Writing Performance, Practices and Locus of Control of the Five Linguistic Groups in Canada

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A study with students from the five linguistic groups in Canada were shown to not succeed at the same level. Francophone students performed better, followed by multilingual, anglophone, allophone, and aboriginal students. Allophones tended to use a more internal locus of control. Students who spoke a Native language were shown to spend the least amount of time writing on the Internet compared to the multilingual and anglophone students who spent the most amount of time, and allophones spent the most time outside of class hours working on homework unrelated to writing and doing activities associated with learning to write.

Keywords: Linguistic Group; Writing; Academic Achievement; Locus of Control; Immigrants

Introduction

Knowing an official language is considered to be essential to an individual’s economic and social integration (Jedwab, 2005). Not knowing the language is the primary source of all of the difficulties in school that lead to academic failure (Blackwell & Melzak, 2000), cultural and social isolation (Long & Amaya, 2007), or a sense of significant distress (Ditisheim, 1990). In contrast, mastering the language is the key to any knowledge acquisition (Loyer, 1987; Moisset, Mellouki, Ouellet, & Diam-bomba, 1995). Indeed, language is crucial from the start when welcoming and integrating children who know neither English nor French.

Reading and writing abilities are particularly important for children long term, as they contribute not only in ensuring their self-determination, their social mobility, their successful integration within society, and their academic achievement, and also in providing greater economic possibilities in the future (Carter, Polevychock, & Friesen, 2006).

Canada and other (Organisation for Economic Cooperation and Development) OECD countries show significant differences in performance associated with the language spoken in the home, even if the level of education and professional status of the parents is taken into account (OECD, 2007).

Literature Review

In a study of 230,000 newly arrived immigrant children and adolescents, the Canadian Council on Social Development found that learning the language (English or French) and the difficulties with homework represented significant challenges (Kunz & Hanvey, 2000). A Statistics Canada National Longitudinal Survey of Children and Youth (NLSCY, 2001) revealed that, on average, immigrant children succeeded as well as did children of persons born in Canada in every aspect of academic performance (reading, writing, mathematics, and overall aptitude). Immigrant children whose first language was English or French obtained high outcomes in reading compared to those for whom the language spoken at home was neither English nor French. However, after a certain number of years in the Canadian school system, the level of achievement of these children in reading was shown to come close to that of children of Canadian-born parents. The findings show that on almost every aspect, 13 year-old immigrant children generally scored as well as did children born in Canada (Statistics Canada, 2001).

The Programme for International Student Assessment (PISA) later showed that Canada figured among the countries in which performance differences were relatively non-significant between immigrant students and those of the host country who had general access to established linguistics programmes with clearly defined standards and objectives (OECD, 2006).

The results were similar in the province of Québec where the number of immigrant students in difficulty in school (all languages combined) steadily decreased from 30.3% (1994-1995) 27% (1997-1998), 24.6% (2000-2001), and 21.7% (2003-2004) and that these difficulties were predominant in high school years rather than primary school. In fact, the early problems for at-risk students were shown to increase over time (Marchesi, 1998). Other smaller studies have also shown various risk factors that affect the academic achievement of immigrant students (Van Ngo & Schleifer, 2005). These factors are numerous, such as individual, socioeconomic, and cultural characteristics (family income, country of origin, religion, language spoken in the home, education level of the parents, etc.) (Marchesi, 1998) and school-related factors (ethnic composition of the school and the means employed by each school to facilitate learning (Moisset et al., 1995).

Writing Performance

Literacy is defined as being more than just the ability to read, write or calculate, but also the ability to understand and use appropriate information to function (National Literacy Secre-

The individuals who master reading and writing can change and adapt to new situations as well as demonstrate overall better health (Public Health Agency of Canada). In a school setting, writing performances appear to be a prerequisite for learning other subjects. The Thayer & Giebelhauss study (2001) showed the positive effect of writing skills on mathematical performances.

Therefore, the literature shows that successful writing depends on several factors such as individual, academic, and social, more specifically the strategic behavior of the student, knowledge, motivation, socio-economic level (Graham, Harris, & Mason, 2005), and language status (minority or majority), as is the case in Canada where the Francophone minority performs less well than Anglophones (Childs & Denomme, 2008; Bouchamma & Lapointe, 2008).

