



ICRML
Institut canadien
de recherche
sur les minorités
linguistiques

CIRLM
Canadian Institute
for Research
on Linguistic
Minorities

Graduating from an English High School in Quebec: Postsecondary Education Aspirations and Career Plans

By

Réal Allard

Université de Moncton

and

Rodrigue Landry

Canadian Institute for Research
on Linguistic Minorities

October 2014

**Graduating from an English
High School in Quebec:
Postsecondary Education
Aspirations and Career Plans**

Graduating from an English High School in Quebec: Postsecondary Education Aspirations and Career Plans

By

Réal Allard

Université de Moncton

and

Rodrigue Landry

Canadian Institute for Research on Linguistic Minorities



ICRML
Institut canadien
de recherche
sur les minorités
linguistiques

CIRLM
Canadian Institute
for Research
on Linguistic
Minorities



**Patrimoine
canadien** **Canadian
Heritage**

We acknowledge the support of the Government of Canada

Moncton (New Brunswick)

October 2014

ISBN 978-1-926730-35-6

© **Institut canadien de recherche sur les minorités linguistiques/
Canadian Institute for Research on Linguistic Minorities**

18 avenue Antonine-Maillet

Léopold-Taillon Building, suite 410

Université de Moncton, Campus de Moncton

Moncton (New Brunswick), Canada, E1A 3E9

Phone : 506.858.4669 Fax : 506.858.4123

Web Site : www.icrml.ca

Legal Deposit : 4th trimestre 2014

Library and Archives Canada

Table of Contents

List of Figures	9
Foreword	13
Acknowledgements.....	15
Chapter 1—Introduction	17
Chapter 2—Conceptual Framework.....	21
2.1 Educational Aspirations	21
2.1.1 <i>Self-Determination Theory and Educational Aspirations</i>	21
2.1.2 <i>Models of Educational Aspirations Used in Canadian Studies</i>	26
2.1.3 <i>Model of Educational Aspirations Used in the Present Study</i>	28
2.2 Intentions to Pursue Postsecondary Education in English.....	30
2.3 Intentions to Pursue a Career in One’s Home Region.....	31
Chapter 3—Methodology.....	33
3.1 Population and Sample	33
3.2 Questionnaires’	33
3.3 Procedures for Questionnaire Administration.....	33
3.4 Data Analysis.....	34
3.4.1 <i>Descriptive Analyses</i>	34
3.4.2 <i>Correlational Analyses</i>	35
Chapter 4—Results.....	37
4.1 Results of the Descriptive Data Analyses.....	37
4.1.1 <i>Student Sample Characteristics</i>	37
4.1.2 <i>Family Characteristics</i>	41
4.1.3 <i>Student Educational Aspirations, Postsecondary Plans and Intentions to Pursue a Postsecondary Education</i>	48
4.1.4 <i>Family and Education</i>	53
4.1.5 <i>School Context</i>	64
4.1.6 <i>Student Psychological Characteristics and School Context</i>	68
4.1.7 <i>Student Dispositions towards Postsecondary Education</i>	77
4.1.8 <i>Student Preferred Language for Postsecondary Studies</i>	83
4.1.9 <i>Financing of Student Postsecondary Education</i>	88
4.1.10 <i>Student Plans to Pursue a Career in Home Region after Completing Postsecondary Education</i>	93
4.1.11 <i>Student Willingness to Participate in a Follow-Up Interview</i>	99
4.2 Results of Correlational Analyses.....	99
4.2.1 <i>Regression Analyses on Educational Aspirations</i>	102



4.2.2	<i>Analysis of Probability of Pursuing Postsecondary Studies in English</i>	105
4.2.3	<i>Regression Analysis on Strength of Intention to Pursue a Career in One's Home Region</i>	108
Chapter 5—Discussion and Conclusion		111
5.1	First objective: study student educational aspirations and the factors related thereto	111
5.1.1	<i>Students' Educational Aspirations</i>	112
5.1.2	<i>Variables related to student educational aspirations</i>	112
5.2	Second Objective: Students' Preferred Language of Postsecondary Education...	114
5.2.1	<i>Likelihood of Pursuing a Postsecondary Education in English</i>	115
5.2.2	<i>Variables of interest in relation to the probability of pursuing postsecondary studies in English</i>	115
5.3	Third Objective: Strength of Student Intentions to Pursue a Career in Their Home Region	117
5.3.1	<i>Intentions to Pursue a Career in Home Region</i>	117
Conclusion		119
References		123



List of Figures

Figure 2.1 Self-determination continuum (Ryan and Deci, 2000)	22
Figure 2.2 Model of the Relationship Between Family Context (Parental Support), School (Educational Staff) Context, Feelings of A-C-R, Motivation Regarding Studies and Postsecondary Education, and Educational Aspirations	25
Figure 2.3 Model of Factors Related to Educational Aspirations.....	29
Figure 2.4 Model of Factors Related to Strength of Intention to Pursue a Career in Home Region after Postsecondary Studies.....	32

List of Tables

Table 4.1	Number and Percentage of Students by Region, Average Age and Gender .	38
Table 4.2	Student Mother Tongue, Second Language, and Other Language	39
Table 4.3	Current Program of Study.....	40
Table 4.4	Enrollment in a Bilingual Program of Study.....	40
Table 4.5	Family Structure and Student Place of Residence.....	42
Table 4.6	Percentage of Students by Number of Brothers and Sisters, Number of Younger Brothers and Sisters and Number of Brothers and Sisters Who Live in the Same Household as the Student	43
Table 4.7	Mother Tongue of Mothers and Fathers	45
Table 4.8	Parents' Education.....	46
Table 4.9	Estimation of the Number of Books in the Home, Without Counting Schoolbooks.....	47
Table 4.10	Students' Educational Aspirations.....	49
Table 4.11	Educational Aspirations by Level of Educational Attainment.....	50
Table 4.12	Educational Aspirations by Gender	51
Table 4.13	Short-Term Postsecondary Plans.....	52



