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Success in Writing and Attributions of 16-Year-Old French-Speaking Students in Minority and Majority Environments

This article examines causal attributions of writing performance made by 16-year-old French-speaking Canadian students (N=3,874). The students are from the French-speaking majority province (Quebec) and minority provinces in Canada (Manitoba, Ontario, New Brunswick, and Nova Scotia). The data came from the School Achievement Indicators Program (SAIP) Writing Assessment III (Council of Ministers of Education, 2002). A total of 15 variables are related to causal attributions of failure and success in writing. The interaction between these variables and the type of environment (i.e., minority vs. majority French environments) indicated that French-speaking students in a minority environment did not perform as well as those from a majority linguistic environment because they did not study hard enough, the teacher marked too severely, they had bad luck, and the course was not well taught. When they were successful, it was because they studied hard at home and attributed their good marks to working hard enough, the teacher being lenient marking, and having good luck. The majority group attributed their good marks to the ease of the course and their bad marks to its difficulty.

Cet article étudie les attributions causales de la performance à l'écrit d'élèves canadiens parlant français et âgés de 16 ans (N=3,874). Les étudiants proviennent d'une province à majorité francophone (Québec) ainsi que de provinces où le français est une langue minoritaire (Manitoba, Ontario, Nouveau-Brunswick, Nouvelle-Écosse). Les données de l'étude sont puisées du Programme d'indicateurs du rendement scolaire, évaluation de l'écrit III (2002). En tout, 15 variables sont liées aux attributions causales de l'échec et de la réussite à l'écrit. L'interaction entre ces variables et le type d'environnement linguistique (majoritairement ou minoritairement francophone) indique que la performance des élèves francophones vivant dans une situation minoritaire était inférieure à celle des élèves provenant d'une situation linguistique majoritaire et ce, parce qu'ils n'étudiaient pas assez, qu'ils étaient malchanceux, que l'évaluation par l'enseignant était trop sévère, et qu'on n'enseignait pas bien le cours. Quand les élèves minoritaires réussissaient, c'était parce qu'ils avaient beaucoup étudié à la maison, que l'enseignant n'était pas sévère et que la chance avait été de leur côté. Les élèves majoritaires ont expliqué leurs bonnes notes en disant que le cours était facile et leurs mauvaises notes en disant que le cours était difficile.

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Introduction

Canada is faced with functional illiteracy, a process-like phenomenon that can make a person virtually illiterate if he or she has not developed reading, writing, and mathematics skills or if his or her environment's requirements increase. With rapid changes in society, the individual must continually update his or her knowledge and competences, which become quickly outdated. Even in the era of new technologies, communication skills still hold a fundamental position (Simard, 1992), particularly in the academic world where good writing skills seem to be a prerequisite for learning other school subjects. In fact certain studies demonstrate the favorable effect of mastering writing skills on performance in mathematics and sciences (Pruneau & Langis 2002; Thayer & Giebelhauss, 2001).

Academic achievement in secondary school has consequences not only for the students, but also for all Canadian school systems and society in general. Corbeil (2000) revealed from data collected by the International Adult Literacy Survey (IALS) in 1994 and 1995 that success or failure in adulthood depends among other things on academic achievement. Along the same lines, Human Resources and Social Development Canada (1996) indicated that although illiteracy is defined as a complex product of socioeconomic factors, it remains linked to academic achievement, and other studies have confirmed that literacy affects income. In fact Osberg (2000) noted that literacy has a notable effect on income and constitutes about 30% of education's economical achievement.

Problem Under Study

The rapidly changing demography of the French-Canadian population has profound implications for all aspects of Canadian education. The number of minority-language youth continues to grow, but their level of academic achievement lags behind that of their majority-language counterparts (Landry & Allard, 2002). Several studies have shown that the confidence that students have in their writing and mathematics skills influences their academic achievement (Orpwood et al., 1998). Indeed, according to Landry and Allard, many students in minority groups are not comfortable with their own language, which means that French teachers face many challenges.

Although a range of studies have examined the attributions that students make of their achievement in the classroom, few have studied the students' attributions and performances in French minority and majority settings. In this article we first compare Canadian students' achievement in various provinces. We then present a model with the attributions of failure and success linked to the student. Finally, we focus on the results of a research project on attributions of writing success made by 16-year-old students from minority and majority French-speaking Canadian provinces.

