

Research Snapshot

Summarising findings and their implications



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The impacts of stuttering

Stuttering is a well-known communication difficulty characterised by interruptions to speech. It can involve repeating sounds or words, prolonging sounds, 'blocks' or trouble making any sounds, as well as non-verbal signs of tension such as blinking or grimacing. A child who stutters may feel that their words 'get stuck'.

Stuttering usually starts in the preschool years. Stuttering that persists into adolescence or adulthood has been shown to affect psychological health through social phobias, educational underachievement and reduced social wellbeing.

Despite its relatively high profile, we don't really know:

- why or how stuttering develops
- why it sometimes resolves on its own
- which children will recover naturally.

Aims

Although previous studies have been useful in identifying when stuttering often starts, they only looked at children who stuttered from 3 years, toddlers who had been clinically diagnosed with a stutter and/or whose parents had sought professional help for the child's stutter – not all children of a certain age.

The stuttering part of the Early Language in Victoria Study (ELVS) aimed to expand our understanding of stuttering and considered:

- how many children start stuttering by 4 years of age
- what factors predict stuttering onset by 4 years
- how many children recover naturally within a year of starting to stutter
- which factors may predict stuttering recovery.

Key findings

The study monitored the speech of 1619 children from 2 to 4 years of age using a combination of monthly and annual language assessments and parent surveys.

Psychosocial health and language skills of stuttering and nonstuttering 4 year olds

	levels of shyness or withdrawal	social-emotional behaviour	language and non-verbal cognitive skills
stuttering children	SAME	SAME	BETTER
non-stuttering children	SAME	SAME	LOWER

In terms of incidence and onset, we found that stuttering:

- affected as many as 11 per cent of children under 4
- typically started between 2 and 3 years of age
- usually developed quite quickly (over one to three days)
- usually started when children began combining words.

In terms of predictive factors, we found that:

- Stuttering was more likely where a child was male, a twin, or had a mother who had a higher level of education.
- Recovery within 12 months of onset was more likely where a child was male; their stuttering at onset was milder or didn't involve the repetition of whole words.

As few as 6 per cent of children recovered from stuttering within 12 months of starting.

The most surprising finding however, was that 4 year olds who stuttered fared just as well as, if not better than, their nonstuttering peers.

We found that children who stuttered:

- had stronger language and non-verbal cognitive skills
- were not more shy or withdrawn prior to or after stuttering onset
- did not seem to experience any of the anticipated negative social, behavioural and emotional effects.

Partners



“It may be necessary to re-examine when it is best to refer a child for stuttering therapy.”



Implications

For policy and practice

Health and education professionals can reassure families that preschool stuttering doesn't necessarily threaten a child's health or education outcomes.

Despite their clear speech difficulty, the stuttering toddlers in this study had stronger language and nonverbal cognitive skills, as well as better psychosocial development, compared to their nonstuttering peers. They were also not more shy or withdrawn. This challenges long-held beliefs about the impact of stuttering. However, this may only be true of preschoolers. Children whose stutter persists into primary school (or beyond) may find it more debilitating.

It may be necessary to re-examine when it is best for a child to commence stuttering therapy.

It had previously been thought that most children who stop stuttering on their own do so within 12 months of starting. On this basis, the recommendation has been that therapy is warranted once a child had been stuttering for 12 months – unless they are distressed, unwilling to communicate or their parents are highly concerned, in which case stuttering therapy should start sooner.

This study shows that very few children recover within 12 months. Delaying therapy might enable more stuttering children to recover naturally. Although further research is warranted, this could save families from enrolling their child in potentially expensive therapy, as well as assist medical professionals and governments to allocate limited resources to those children most at risk of having a persistent stutter.

Stuttering is twice as common as previously thought and should be monitored.

More than 11 per cent of children in our study started stuttering by 4 years of age. Previously, the generally accepted rate was approximately 5 per cent. It's unlikely that stuttering rates have increased between studies and more likely that this study simply provides a more accurate picture of incidence due to the representativeness of its sample and the earlier recruitment of children. Nevertheless, the fact that stuttering affects more than one in 10 preschoolers suggests that, while not a cause for automatic concern, children who begin stuttering should be assessed by a speech pathologist to determine their individual need for treatment.

For research

There is value in identifying the factors associated with the natural resolution of stuttering.

In the same way that information about the average recovery time will enable us to allocate resources efficiently, identifying the factors that increase the likelihood that a stuttering child will recover naturally will also enable us to ensure that those children with the greatest needs are prioritised for services.

Study details

In 2003, maternal and child health nurses invited families to join the Early Language in Victoria Study (ELVS) when families brought their child for a routine well-child check at 8 months of age. Around 80 per cent of Victorian babies attend this check and nurses were able to recruit 1,910 children. Children were recruited from six local government areas in metropolitan Melbourne that represent a mix of socioeconomic status. Parents completed a survey about family demographics and their child's language and speech development, each year for eight years.

When the children turned 2, 1,619 families agreed to participate in the stuttering component of ELVS. These families were asked to contact the research team if their child started to exhibit stuttering behaviours. A speech pathologist then interviewed the parents who made contact, confirming that 181 children had a stutter. The speech pathologist then visited the homes of these 181 stuttering children once a month for a year. At each visit, a sample of the child's speech was recorded and the parent(s) completed a stuttering questionnaire.

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About us

The Centre of Research Excellence in Child Language is a collaboration of child language experts. It uses the latest approaches in molecular genetics, neuro-imaging, epidemiology, biostatistics and health economics to investigate factors that affect and improve child language and development.

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Centre of Research Excellence in Child Language
Murdoch Childrens Research Institute
50 Flemington Road, Parkville VIC 3052 Australia
info.CRE@mcri.edu.au
www.mcri.edu.au/CREchildlanguage