

**ORAL LANGUAGE DEVELOPMENT IN
FRENCH AND ENGLISH AND THE ROLE OF
HOME INPUT FACTORS**

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EXECUTIVE SUMMARY

The purpose of this research was to examine the oral language abilities in French and English of francophone children in the minority context in the elementary school years. More specifically, the children's performance on tests of vocabulary and grammar in both languages were compared with those of monolinguals, and analysed in terms of the influence of home language use and parental education levels.

Eighty-one children in grades 1 and grade 6 from two schools, Sainte-Jeanne-d'Arc and Gabrielle-Roy, participated in the study. The majority of children came from families where mainly French or both French and English were spoken equally at home. A minority of children came from homes where mainly English was used.

Children who spoke French and English equally at home performed on the tests of vocabulary and grammar like monolinguals their own age in each language, at grade 1 and grade 6. Children who spoke mainly French or mainly English at home performed like their monolingual peers in that language, at grade 1 and grade 6; however they lagged behind monolinguals in the language not spoken much at home, in grade 1 in particular. All home language effects diminished, but did not disappear, by grade 6. Children of mothers with university education had bigger vocabularies in French and English, and this was the case regardless of which language the mother spoke most often with the children.

The results of this study have implications for the following domains: (1) special education assessments and programming, especially when based on language and literacy; (2) special support for oral French development in the elementary school years, and (3) advice to parents about the use of French and English at home.

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1. INTRODUCTION TO THE RESEARCH

1.1 Background

An influential book published in 2002, *Language and Literacy in Bilingual Children* (authors: K.D. Oller & R. Eilers), documented Spanish-English bilingual children's performance on tests of oral language and literacy skills at grades 2 and 5 in bilingual and English immersion elementary schools in Miami, USA. The researchers compared bilingual children's performance with that of monolingual English-speaking and monolingual Spanish-speaking children the same age. The researchers also looked at the impact of home input factors on children's performance on these measures: languages spoken in the home and parental levels of education. Oral language measures were of tests of vocabulary size, knowledge of grammatical rules, and accurate use of grammar in speech. The major findings of the Miami study were:

- Bilingual children had lower scores than monolingual children in both languages for most tests, even in grade 5.
- Bilingual children performed better on tests in one language when that language was spoken more at home.
- Bilingual children of parents with higher levels of education had higher scores on the tests.

Our research team wanted to duplicate this study with bilingual francophone children in the minority context. We thought that the delays shown by the bilinguals in Miami might be due mainly to socio-cultural factors, and not because children in general are not able to become proficient bilinguals, i.e., similar to monolinguals in both languages, at an early age. Like French in Canada, Spanish in the United States is spoken widely, although a minority language in the country as a whole. But this is where the similarities between these two socio-cultural contexts end. Spanish is not an official language of the United States, and even though bilingual education is available in Miami, Spanish-speaking children do not have a legal right to receive Spanish language education in the United States. The Spanish-speaking community in Miami also has "shallow immigration depth". This means that most Spanish speakers are first and second generation immigrants. This contrasts with the status of the French language and the history of French-speaking communities in Canada. Accordingly, we predicted that children could develop oral bilingual proficiency earlier in a more positive socio-cultural context for bilingual development, like the minority francophone context in Canada.

Our research team also wanted to understand the role of home language and parental education in children's development of French and English oral language abilities. In this case, we predicted that both these factors would impact children's development in similar ways to those found in the study from Miami.

THE RESEARCH TEAM

This study at the CSCN schools was part of a larger research project conducted by *Johanne Paradis* (University of Alberta), *Martha Crago* (Université de Montréal/Dalhousie University), and *Fred Genesee* (McGill University).

The bilingual children were tested in Edmonton by Johanne Paradis, Department of Linguistics at the University of Alberta. Research assistants were *Dorothy Pawlina-Pinto*, *Tamara Sorenson-Duncan*, and *Antoine Tremblay*.

The monolingual francophone children were tested in Montréal by Martha Crago, l'Ecole d'orthophonie et d'audiologie, Université de Montréal. Research assistants were *Carole Bélanger* and *Andréanne Gagné*.

1.2 Significance

Because most francophone children in the minority context are bilingual, or in the process of becoming bilingual, understanding their dual language development over time, and the factors that influence it, is important for considering their performance on government-mandated tests of academic achievement and for tests used in psychological, reading, and speech-language assessments. Performance on these tests is usually benchmarked to the performance of monolingual or “mono-literate” children. If bilingual children show unique performance profiles for these tests, this is important to know in order to avoid misidentification of language and learning disabilities, and inappropriate placements in special education. It is important to note that even if tests are not designed to measure language abilities themselves, they are measuring other abilities through the medium of language most of the time, and therefore, if bilingual children are different from their monolingual peers, this information is necessary for reliable interpretation of test scores. Beyond appropriate assessments, understanding the unique profiles of bilinguals is relevant to planning effective special education programming for those appropriately identified.

The influence of home input factors like language use and parental education levels, and how long their influence extends in the elementary school years, is also important for the implementation of special support for French in the minority context, e.g., “*francisation*” programming. The results of this research are relevant to considerations of who might be most in need of such programming, and when it should be made available.

The results of this research also have significance for giving advice to parents about language use in the home. Parents often ask whether the use of two languages is the home promotes optimal language development in children. In most cases, these are “*les familles exogames*”, where spouses have different native languages. Parents also often ask about what the optimal age is for the

introduction of English, given that French is a minority language in Edmonton. The results of this study provide evidence that addresses these questions.

1.3 Research Questions

1. *Does early bilingualism cause children to lag behind in their oral language compared to monolinguals?*
 - How long is the road to becoming a proficient bilingual?
 - Does bilingualism have the same impact on French and English development in the minority context?
2. *What is the role of home language use on children's development of French and English?*
 - What is the impact of using both French and English versus mainly French at home?
 - What is the impact of using mainly English at home?
3. *What is the role of other home input factors, like parental education, on children's development of French and English?*

WHY DOES PARENTAL EDUCATION MATTER?

It is obvious to most people why home language use would have an impact on children's development of French and English, but it is less obvious why parental education would. Much research with monolingual children has shown that children of parents with higher education levels, mothers in particular, show superior vocabulary and grammatical abilities even before they enter school. Researchers believe that this effect comes from the interaction style and language use of parents with their children. Parents with higher education speak to their children more, ask more questions that encourage the children to tell stories or give explanations, use more diverse vocabulary and grammatical structures. It is thought that this creates a richer language environment for the child in the home. This positive effect of parental education should be present regardless of whether one or two languages are used in the home.

2. OVERVIEW OF THE STUDY

2.1 Participants

- Gabrielle-Roy and Sainte-Jeanne-d'Arc schools in Edmonton
- 55 children in grade 1 and 26 children in grade 6
- 20 monolingual Francophone children in grade 1 from schools in Montréal
- Edmonton families spoke mainly French, mainly English, or both languages at home

2.2 Measures

- Parental questionnaire
- Échelle de vocabulaire en images Peabody (ÉVIP) – French receptive vocabulary
- Peabody Picture Vocabulary Test (PPVT) – English receptive vocabulary
- Experimenter-made tests for French grammar
- Test of Early Grammatical Impairment (TEGI) – English grammar

FOR YOUR INFORMATION

More details about families and schools are given in section 3. More details about the tests are given in sections 4 to 7.