The Locus of Control

How we explain success and failure influences practices and decisions (Bandura, 1986; Pajares, 1992). These causal explanations are subjective and vary according to four attribution variables: 1) locus of control (Heider, 1958; Rotter, 1966); 2) stability (Weiner, Heinz, Meyer, & Cook, 1972); 3) controllability (Heider); and 4) globality (Abramson, Seligman, & Teasdale, 1978). Locus of control, the most studied dimension of the attribution theory (Bell-Dolan & Anderson, 1999), was chosen for the present study. In essence, the causes may be internal (personality factors) or external (circumstances of the situation), and how an individual interprets success/failure may vary depending on their own characteristics, including culture (Berry et al., 1997).

Academic Achievement and Student Attributions

In Canada, the School Achievement Indicators Program (SAIP, Sciences, 1996) revealed a positive relationship between performance and the fact of attributing success to hard work. Research in this area also has shown a positive link between academic achievement and attribution style (Cortes-Suarez, 2005).

Methodology

Participants and Data Collection Instrument

The present study used data collected through the School Achievement Indicators Program—Writing Assessment III (SAIP, 2002) developed by the Council of Ministers of Education of Canada (CMEC). This program gathered information on 23,680 13- and 16-year-old students from a total of 17 different populations representing all ten Canadian provinces, the Northwest Territories, and Yukon on writing achievement. Students completed the Student Questionnaire which was administered in one of the two official Canadian languages (English and French). For the purpose of our study, only the 13-year-old students (12,708; 6062 boys) were used in our sample. A large majority of these students (95.1%) are Canadian-born. Seventy-six percent of the 13-year-old students completed the assessment in English. The SAIP student questionnaire contains a total of fifty-five questions. For the present study, specific questions pertaining to language spoken at home (question 8), locus of control (question 23), school practices (questions 32, 36 - 42), and extracurricular practices (questions 19 - 20) were selected.

Measures

First, a new variable was created based on the four presented items (English, French, Aboriginal language, and Other) of “Which of these languages is (are) spoken in your home?” (question 8). This question required students to answer “often spoken” or “occasionally spoken” for languages specific to them. Students were assigned to a specific language group according to which language they answered “often spoken” (1- Anglophones, 2-Francophones, 3-Aboriginal language, 4-Allophones). Next, a fifth category, called Multilingual has been added in order to dispatch students who answered “often” to two or more languages. Then, 8512 students were assigned to the Anglophones group; 1895 to the Francophones group; 53 to the Aboriginal language group; 362 to the Allophone group; and 1028 to the Multilingual group. This distribution is consistent with the Canadian linguistic distribution obtained through the 2001 Census (www.statcan.gc.ca).

The locus of control concept was represented by a group of 15 statements. The students were asked to respond to each statement on a scale of A to D (A: strongly disagree, B: disagree, C: agree, and D: strongly agree). A factorial analysis enabled us to identify two dimensions: internal and external. The internal locus of control dimension consisted of eight items (one of which was eliminated to improve internal consistency), such as “To write well, I must... work hard”, “When I get an exceptionally low score on a French paper, it’s mainly because... I didn’t study enough”, and “When I get an exceptionally high score on a French/English paper, it’s mainly because... the course was well taught” (α = .64). The external locus of control dimension consisted of seven items, including “When I get an exceptionally low score on a French paper, it’s mainly because... the teacher was too strict”, “When I get an exceptionally high score on a French paper, it’s mainly because... the course was easy”, and “When I get an exceptionally high score on a French paper, it’s mainly because... I was lucky” (α = .68).

Two questions (19 and 20) used to measure the variable “extracurricular practices” were respectively ranged on a scale from A to F (A: no time, B: less than 1 hour, C: 1 - 2 hours, D: 3 - 4 hours, E: 5 - 6 hours, and F: more than 6 hours) and on a scale from A to D (A: rarely or never, B: a few times a month, C: a few times a week, and D: almost every day). Factorial analyses were performed on the statements pertaining to extracurricular practices so as to construct six new independent variables: learning-related activities outside of class hours (a19), homework unrelated to writing (b19), using a computer outside of class hours (c19), writing different literary genres (poetry, letters, etc.) outside of class hours (d19), and reading for different reasons outside of class hours (e20).

Regarding the variable “school practices”, eight questions were used in our analysis (32, 36 - 42). Question 32 consisted of 14 statements on a scale of A to D (A: always or almost always, B: often, C: occasionally, and D: rarely or never). Questions 36, 37, 38, 41, and 42 were also compiled on a scale of A to D (A: rarely or never, B: a few times a month, C: a few times a week, and D: almost every day), while questions 39 and 40 were respectively measured on a scale of A to E (A: more than 10 pages, B: 6 to 10 pages, C: 1 to 5 pages, D: almost none, and E: I am not currently taking English Language Arts) and A to D (A: more than 10 pages, B: 6 to 10 pages, C: 1 to 5 pages, D: none or almost none). Following multiple factorial analyses, the school practices items were grouped in order to reduce the
The dependent variable in this study was determined as “student achievement in writing”. This variable was based on the results of a student essay used to measure the students’ writing performance. Students were assessed on their writing skills and the knowledge they expressed through their writing. According to the specific criteria for each performance level, 13 year old students were expected to perform at a level 2 or better. Therefore, an assignment to level 2 or upper meant that they successfully achieved the writing assessment while an assignment to level 1 indicated that they did not achieve properly the assessment (failure). For the purpose of this study, students who performed at level 2 or better were all assigned to create the successful group. A chi-square test was conducted to assign students into each writing achievement level while controlling for their language group attribution.