Theoretical Framework: Students' Academic Achievement in Minority and Majority Contexts

Although Canada is in a good position compared with many countries in terms of 13- to 16-year-olds' academic achievement in sciences and mathematics (International Association for the Evaluation of Educational Achievement, 1995) and of 15-year-olds' writing achievement (Human Resources and Social Development Canada, 2000), we are now looking to improve our knowledge of

explanatory factors of academic performance, provincial, and language inequalities to eliminate or at least attenuate them. This allows us to complete the analysis that demonstrates the inequalities and attributions of the French student population from a minority province (Manitoba, Ontario, New Brunswick, and Nova Scotia) and those from a majority province (Quebec).

For some years departments of education in various Canadian provinces have compared students' achievement. Many earlier studies revealed growing concern about the academic achievement of French-speaking minority students (Landry & Allard, 2002). In fact the large national surveys on students' achievement in Canada showed poor performance in writing, sciences, and mathematics among French-speaking students in minority provinces compared with the overall national average (Council of Ministers of Education, 2002, 2003, 2005) and to French-speaking students in a majority province, Quebec (Landry & Allard; Crocker, 2002).

PISA's (2000) results are generally consistent with those obtained by SAIP (Council of Ministers of Education, 2002). In all provinces with the exception of Quebec because of its French majority, students from a French-speaking minority did not succeed as well in reading and sciences as those from an English-speaking majority, and Ontario (a French minority) is the province where French-speaking students have the lowest results in reading and sciences. Also, Pruneau and Langis (2002) assessed students with a written and a practical test in minority and majority contexts to measure their achievement in sciences. The average student of the French-minority group tended to have more difficulty with the written test than with the practical test. The authors confirmed that many students in minority linguistic environments had vocabulary difficulties that interfered most often with their comprehension of scientific concepts.

Although some minority students do experience outstanding academic achievement, it is clear that many experience difficulties in a minority French-speaking province compared with those in a majority French-speaking province. But how do these students attribute their achievement in a French class? More specifically, how does the student perceive his or her success in writing?

Causal Attributions

Individuals use varying causes to explain their own and other people's behaviors in successful and unsuccessful situations. Heider (1958) was the first to hypothesize that the individual is strongly motivated to understand his or her environment, and when he or she finds answers to the questions, he or she then wonders about the causes of observed events and behaviors. These attributions or explanations are subjective causal explanations and vary along at least four attributional dimensions: (a) locus of control (Heider; Rotter, 1966); (b) stability (Weiner, Heinz, Meyer, & Cook, 1972); (c) controllability (Heider); and (d) globality (Abramson, Seligman, & Teasdale, 1978).

The *locus of control* is the most extensively studied attributional dimension (Bell-Dolan & Anderson, 1999). Causes can be described as internal (personality factors) or external (situational circumstances). In fact Rotter et al., (1962, in Berry, Segall, & Kagitçibasi, 1997) defined locus of control as a concept of reinforcement where one's reinforcement either depends on one's actions

(internal) or is outside one's control (external). These have been shown to be related to self-esteem, that is, the attribution of successful events to internal causes is related to a higher level of self-esteem, whereas attribution of failure to external causes is related to a lower level of self-esteem (Weiner, Russell, & Lerman, 1978, 1979).

McFarland and Ross (1982), however, discussed some difficulties determining the causal direction between attributional patterns and self-esteem although they did present evidence for the relationship suggested above for attributions of successful and failed situations and the level of self-esteem.

Stability has been shown to be associated with the anticipation of future success or failure. The probability of future success is anticipated if the current successful event is attributed to a stable cause. On the other hand, if the successful event is attributed to an unstable cause, then future success is much more uncertain. Similarly, a failure that is attributed to a stable cause is viewed as more likely to occur in the future, but less likely if it was attributed to an unstable cause. Luck can be considered as very unstable, fluctuating over time, whereas other causes like intelligence are perceived as much more stable (Bell-Dolan & Anderson, 1999).