For this study, only children who spoke French, English, or both at home were studied. Therefore, the results of this study do not inform our understanding of allophone children's development of French and English.

Monolingual anglophone children were not needed for this study. The English tests used are standardized tests, and so bilingual children's scores could be compared to the normative scores for monolingual children their age.

3. DESCRIPTION OF PARTICIPATING FAMILIES AND CLASSROOMS

3.1 Parents' first languages

We obtained this information from the parent questionnaire, given in person or over the phone. Table 1 shows the distribution of first languages among participating families (first language = L1; bilingual L1 = both languages from birth). The two largest groups are (1) families where both parents had French as their first language, and (2) families where one parent's first language was French and the other's was English. In a small number of families, one parent had a third language as their first language, but if they reported early fluency in English or French, they were included as having English or French as a first language. Over 90% of parents reported speaking their first language(s) with their children. Thus, most children in the study were not regularly exposed to second language English or French at home.

PARENTS	NUMBER
Both L1 French	29
L1 French and bilingual L1	7
Both L1 English	6
L1 English and bilingual L1	7
Both bilingual L1	3
L1 French and L1 English	30

Table 1. Distribution of first language backgrounds among parents

3.2 Languages spoken at home

Based on the answers to several questions, we categorized the child's home language environment into (1) mainly French at home; (2) mainly English at home, and (3) both French and English at home. Table 2 shows the distribution across families. Most children in the study experienced either "mainly French" or "French and English" at home.

LANGUAGE AT HOME	NUMBER OF CHILDREN
Mainly French	32
French and English	33
Mainly English	16

Table 2. Home language environments of the children

3.3 Parental education levels

Parental education levels were divided into three categories: (1) secondary school diploma, (2) community college or CEGEP diploma, or (3) university degree. The distribution of education levels for mothers and fathers are given in Figure 1. Figure 1 shows that this study includes a large number of university educated parents. Figure 1 also shows that there is no great difference in the distribution of levels of education between mothers and fathers in the group as a whole. Within families, parents tend to have similar levels of education.

For the analyses in sections 4-7, mother's education is used because it is a stronger predictor of children's language development than father's education. Also, secondary education and CEGEP/college are grouped together for the analyses because the only significant differences were between children of parents with and without university level education.

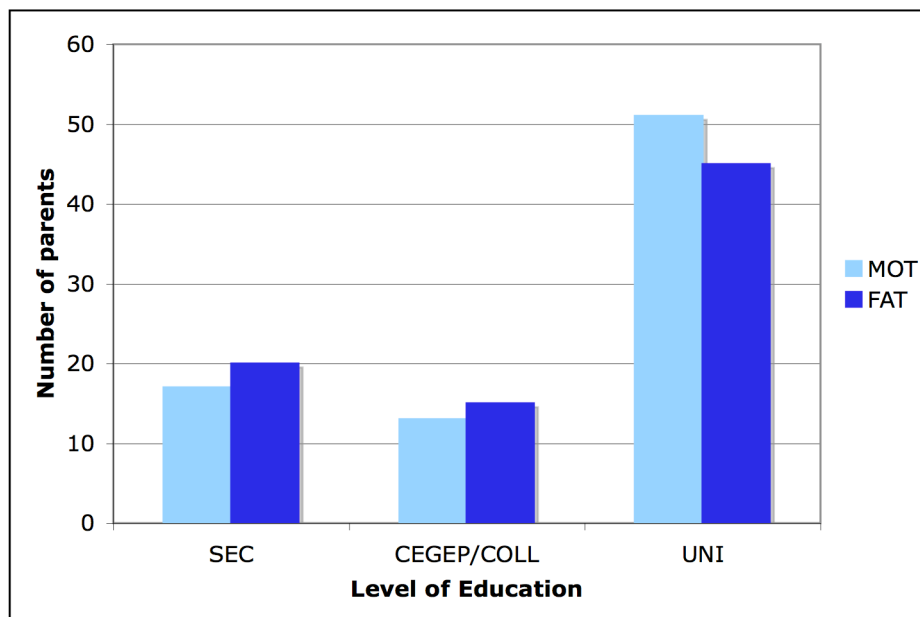


Figure 1. Distribution of education levels among parents

RELATIONSHIP BETWEEN LANGUAGE AT HOME AND PARENTAL EDUCATION

Correlational analyses showed that language at home and level of education of mothers and fathers is not related. In other words, it is not the case that more highly educated parents tend to be more francophone, or vice versa. This means that the influence of these two home input factors on children's development can be analysed separately.

3.4 Classrooms

Children from grade 1 and grade 6 classrooms at two schools, Gabrielle-Roy and Sainte-Jeanne-d'Arc, participated in the study. Questionnaires given to the teachers yielded the following information:

- Teachers at Sainte-Jeanne-d'Arc reported having more franco-dominant than anglo-dominant and allophone children in their classrooms, but teachers from Gabrielle-Roy reported having franco-dominant and allophone children fairly equally in their classrooms.
 - *This means that the children in this study from Gabrielle-Roy have more culturally and linguistically diverse classmates than the children from Sainte- Jeanne-d'Arc.*
- Most teachers reported that they “sometimes” or “regularly” corrected pronunciation and grammatical errors in children’s speech and writing. Teachers also reported that they “sometimes” teach rules of grammar explicitly. Teachers in grade 6 reported doing this more often than teachers in grade 1.
 - *This means that the children in this study have their attention focused on the correct form of the French language some of the time.*
- All teachers in both grades reported they “sometimes” or “regularly” “strongly encourage the use of French exclusively” in the classroom.
 - *This means that children are in an environment where the French language is highly promoted and valued.*

COMBINING THE CHILDREN FROM BOTH SCHOOLS

Twice as many children from Sainte-Jeanne-d'Arc as from Gabrielle-Roy participated. The smaller number of children from Gabrielle-Roy could mean that analyses conducted for each school separately could be unreliable. For this reason all the results reported are from the combined group of children from both schools, divided by grade. It is important to note that all the statistically significant results show the same trends for the children from Gabrielle-Roy and Sainte-Jeanne-d'Arc when examined separately.

4. VOCABULARY DEVELOPMENT IN FRENCH

ÉCHELLE DE VOCABULAIRE EN IMAGES PEABODY

This is a standardized test designed to measure receptive vocabulary size, i.e., how many words a child knows. Children are shown pages with four pictures and asked to point to the picture that matches the word being said by the tester. The mean expected score for French-speaking Canadian children in each age group is 100, with the range of normal performance being 85-115. Note that standard scores are calculated from raw scores according to expectations based on a child's age, and so to obtain a standard score of 100 in grade 6, a child needs to have a higher raw score, i.e., know more words, than a child would need to obtain a score of 100 in grade 1.