Analyses

All of the analyses were performed using SPSS software, version 13.0. A preliminary chi-square test was performed to verify whether the percentage of students who passed/failed differed among the different linguistic groups. Thereafter, ANOVA variance analyses were undertaken to identify any differences between the groups in terms of locus of control, school practices, and extracurricular practices.

Results

Writing Achievement

Figure 1 presents the proportion of students who succeeded and failed the writing assessment, according to linguistic group. Overall results indicate that 83.2% of 13-year-old students (all linguistic groups combined) successfully achieved the writing assessment while 16.8% did not. The chi-square test revealed significant differences between success and failure in the different linguistic groups, $\chi^2 = 51.039, p < .001$. Specifically, in the francophone group, the proportion of students who successfully achieved the assessment (85.3%) was significantly higher than expected. On the other hand, fewer students than expected did not achieve it properly (14.7%). Nevertheless, the opposite pattern was observed for the students who spoke an aboriginal language (success: 49.0%; failure: 51%). Our findings show no significant difference in the proportions obtained by the anglophone students (success: 82.8%; failure: 17.2%), allophones (success: 82%; failure: 18%), and multilingual students (success: 84.6%; failure: 15.4%).
Table 1.
ANOVA of internal and external locus of control for each linguistic group.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Anglophones</th>
<th>Francophones</th>
<th>Aboriginals</th>
<th>Allophones</th>
<th>Multilingual</th>
<th>F</th>
<th>Df</th>
</tr>
</thead>
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<tr>
<td>Internal</td>
<td>M (SD)</td>
<td>M (SD)</td>
<td>M (SD)</td>
<td>M (SD)</td>
<td>M (SD)</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>2.92 (.42)</td>
<td>2.83 (.46)</td>
<td>2.81 (.62)</td>
<td>3.01 (.45)</td>
<td>2.92 (.48)</td>
<td>16.560***</td>
<td></td>
</tr>
<tr>
<td>External</td>
<td>2.32 (.48)</td>
<td>2.32 (.50)</td>
<td>2.18 (.48)</td>
<td>2.31 (.52)</td>
<td>2.30 (.51)</td>
<td>1.694</td>
<td>781.732</td>
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</tbody>
</table>

Note: *** \( p < .001 \).

Table 2.
ANOVA of time spent on extracurricular practices according to the linguistic group.

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Anglophones</th>
<th>Francophones</th>
<th>Aboriginals</th>
<th>Allophones</th>
<th>Multilingual</th>
<th>F</th>
<th>Df</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M (SD)</td>
<td>M (SD)</td>
<td>M (SD)</td>
<td>M (SD)</td>
<td>M (SD)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a19</td>
<td>2.69 (.92)</td>
<td>2.59 (.87)</td>
<td>2.12 (.86)</td>
<td>2.98 (.98)</td>
<td>2.88 (.99)</td>
<td>29.787***</td>
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<tr>
<td>b19</td>
<td>1.89 (.94)</td>
<td>2.11 (.99)</td>
<td>1.85 (1.05)</td>
<td>2.12 (1.09)</td>
<td>2.14 (1.04)</td>
<td>29.351***</td>
<td></td>
</tr>
<tr>
<td>c19</td>
<td>3.26 (1.08)</td>
<td>3.18 (1.12)</td>
<td>2.91 (1.28)</td>
<td>3.35 (1.14)</td>
<td>3.42 (1.11)</td>
<td>10.064***</td>
<td></td>
</tr>
<tr>
<td>a19</td>
<td>1.49 (.58)</td>
<td>1.53 (.59)</td>
<td>1.60 (.61)</td>
<td>1.55 (.59)</td>
<td>1.58 (.63)</td>
<td>6.474***</td>
<td></td>
</tr>
<tr>
<td>b20</td>
<td>2.80 (1.04)</td>
<td>2.61 (1.03)</td>
<td>2.33 (1.08)</td>
<td>2.77 (1.00)</td>
<td>2.82 (1.00)</td>
<td>15.705***</td>
<td></td>
</tr>
<tr>
<td>c20</td>
<td>2.26 (.72)</td>
<td>2.17 (.68)</td>
<td>2.11 (.80)</td>
<td>2.30 (.73)</td>
<td>2.36 (.75)</td>
<td>11.246***</td>
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Note: *** \( p < .001 \).

