

Research Snapshot

Summarising findings and their implications



NUMBER 6 APRIL 2015

Stuttering and anxiety

We know that adolescents and adults who stutter are typically more anxious than their nonstuttering peers. There is also a perception that people who stutter do so because they are shy or nervous. But is this true? Does an anxious disposition trigger the development of stuttering, or is anxiety a by-product of stuttering? By better understanding the relationship between stuttering and anxiety, we may be able to identify if and when children who stutter are placed at greater risk of developing anxiety.

The combination of your genes, temperament and the environment you grow up in all affect your risk of developing anxiety. Temperament refers to your innate personality and is the way a person reacts to and interacts with their environment, for example how children manage new experiences. Children who have an anxious personality are shy and 'behaviourally inhibited'. This means they are reluctant to explore and tend to avoid new experiences. Anxious children are also described as having a 'difficult' personality where they are nervous, tense, worried, not as happy as other children and/or have difficulty enjoying themselves.

To date there has been limited research exploring the relationship between personality, anxiety and stuttering in children.

Aims

The stuttering component of the Early Language in Victoria Study (ELVS) aimed to determine if there were differences in personality between stuttering and nonstuttering preschoolers, particularly those personality characteristics considered to be risk factors for the later development of anxiety.

Unlike previous studies, ELVS measured temperament characteristics prior to the onset of stuttering as well as over time. The study also involved a more community representative sample of toddlers.

Personality traits of stuttering and nonstuttering 2 to 4 years olds

	overall personality traits	personality traits associated with anxiety
stuttering children	SAME	SAME
non-stuttering children	SAME	SAME

Key findings

This study used parent surveys to annually monitor the personality characteristics of 1,444 stuttering and nonstuttering 2 to 4 year olds.

It found that:

- There were no consistent differences in personality between stuttering and nonstuttering preschoolers after stuttering onset.
- Stuttering preschoolers did not show more of the personality characteristics associated with anxiety.

Implications

For policy and practice

Health professionals can reassure families that stuttering is not related to having particular temperament traits.

The stuttering preschoolers in this study displayed similar personality characteristics to their nonstuttering peers both before and after they started to stutter. This finding challenges the common misconception that people who stutter do so because they are shy or nervous. These findings also support current treatment approaches for the preschool population which focus on reducing stuttering unlike treatment approaches for adolescents and adults which also address any secondary mental health issues.

Partners



“Health professionals can reassure families that stuttering is not related to having particular temperament traits.”



Stuttering alone in a preschooler is not a risk factor for developing anxiety.

The stuttering preschoolers in this study did not display any personality characteristics associated with anxiety. This suggests that the clinical anxiety experienced by some adolescents and adults who stutter develops after the preschool years. Given that personality can be influenced by our experiences, the anxiety seen in adolescents and adults who stutter are most likely in response to repeated exposure to negative social experiences, perhaps during the school years.

Health professionals must still consider individual cases.

This study recruited preschoolers from the general population. This means that while on average we can make recommendations, health professionals need to assess each stuttering preschooler as they present, mindful that some may indeed be negatively affected by their stuttering.

For research

It is important to identify when and which children who stutter will develop anxiety.

We know that anxiety can be debilitating for some adolescents and adults who stutter – even though it does not appear to affect stuttering preschoolers. Identifying the age at which anxiety typically emerges in stuttering children might enable us to develop anxiety prevention strategies and time the delivery of them to be the most effective and cost-efficient. In the same way, research identifying which stuttering children or adolescents have the greatest risk of developing anxiety may enable prevention efforts and limited resources to be directed to those who need them most.

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 parents of the 1,619 children in the study completed the Short Temperament Scale (STS) survey each year around their child’s birthday. As autism and low language levels are associated with particular personality characteristics, 175 children with these conditions were excluded from this particular study. The current study’s findings are therefore based on 1,444 families.

Suggested citation

Kefalianos, E. (2015) Stuttering and anxiety, Centre of Research Excellence in Child Language, Research Snapshot 6.

Published article details

Kefalianos E., Onslow M., Block S., Menzies R., Reilly S. (2012). Early stuttering, temperament and anxiety: Two hypotheses. *Journal of Fluency Disorders*, 37(3), 151-163.

Kefalianos E., Onslow M., Ukoumunne O., Block S., Reilly S. (2014) Stuttering, temperament and anxiety: Data from a community cohort aged 2-4 years. *Journal of Speech, Language and Hearing Research*, 57, 1314-1322.

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.

The Centre is funded by the National Health and Medical Research Council.

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