Table 4.14	Family Communication Reflecting Cohesion and Solidarity.....	54
Table 4.15	Maternal and Paternal Behaviour Promoting Feelings of Autonomy, Competence and Relatedness.....	55
Table 4.16	Frequency of Parental Communication about School and After-School Experiences.....	56
Table 4.17	Frequency of Parental Communication with Student about Social Issues....	57
Table 4.18	Frequency of Parental Encouragement to Perform Well in School.....	58
Table 4.19	Frequency of Parental Involvement in School and After-School Activities...	58
Table 4.20	Frequency with Which Parents Express Expectations of Academic Success.	59
Table 4.21	Parent Expectations Regarding Postsecondary Education	60
Table 4.22	Mother, Father and Other Family Member Influence on Postsecondary Education Plans	62
Table 4.23	Elementary and High School Teachers' Behaviour Promoting Feelings of Autonomy, Competence and Relatedness	65
Table 4.24	School Staff and Friends' Expectations Regarding Educational Attainment	66
Table 4.25	Influence of Educational Staff, Role Models, and Friends on Postsecondary Plans	67
Table 4.26	Feelings of Autonomy, of Competence, and of Being Controlled or Incompetent During Learning Activities.....	69
Table 4.27	Feelings of Relatedness with Teachers and Schoolmates.....	70
Table 4.28	Feelings of Satisfaction with Academic Performance and Learning by Subject	72
Table 4.29	Importance of Academic Success	73
Table 4.30	Feelings of Discouragement with School Subjects.....	73
Table 4.31	Student Self-Evaluation of Ability to Learn in Comparison to Perceived Learning Ability of Peers.....	74
Table 4.32	Feelings of Inclusion at School.....	74



Table 4.33	Self-Esteem and Feelings of Failure and Uselessness	75
Table 4.34	Types of Motivation for Postsecondary Education.....	78
Table 4.35	Confidence in Ability to Obtain a CEGEP or University Diploma.....	80
Table 4.36	Strength of Students' Intentions to Pursue Postsecondary Studies.....	80
Table 4.37	Location of Student Preferred Program of Postsecondary Studies.....	81
Table 4.38	Barriers to Postsecondary Education	82
Table 4.39	Desired Proportion of Postsecondary Courses in English, Given the Choice	84
Table 4.40	Likelihood of Pursuing Postsecondary Education in English	85
Table 4.41	Linguistic Character of Preferred Postsecondary Institution.....	85
Table 4.42	Barriers to Pursuing a Postsecondary Education in English	86
Table 4.43	Perceived Availability of Bursaries by Language of Study	87
Table 4.44	Knowledge of Sources of Financing for Postsecondary Education.....	88
Table 4.45	Amounts Expected from Various Sources of Financing for Postsecondary Education.....	89
Table 4.46	Savings for Postsecondary Education	90
Table 4.47	Person Responsible for Postsecondary Education Savings.....	90
Table 4.48	Concerns about Financing Postsecondary Studies.....	91
Table 4.49	Concerns about Indebtedness at End of Postsecondary Studies	91
Table 4.50	Likelihood of Living with Parents During Postsecondary Studies.....	92
Table 4.51	Intentions Regarding Eventual Region of Employment.....	94
Table 4.52	Strength of Intentions to Pursue a Career in the Home Region.....	94
Table 4.53	Confidence in Ability to Find Employment in the Home Region.....	95
Table 4.54	Likelihood of Finding Employment in the Home Region	96
Table 4.55	Perception of Current Regional Context.....	96
Table 4.56	Perception of Barriers to Pursuing a Career in Home Region	97
Table 4.57	Percentage of Working Time in English, if Working in Home Region.....	97
Table 4.58	Willingness to Participate in a Follow-Up Interview	99
Table 4.59	The 19 Factors and their Variables with Loadings Greater than .50.	100

Table 4.60	Summary of Results of Multiple Regression Analysis Between Factor Scores and Students' Postsecondary Education Aspirations	103
Table 4.61	Summary of Results of Multiple Regression Analysis Between Factor Scores and Female Student Educational Aspirations.....	104
Table 4.62	Summary of Results of Multiple Regression Analysis Between Factor Scores and Male Student Educational Aspirations	105
Table 4.63	Summary of Results of Multiple Regression Analysis Relating Factor Scores and Strength of Student Intentions to Pursue a Postsecondary Education in English.....	107
Table 4.64	Summary of Results of Multiple Regression Analysis Relating Factor Scores and Strength of Student Intentions to Pursue a Career in the Home Region	109



Foreword

Created by the Government of Canada in 1998, the Canada Millennium Scholarship Foundation made an important contribution to research on the access of Canadian students to postsecondary education and on their participation in postsecondary education. Unfortunately, the Millennium Scholarship Foundation was terminated in 2010. Millennium Scholarship Foundation reports prepared by Junor and Usher (2002, 2004) and by Berger, Motte and Parkin (2007, 2009) provide detailed information on the results of research conducted on a broad variety of topics relative to student postsecondary education.

However, the Association des universités de la francophonie canadienne (AUFC) and the Canada Millennium Foundation agreed that few of the studies on student postsecondary education had been conducted on the students of the

Francophone minority communities of Canada (Allard, 2005). The two organizations established a partnership which led to the Canadian Institute for Research on Linguistic Minorities (CIRML) pan Canadian study on the postsecondary education aspirations of students in Francophone schools in minority contexts in Canada (Allard, Landry, & Deveau, 2009a, 2009b) and to the publication of a report on Ontario Francophone grade 12 student postsecondary aspirations prepared at the request of the Ontario Ministry of Education (Allard, Landry, & Deveau, 2010).