4.1 Vocabulary in French by grade

- Children's mean scores at both grades 1 and 6 are very close to the age-expected mean of 100 on the test. This means that they are not lagging behind monolinguals in their performance on this test.
- But, it is important to note that this sample of children includes a larger number who have highly educated parents than the group of children used to gather norms for the test. This means that one might expect these children to achieve slightly higher scores than average (see section 4.3). Also, the children used to gather norms for this test were from Québec and Ontario. The children from Ontario may have been bilingual.

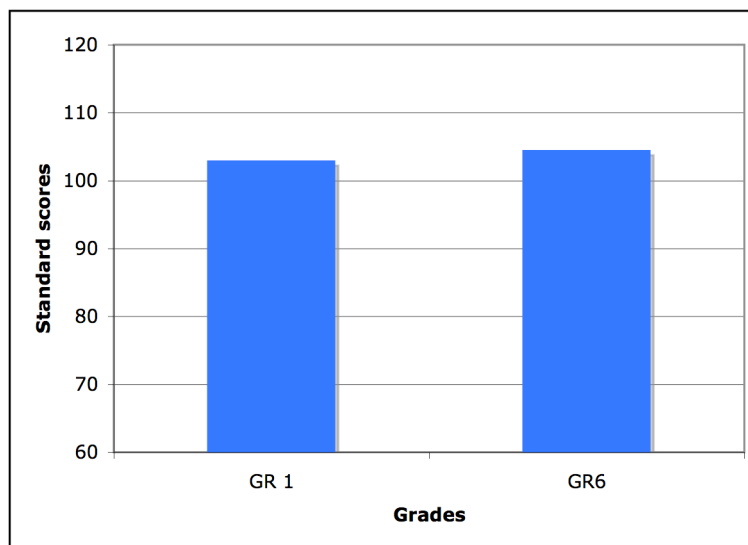


Figure 2. Children's mean standard scores on the ÉVIP by grade

4.2 Vocabulary in French by home language use

- There is no statistically significant difference between the scores for children who speak mainly French (M-FR) at home and French and English (FR-ENG) at home on this test.
- Children who speak mainly English (M-ENG) at home have significantly lower scores than the other two groups. But, notice their scores are higher in Grade 6.

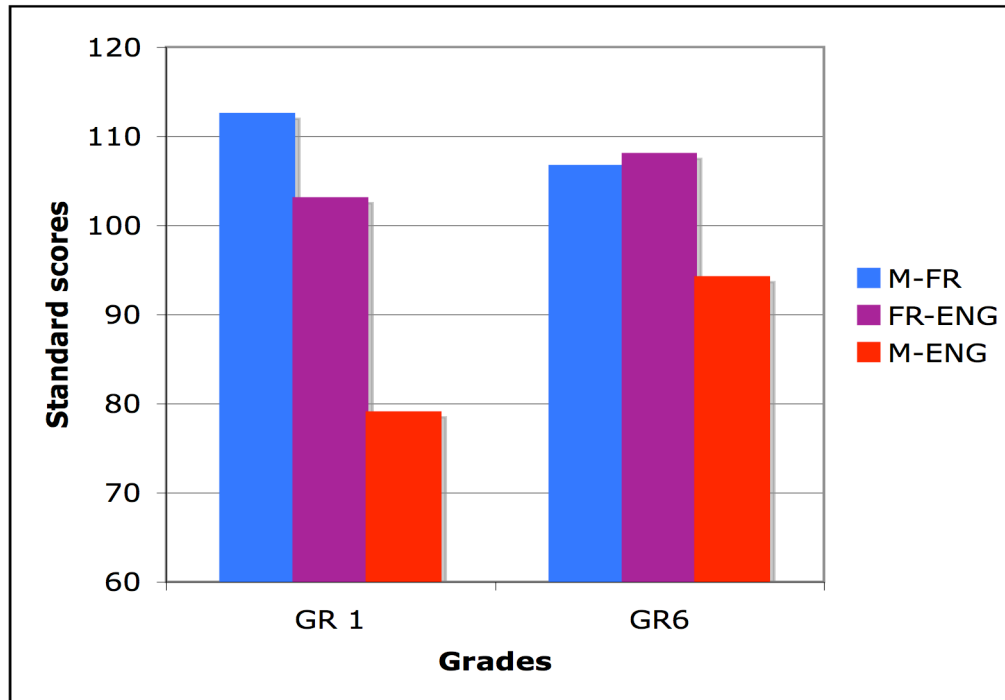


Figure 3. Children's mean standard scores on the ÉVIP by grade and home language

4.3 Vocabulary in French by mother's education

- Children with university-educated mothers had higher vocabulary test scores
- *It is important to note that some of these mothers would be speaking English, not French, at home with their children.*

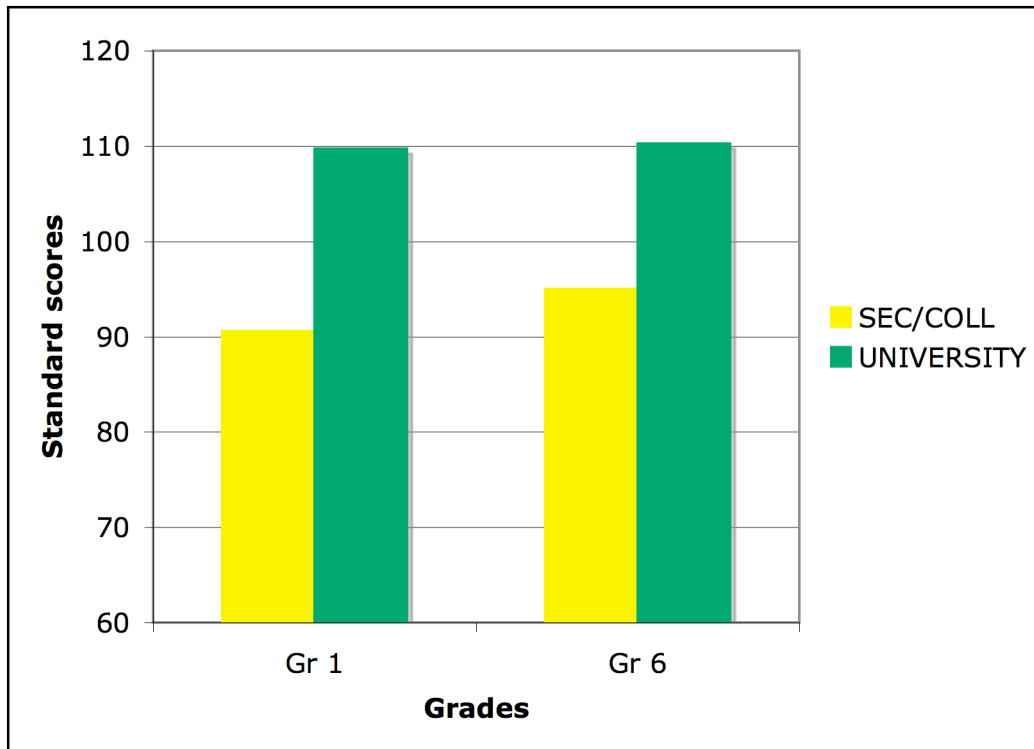


Figure 4. Children's mean standard scores on the ÉVIP by grade and mother's education

5. VOCABULARY DEVELOPMENT IN ENGLISH

PEABODY PICTURE VOCABULARY TEST

This is a standardized test designed to measure receptive vocabulary size, i.e., how many words a child knows. Children are shown pages with four pictures and asked to point to the picture that matches the word being said by the tester. The mean expected score for English-speaking children in each age group is 100, with the range of normal performance being 85-115. Note that standard scores are calculated from raw scores according to expectations based on a child's age, and so to obtain a standard score of 100 in grade 6, a child needs to have a higher raw score, i.e., know more words, than a child would need to obtain a score of 100 in grade 1.

