

Child characteristics related to improvement in language performance of children with DLD of 4-6 years

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Introduction

There is a paucity of information on the effects of special education provisions on the language skills of children with DLD. Specifically, it is unclear

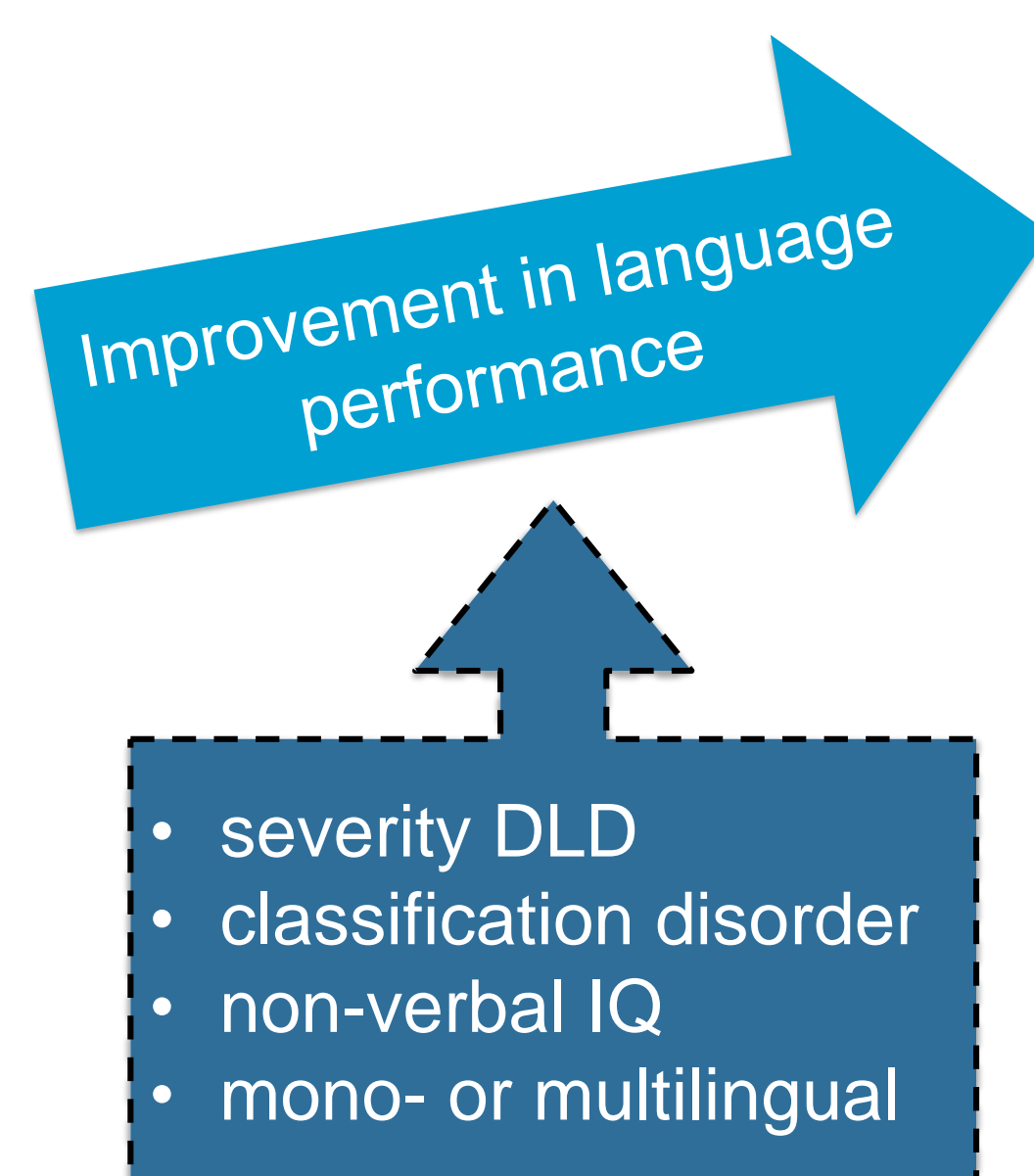
1. if (and how) school-based intervention impacts various language domains
2. to what extent child characteristics modulate outcomes

Method

We traced the trajectory of 154 children with DLD at 18 schools for special education that provide systematic language-oriented interventions.

Mean age 4;10 at the start of the study; range 3;11 – 5;7 yrs

T0 = start schoolyear T1 = end schoolyear



Children with DLD in special education show improvement in language performance.

No differences in improvement between:

- Children with receptive-expressive disorders and expressive disorders
- Children with low or high IQs
- Mono- or multilingual children

Intervention is important for all children with DLD.