Table 3.
ANOVA of the average time spent for school practices.

<table>
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<tr>
<th>Independent variables</th>
<th>Anglophones</th>
<th>Francophones</th>
<th>Aboriginals</th>
<th>Allophones</th>
<th>Multilingual</th>
<th>F</th>
<th>Df</th>
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<tr>
<td></td>
<td>M (SD)</td>
<td>M (SD)</td>
<td>M (SD)</td>
<td>M (SD)</td>
<td>M (SD)</td>
<td></td>
<td></td>
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<tr>
<td>a32</td>
<td>2.37 (.59)</td>
<td>2.12 (.59)</td>
<td>2.56 (.66)</td>
<td>2.32 (.60)</td>
<td>2.20 (.60)</td>
<td>81.556***</td>
<td></td>
</tr>
<tr>
<td>b32</td>
<td>2.47 (.59)</td>
<td>2.34 (.54)</td>
<td>2.69 (.68)</td>
<td>2.47 (.58)</td>
<td>2.36 (.59)</td>
<td>25.248***</td>
<td></td>
</tr>
<tr>
<td>c32</td>
<td>2.84 (.70)</td>
<td>2.86 (.67)</td>
<td>2.96 (.72)</td>
<td>2.85 (.69)</td>
<td>2.77 (.72)</td>
<td>3.057***</td>
<td></td>
</tr>
<tr>
<td>d32</td>
<td>3.19 (.64)</td>
<td>3.19 (.62)</td>
<td>3.16 (.69)</td>
<td>3.09 (.69)</td>
<td>3.07 (.70)</td>
<td>8.072***</td>
<td></td>
</tr>
<tr>
<td>a36</td>
<td>2.65 (.78)</td>
<td>3.04 (1.74)</td>
<td>2.67 (.83)</td>
<td>2.80 (.80)</td>
<td>2.81 (.80)</td>
<td>94.239***</td>
<td></td>
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<tr>
<td>b36</td>
<td>2.60 (.62)</td>
<td>2.59 (.67)</td>
<td>2.44 (.69)</td>
<td>2.68 (.65)</td>
<td>2.65 (.67)</td>
<td>3.054***</td>
<td></td>
</tr>
<tr>
<td>c36</td>
<td>2.03 (.59)</td>
<td>2.03 (.61)</td>
<td>2.06 (.54)</td>
<td>2.07 (.59)</td>
<td>2.09 (.62)</td>
<td>2.641***</td>
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<tr>
<td>d36</td>
<td>2.10 (.75)</td>
<td>1.75 (.73)</td>
<td>2.10 (.82)</td>
<td>2.15 (.81)</td>
<td>2.07 (.79)</td>
<td>76.016***</td>
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<td>e36</td>
<td>2.16 (.63)</td>
<td>1.97 (.65)</td>
<td>2.24 (.63)</td>
<td>2.26 (.65)</td>
<td>2.19 (.68)</td>
<td>37.393***</td>
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<td>a37</td>
<td>2.81 (.62)</td>
<td>2.90 (.57)</td>
<td>2.79 (.61)</td>
<td>2.82 (.58)</td>
<td>2.83 (.63)</td>
<td>8.985***</td>
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<tr>
<td>b37</td>
<td>2.78 (.84)</td>
<td>2.27 (.86)</td>
<td>2.56 (.82)</td>
<td>2.61 (.82)</td>
<td>2.67 (.88)</td>
<td>141.050***</td>
<td></td>
</tr>
<tr>
<td>c37</td>
<td>2.57 (.71)</td>
<td>2.35 (.73)</td>
<td>2.65 (.89)</td>
<td>2.61 (.75)</td>
<td>2.52 (.73)</td>
<td>30.532***</td>
<td></td>
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<tr>
<td>a38</td>
<td>2.05 (.66)</td>
<td>1.86 (.63)</td>
<td>2.16 (.88)</td>
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<td>2.07 (.70)</td>
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<td>1.84 (.74)</td>
<td>2.12 (.85)</td>
<td>2.04 (.83)</td>
<td>2.00 (.77)</td>
<td>25.709***</td>
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<td>a39</td>
<td>3.91 (.98)</td>
<td>3.95 (.95)</td>
<td>3.78 (.11)</td>
<td>3.87 (.97)</td>
<td>3.97 (.95)</td>
<td>1.847 465.974</td>
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<td>a40</td>
<td>3.13 (.91)</td>
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<td>2.78 (1.12)</td>
<td>3.10 (.90)</td>
<td>3.24 (.88)</td>
<td>10.999***</td>
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<td>2.35 (.73)</td>
<td>2.28 (.68)</td>
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<td>2.39 (.71)</td>
<td>2.46 (.75)</td>
<td>10.850***</td>
<td></td>
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<tr>
<td>a42</td>
<td>2.57 (.80)</td>
<td>2.40 (.79)</td>
<td>2.55 (.81)</td>
<td>2.71 (.77)</td>
<td>2.60 (.81)</td>
<td>22.671***</td>
<td></td>
</tr>
</tbody>
</table>