5.1 Vocabulary in English by grade

- Children's mean score is below the age-expected mean of 100 for monolinguals at grade 1, but is at the age-expected mean in grade 6. This means that the children are lagging behind monolinguals in their performance on this test in grade 1.
- This difference between grade 1 and grade 6 is probably due to the introduction of English Language Arts in grade 3.

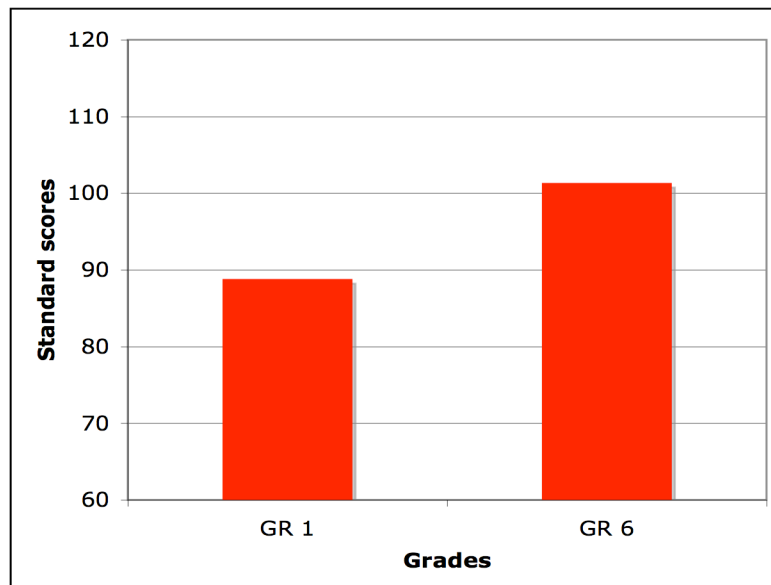


Figure 5. Children's mean standard scores on the PPVT by grade

5.2 Vocabulary in English by home language use

- There is no statistically significant difference between the scores for children who speak mainly English (M-ENG) at home and French and English (FR-ENG) at home on this test.
- Children who speak mainly French (M-FR) at home have significantly lower scores than the other two groups. But, notice their scores are higher in Grade 6.

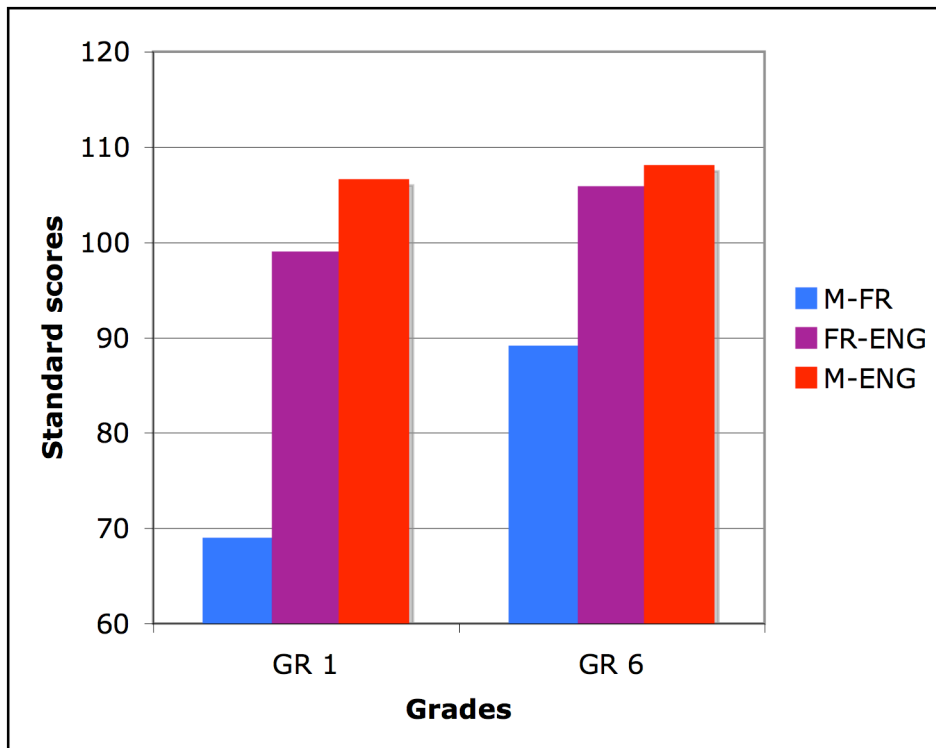


Figure 6. Children's mean standard scores on the PPVT by grade and home language

5.3 Vocabulary in English by mother's education

- Children with university-educated mothers had higher vocabulary test scores at grade 6 only.
- *It is important to note that some of these mothers would be speaking French, not English, at home with their children.*