The present report on the postsecondary education aspirations and career plans of secondary V students in the high schools of the Anglophone minority of Quebec is the result of continuing efforts to describe and understand the educational aspirations of official language minority students in Canada.

Acknowledgements

This survey on the postsecondary education aspirations and career plans of Secondary V students in Quebec English high schools was made possible thanks to funding received from Canadian Heritage.

The Canadian Institute for Research on Linguistic Minorities and the authors of this report wish to extend special thanks to the more than 4000 Secondary V students of English high schools in Quebec who accepted to answer the numerous survey questions. We also salute and thank very sincerely the Quebec English School Boards Association Executive Director, the Directors General of the English School

Boards, and the school principals, teachers, and staff members who made this survey possible.

We also extend our most sincere thanks to Ms. Kimberley Hunt, Research Assistant with QUESCEN (Quebec English Speaking Communities Research Network, Concordia University) and CIRLM (Canadian Institute for Research on Linguistic Minorities), for her work in liaising and maintaining open and positive communications with the English School Boards and schools in relation to the survey.

Finally, our thanks to Mr. Donald Long who organized and supervised the data entry process, verified the data, and carried out most of the statistical analyses.





Chapter 1—Introduction

A recent study analyzed the vitality of the English language in Quebec by looking at a number of factors that influence the status of English-speaking communities in the only Canadian province that has French as the sole official language and by elaborating a sociolinguistic profile of secondary 4 students in English high schools in the province (Landry, Allard, & Deveau, 2013)¹. This study concludes that the vitality of the English language *per se* is not threatened in Quebec, mainly because English is a global language (Crystal, 2004) that has a strong gravitational pull (Calvet, 1999; de Swaan, 2001) not only on its native speakers but also on speakers of other languages in the world. This effect was clearly visible in the consumption of English-language media by Quebec's English high school students, even in the Quebec regions where the English-speaking community represents as little as 2% of the population.

Yet, when the student's more situated sociolinguistic profile was analyzed (their use of the language with family members, relatives, friends and their contacts in the public sphere), the degree of English socialization and

language use varied greatly with the demographic context of the English-speaking community. For example, a minority of the students attending an English high school in Quebec regions where French is dominant had English as their mother tongue and, although they were schooled in the English language, their identification with the Francophone community was equal to that with the Anglophone community. Even within the Greater Montreal region, where approximately 80% of Quebec's English speakers reside, the sociolinguistic profile of the students varied with the demographic concentration of the English-speaking population.

It was concluded that the English-speaking communities of Quebec constitute a real minority and that its vitality profile, similarly to other minority language groups, particularly those of Francophone minorities outside Quebec, varies according to demographic contexts. In other words, language socialization, ethnolinguistic identity, language behaviours and other language characteristics of the students could be explained by the same sociolinguistic principles that explain other minority language situations. Nonetheless, the study pointed out that the English-speaking communities of Quebec can be seen as a "minority with an edge" due to the fact that its members speak the world's most dominant language, in global terms. This situation is both an advantage and a challenge. It is an advantage because of the important status it gives to English,

¹ Readers may also be interested in the sociolinguistic profile of Grade 11 students in Francophone minority schools outside of the province of Quebec prepared by Landry, Allard, and Deveau (2010).

even in situations where the English-speaking minority is sparsely populated. But it is a challenge when the group faces the possibility of defining itself as a “distinct and active entity” within an intergroup setting (Giles, Bourhis, & Taylor, 1977), especially if its aim is that of becoming a collectivity with a recognized “cultural autonomy” project (Landry *et al.*, 2013). The social attractiveness of the English language incites a large proportion of “Allophones” in Quebec to adopt English as their “first official language spoken” (Lachapelle & Lepage, 2010) and the end result is a very pluralistic group of English speakers which challenges the unity of the group from a governance perspective (Jedwab, 2006) and tends to favor the emphasis on individual linguistic rights rather than collective rights (Foucher, 2013), a situation that may hamper the possibility of a cultural autonomy project (Landry *et al.*, 2013).

One of the main challenges of the English-speaking communities of Quebec has been that of retaining its population, the political situation being a factor that has contributed to a very significant outmigration of its members (Corbeil, Chavez & Pereira, 2010; Floch & Pocock, 2013). According to Floch and Pocock (p. 162),

“... there is a strong link between the level of education and the tendency to stay or leave. Quebec

Anglophones (EMT²) with higher levels of education are much more likely to leave the province than those with lower levels of education”.

Floch and Pocock estimate the retention rate of the Francophone majority in Quebec in 2001 to be 96.3% whereas that of the Anglophone minority in Quebec was 50.1%. They argue also that Anglophones who stayed in Quebec experienced a relative loss in socio-economic status.

The present study is in line with these socio-economic and demographic challenges. Whereas our first study focused on the bilingual experiences of Secondary IV students enrolled in English high schools in Quebec, this report analyzes the career plans and the educational aspirations of Secondary V students enrolled in English high schools in all of Quebec’s English language school boards. A similar study was undertaken in Francophone high schools outside Quebec (Allard, Landry, & Deveau, 2009a, 2009b).

Although the study analyzes a large variety of variables related to the student’s lives, their family, their school and their community, the study focuses on three major objectives. The primary purpose is to present an in-depth analysis of the many factors that may be linked to the students’ intentions to pursue postsecondary education. Family

² EMT means of English mother tongue.



climate and school climate variables are analyzed, as well as more personal variables such as self-esteem, basic needs satisfaction, satisfaction with academic results and their motivations relative to the pursuit of postsecondary studies. Socio-economic status and perceived financial obstacles are also examined.