Controllability refers to the degree of personal control that individuals believe they exert over specific outcomes. Some situations and outcomes are much easier to control by oneself, whereas others are harder. Based on earlier findings, Weiner (1985, 1986) suggested that individuals experience guilt if they believe that they could have exerted control over a situation and thus would have behaved differently, whereas they experience shame if they have experienced failure while believing that they could not have controlled a situation.

Globality refers to whether a given cause is expected to be consistent for varied situations. Abramson et al. (1978) proposed that depressed individuals were characterized by attributing internal, stable, and global causes to uncontrollable negative outcomes.

Also, among the factors that explain students' failure and success are those linked to their beliefs and attributions. These influence individuals' practices and decisions (Bandura, 1986; Pajares, 1992). Specifically, explanations of failure and success are associated with certain sociodemographic and sociocognitive characteristics. Without mentioning specific belief schemes related to sex and age, certain studies reveal that explanations of failure and success vary according to certain sociodemographic variables such as the student's sex (Chapman & Lawes, 1984; Lightbody, Siann, Stocks, & Walsh, 1996; Leung, Maehr, & Harnisch, 1993), age (Leung et al.; Vispoel & Austin, 1991), socioeconomic environment (Leung et al.), their perceptions (Perry, 2003; Perry & Magnusson, 1989); and the teachers' and parents' attributions (Bar-Tal & Guttman, 1981; Miller, Ferguson, & Byrne, 2000).

Gender

There are conflicting results for how gender influences academic achievement among high school students. Ma's (2001) results support the belief that the sex of the student has a significant influence on academic achievement. Leung et al. (1993) establish a clear distinction between male and female students where their causal attributions are concerned. Girls tend to explain their success

through internal and controllable factors. Along the same lines, Chapman and Lawes (1984) assert that girls present more external attributions for failure and success than boys. Lightbody et al.'s (1996) study on secondary school students shows that girls rate hard work and teachers' preferences as more important, whereas boys rate cleverness, talent, and luck as more important than do girls.

Age

Leung et al. (1993) found that older students were more task-oriented than younger students. At the same time, older students showed a higher level of external attributions where success was concerned: they "blamed" teachers more for their failures. Vispoel and Austin's (1991) research results can be found on the other side of the discussion to Leung et al.'s findings. Vispoel and Austin considered eight causal attributions, and their participants showed a low level of external attributions to explain their failures, but a high level of external attributions to explain their successes. Elementary students do not distinguish between effort and intelligence, whereas middle school and high school students perceive intelligence as an internal, stable, and uncontrollable cause.

Perceptions/Metacognitions

Perry and Magnusson (1989) tackle the subject of perceptions or distorted perceptions versus achievement and locus of control. Their studies proposed the idea that the usefulness of causal attributions in dealing with academic failure depends on personal interpretation of failure and quality of instruction. Their results show that for students with undistorted perceptions of their own performance, the attribution of ability generates better achievement, and the attribution of effort increases perceived control. Students with distorted perceptions follow a more complex pattern: the attribution of effort improves achievement (in poor instructional settings), but none of the three causal attributions considered (ability, effort, and test difficulty) induces a higher achievement level.

Social Profile

Miller et al. (2000) approach the differences between causal attributions of teachers/parents and students in terms of difficult classroom behavior and its direct effects on achievement. Their causal attributions differ. Bar-Tal and Guttman (1981) found that for students, causal attributions for academic success were much more similar to those of the teachers than to those of the parents. Galloway, Rogers, Armstrong, and Leo (1998) showed that during the transition from primary to secondary school, there is a disruption of students' motivational patterns and a significant decline in achievement levels. The effects of this transition on students' causal attribution style are not yet completely known. Sondaite (2000) reveals the connection between goals, hopes, locus of control, and achievement from the students' perspective. Her results indicate that high-achieving students define their future goals or hopes more clearly than do low-achieving students.

Students from a high socioeconomic environment perceive themselves as having higher academic achievement than those from a low socioeconomic environment (Leung et al., 1993).