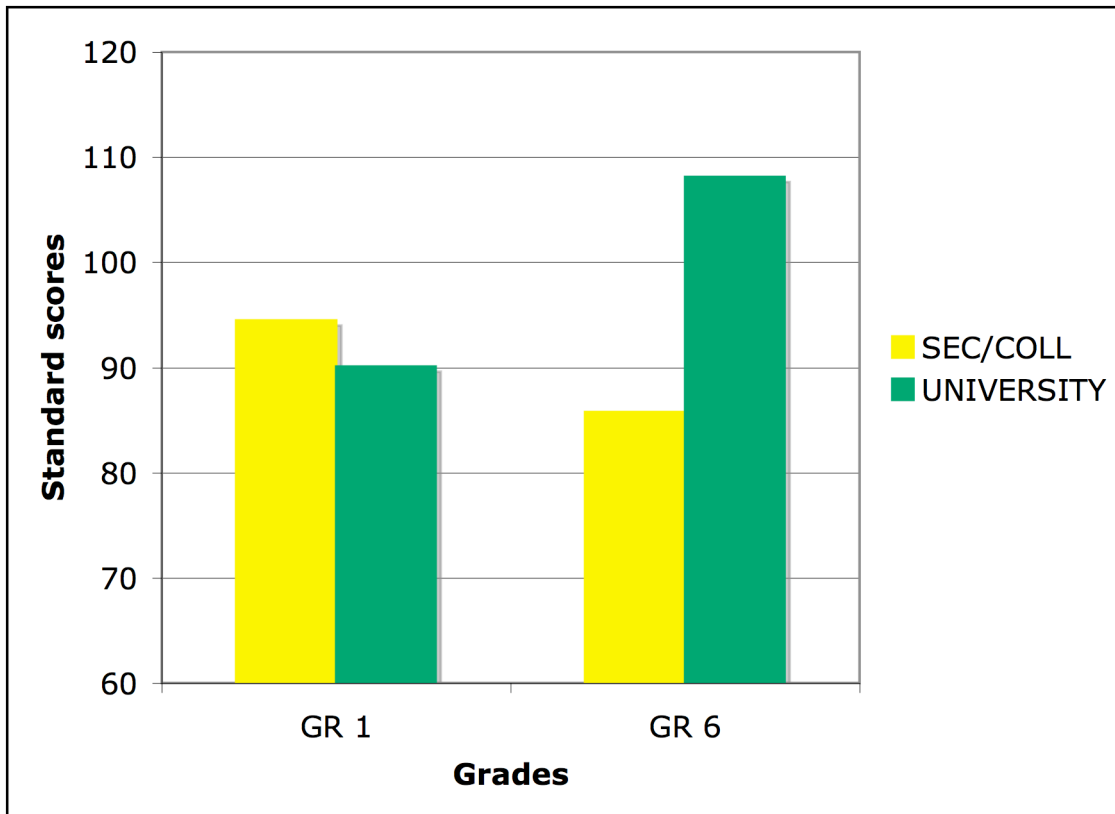


Figure 7. Children's mean standard scores on the PPVT by grade and mother's education

6. GRAMMATICAL DEVELOPMENT IN FRENCH

DIRECT OBJECT PRONOUNS IN FRENCH

- In French, direct object pronouns (*le, a, les*) come before rather than after the verb. They also reduce to *l'* before verbs beginning with a vowel (except *les*). This part of French grammar is notoriously difficult for anglophones to learn, and it is relatively late-acquired even in monolinguals. The grammar tests in this study are based on this part of French grammar.
- There are two kinds of grammar tests: (1) accurate production in speech – children are told a story and asked questions during the story designed to elicit use of pronouns; (2) detection of errors in the speech of others – children listen to an “*extraterrestre*” who is learning French, tell a story. Children are asked to judge if his sentences are correct or not. Some of his sentences contain errors with object pronouns. Some of these errors mirror the errors anglophones make when they speak French.
- The French tests are experimenter made, not standardized tests. Therefore, the CSCN schools children’s performance was compared to monolingual francophone children from Montréal. Comparisons are made with monolinguals for grade 1 only, because in grade 6, the children have very high scores on the tests.

6.1 Grammar in production in French by grade

- The children are more accurate in producing object pronouns at grade 6 than at grade 1.
- At grade 1, there is no statistically significant difference in the scores between the (bilingual) children at CSCN schools, and the monolinguals from Montréal.

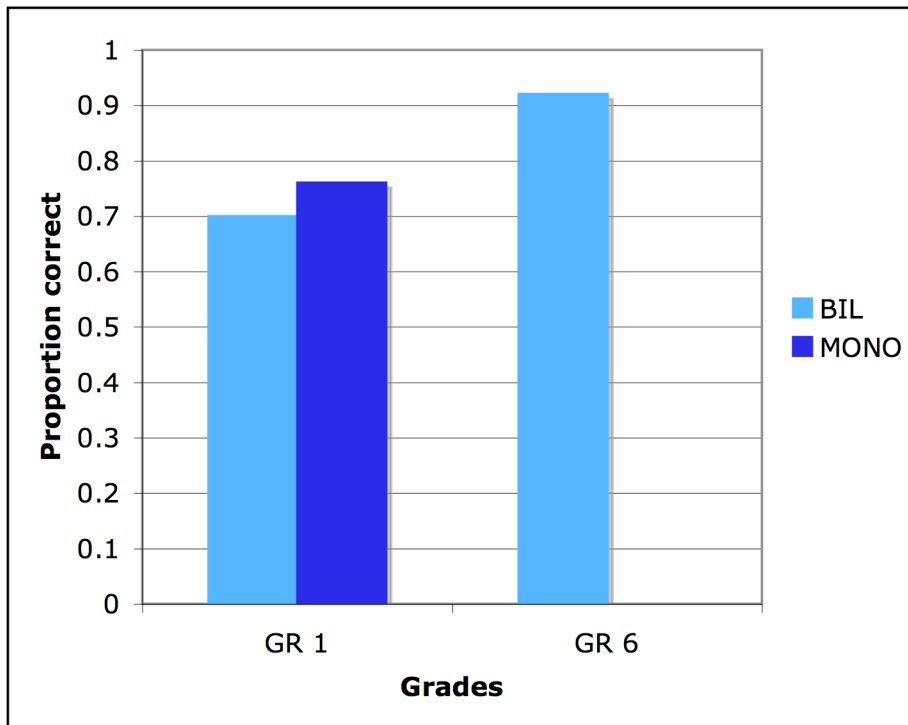


Figure 8. Bilingual (CSCN) and monolingual children’s mean proportion correct scores on the object pronoun production test by grade

6.2 Grammar in production in French by home language use

- There is no statistically significant difference between the scores for children who speak mainly French (M-FR) at home and French and English (FR-ENG) at home on this test.
- Children who speak mainly English (M-ENG) at home have significantly lower scores than the other two groups in grade 1, but in grade 6 there is no significant difference in the scores by home language use.

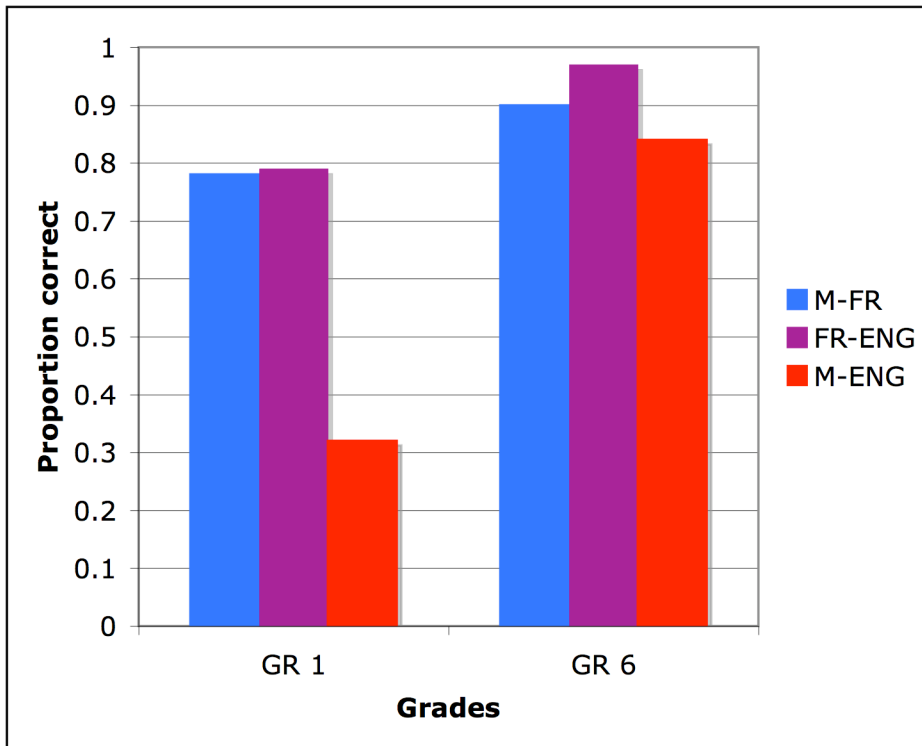


Figure 9. Children's mean proportion correct scores on the object pronoun production test by grade and home language

6.3 Grammar in production in French by mother's education

- There were no statistically significant differences between children's scores on this test and mother's (or father's) education levels at either grade.
- This result contrasts with the results for vocabulary; however, this is not entirely surprising because use of object pronouns is a basic grammatical structure that would occur frequently in conversation regardless of parental interactional style or the topic being discussed.