The second objective is to analyze the extent to which the students' intentions are to pursue their studies in English or in French. A very high proportion of young Anglophones in Quebec consider themselves to be bilingual (Lachapelle & Lepage, 2010) but measured competencies in French vary widely according to the demographic density of the Anglophone population (Landry *et al.*, 2013). Most of the factors that could have more effectively predicted the intention to study in French or English were measured in a separate study (Landry *et al.*, 2013). It was intended that a majority of the Secondary IV students who participated in the language study would also participate in the present study which focusses on Secondary V students. This would have made it possible to analyze the relationship between language variables and the intention to pursue postsecondary education in English or French. Due to a variety of factors, the links between the two studies are not possible. Yet, we will analyze the effects of the demographic concentration of Anglophones (a variable that reflects the vitality of the English speaking community) as well as other variables such as reasons for studying in French or

English, distance from the institutions that offer postsecondary programs in English and French and the financial resources or incentives for studying in either language.

The third objective of the study is to determine the strength of students' intentions to pursue a career in their home region. Factors analyzed in relation to these intentions are variables such as their confidence in the ability to find employment in their region and variables related to their perceptions of the quality of community services therein.

The underlying goal of the study is not to compare different school boards in relation to the three objectives of the study but to offer a global perspective that would be representative of all Secondary V students enrolled in English high schools in Quebec. Students from all ten school boards have participated in the study. It was a challenge to categorize students in a way that the results would not identify characteristics of students from a particular school district and yet be grouped in such a way that the categories would represent relevant and useful context variables. For data presentation purposes, students were grouped according to two underlying variables, one geographical, the other demolinguiistic; each of these has two categories. The first variable is the Montreal versus remainder of Quebec geographical context. The second underlying variable is demolinguiistic in nature: one category is created by grouping students who

live in municipalities which have an Anglophone population that constitutes more than 30% of the municipal population, while the other category groups students from municipalities where Anglophones represent 30% or less of the population. Thus data is presented for four groups of students: Greater Montreal (more than 30% Anglophones), Greater Montreal (30% Anglophones or less), remainder of Quebec (more than 30% Anglophones),

remainder of Quebec (30% Anglophones or less). More details are presented in Chapter 3.

Following this introduction, Chapter 2 describes the conceptual frameworks of the research. The methodology of the study is described in Chapter 3. Results are presented in Chapter 4 and are divided according to the three main objectives of the study. Chapter 5 contains a discussion of the results and provides the conclusion of the research.



Chapter 2—Conceptual Framework

This chapter³ deals mainly with the conceptual framework used for the primary objective of the study—examining the educational aspirations of students attending Anglophone schools in Quebec and analyzing factors which may be related to such aspirations and to students’ intentions to pursue a postsecondary education. It also outlines the conceptual framework relating to the third objective—studying the intentions of students to pursue a career in their home region and factors which may be related to such intentions. We do not discuss the conceptual framework used for the second objective (studying students’ intentions to pursue a postsecondary education in English or French and factors related to their choice of language of postsecondary education). Students who participated in a previous study of Secondary IV students that analyzed the students’ experiences with the two official languages of Canada (Landry, Allard & Deveau, 2013) are not the same students who participated in the present study that focusses on Secondary V students.

³ This chapter is adapted from the study by Allard, Landry and Deveau (2009a) which dealt with the postsecondary educational aspirations of students from Francophone minority schools outside Quebec.

2.1 Educational Aspirations

The following is a description of the conceptual model we developed to examine students’ postsecondary aspirations. Our model is substantially inspired by models used by other researchers to study factors related to educational aspirations, and it also comprises elements of Ryan and Deci’s self-determination theory (1985, 2000, 2002), which has been applied to Anglophone students’ decisions to pursue a postsecondary education in French (Goldberg & Noëls, 2006) and with Francophone students’ intentions to pursue postsecondary studies in their first language (Allard, Landry, & Deveau, 2009a, 2009b). We begin with a description of the elements of self-determination theory, with the aim of studying their effect on educational aspirations and intentions to pursue a postsecondary education. We follow this description with a table of the variables used in other pan-Canadian studies on the educational aspirations of high school students and indicate the elements we have integrated into, and adapted for, our own research. We conclude with a presentation of the factors and variables chosen to create the model used in the present study.

2.1.1 Self-Determination Theory and Educational Aspirations

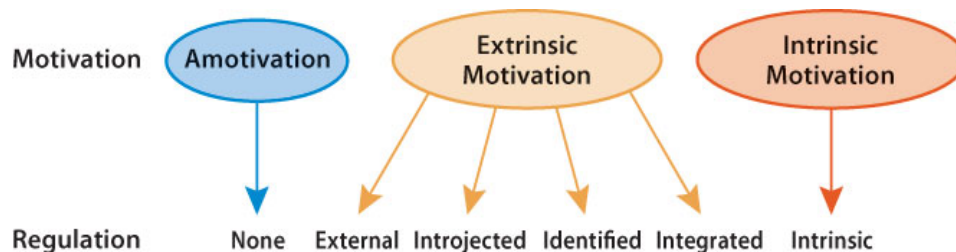
The theory proposed by Deci and Ryan (1985, 2000, 2002) is founded on the following premise: individuals are



predisposed to interact with their environment and to adopt specific types of behaviour for intrinsic reasons (based on personal choice or simply the inherent pleasure of the task itself) rather than extrinsic reasons. The more individuals' environments permit or favour the expression of autonomy (which implies a non-controlling environment), the more likely it is that they will develop a capacity for self-determination.

Deci and Ryan (1985) propose a self-determination continuum in which intrinsic motivation represents the highest level, while amotivation (an absence of motivation associated with feelings of helplessness and lack of control over the activity or behaviour in question) represents the lowest. Extrinsic motivation and its four related forms of behavioural regulation are located between these two poles (Figure 2.1).

Figure 2.1
Self-determination continuum (Ryan and Deci, 2000)



As seen in Figure 2.1, the degree of self-determination increases from left to right along the continuum. Our goal is to understand how the six types of motivation proposed by Ryan and Deci's theory of self-determination (2002) apply to learning and intentions to pursue postsecondary education.