Many studies have shown that individuals have varying attributional styles depending on their culture. The overall results demonstrate that Westerners, urban-dwellers, those with high SES, and men have a stronger locus of control than non-Westerners, rural-dwellers, those with low SES, and women (Berry et al., 1997). There are also differences between various cultures' attributional styles, especially in terms of the effort and difficulty of the task, although it is also important to take into consideration self-concepts when explaining the differences in attribution patterns (Berry et al.).

Social attributions are affected by certain social characteristics. Thus a socially secure individual who receives positive reinforcements from his environment (Lefcourt, 1982) tends to believe that his success comes from his own efforts (Beauvois & LePoultier, 1986). Also Weiner et al. (1971) postulate that attributions are represented variably according to social class in that individuals with low SES attribute their failure to their weak abilities. For this assumption, internal control would be related to high socioeconomic classes, and external control would be related to low socioeconomic classes. Therefore, children go to school with attributions affected by their social backgrounds.

Academic Achievement and Students' Attributions

In Canada the School Achievement Indicators Program (SAIP, 1996) results in sciences revealed a positive relationship between academic achievement and perceptions of hard work. Also, there is a positive relationship between studying at home and one's confidence in one's capacity to do well on a scientific assignment. Finally, the results in sciences also showed a positive relationship between academic achievement and the belief that one has to work hard to achieve success in this subject.

Research in the field of attribution theory and academic achievement suggests a positive relationship between a student's attributional style and his or her academic failure. A study conducted in a university-level mathematics course indicated that students attributed their failure to the difficulty of the task (Cortes-Suarez, 2005). Another study by Boruchovitch (2004) carried out with 16-year-old students in a math class revealed that lack of effort was the most significant attribution for failure.

Model

In this study we were inspired by a model pertaining to teachers' causal attributions of students' academic failure and success (Bouchamma, 2002). This model takes into account three interlinked components, that is, process variables (or of behavior), predictive variables, and result variables. Process variables are the varying types of explanations given by the student about failure and success. In this framework we regrouped the attributions for failure into varied categories such as internal/external, stable/non-stable, control/non-control, and global/specific (Weiner, 1979).

These explanations of failure and success are affected by six biases: (a) the fundamental error: a tendency to place the causes of an event on the individual rather than on the environment (Hewstone, 1989); (b) the type of question asked: global/specific (Schubauer-Leoni & Perrett-Clermont, 1988); (c) the complacency bias: attributing one's success and rejecting one's failure (Clark & Peterson, 1986); (d) the humility bias: attributing one's failure and rejecting

one's success (Tom & Cooper, 1984); (e) the angle from which the student's point of view is considered, that of actor or observer (Anderson, 1991; Storms, 1990); and (f) the polydoxy effect: the coexistence of varied conceptions of causes of failure depending on the situation that emerges when the student is asked to call on them (Pagès, cited in Monteil, Bavent, & Lacassagne, 1986).

Predictive variables are in two groups: variables linked to the student (sociodemographics, school, and sociocognitives and its practices) and those linked to the context (the characteristics of the institution).

Result variables are the long-term effects of the explanations of failure and success on the student's feelings that would condition his or her behavior toward other students in terms of assistance, the effort that he or she would provide for them, evaluation, motivation, and the feeling of power and control over other students' achievements.

This enables nuances and helps to specify the type of attribution according to the characteristics of the student who formulates them, the student's characteristics with regard to whom the attribution is formulated, and the context in which the attribution is formulated and the biases that can alter these explanations. In other words, it is a question of considering who formulates attributions (student's characteristics), with regard to whom (in general or to oneself), in which context or situation, and with what possible consequences and biases.

The goal of this study was to identify attributions among minority and majority French students for their success in writing and their success and failure in their French class.

Methodology

Participants

The sample consisted of 16-year-old French-speaking students ($N=3,874$). They were mainly from Quebec (32.5%), New Brunswick (27.6%), Ontario (23.1%), Manitoba (9.1%), and Nova Scotia (6.6%). The minority provinces were Manitoba, Ontario, New Brunswick, and Nova Scotia, $N=2,119$, and the majority province was Quebec, $N=1,755$. Among the sample 46% were boys and 54% girls.

