LANGUAGE ACQUISITION OVER TIME FOR TYPICALLY DEVELOPING CHILDREN AND CHILDREN WITH DEVELOPMENTAL LANGUAGE DISORDER

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ABSTRACT

- This research aimed to determine if there is a shift in language dominance for TD children and children with DLD from Kindergarten to grade three, and if so, which language domains are most affected.
- Previously collected data from bilingual TD children and bilingual children with DLD was analyzed.
- The language domains examined were; oral language (receptive and expressive), information processing and written language (receptive and expressive).
- Overall, children obtained higher scores in the English language overtime with a shift occurring mostly between first and third grade. Children with DLD appeared to be more heavily impacted by the majority language.

INTRODUCTION

- French is a minority language in most parts of Canada. That being said, it is not uncommon to find English, the majority language, circulating in French schools. Gauthier and Cormier (2017) discussed how 50% of the students eligible to enroll in French schools in a minority context do not have French as their mother tongue.
- An unknown factor is how greatly the majority language influences the minority language learners in French Canadian schools outside of Quebec. Studies have shown that the acquisition of a minority language is more difficult than that of the majority language (Gathercole, 2014).
- These difficulties can be even more prominent in children with a developmental language disorder (DLD) compared to typically developing (TD) bilingual children. This is because children with DLD must overcome difficulties related to their minority context on top of learning strategies to overcome their language difficulties.
- Knowing if, when and where a shift in language dominance may happen can increase our ability to help children through their minority language acquisition.

OBJECTIFS

The objectives of this study were to determine if:

1) The majority context (English) creates a shift in language dominance in TD bilingual (French-English) children and bilingual (French-English) children with DLD from kindergarten to grade three in French-language schools in Northern Ontario.

2) The language domains that are the most affected by the language shift, where applicable.

METHODOLOGY

- This study used data from a previously conducted study (Mayer-Crittenden, in process).
- A total of 30 children were assessed: fifteen were TD and fifteen had a diagnosis of DLD.
- All children are from French-medium schools in an English language dominant area (Ontario, Canada).
- The children were assessed in both English and French at three time points: kindergarten, first grade and third grade in order to determine if there was a shift in language dominance.
- The assessments measured receptive & expressive oral language, information processing, and receptive & expressive written language.

Characteristics of the participants

	n	Age FA[a] M (SD)	Age SA[a] M (SD)	Age TA[a] M (SD)	IQ M (SD)	Gender Boy	Gender Girl	SES[b] M (SD)	French Exposure[c] M (SD)	English Exposure[c] M (SD)
TD FE	9	67.25 (1.90)	81.75 (2.91)	106.50 (1.06)	102.38 (6.80)	5	4	3.50 (0.75)	4.13 (1.57)	1.18 (0.34)
DLD FE	8	65.86 (5.55)	80.28 (7.29)	104.00 (4.39)	103.57 (7.16)	4	4	2.86 (0.69)	3.45 (2.28)	2.66 (2.01)
TD EF	6	64.57 (3.40)	77.42 (3.04)	102.57 (2.22)	106.57 (6.75)	2	4	3.57 (0.97)	1.87 (0.59)	3.74 (0.79)
DLD EF	7	63.88 (6.89)	77.83 (6.36)	102.86 (5.24)	104.25 (6.11)	3	4	3.43 (1.13)	2.76 (2.07)	3.34 (1.52)

Note. TD = Typically Developing; DLD = Developmental Language Disorder; FE = French-English; EF = English-French.

[a] Age is demonstrated in months. FA = First Assessment; SA = Second Assessment; TA = Third Assessment.

[b] Socioeconomic status was calculated by maternal education levels using a Likert Scale: 1 = 1-8 years of education; 2 = 8-13 years of education; 3 = 13-15 years of education; 4 = 15-17 years of education; 5 = 17 years or more of education.

[c] Exposure to French\English was calculated using a Likert Scale: 1 = 0-5 hours per week; 2 = 6-10 hours per week; 3 = 11-15 hours per week; 4 = 16-20 hours per week; 5 = 21-25 hours per week; 6 = 26-30 hours per week; 7 = 31-35 hours per week; 8 = 40 hours per week.

RESULTS

Results of descriptive statistics for French-dominant vs English-dominant participants

Note. TD = Typically Developing; DLD = Developmental Language Disorder; FE = French-English; EF = English-French; MAVA exp. = Montgomery Assessment of Vocabulary, expressive vocabulary test; MAVA rec. = Montgomery Assessment of Vocabulary, receptive vocabulary test; CELF-5 = Clinical Evaluation of the Fundamental Notions of Language; ÉVIP = Échelle de Vocabulaire en Images Peabody; CDN-F = Clinical Evaluation of the Fundamental Notions of Language; TILLS = Test of Integrated Language & Literacy Skills; TWS-5 = Test of Written Spelling-Fifth Edition.

* scores are between 1 and 2 standard deviations from the published mean
** scores are between 2 and 3 standard deviations from the published mean
*** scores are more than 3 standard deviations from the published mean

CONCLUSION

- The English majority context impacts the expressive vocabulary of bilingual children.
- English expressive vocabulary demonstrated an increased or remained the same for the majority of groups. French expressive vocabulary demonstrated a decrease in standard scores between first and third grade.
- English receptive language mostly stayed the same or increased. Surprisingly, TD EF group decreased (possibly due to energy being spent on learning French at that time). French receptive language mostly stayed the same or decreased. Only the TD FE group increased.
- Performance in English information processing was better than French information processing throughout the years.
- Morphosyntax scores varied. Most groups had lower scores in both language in the third grade.
- Reading in French demonstrated varied tendencies. TD EF group had either similar scores or outperformed TD FE group. Reading in English demonstrated varied results.
- Writing in French showed relatively low scores overall. The TD FE group outperforming the TD EF group (FE might have an advantage regarding encoding). The TD EF group performed better than the TD FE group regarding writing in English. The TD FE group did better on nonword spelling, suggesting they may perform better on encoding tasks.
- Children with DLD generally demonstrated lower scores compared to their TD peers.
- To conclude, a shift in language dominance was observed in expressive vocabulary and information processing.
  - Further research should be done to analyze if the same results are reproduced with a larger sample size.

REFERENCES