Note: *** \( p < .001 \), ** \( p < .01 \), * \( p < .05 \).

francophone, and anglophone students to the writing practices bloc “discussion with others about my text” (c32) \( [F_{\text{Welch}}(4,622,786) = 3.057, p < .05] \), and “usefulness of the text” (d32) \( [F_{\text{Welch}}(4, 634,033) = 8.072, p < .001] \). Francophone and anglophone students reported a greater tendency on these two dimensions compared with their multilingual peers. Noticeable differences were also identified between groups on “class climate” (b37). Anglophone students revealed spending more time on writing tasks in class than their francophone and allophone counterparts \( [F_{(4,11,607)} = 141.050, p < .001] \). Nevertheless, allophone students still report spending more time on writing tasks in class than their French counterparts, who reported occasionally spending time on in-class writing activities.

Significant differences were also revealed on the two following variables: “reading of texts by the teacher or by the other students” (c37) and “use of different resources by the student
for writing” (a38). Indeed, francophone students reported the lowest frequency of out loud readings in their class compared to the four other linguistic groups, [F_{Welch} (4,418.591) = 30.532, p < .001]. Among all five linguistic groups, francophone students revealed referring less frequently to other resources such as Internet, a computer, and the library, [F_{Welch} (4,365.081) = 29.291, p < .001].

Finally, the results showed significant differences between the linguistic groups on the variable “writing explanation and evaluation” (a42), [F(4,11605) = 22.671, p < .001]. Allophone students reported requiring more frequent explanations and evaluations related to their writing in their “courses other than French” compared to their francophone, anglophone, and multilingual counterparts.

Discussion and Conclusion

This study was conducted using the cross-country data obtained from the the School Achievement Indicators Program—Writing III (SAIP, 2002). Our findings show that the five linguistic groups in Canada do not perform at the same level. In order, the francophone students achieved the highest scores, followed by the multilingual, anglophone, allophone, and aboriginal students.

Similar achievement levels were observed between allophone students and the other groups, with the exception of the aboriginal students, who failed in approximately 60% of cases. This observation concurs with results of other studies showing that immigrant children who initially have weak outcomes in Canadian schools catch up to non-immigrant children in reading, writing, and mathematics around the age of 13 (Worswick, 2001).

Regarding the locus of control, we found that compared to the other linguistic groups, the allophone students had a tendency to refer to a more internal locus of control. Studies indicate that an internal locus of control increases the level of motivation. This aspect was mentioned by the OECD who noted the motivation and positive attitude of immigrant students with regard to school and who recommended that schools take the necessary actions to facilitate learning for this specific student population in order to help them succeed (OECD, 2006).

As for the extracurricular practices, allophone students were shown to spend the most amount of time outside of class hours doing activities associated with learning to write and to homework unrelated to writing outside of class hours.

A more recent Programme for International Student Achievement (PISA) showed that Canada was one of the countries in which performance differences were relatively non-significant between immigrant students and those of the host country who generally benefited from established language support programs with clearly defined objectives and norms (OECD, 2006). However, this same organization stated that Canada, along with other OECD countries, showed significant performance differences associated with the language spoken at home, despite the education and professional status of the parents (OECD, 2007).

Moreover, if we examine the practices teachers must adopt to improve the academic achievement of allophones—which is so close to that of the other linguistic groups (with the exception of aboriginal students), we may conclude that no “universal” solution exists for immigrant students. Immigrants in Canada are a heterogeneous ensemble whose paths differ from one group to another. The effectiveness of teaching these students therefore depends on target programmes (McAndrew et al., 2009).

Regarding the allophone students who participated in this study, their characteristics are unknown (number of years since their arrival in Canada, whether they went through preparatory programmes), thus we ultimately question whether this sample is representative of all immigrant students, including those with learning difficulties.

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