Material

This study uses part of its secondary data from the Council of Ministers of Education of Canada (CMEC) of the SAIP Program Writing Assessment III (Student's version, Council of Ministers of Education, 2002). The first section of the questionnaire is about information related to the school and sociodemographic characteristics of the students. The students' attributions (for failure and success) were measured by using the 23rd question of the student's questionnaire. Table 1 shows the questions that measure the causal attributions for success and failure. It consists of 15 items, five of which refer to success in writing in general, for example, "To be able to write well you need to work hard at your writing." Five items refer to failure in a French course, for example, "When I get an unusually low mark in a French language arts assignment, it is most likely because I did not study hard enough." The final five items refer to success in a French course, for example, "When I get an unusually high mark in a French language arts assignment, it is most likely because I worked especially hard to do well." The items are on a 4-point Likert-type scale

Table 1
Examples of Items Used for Student Causal Attributions Failure and Success

<i>The student's causal attribution (15 items)</i>	<i>Examples</i>
Success in writing in general (5 items)	"To be able to write well you need to work hard at your writing"
Failure in a French course (5 items)	"When I get an unusually low mark in a French language arts assignment, it is most likely because I did not study hard enough"
Success in a French course (5 items)	"When I get an unusually high mark in an French language arts assignment, it is most likely because I worked especially hard to do well"

ranging from *strongly agree* (4) to *strongly disagree* (1). The internal consistency of the overall scale is acceptable (coefficient $\alpha=.64$).

Academic achievement was measured by administering a writing task from the SAIP Writing Assessment III to a random sample of students. Only the French-speaking population was included in this study. During the first session the students were asked to complete a writing task by first responding to a short text for an hour and then discussing a series of brief texts. A few days later during the second session, students had two and a half hours to complete the assigned writing task. This writing achievement was scored on a 5-point level scale (low to high) representing a continuum of knowledge and skills acquired by students of the same age. The syntax, overall ideas, and errors of each essay were considered in the scoring. The results of the essay were coded as either a success or a failure, which served as the dependent variable for this study.

Results

Attributions and Academic Achievement

Fifteen variables (independent variables) were measured to predict achievement (the dependant variable), where the first five variables are related to success in general, the next five are related to the student's failure in writing, and the last five are related to the student's success in writing. These variables are 1. You need a natural ability; 2. You need to work hard; 3. You need to study at home; 4. You need to write on own time; 5. You need a good teacher; 6. I did not study hard enough; 7. The teacher marked too hard; 8. I had bad luck; 9. The course was difficult; 10. The course was not well taught; 11. I worked hard to do well; 12. The teacher was easy in marking; 13. I had good luck; 14. The course was easy; and 15. The course was well taught.

Comparisons of the Two Groups Regarding Their Achievement

Table 2 presents an independent *t*-test that compares the two groups' achievement (majority and minority). The results indicate a significant difference for the majority group, $t(1,837)=13.26, p<.001$, meaning that students in a majority group ($M=.70$) achieved better than students in a minority group ($M=.44$).

The Influence of Attributions on Students' Achievement

A standard multiple regression was performed as shown in Table 3 to determine whether the students' attributions contributed significantly to their

Table 2
Comparison of 16-Year-Old Students' Achievement in Majority and Minority Environments

	Majority		Minority		Df	t
	M	SD	M	SD		
Achievement	.70	.46	.44	.50	1,837	13.26***

*** $p < .001$.

academic achievement in writing. Among the 15 variables linked to causal attributions made by students about success in general, failure in writing, and success in writing, nine were considered to have a significant statistical effect on academic success (positive or negative depending on the situation).

Standardized regression coefficients of four of the five predictors related to attributions of success in general significantly and positively predict achievement in writing: *to write well you need a natural ability* ($\beta = .02, p < .05$) and explains 0.04% of the total variance, *to work hard* ($\beta = .08, p < .001$) and explains 0.59% of the total variance, *need to write on own time* ($\beta = .03, p < .01$) and explains 0.06% of the total variance, and *need a good teacher* ($\beta = .03, p < .01$) and explains 0.13% of the total variance where a student who attributes his or her success in general to a natural talent, working hard, and writing on one's own time will have a better chance to achieve. One predictor contributed significantly and negatively to the students' success, *to study at home* ($\beta = -.10, p < .001$), where a student who attributes his or her success to studying at home will be less likely to achieve success, and it explains 0.58% of the total variance.