Intrinsic motivation represents the most complete form of self-determination. Students acting on the basis of intrinsic motivation are the most motivated to learn and to pursue a postsecondary education, as they are doing so for the sheer pleasure, stimulation or sense of accomplishment that comes when they

are engaged in these activities. This type of motivation is similar to that of a child playing or exploring. Amotivation represents the opposite of this phenomenon. In cases of amotivation, students do not act according to their intentions, but instead realize that their behaviour is based on external factors out of their control. In other words, amotivation corresponds to the absence of behavioural self-regulation. As such, these students do not experience any sense of pleasure, satisfaction or accomplishment from learning; moreover, they do not experience any feelings of autonomy or competence.

Extrinsic motivation is located between intrinsic motivation and amotivation along the continuum. The four types of regulation associated with extrinsic motivation reflect different forms and degrees of internalization of the values and expectations projected by the individual's environment.

External regulation refers to the fact of learning or of being inclined to pursue a postsecondary education in order to be rewarded or to avoid punishment. Introjected regulation refers to learning for reasons linked to internal rewards and punishment. Students' behaviour corresponds to a desire for the approval or acceptance of a significant third party, such as a parent or an educator. Students would thus pursue a postsecondary education, for example, to avoid feeling they had let their parents down. In these two forms of regulation (external and introjected), students do not attribute any value to learning as such, and their motivation is therefore not self-determined. Identified regulation, on the other hand, is manifested in situations where students have internalized the importance of learning and pursuing a postsecondary education and when they associate this behaviour with personal goals. Integrated regulation is the type of interiorized behavior most closely related to self-determination. In this type of behaviour, students have integrated the value of learning and pursuing a postsecondary education into their own sense of self. They seek to establish a sense of coherence between their values and identities and

therefore choose to learn and pursue a postsecondary education because these actions correspond to who they are and who they wish to become. In short, these last two types of regulation are more internal than the previous two and reflect greater behavioural self-determination.

In closing this section, we feel it is important to emphasize two points. First, an individual's motivation for adopting specific types of behaviour is rarely limited to a single type of regulation. Rather, behaviour results from several different motivations acting simultaneously. As such, we believe that students may have various different motivations to study and to pursue a postsecondary education. For example, a high school student may do his or her homework, seek to learn and contemplate plans to pursue postsecondary studies because he or she is truly interested and stimulated (intrinsic motivation), because he or she feels it is important on a personal level (extrinsic motivation with integrated regulation) and also because good academic results are a prerequisite for obtaining bursaries or scholarships (extrinsic motivation with external regulation). The student may also choose to study and pursue a postsecondary education in order not to disappoint an important person in his or her life who has expressed expectations in this regard (extrinsic motivation with introjected regulation). What is important is that the most self-regulated motivations be dominant.



Secondly, we must distinguish between the effects of self-determined extrinsic motivation (identified and integrated) and those stemming from intrinsic motivation. While intrinsic motivation is very important to the intensity with which an individual carries out specific behaviour, the identified and integrated types of regulation within extrinsic motivation play a crucial role in terms of perseverance (Koestner & Losier, 2002). For example, if intrinsic motivation—studying and pursuing a postsecondary education for the pleasure of learning and self-development—allows a student to willingly and enthusiastically pursue his or her studies, it is the identified and integrated regulations or motivations which will give this student the drive to persevere when confronted with a given barrier. Ultimately, the interiorization and integration of regulations in terms of learning and wanting to pursue a postsecondary education may also be related to a greater self-determination of identity construction or self-image.

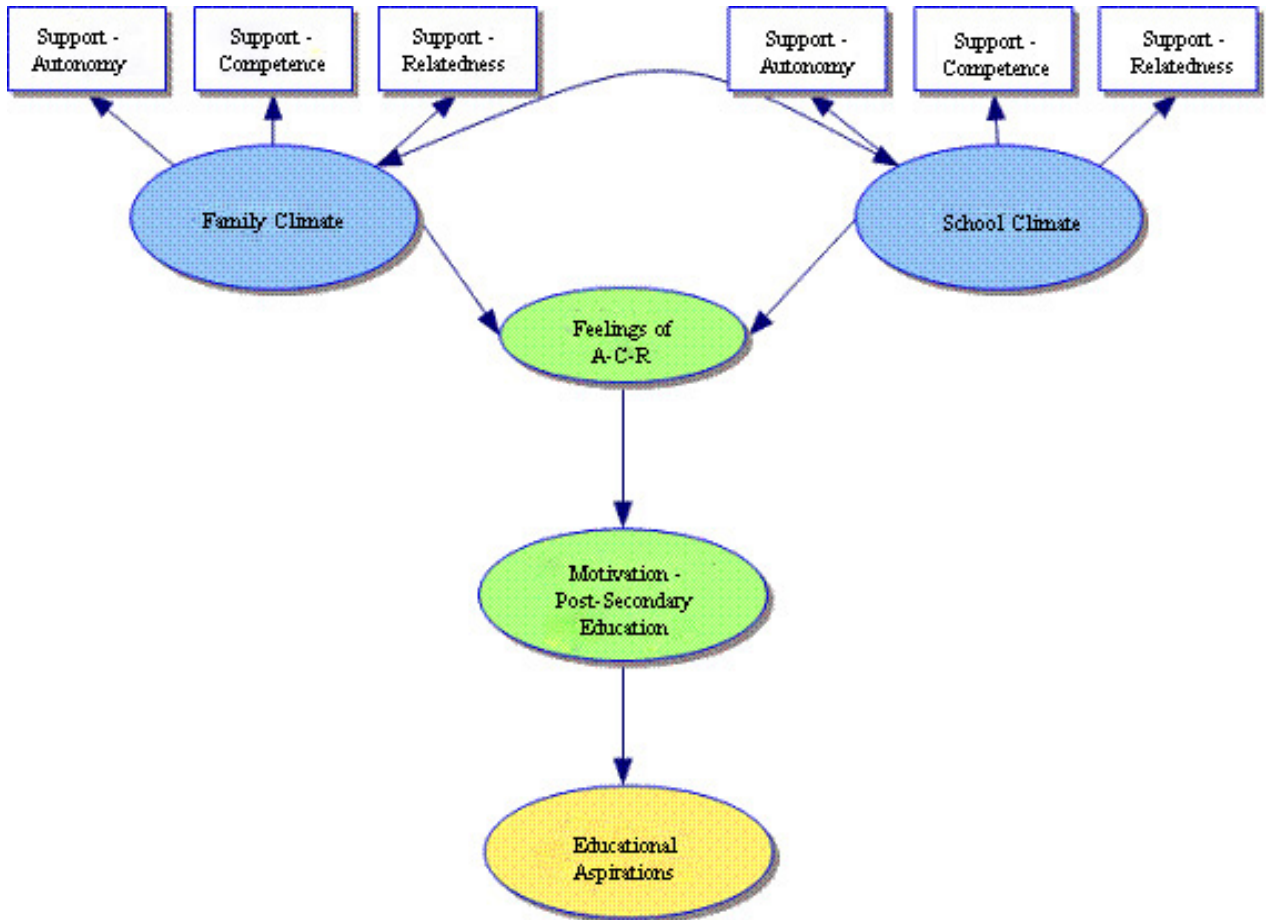
The underlying premise of Deci and Ryan’s cognitive evaluation theory—a mini-theory within their self-determination theory (2002)—is that children are intrinsically motivated to participate in an activity if they: (1) believe they have some control over it, (2) feel at ease with themselves and competent while they are engaged in it, and (3) have a sense of belonging while they are participating in it. These three psychological mediators or “feelings of A-C-R”—namely, feelings of autonomy, competence and social relatedness (or belonging)—influence

