Hear the Word

Professor Denis Burnham from the MARCS Institute and Dr Usha Goswani from the University of Cambridge, UK, are exploring the acquisition of reading skills in children with dyslexia. This research is funded by the Australian Research Council Discovery Projects grant scheme.

‘A child in a room full of language speakers will learn to speak without explicit instructions, but a child in a room full of books will not learn to read unless taught,’ says Professor Burnham. ‘Reading is one of the most difficult skills we learn, and while the process is largely forgotten by adults, any minor difficulty can have lasting adverse effects. Previous research has focussed on what happens in an infant’s brain when learning language, but similar studies on what happens when learning literacy has been scant. There is evidence for a common sound-related mechanism for both speech perception in infancy and for literacy in childhood. In this study, we will follow children from 6 months old to 5 years to investigate the perceptual and cognitive precursors of literacy skills.’

The research team will use state-of-the-art facilities at the MARCS Baby Lab to observe and test the development of infant speech, parental input to speech, and language and reading abilities in two groups of infants: one at-risk of developing dyslexia, by virtue of having a dyslexic parent, the other not at-risk.

Learning to read gives every child the ability to reach their full potential and enrich their life through absorbing as much of the rich history and diversity of human endeavour encompassed in the written word as they wish. An understanding of how we do this, and how individual differences in speech perception may affect later reading ability is crucial to enabling all children, no matter what their ability, to become literate in a world dominated by the written word in print and electronic form.

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