The next three predictors related to attribution of failure significantly and negatively predict achievement in writing: *I did not study hard enough* ($\beta = -.05, p < .001$) and explains 0.18% of the total variance; *the teacher marked too hard* ($\beta = -.03, p < .05$) and explains 0.11% of the total variance; and *I had bad luck* ($\beta = -.04, p < .01$) and explains 0.42% of the total variance. In summary, a student who attributes his or her failure in writing to not studying hard enough, the teacher's hard marking, and to bad luck will be less likely to achieve success.

The last predictor related to attribution of success significantly and negatively predict achievement in writing: *I had good luck* ($\beta = -.10, p < .001$), where the student who attributes his or her success in writing to good luck will be less likely to achieve success and it explains 1.28% of the total variance.

Attributions of Students in Minority and Majority Environments

As shown in Table 4, independent sample *t*-tests were conducted to see if there were significant differences between the means of the students in a French-speaking majority setting ($N = 1,755$) and those in a French-speaking minority setting ($N = 2,119$). Results indicated that there were significant differences for the student's attributions for success in the minority group when they attributed their good marks to: *study at home*, $t(2,455) = -3.56, p < .001$; *work hard*, $t(1,446) = -5.03, p < .001$; *the teacher was easy in marking*, $t(1,497) = -4.95, p < .001$; and *I had good luck*, $t(1,573) = -7.14, p < .001$, whereas the majority group attributed their good marks to *the course was easy*, $t(2,463) = 3.86, p < .001$. There were also

Table 3
Regression Analysis Predicting Academic Achievement Among 16-Year-Old
Students' Attributions (N=3,874)

<i>Causal attributions</i>	<i>B</i>	<i>SE</i>	<i>β</i>	<i>t</i>	<i>Variance</i>
<i>Success in general</i>					
1. To write well you need a natural ability	.12	.01	.02	2.34*	.000384
2. To write well you need to work hard	.06	.01	.08	6.82***	.005928
3. To write well you need to study at home	-.07	.01	-.10	-8.72***	.005757
4. To write well you need to write on own time	.02	.01	.03	2.63**	.000609
5. To write well you need a good teacher	.02	.01	.03	2.87**	.001333
<i>Student's failure</i>					
6. I did not study hard enough	-.03	.01	-.05	-4.34***	.00184
7. The teacher marked too hard	-.12	.01	-.03	-2.35*	.001092
8. I had bad luck	-.02	.01	-.04	-2.89**	.004181
9. The course was difficult	.00	.01	.00	.10	.000033
10. The course was not well taught	.00	.01	.00	.20	.000056
<i>Student's success</i>					
11. I worked hard to do well	.01	.01	.02	1.77	.00078
12. The teacher was easy in marking	-.01	.01	-.01	-1.25	.000812
13. I had good luck	-.06	.01	-.10	-7.25***	.012825
14. The course was easy	-.00	.01	.00	.06	.000036
15. The course was well taught	.01	.01	.02	1.76	.000665

* $p < .05$. ** $p < .01$. *** $p < .001$.

significant differences in students' attributions of failure for the minority group, which attributed their bad marks to: *did not study hard enough*, $t(1,429) = -5.97$, $p < .001$; *the teacher marked too hard*, $t(1,647) = -4.30$, $p < .001$; *I had bad luck*, $t(1,573) = -4.32$, $p < .001$; and *the course was not well taught*, $t(2,444) = -2.96$, $p < .01$. As for students in the majority group, they attributed their bad marks to *the course was difficult*, $t(1,672) = 5.40$, $p < .001$.

Discussion

This study reveals a growing concern about the achievement of minority French-speaking students. To develop feelings of autonomy in his or her education, a student must perceive his or her experiences as providing a certain amount of control. The SAIP (Council of Ministers of Education, 2002) results showed that students in a minority environment felt that they did not have control over their achievement in particular subjects such as writing, mathematics, and sciences (Landry & Allard, 2002).