6.4 Detection of grammatical errors in French by grade

- The children are more accurate in detecting errors with object pronouns at grade 6 than at grade 1.
- At grade 1, there is no statistically significant difference in the scores between the (bilingual) children at CSCN schools, and the monolinguals from Montréal.

A-PRIME SCORES

- The error detection test does not have proportion correct, but instead yields A-prime scores. These scores gauge the ability of the children to detect errors from the range of .50 (chance level) to 1.0 (perfect detection).
- Part of the error detection test includes sentences with errors in the use of definite articles (*le, la, les*), in addition to the errors with object pronouns. These were included to make sure the children could perform this kind of task. There is no reason to assume that they cannot detect errors with articles in French. Children in both grades, and regardless of language use at home, had A-prime scores over .90 for detection of errors with definite articles. Thus, they can perform this kind of task.

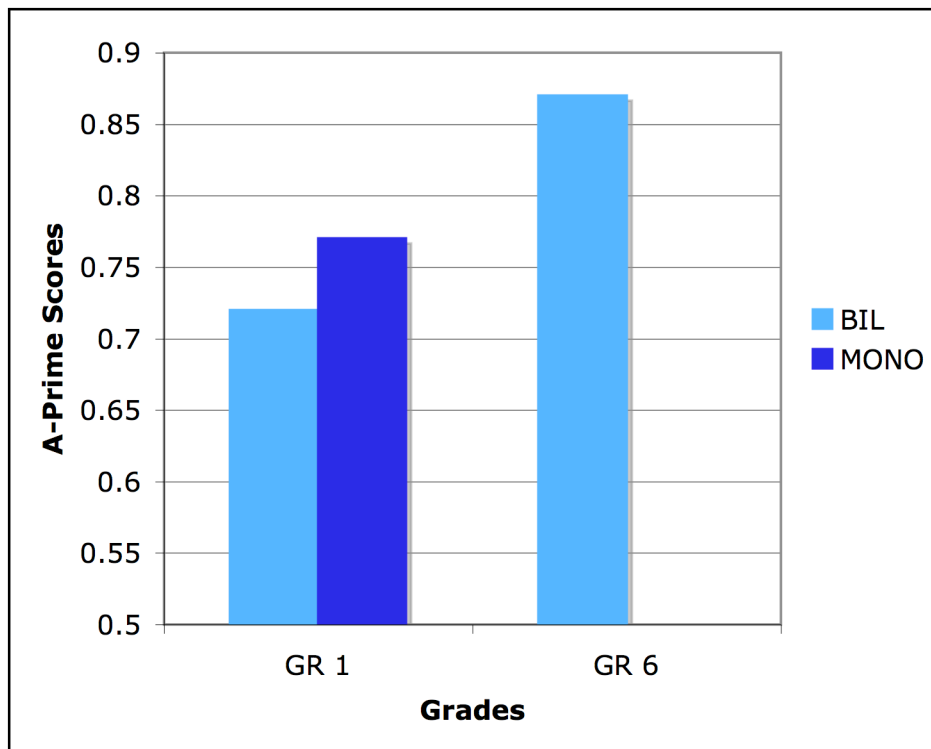


Figure 9. Bilingual (CSCN) and monolingual children's mean A-prime scores on the object pronoun error detection test by grade

6.5 Detection of grammatical errors in French by home language use

- There is no statistically significant difference between the scores for children who speak mainly French (M-FR) at home and French and English (FR-ENG) at home on this test.
- Children who speak mainly English (M-ENG) at home have significantly lower scores than the other two groups. But, their scores increase from grade 1 to grade 6.

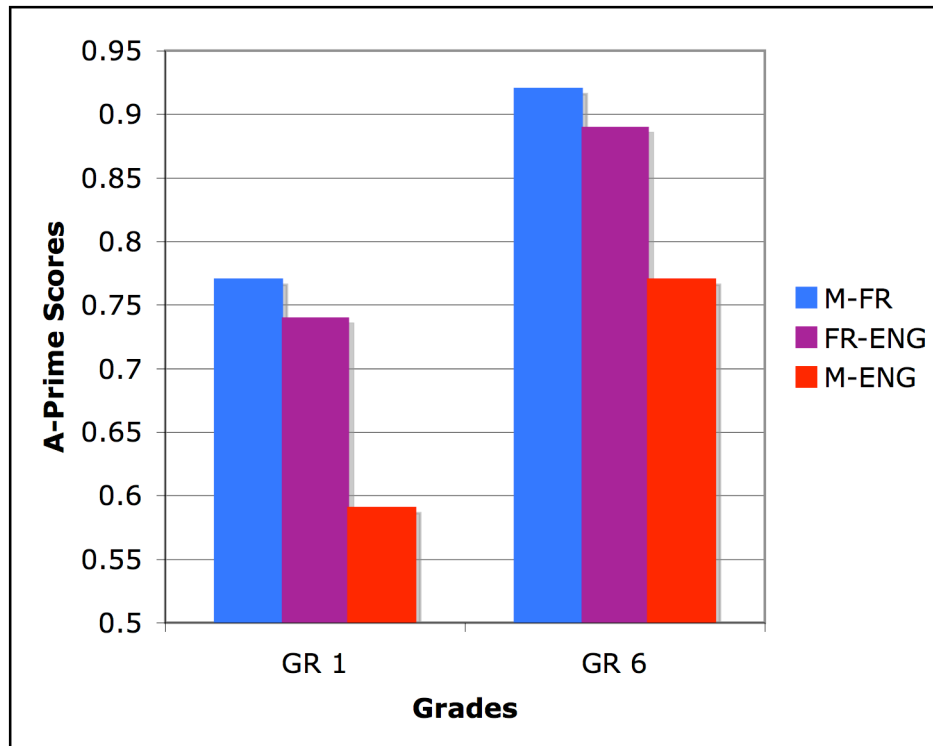


Figure 10. Children's mean A-prime scores on the object pronoun error detection test by home language use

6.6 Detection of grammatical errors in French by mother's education

- There were no statistically significant differences between children's scores on this test and mother's (or father's) education levels at either grade.
- This result contrasts with the results for vocabulary; however, this is not entirely surprising because use of object pronouns is a basic grammatical structure that would occur frequently in conversation regardless of parental interactional style or the topic being discussed.