self-determination. These mediators reflect an individual’s fundamental needs: the need to be in control of one’s behaviour or actions, the need to interact efficiently and with competence with one’s environment and the need for belonging and security in relation to significant others. Finally, any type of regulation of motivation entails significant cognitive, affective and behavioural consequences. Extrinsic motivation with internal regulation (identified or integrated regulation) and intrinsic motivation are those which have the most positive impact on individuals. Many studies have confirmed these assumptions and hypotheses of self-determination theory (Deci & Ryan, 2002; see also Special issue on Symposium on SDT in education in *Theory and Research in Education* (2009, no 7(2), Guest editors Ryan & Niemiec).

In basing our study on this theory (Deci & Ryan, 2000, 2002)—which posits that contexts encouraging the development of feelings of autonomy, competence and relatedness tend to reinforce identified and integrated regulation, as well as intrinsic motivation—we hypothesize that the extent to which a student shows a high degree of educational aspirations and strong intentions to pursue postsecondary studies is positively influenced by family and school experiences which encourage feelings of A-C-R in terms of studies and learning (Figure 2.2).



Figure 2.2
Model of the Relationship Between Family Context (Parental Support),
School (Educational Staff) Context, Feelings of A-C-R, Motivation
Regarding Studies and Postsecondary Education, and Educational
Aspirations



Note. Adapted from Allard, Landry, & Deveau, 2009a, p. 27

2.1.2 Models of Educational Aspirations Used in Canadian Studies

Scientific journals have published numerous studies dealing with the factors related to educational aspirations or intentions to pursue postsecondary studies. Some noteworthy examples are: Majoribanks' research on the educational aspirations of Australian students (1985, 1998, 2003), Khattab's study on minority Palestinian students in Israel (2003), Goyette and Xie's study on the aspirations of Asian American youths (1999) and Krahn and Taylor's study on the aspirations of visible-minority immigrant youth in Canada (2005). For the purposes of our research, we took note of the studies conducted among samples of Canadian students from several provinces by Garg, Kauppi, Lewko and Urajnik (2002), Looker and Thiessen (2004) and the *Réseau des cégeps et des collèges francophones du Canada* (RCCFC, 2003, 2005). In the following section, we present the models employed in these studies.

First model: Garg, Kauppi, Lewko and Urajnik (2002) analyzed data from 1,567 secondary students to test their structural model of educational aspirations. For the most part, they based their study on the work of Farmer (1985), whose model of career development and performance incentives is founded on Bandura's theory of social learning (1976, 1978), as is the model developed by Lent, Brown and Hackett (1994). As in Farmer's

model, the model proposed by Garg *et al.* contains three groups of variables or factors. The group of variables related to context includes demographic characteristics such as students' gender, age, grade, family structure (lone-parent or two-parent) and socioeconomic status. The group of variables related to the student as an individual includes the following psychological variables: students' personal attributes, their perceived competence and their attitudes toward education, school and work. Finally, the group of variables related to environmental influences includes aspects of social support as they affect students (i.e., parental involvement, parental support and teacher support). In the revised structural model proposed by Garg *et al.*, the groups of variables related to context and environment are linked indirectly to students' educational aspirations. The effects of these two groups of variables are mediated by the third group (related to students' personalities), the only one of these three directly linked to students' educational aspirations.

Second Model: In their study, Looker and Thiessen (2004) analyzed the factors related to the educational aspirations of 29,687 15-year-old youths who participated in the pan-Canadian PISA/YITS study. Their model is composed of six groups of variables. The first group includes the following basic variables: gender, region, language, community size, family structure and birth order, maternal employment status, and parental education and

financial resources. The second group deals with academic performance and includes four variables: incidence of grade retention, educational stream, grades and reading capacity. The third group of variables focuses on students' school participation, including: homework, lack of respect for school rules and regulations, disobedience of school and home rules, after-school activities and indifference and detachment regarding school. The fourth group of variables deals with students themselves: their confidence in their own capacity for academic success, the importance they ascribe to their studies in terms of finding employment and their use of information technologies. The fifth group of variables deals with the role of parents and peers: parental encouragement of educational projects, household resources and peer influence. The sixth and final set of variables encompasses students' employment experiences: paid work during the school year and volunteer experiences.