Attributions That Influence Success and Failure in Writing

The results revealed that, "When a student believes that in order to write well, he needs a natural talent, he has a better chance to succeed than to disbelieve it." These results contradict logical thinking, according to which a student who learned from his social environment that intelligence was stable and not an evolutionary factor would have difficulty in improving his or her feeling of competence and perception of controllability of the task. Therefore, the causes

Table 4
Comparison of 16-Year-Old Students' Attributions in Majority and Minority Environments (N=3,874)

<i>Causal attributions</i>	<i>Majority</i>		<i>Minority</i>		<i>Df</i>	<i>t</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
<i>Success in general</i>						
1. To write well you need a natural ability	2.28	.85	2.26	.84	2,463	.55
2. To write well you need to work hard	2.97	.79	3.03	.75	1,479	-1.69
3. To write well you need to study at home	2.21	.78	2.32	.77	2,455	-3.56***
4. To write well you need to write on own time	2.62	.79	2.64	.78	2,433	-.69
5. To write well you need a good teacher	2.96	.85	2.93	.86	2,432	.86
<i>Student's failure</i>						
6. I did not study hard enough	2.49	.92	2.72	.83	1,429	-5.97***
7. The teacher marked too hard	2.23	.78	2.38	.83	1,647	-4.30***
8. I had back luck	1.81	.77	1.95	.76	1,573	-4.32***
9. The course was difficult	2.69	.76	2.51	.81	1,672	5.40***
10. The course was not well taught	2.32	.88	2.44	.88	2,444	-2.96**
<i>Student's success</i>						
11. I worked hard to do well	2.67	.96	2.87	.87	1,446	-5.03***
12. The teacher was easy on marking	2.37	.90	2.56	.85	1,497	-4.95***
13. I had good luck	1.98	.87	2.25	.87	1,573	-7.14***
14. The course was easy	2.66	.83	2.52	.82	2,463	3.86***
15. The course was well taught	3.12	.74	3.14	.77	2,462	-.70

** $p < .01$. *** $p < .001$.

of failure will remain unfavorable for improving expectations of success. Also, intelligence would seem to be more important than one's own efforts, and so students do not realize the negative effects of their attribution of powerlessness. The results show that students who attribute their failure to a lack of studying are less likely to succeed. Attributing failure to a lack of effort is an explanation that encourages the individual to perform better in the future (Viau, 1997), but this type of attribution does not automatically lead to success because self-efficacy influences the types of goals chosen. Energy spent by students on a difficult activity can be positive when this leads to success or negative if the efforts do not automatically lead to success. In this sense, "effort becomes the double-edged sword" (Covington & Omelich, 1979) where students do not risk engaging themselves significantly or do not persist in challenging tasks; therefore, they will feel negative emotions following failure, will feel increased self-esteem following success without much effort, and will use superficial strategies (Ames, 1992, avoidance attitudes [performance/

avoidance goals], negativism, procrastination, negotiation, copying, withdrawal, lack of effort, etc., Turner & Meyer, 2002).

The results also show that those who think they work hard, study at home, write on their own time, have a good teacher, and have good luck have a better chance of succeeding. Also, the opposite results apply to those who think that they did not study hard enough, their teacher marked too hard, and that they had bad luck have less chance to succeed. This is explained by the students' involvement, which results from their motivation for the task. Their engagement depends primarily on the value they give to achievement and of their system of causal attribution of perceptions concerning their own competences in the field, the importance of the activity, the degree of control that they will be able to exert, and their involvement in learning. Students who are having difficulty and see their failure as inevitable will invest the least amount of effort possible because they do not see the purpose of doing so. This phenomenon is called *learned helplessness* (Dweck, 1975). To maintain a positive self-image, students will tend not to make enough effort to succeed and will avoid undertaking tasks that involve risk of failure in order to keep up their image in front of their friends (Gagné, Yekovich, & Yekovich, 1993). They will involve themselves in tasks with results that do not threaten their image (easy or difficult tasks, Viau, 1997).

