 weeks and beyond 20 weeks for children with Down's Syndrome. Effects of another study were seen in the year after intervention rather than during it.

Liz Pena gave therapists a further reason to be optimistic about their unique role. Explaining how dynamic assessment using narrative with bilingual children "consistently demonstrates differences between language impaired and typically developing even in the weaker language", she talked about the mediation strategies available to therapists. Interestingly, greater effort by the clinician, such as the extent of scaffolding and repetition offered, is more associated with specific language impairment. Adding clinician effort to the equation "reduces the bias inherent in standardised testing".

Helen Stringer also made a compelling case for assessment that enables accurate identification of children who need therapy, and of what type. Her study showed that you "cannot rely on your clinical judgement, however experienced you are" to distinguish consistent

from inconsistent phonological disorder. Using the 5 minute DEAP (Diagnostic Evaluation of Articulation and Phonology) screening test, she found the specificity (those correctly identified as having a speech disorder and whether the disorder was consistent or inconsistent) was 98.34 per cent, and the sensitivity (those correctly identified as not having a speech disorder) was 100 per cent. The study also showed PCC (percentage consonants correct) is a good measure of improvement for consistent speech disorder while, for the inconsistent type, more in-depth quantitative and qualitative measures are needed until the child's phonology becomes consistent.

### Interesting balance

This interesting balance of moving away from the concept of pure disorders to dimensions while recognising the benefits of differential diagnosis is also being played out in the field of memory impairment, where the relative roles of long-term, short-term and working memory (a trade-off of storage and processing) are debated. Jenny Freed is part of the Manchester team investigating pragmatic language impairment. They used memory tasks devised to

◀ test performance on phonological, linguistic and visuospatial dimensions. For short-term memory, both the specific language impairment and pragmatic language impairment groups were best with visuospatial, followed by phonological, then linguistic memory tasks. However, the pragmatic group was only impaired on the linguistic measures, and the impairment overall of the specific language group was greater. Working memory tests showed the same pattern of best to worst, but this time there was a similar level of impairment for both groups.

Although as a psychologist rather than a speech and language therapist Jenny was reluctant to say too much about any implications for therapy, she did suggest that, where children from either group have significant memory problems, reducing demands on their memory will facilitate learning. For others, memory – particularly visuospatial – will be a relative strength which can help them learn, and they should be made aware of the strategies and why they need to use them.

This fits well with current practice which, as [Lydia Morgan](#) found in her focus groups, considers activity and participation as well as impairment. The expert therapists reported the core components of their therapy for children with receptive language impairment include metacognitive and metalinguistic strategies as well as active pre-teaching and multisensory tasks tailored to the needs of the child. Language unit therapists do the most impairment based work, but it is not clear from this study whether other therapists would do more if they had the time.

[Sue Roulstone](#) also looked more closely at what therapists do, asking them for their 'top 3 interventions' and probing to discover who they use them with and why. This study identified 158 interventions, divided between published approaches, service developed programmes and activities. These included principles or resources which are seen as a way of doing things, for example: "I use Black Sheep Press". If you want to compare your own preferred resources, the top published inter-



(l-r) Sheena Reilly, Lydia Morgan and Sue Roulstone

ventions were the Derbyshire Language Scheme, Makaton, Hanen, Core Vocabulary, Language for Thinking, PECS, Social Stories, Shanks Narrative, Intensive Interaction, Circle of Friends, Colourful Semantics, Socially Speaking, Talkabout, Comic Strip and Metaphon.

### Traditional view

It is interesting that, in spite of a large sample, the majority of participants' clients were aged from 5 to 7 years, were in mainstream and were being seen once a week, most commonly in 6 week blocks. As Sue says, this presents "quite a traditional view" of intervention. Although it was a large sample it was self-selected, and analysis is ongoing.

At a time when the political focus is on outcomes, it is perhaps surprising that only a third of the participants are required to submit outcomes data to their service, and that clinical judgement emerged as the highest measure. Sue is working on the Better Communication Research Programme alongside [James Law](#) who is upbeat that "the emphasis on participatory outcomes will happen". This can't come soon enough for [Anita Franklin](#), a social policy researcher who is looking into decision making and involvement of disabled children in their own care.

In carrying out a literature review Anita has concluded that, although there are good examples from individual care, "we are not learning from that" and "in reality, disabled children – especially those with communication support needs – are not being involved as much as non-disabled children."

