

Paula McLaughlin

Paula McLaughlin reflects on the benefits of being part of the ESRC International Centre for Language and Communicative Development

The benefits of doing

Over the past few years we have heard from SLTs who are finding many different ways to participate in research. In November, we heard from Jane Johnson, who teamed up with University College London to 'host' Masters projects. In December, Rachel Mathrick and Courtenay Norbury inspired us with their personal reflections on the Literacy Language and Communication (LiLaC) network. In January's Bulletin, Helen Witts outlined the benefits of being involved with a multi-centre research study. What is clear is that the advantages of getting involved are far-reaching. This month, Paula McLaughlin reflects on the impact that getting involved in a large multi-centre research programme has had on her own clinical practice and how

research can influence change in how we do things.

LuCiD participation

Paula is a paediatric SLT currently working as a research assistant at the University of Liverpool as part of the Economic and Social Research Council (ESRC) International Centre for Language and Communicative Development (LuCiD). This is a five-year project based at the universities of Lancaster, Manchester and Liverpool, with collaborators in Europe, Australia and America. The project's aim is to transform the understanding of how children learn to communicate, not only by conducting research on children's early language development, but also by communicating the latest research findings to those who need them.

Paula says: In August 2016, I

was offered a research assistant post within the LuCiD Language 0-5 project. The project is following 80 children from birth to four-and-a-half years, testing many different areas of their language development. This includes assessing their pre-linguistic skills, such as pointing and babbling; eye tracking their responses to novel words; and recording and transcribing them at play with their caregivers in naturalistic settings. The project is particularly interested in looking at individual differences in early language development; in why these might occur; and in their consequence for later development.

Individual differences are often a talking point in practice. In my first week on the project I realised how wide the range of individual differences can actually be. A two-year-old who comes to clinic and is able to understand three key words and use a three key word utterance, such as 'big blue ball', is considered to have appropriate play and pragmatic skills and is likely to be discharged. However, this project has allowed me to see the other end of the 'typically developing' spectrum. In that first week, I had been video-recording a two-year-old at naturalistic play with his mother when I heard him ask, "Why is that going there mummy?"

A few days later, I heard another child produce a perfectly logical response to his mother's 'why' question with the utterance, "Because he's cold". I had not imagined hearing these kinds of utterances until the children were closer to primary school age. This natural variation in the abilities of 'typically developing' children got me thinking about the expectations we have regarding children with language difficulties, and what

we consider to be 'the normal range'.

The bigger picture

Being part of LuCiD has provided me with broader learning opportunities. At the annual LuCiD conference, Professor Dorothy Bishop brought up the issue of how we should treat late talkers. As therapists, we would obviously not refuse treatment to those who may potentially need our input, but Dorothy pointed out that many late talkers will actually catch up with their peers without any therapeutic input.

She posed the question, "Is it



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the most efficient use of our time and resources to be treating children who would get better spontaneously?" She was not suggesting that we stop treating these children immediately, simply that we need to work on developing better ways of

differentiating between late talkers who will catch up without treatment and late talkers who will go on to be diagnosed with language disorder.

The University of Liverpool's Charleen Neumann delivered another interesting talk at the

“Research is deepening our understanding of what language impairment is and how we can identify it earlier”

conference. Charleen was looking at a rich speech corpus from a German-speaking child with specific language impairment (SLI). She found that some of the mistakes this child made were like those made by typically developing two-year-olds, but others were not. She continues to investigate what difficulties in SLI present as significant delays and what difficulties present as differences in children's patterns of language use. Her findings are also being simulated using a computer model called MOSAIC, which substitutes words that the child hears a lot for words that the child hears less often. This sometimes leads to mistakes where the word looks like it is in the wrong place. This kind of mistake has also been reported in other research on children with SLI, such as Larry Leonard's experimental work on English-speaking children (Leonard et al, 2015).

Implications for practice

How can we address the problem of how to identify children who will have persisting needs? I believe the only real answer is to find new and more innovative ways of testing children. Projects like LuCiD are looking at how to do this and raising questions that can expand our knowledge of how language is acquired, which will ultimately help us understand where the breakdowns are and why they are happening. It is important that we as SLTs know the current research being carried out and the different methods used to assess different aspects of children's language learning ability.

From a therapist's perspective, it is fascinating to look at language from so many different angles, including examining different languages, analysing corpus data and using

computer models to understand the results.

Since dipping my toe in the research world, I have realised that projects like LuCiD are very exciting for the world of therapy. Research is continually increasing our understanding of how language is acquired from the very early pre-linguistic stages to developing understanding of complex sentences in readiness for school. It is also deepening our understanding of what language impairment is and how we can identify it earlier.

It is important to remember that when we talk about evidence-based practice this should not only mean making sure that there is good evidence for the interventions that we use, but also keeping up to date with the latest advances in understanding how language is learned. Since joining LuCiD, I have become more and more convinced that as therapists we need to get more involved in the world of research. The more we are involved, the easier it will be to keep abreast of the latest advances but also the more we will be able to talk to researchers about the kind of work we would like to see happening in the future. ■

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Find out more about the **ESRC International Centre for Language and Communicative Development (LuCiD)**. Visit: www.lucid.ac.uk



References & resources

Leonard LB, Fey ME, Deevy P, Bredin-Oja SL. Input sources of third person singular -s inconsistency in children with and without specific language impairment. *Journal of Child Language* 2015; 42:4, 786-820.