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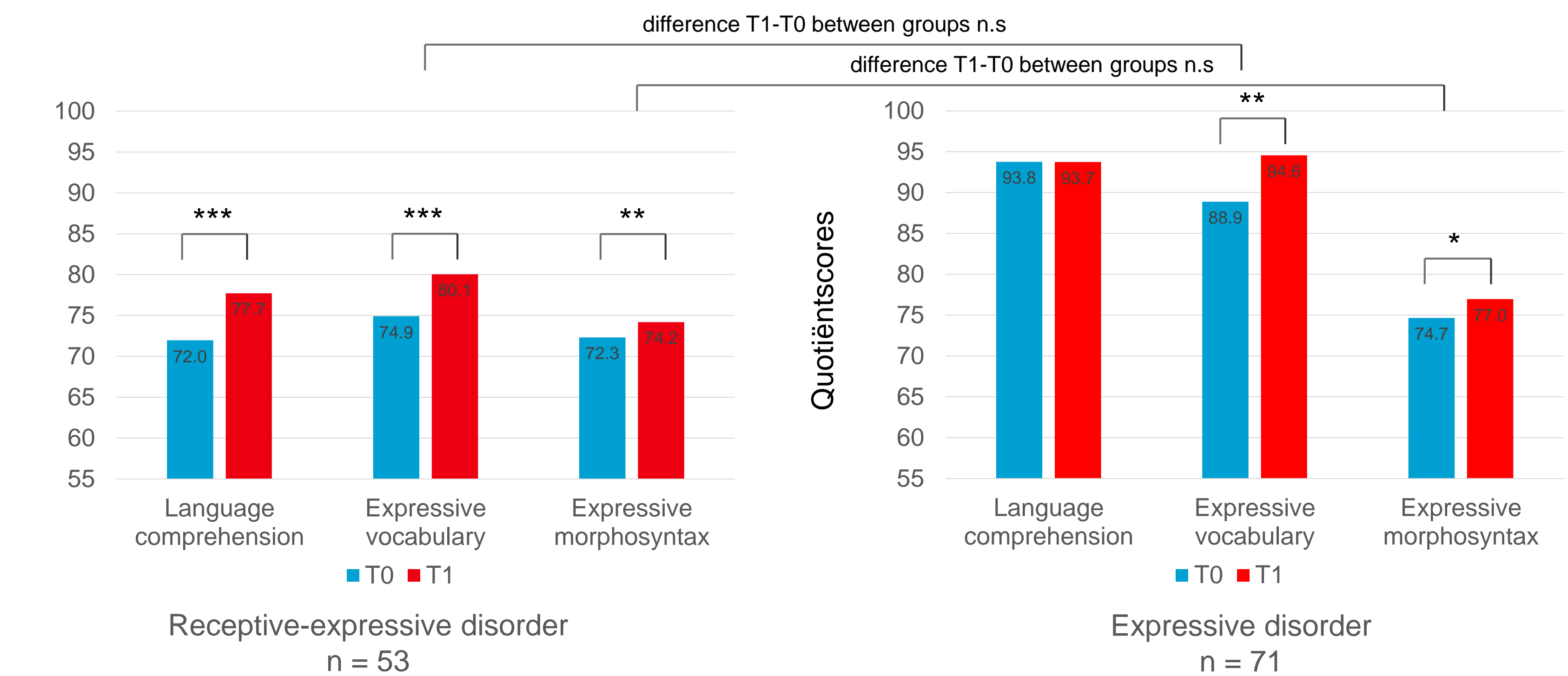
Research Group Speech and Language Therapy

The primary aim of the research group Speech and Language Therapy of HU University of Applied Sciences Utrecht is to improve the efficacy of prevention and treatment of communication disorders in children and adults. The research group partners with Utrecht Institute of Linguistics UIL OTS and the Royal Auris Group. One of the aims of UIL OTS is to transfer its scientific expertise on processing, development and disorders of language and speech to clinical practice. The Royal Auris Group is a professional partner for people who need support with hearing, speech or language.

Gerda Bruinsma: no conflicts of interest
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Frank Wijnen: no conflicts of interest

Results

Scores on standardized tests for different language domains of children with receptive-expressive disorders and expressive disorders



* p < 0.05; ** p < 0.01; *** p < 0.001

Correlations of improvement (difference scores between T0 and T1) with non-verbal IQ and severity of the disorder (scores at T0)

		LC T1-T0	EV T1-T0	EM T1-T0
Nonverbal IQ	Pearson Correlation	0.042	0.058	0.061
	N	126	130	127
LC T0	Pearson Correlation	-.317***	0.055	0.035
	N	130	128	126
EV T0	Pearson Correlation	0.094	-.420***	0.002
	N	129	134	130
EM T0	Pearson Correlation	0.087	-0.098	-.446***
	N	127	130	131

LC = language comprehension; EV = expressive vocabulary; EM = expressive morphosyntax
*** p < 0.001

Quotient scores on T0 and improvement of mono- and multilingual children

	N	M LC T0 (SD)	M EV T0 (SD)	M EM T0 (SD)
Monolingual	109	83.7*** (12.73)	85.5*** (14.66)	74.29 (7.62)
Multilingual	32	72.5 (12.46)	68.5 (14.00)	71.78 (5.35)

	N	M LC T1-T0 (SD)	M EV T1-T0 (SD)	M EM T1-T0 (SD)
Monolingual	97	3.3 (9.53)	4.1 (11.96)	1.99 (5.78)
Multilingual	30	4.3 (9.55)	7.7 (11.20)	2.87 (6.46)