Third Model: The *Réseau des cégeps et des collèges francophones du Canada* (RCCFC, 2003, 2005) undertook two studies on the postsecondary plans of French-language school students in a minority context and their intentions to pursue a postsecondary education. In 2002-03 some 1,315 Grade 12 students participated in the study, and in 2004-05 1,626 Grade 10 students and 1,334 Grade 12 students participated. The RCCFC's model is composed of eight groups of variables. The first group deals

with socio-demographic variables: age, province (or region), gender, civil status, dependents, province or region of residence, number of siblings, maternal or paternal employment and parental education. The second set of variables aims to evaluate the influence of various sources of encouragement: mother, father, friends, teachers, counsellors and siblings. The third group consists of perceived barriers to the pursuit of a postsecondary education: academic results, financial resources, fear of indebtedness, lack of access to loans and bursaries, lack of interest or determination, lack of information, lack of acquired knowledge, lack of programs in preferred language and distance from preferred institution. The fourth group takes into consideration other motivations, for the most part positive, which may lead to the decision to pursue a postsecondary education: an interesting career, improved quality of life, a well-paying job, personal development, social advancement, leaving the family home, pleasing parents, following friends, lack of current employment prospects, helping people in need and owning a business. The fifth group deals with students' self-perceptions: mental health, physical health, active class participation and study methods. The sixth group aims to measure students' motivation to study and the time spent on various activities, such as: studies outside school hours, activities with friends and after-school activities including sports, paid employment and family activities. The RCCFC's model also includes variables



which may be related to a particular program or postsecondary institution and variables which may be related to the choice of language of college or university studies.

In summary, the conceptual models used in these studies are quite similar with respect to the factors or groups of factors they incorporate and analyze in relation to educational aspirations. We believe that each model contains three main types of factors or groups of variables: a contextual factor, made up of socio-demographic variables; a personal factor, made up of variables pertaining to the students themselves (psychological or behavioural characteristics); and an environmental factor, made up of variables relating to social support within the family and school contexts. The models can be differentiated based either on the number or the type of variables within each factor or group of variables or according to the way in which the variables given the same name are defined and measured.

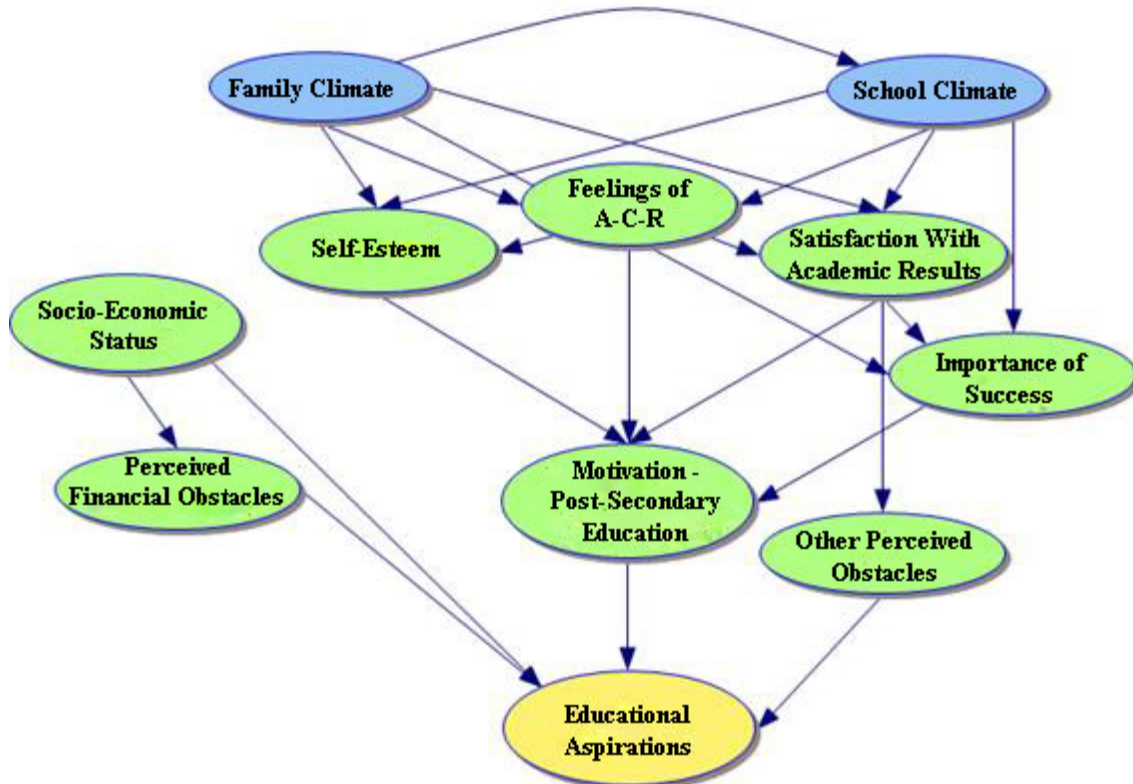
2.1.3 Model of Educational Aspirations Used in the Present Study

The model of educational aspirations we have developed shares several characteristics with the aforementioned models. As we have pointed out, its

originality lies in the incorporation of some key elements of Deci and Ryan's theory of self-determination (1985, 2000, 2002): 1) experiences promoting students' feelings of autonomy, competence and relatedness, 2) feelings of autonomy, competence and relatedness, and 3) the six types of motivational regulation.