Attributions That Determine Success or Failure in Writing Vary According to the Environment

An analysis of the attributions of students in minority and majority environments reveals two separate profiles. In summary, a student in a minority environment attributes his or her success to studying hard at home, working hard enough, having a teacher who is easy on marking, and good luck. The student in a majority environment attributes his or her success to the ease of the course. The student in a minority environment attributes his or her failure to not studying hard enough, to bad luck, to having a teacher who marks too hard, and to the course not being well taught. The student in a majority environment attributes his or her bad marks to the difficulty of the course. These results are comparable to those found by Landry and Allard (2002), according to which the average student of a minority group tended more than the average Canadian student to blame the teacher for his or her failure or low marks. As well, these authors notice that the students in the minority group also believe in the importance of their efforts for success, but will also attribute their success to good luck.

In fact by taking into account the interaction between the environment and causal attributions, we see that the students' achievement in writing in majority or minority environments depends on their attributions for failure and success.

These results lead us back to motivation, a complex concept with various facets. In reality each student grasps the various school subjects in his or her own way. The cognitive motivations are of concern for schools because they are a combination of feelings of interest and lack of interest that can be considered causes of failure. They are based on specific traits that characterize human beings; cognitive activities of acquisition of information concretized by

the attention process; and their correlations of active maintenance of information treatment, learning, and memorizing new information (Le Ny, 1994).

However, it is important to be careful in interpreting these results. Pettigrew (1979, in Berry et al., 1997) calls this the ultimate attribution error as the “systematic patterning of intergroup misattributions shaped in part by prejudice.” He suggested some hypotheses concerning the attribution error.

Group-serving attributions do vary across inter group situations and may be stronger when the groups have histories of intense conflict and possess negative stereotypes and when group differences covary with national and socioeconomic differences the bias can however, be extinguished, even reversed, for members of subordinate or low status groups. (p. 137)

We note the lack of research on students’ attributions of success and failure in minority and majority environments. Achievement cannot be improved without considering the variables linked to attributions because although they are subjective, they influence a student’s choices, his or her future behaviors and interests; which comes down to the point where the interactions between the student and the environment are not only influenced by the “objective aspect of the situation, but also by his subjective perception of the situation” (Vallerand & Bouffard, 1985, p. 46).

Conclusion

This study examined French-speaking students’ attributions from minority and majority environments with regard to their writing achievement. The results with the retained variables show varied profiles of attributions among the students in a minority linguistic environment and those from a majority linguistic environment.

The findings of this study may have important implications for understanding how students perceive their own success. In fact the minority group students’ explanations for their performances cannot be analyzed separately from the minority context, which has an effect on their academic results and consequently on their perceptions. The French-speaking students from the minority group demonstrate a profile called learned helplessness (Tardif, 1992). Failure seems inevitable, so the students put in the least possible amount of effort because they do not see the usefulness of their effort. Also, because the perceptions of students in a minority environment are linked to their academic success, it is important for schools to enhance their feelings of accomplishment. In this context it is important to consolidate the assets for the minority French school while maintaining its bond with the community to avoid isolation. Therefore, effective teaching interventions adapted to the reality of the community should be put in place in all minority French schools in order to improve students’ writing achievement. This will help the students not only with their writing and reading, but also with their other school subjects and throughout their lives. As well, students’ perceptions (their attribution style) can be improved. The students must be equipped with a style that promotes their motivation and achievement, so it seems important to educate them about attributions, an important component of their success.

This study looked at students only as participants. However, the teaching-learning process does not limit itself to students, but involves their interaction

in class, in school, in the family, and in the social environment. The other actors (parents, teachers, principals, and other administrators) were not considered in this study. Because other variables could be added to the model, the list of variables is not exhaustive. In addition, the model does not include variables capable of mediating the effects of the predictors on the type of attribution.

For future studies of students' achievement in a minority environment, it would also be important to situate the schools in their respective communities. In fact the linguistic reality varies from province to province and may vary even in the regions of a single province. For example, in some regions the French language is mixed with English, whereas in others people speak only French. Because the minority group in this study was considered a homogeneous group, it would be important to consider the linguistic differences in the French communities and find out if there are minority differences in each group in terms of their attributions.

Future research should also examine the effect of gender in writing, more specifically to verify the significant differences between girls' and boys' writing achievement in majority and minority provinces. Finally, continued research should help further our understanding of academic achievement in French majority and minority environments in Canada and enhance the quality of students' achievement in minority contexts.

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