7. GRAMMATICAL DEVELOPMENT IN ENGLISH

TEST OF EARLY GRAMMATICAL IMPAIRMENT (ENGLISH)

- In English, verb suffixes (“ed” or “s” in *he walked* or *he walks*) and auxiliary verbs (“is” in “is going”) are not fully acquired until children are four to five years old. Thus, English verb forms are relatively late-acquired even in monolinguals. The English grammar test in this study – the TEGI - is based on this part of English grammar.
- There are two kinds of grammar tests in the TEGI: (1) accurate production in speech – children are shown pictures of activities on-going then completed, and asked questions designed to elicit the use of verb suffixes; (2) detection of errors in the speech of others – children listen to two toy robots, who are learning English, tell a story. Children are asked to judge if their sentences are correct or not. Some of their sentences contain errors with verbs. Some of these errors mirror the errors children make when they are learning English.
- Because the TEGI is a standardized test, the CSCN children’s scores can be compared to the scores from the monolingual children used to norm the test.
- For the sake of brevity, only the TEGI results for the past tense (“ed” and irregular verbs like *dig-dug*) are shown for grammar in production. The influence of home input factors is the same for the other verb forms.

7.1 Grammar in production in English by grade

- The children are more accurate in producing past tense in grade 6 than at grade 1. But, notice that their mean score is near perfect at grade 6.
- At grade 1, the bilingual children had a significantly lower mean score than the monolingual norming group for the TEGI. This means that bilingual children are lagging behind monolinguals in their performance on this test in grade 1.

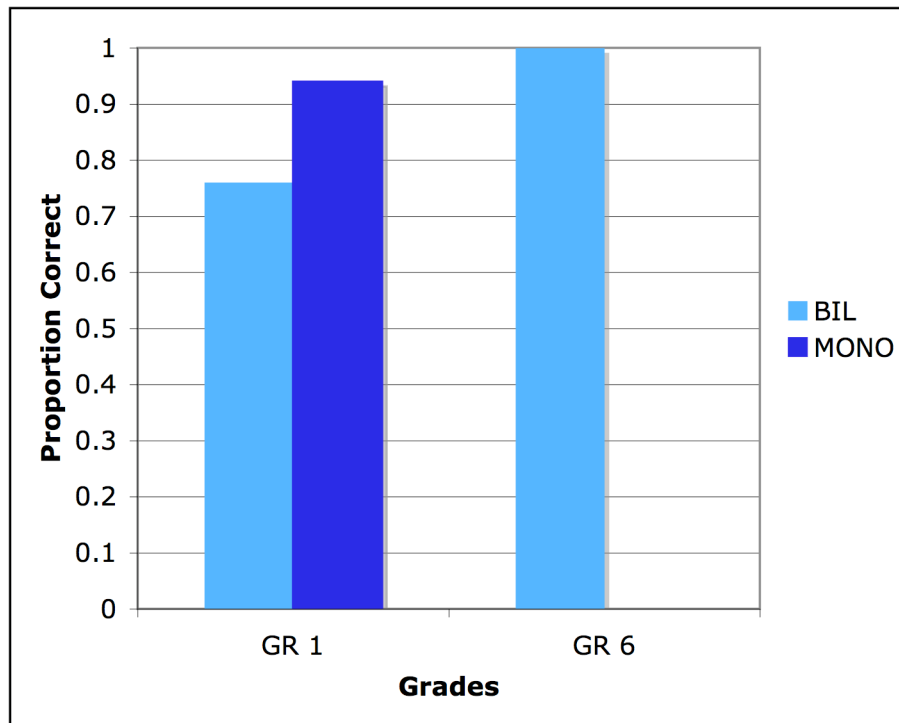


Figure 11. Bilingual (CSCN) and monolingual children’s mean proportion correct scores on the TEGI past tense test by grade

7.2 Grammar in production in English by home language use

- There is no statistically significant difference between the scores for children who speak mainly English (M-ENG) at home and French and English (FR-ENG) at home on this test in grade 1.
- Children who speak mainly French (M-FR) at home have significantly lower scores than the other two groups in grade 1. In grade 6 there is no significant difference in the scores by home language use, but there is a small number of children in each home language group at grade 6, which means this distribution might not be reliable.

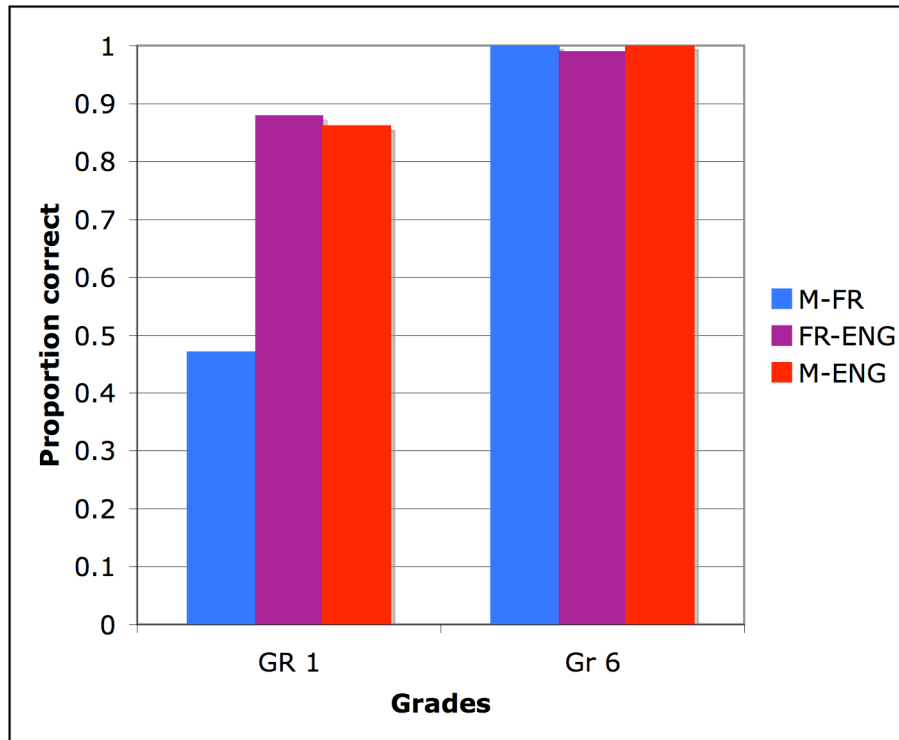


Figure 12. Children's mean proportion correct scores by grade and home language on the TEGI past tense test

7.3 Grammar in production in English by mother's education

- There were no statistically significant differences between children's scores on this test and mother's (or father's) education levels at either grade, although there were trends for the effect of parental education for irregular past tense verbs.
- This result contrasts with the results for vocabulary; however, this is not entirely surprising because the past tense, and the other verb forms probed on the TEGI, are basic grammatical structures that would occur frequently in conversation regardless of parental interactional style or the topic being discussed.

A-PRIME SCORES

- The error detection test does not have proportion correct, but instead yields A-prime scores. These scores gauge the ability of the children to detect errors from the range of .50 (chance level) to 1.0 (perfect detection).
- Part of the error detection test includes sentences with errors in the use of “verb+ing”, in addition to the errors with verb suffixes and auxiliary verbs. These were included to make sure the children could perform this kind of task. There is no reason to assume that they cannot detect errors with “verb+ing” in English. Children in both grades, and regardless of language use at home, had A-prime scores over .90 for detection of errors with “verb+ing”. Thus, they can perform this kind of task.

