

## **Critical Review: What are the Early Predictors of French Literacy in Canadian French Immersion Programs**

| Many

This critical review will aim to identify early predictors of French reading, so that these factors can effectively be targeted in reading risk assessments, and the corresponding reading interventions at an early stage of the child's literacy development.

The objective of this paper is to critically analyze and review the research that is available on the early predictors for French reading achievement for students in French immersion.

Search strategy: Computerized databases including Google Scholar and PubMed were searched using the terms [(bilingual literacy development) or (L1 L2 literacy)] and [French Immersion] and [Canada]. No limits were placed on this search.

Selection criteria: Studies were required to measure or describe the literacy outcomes of Canadian students studying in a French immersion environment at the primary level. Even with this search criteria, articles featuring different languages and different countries appeared in the search. Therefore, articles were selected if they were based on being tied to Canadian classrooms, provided information on both the factors influencing pre-literacy success as well as cross-linguistic transfer between L1 and L2 French literacy.

Data collection:

Results of the search criteria generated five relevant articles that addressed the research question including 4 single group studies without control, and 1 non-randomized clinical trial.

Single group study without control (level of evidence: 3).

conducted a single group longitudinal study to study the effects of early literacy skills on Grade 3 French immersion reading achievement. Eighty-three well-described primary school children (35 boys) who entered the Grade 3 French immersion program were followed until grade 3, at which time 56 students were available for follow up. Kindergarten literacy assessments were completed 3 times over the school year including measures of initial sound letter naming at time 1, letter naming, phoneme segmentation, and nonsense words at time 2, and letter naming, phoneme segmentation and nonsense words at time 3. Once in the grade 3 FI program, French assessments consisted of letter naming, phoneme segmentation and nonsense words in the fall, phoneme segmentation and nonsense words in the winter, and oral reading fluency, retell fluency and running records in the spring. All assessments were published tests or procedures commonly employed for this purpose. No information regarding blinding or reliability measures were reported.

Overall, this study provides suggestive evidence that testing pre-literacy skills can predict later French immersion literacy skills. The study found that letter naming (assessed in the spring) was found to be significantly correlated to L2 oral reading fluency and L2 comprehension scores. The spring letter naming assessment and the fall initial sound measures explained 59% of story retell. The spring letter naming test was a significant predictor of running record scores and the winter phoneme segmentation measures. All three L2 achievement



students who might be at risk later for reading difficulties (as early as fall of kindergarten).

test of English and French lexical specificity on the early classification of at-risk status in emergent bilingual children enrolled in French immersion schools in a predominantly English-speaking region in Canada.

This study consisted of 57 children who began French instruction in the fall of Senior Kindergarten. Children were classified into at-risk or not at-risk subgroups based on their reading performance at the end of Grade 1 (n=13 at-risk; n=22 'not at-risk' emerging English (L1) –French (L2) bilinguals). In the fall of Grade 1, the children were assessed on lexical specificity and phonological awareness individually in English and in French. In the spring of Grade 1, the children were tested individually on English and French word reading accuracy and fluency. Appropriate statistical analyses revealed that English lexical specificity contributes to the early classification of at-risk readers in French, after controlling for French phonological awareness and nonverbal reasoning. Further, this study provided evidence that a dynamic measure of lexical specificity improves the prediction of at-risk status over and above phonological awareness. The paper concluded then that English–French bilinguals 'rely on phonological representations of English words to develop English phonological awareness, which, in turn, facilitates word reading in French'. Strengths of the study included the use of a longitudinal design and that it was the first study of its kind to explore the utility of dynamic assessment in risk-identification within diverse early immersion environments. Limitations of the study however included the use of a small sample size in the determination of a child's 'at-risk' status; a lack of specificity of which region in Canada the study was conducted; the lack of a multivariate battery of early

screening measures (rather than the small number of screening measures used by the study) to increase the sensitivity of at-risk identification; and 28% of the study's sample was exposed to another language at home (as well as English) - which is more representative of students enrolled in Canada (Krenca et al., 2019). Overall, this study found evidence that a dynamic assessment measure which targets lexical specificity (a precursor to phonological awareness) in English improves the early at-risk classification of children for reading difficulties in French. This suggests then the idea that there may be a significant role for L1 (English) reading-related and language-related abilities in the acquisition of reading skills in L2 (French).

conducted a matched control intervention study to study if reading intervention is provided in the L1, will there be a cross-linguistic transfer to the L2 across French immersion students in Montreal?

84 at-risk grade 1 students were selected from a group of 226 students from 10 public French Immersion elementary schools in Montreal, Quebec. 44 of the participants were girls and 40 participants were boys. The majority of the students came from English-speaking backgrounds, where 61.6% spoke English to both of their parents, 29.1% spoke English with at least one of their parents, and 19.8% spoke only French to both of their parents. 8.1% of students spoke a language other than English or French at home. Each student enrolled in the study was identified as "at-risk", scoring below the 30<sup>th</sup> percentile on the WRAP IV English word-reading measure assessment.

Students were given both an English and French pre-test in December and a post-test in May. The English test consisted of the

Reading Subtest of the Wide Range Achievement Test III (WRAT), 20 words from the Fry high frequency word list, the Comprehensive Test of Phonological Processing (CTOPP), and the segmentation fluency and spelling subtest of the Woodcock-Johnson III Test of Achievement (WJ).

The French test included reading of regular words, irregular words and pseudowords. To measure the students' phoneme blending in reading of both regular and irregular French words, the French standardized battery Épreuves de Compétence en Lecture (ÉCOLE) was used.

The students were put into groups of three or four and received three 30-minute intervention sessions per week (11 hours total) by trained research associates. The focus of the intervention sessions included lessons on vowel pronunciation, digraphs, blending, sight words pronunciation and segmenting words while reading. The author compared this intervention to the DMSfV.

The study confirmed that the students that participated in the English reading intervention improved in their post-test scores in both English and French reading. The specific cross-language effect included French word regular and pseudoword reading.

In the study, the researchers included a similar number of girls and boys who were the same age, making this research generalizable to both boys and girls in Grade 1. However, it is important to note that the sample size was 11.

critical analysis examined the early predictors of French literacy in Canadian French immersion programs. Overall, the research reviewed provided somewhat suggestive to suggestive evidence for a variety of factors that influence early literacy success. Nevertheless the research isolates early literacy skills that, when targeted and mastered, have impacts on a student's literacy outcomes in the French language classroom.

Predictors of literacy success in kindergarten included: letter-naming abilities correlated to L2 oral reading fluency and L2 comprehension scores in grade 3 (Bourgoin, 2014). Additionally, when tested in kindergarten, early English morphological awareness is related to strength in reading abilities in both English and in French reading. In contrast however, early measures of French morphological awareness were significantly related to French reading only.

Predictors of literacy success in grade 1 included: having a good base in alphabetic knowledge, phonological awareness and letter-sound knowledge in English, impacts success in French decoding (Bourgoin, 2014, and Erdos et al., 2011). The transfer