Anita believes that a "narrow" view from some professionals about what involving children means is partly responsible for this situation, and she

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is facilitating more creative ventures to develop participation such as training disabled young people as co-researchers. In one of the strands of the Better Communication Research Programme, [Sue Roulstone](#) is also using creative techniques to explore what really matters to parents and young people. This reflects a growing interest in providing services where client and family perception of outcomes is important. ▶

For parents, this included asking them to think back to past achievements and what they valued, what made them laugh and what has stayed in their memory. While communication was central to the emerging themes, it wasn't in itself highlighted. The parents were concerned about social inclusion in terms of friendships and peer groups for their child and independence with skills such as managing money, staying safe and economic wellbeing. They also felt weariness with having to explain and justify their child's needs, and wished other people could understand better.

For children, the researchers focused on the present, asking them what is good, and what they would like to be better about 'now'. Rather than relying on verbal interviews alone with the children, craft and art activities such as a graffiti wall and a collage of the ups and downs of the day proved useful. The big theme for children was humour and having fun, and they at times showed an acute awareness of their difficulties and how other people treat them as a result. As one participant said, "I get chicken jokes, but not jokes about me."

Sue recognises that the people interviewed for this project were activists. At the next stage, the researchers will be going out to groups in the community to check the views gathered so far are representative.

We have the Better Communication Research Programme to thank for recent investment and interest in such research that directly relates to practice. James Law explained the catalyst for some of the choices was when the Department of Education "had questions we couldn't answer". It is likely that from the various strands of the research we will learn more about dosage, the difference between targeted and specialist services and what distinguishes schools that prioritise communication from those who do not. We can also look forward to a user-friendly database that will make more evidence available to therapists, including information from education, and more detail on the cost benefits of speech and language therapy.

As with any conference which includes parallel sessions, I can only report from the ones I attended – and these will inevitably reflect my own biases and preferences. I also feel guilty that, because I find posters so difficult to read and digest, I can't do them justice. The NHS Fife contingent consisted of 7 staff including their consultant speech and language therapist. This gave them an ideal opportunity to cover all the bases and discuss and share decisions about following up what they had heard. The choice of keynote speakers was inspired, and delegates who attend conferences without colleagues might welcome an option to go into facilitated small

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groups to discuss the implications with people from a variety of services and backgrounds.

One delegate told me he really enjoyed the conference because it reminded him why he is a speech and language therapist. It also offered an ideal opportunity to reflect on where we are in terms of our evidence base and to pick up clues about where we might be going. Uncertain it may be, but watching the evolution of speech and language therapy research and the evidence base for interventions is exciting for clinicians as well as researchers. As the joke goes:

*Why did the dinosaur cross the road? Because chickens hadn't evolved yet.*

I'll just get my coat... SLTP

Avril Nicoll (email [avrilnicoll@speechmag.com](mailto:avrilnicoll@speechmag.com)) is editor of *Speech & Language Therapy in Practice*. The organisers of CLS 2011 kindly offered her a complimentary press pass for the event, and associated expenses were self-funded.

## References

- Children's Communication Coalition (2010) *Engaging for their futures and our society – Improving the life chances of children with speech, language and communication needs*. Available at: [www.rcslt.org/about/campaigns/ccr\\_report\\_2010](http://www.rcslt.org/about/campaigns/ccr_report_2010) (Accessed 10 September 2011).
- Holm, A., Dodd, B. & Hua, Z. (2002) *Diagnostic Evaluation of Articulation and Phonology (DEAP)*. Oxford: Pearson.

## Further information

- Better Communication Research Programme, see [www2.warwick.ac.uk/fac/soc/cedar/better/](http://www2.warwick.ac.uk/fac/soc/cedar/better/)
- Child Language Seminar 2011, see [www.ncl.ac.uk/ecls/conferences/CLS2011/](http://www.ncl.ac.uk/ecls/conferences/CLS2011/)
- National Year of Communication, see [www.hello.org.uk](http://www.hello.org.uk)

## Speakers referred to:

- Dr Anita Franklin is senior researcher with The Children's Society.
- Jenny Freed is a research assistant in Manchester on the Social Communication Intervention Project (SCIP).
- James Law is Professor of Speech & Language Sciences at Newcastle University.
- Lydia Morgan is a PhD student and part time research assistant at the Speech & Language Therapy Research Unit in Bristol.
- Elizabeth Pena is a Professor in the Department of Communication Sciences & Disorders at The University of Texas at Austin.
- Sheena Reilly is Professor of Paediatric Speech Pathology at the University of Melbourne and a visiting Professor at University College London.
- Sue Roulstone is the Underwood Trust Professor of Language and Communication Impairment and Director of the Speech & Language Therapy Research Unit in Bristol.
- Professor Maggie Snowling holds a personal Chair in the Department of Psychology at the University of York.
- Dr Helen Stringer is a lecturer and speech and language therapist at Newcastle University.