7.4 Detection of grammatical errors in English

- Due to time constraints, this test was only given to children in grade 1
- There is a statistically significant difference in the scores between the (bilingual) children at CSCN schools, and the monolinguals from the norming sample for the TEGI. This means that children are lagging behind monolinguals in their performance on this test in grade 1, but the difference between monolinguals and bilinguals on the error detection test is smaller than on the production test.

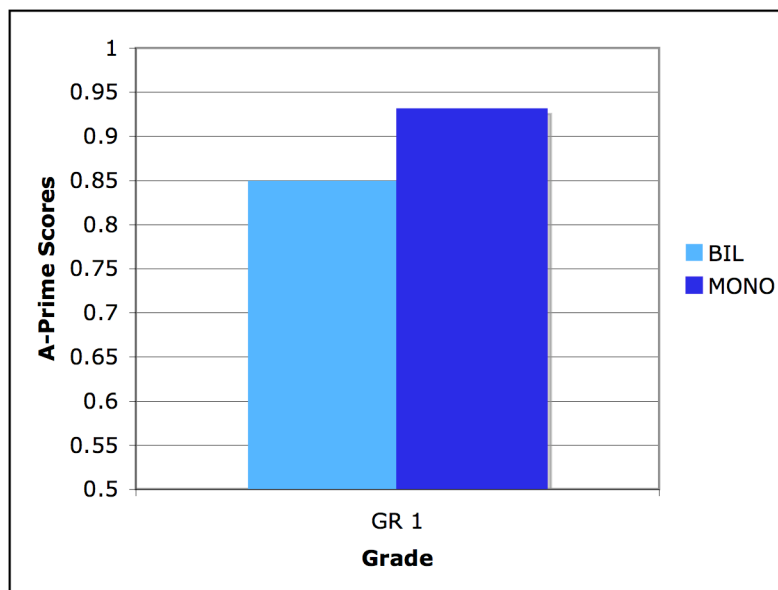


Figure 13. Bilingual (CSCN) and monolingual children’s mean A-prime scores on the TEGI error detection test

7.5 Detection of grammatical errors in English by home language use

- There is no statistically significant difference between the scores for children who speak mainly English (M-ENG) at home and French and English (FR-ENG) at home on this test in grade 1.
- Children who speak mainly French (M-FR) at home have significantly lower scores than the other two groups in grade 1.

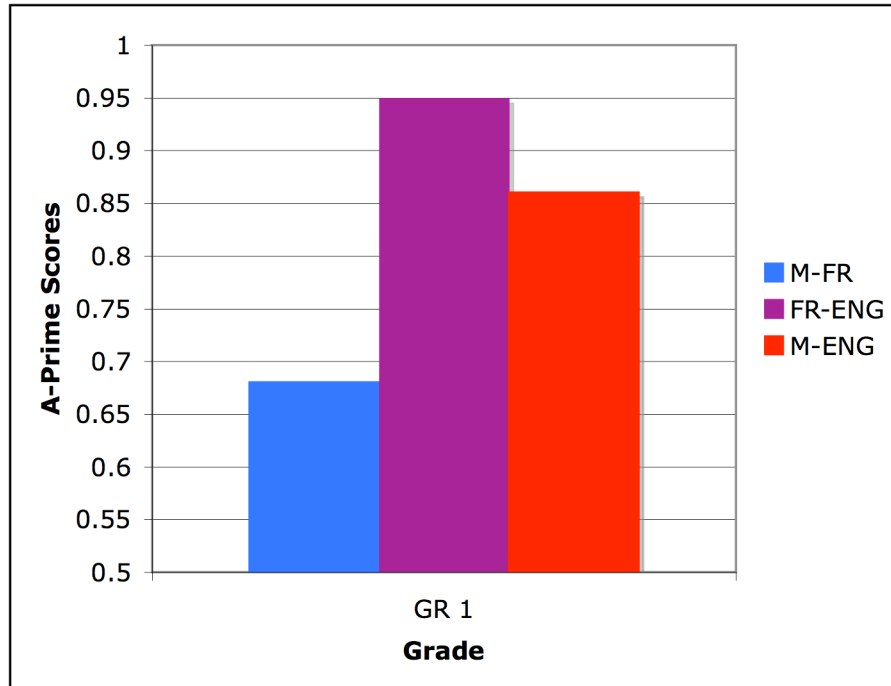


Figure 14. Children's mean A-Prime scores by home language use on the TEGI error detection test

7.6 Detection of grammatical errors in English by mother's education

- There were no statistically significant differences between children's scores on this test and mother's (or father's) education levels at either grade.
- This result contrasts with the results for vocabulary; however, this is not entirely surprising because the verb forms probed on the TEGI are basic grammatical structures that would occur frequently in conversation regardless of parental interactional style or the topic being discussed.

8. SUMMARY OF RESULTS

- CSCN children's abilities in French vocabulary and grammar are similar to their monolingual peers in Montréal in grade 1, as a group.
- CSCN children's abilities with English vocabulary and grammar are similar to their monolingual peers in grade 6, as a group.
 - The gap between CSCN children and monolinguals in grade 1 is smaller for error detection than for production tests. Children know more than they are able to produce.
- Children who speak mainly French or both languages equally at home are similar to each other and to monolinguals in French.
 - Children who speak mainly English at home lag behind in grade 1, and do not entirely catch up by grade 6.
- Children who speak mainly English or both languages equally at home are similar to each other and to monolinguals in English.
 - Children who speak mainly French at home lag behind in grade 1, but catch up for vocabulary by grade 6.
- Children whose mothers (and fathers) have University level education have bigger vocabularies in both languages.
 - Children may have bigger vocabularies in French, even when their mothers speak to them mainly in English and vice versa.
- Future research on this topic should include larger numbers of children, comprehensive tests of grammar and vocabulary, and allophone children as an additional participant group.

COMPARISONS WITH THE MIAMI STUDY

In line with our expectations, the French-English bilingual children in the Canadian minority context are more likely to become proficient bilinguals earlier in their schooling than Spanish-English bilingual children in Miami. Therefore, bilingualism is not a cause of significant delays in oral language development for children in general.

Also in line with our expectations, home input factors influence children's performance in French and English in much the same way as for their bilingual peers in Miami, except that parental education influences vocabulary but not grammar.

9. IMPLICATIONS AND RECOMMENDATIONS

- The use of mainly French or *balanced* use of both French and English are both optimal home language strategies for bilingual success in the minority context.
- The introduction of English at early ages, even birth, can be fine for long-term outcomes in French, as long as the child receives consistent and rich input in French.
- Children in families who speak mainly English at home do make significant gains in their French by grade 6, but are not equivalent on all measures to their peers who speak some or mainly French at home.
- Parental education levels are an important home input factor predicting children's outcomes in French vocabulary, and may be just as important as the amount of French spoken in the home.
- Children who speak mainly English at home, especially if their parents have lower education levels, might benefit from extra support to fully develop oral French abilities.
- Information on home input factors should be gathered from the parents of children who are undergoing speech-language, reading and other psychological assessments, in order to fully interpret children's performance on standardized tests, and to develop special programming.

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