The model of factors related to educational aspirations we have produced includes four large groups of variables, which we will analyze in relation to educational aspirations. These groups of variables are: 1) characteristics of students and their families, 2) characteristics of their family context, 3) characteristics of their school context, and 4) psychological attributes of the students themselves (Figure 2.3). This model includes variables similar to those found in models used by Farmer (1985), Garg *et al.* (2002), and Looker and Thiessen (2004).

Figure 2.3
Model of Factors Related to Educational Aspirations



Note: Adapted from Allard, Landry, & Deveau, 2009a, p. 30

Our first group of variables deals with background characteristics such as student gender, school stream and family characteristics (family structure, number of younger siblings, parental education, perceived family income and educational resources). While we have analyzed the effect of this first group of variables, we do not include them all in the conceptual model presented. Aside from students' gender, parental education and family income, which may have a significant impact, these

contextual variables generally have little relation to educational aspirations.

A second group of variables pertains to the student's family. As in the work of Garg *et al.* (2002), we have taken into consideration the degree of family communication and family involvement in education, parental expectations regarding their child's educational aspirations and the influence of these expectations on their child's intentions to pursue a postsecondary education. Basing our study on Deci and Ryan's

theory of self-determination (2002), we have included in this group parental behaviour encouraging feelings of autonomy, competence and relatedness in their child.

A third set of variables pertains to the school. Garg *et al.* (2002) included students' estimates of their average grade in four school subjects during the previous school year, as well as the importance they ascribed to school and homework. We chose instead to ask students to what extent they were satisfied with their performance in six subjects. We also chose to ask about the expectations of educational staff regarding students' educational aspirations and the influence this has had on their intentions to pursue a postsecondary education. For this group of variables we have again, based on Ryan and Deci's theory of self-determination (2002), taken into account elementary and high school teachers' behaviour promoting feelings of autonomy, competence and relatedness.

Our fourth and final group of variables pertains to the student beliefs and attitudes, i.e. psychological variables: self-esteem, degree of importance given by the student to academic success and student academic self-concept. As stated before, we have used Ryan and Deci's theory of self-determination (2002) as the basis for including students' feelings of autonomy, competence and relatedness or belonging, as well as the different types of motivations for learning and

postsecondary studies. We have also included in this group perceived barriers to plans for a postsecondary education; distance between home and postsecondary institution is one such notable barrier (Frenette, 2002, 2003).

We have already noted that some elements of the student's experience in the family context, in the school context, and of student psychological characteristics used in our model are based on Ryan and Deci's theory of self-determination (2002). Specifically, the elements relating to family context are paternal and maternal behaviour encouraging their child's feelings of autonomy, competence and belonging; the elements of school context are, similarly, the behaviour of educational staff promoting these same feelings in their students; and the psychological elements we mentioned correspond to students' feelings of autonomy, competence and relatedness with respect to learning and the types of motivations for pursuing postsecondary studies. The numerous studies produced by Deci, Ryan and their colleagues (e.g., Deci & Ryan, 2002; Niemiec & Ryan, 2009) reveal that the type of motivation (external vs. internal) is in fact just as important as the degree of motivation in predicting human behaviour.

2.2 Intentions to Pursue Postsecondary Education in English

At the end of Chapter 1 we stated that the second objective of the present



study—analyzing the factors related to the choice of English as the language of postsecondary studies will be only briefly analyzed. As such, the present study includes only a descriptive analysis and a discussion of the data relating to intentions to pursue postsecondary studies in English and some of the variables which may be related to such intentions. Our study on secondary IV students (Landry *et al.*, 2013; see also Landry, 2014) points out that, contrary to Francophone Grade 12 students outside Quebec who have a tendency to want to do more of their studies in the majority language, English, as they progress from grade to grade, Anglophone students in Quebec tend to receive more instruction in French (the majority language) than in English in the earlier grades and more instruction in the minority language in Quebec, English, than in French at the secondary and postsecondary levels.

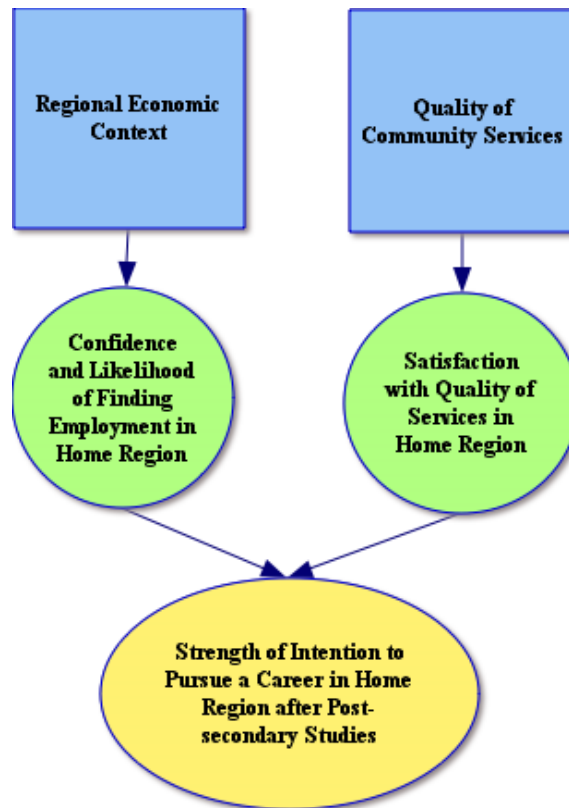
2.3 Intentions to Pursue a Career in One’s Home Region

The present study focused mainly on collecting data which would allow us to accomplish the first two objectives and, as such, the conceptual framework of the third goal remains limited to the relationship between a few factors and students’ intentions to pursue a career in their home region. In short, we believe that students’ perceptions of the economic context are related to their confidence about (and the perceived likelihood of) finding employment in their home region. The latter is in turn

related to students’ intentions to pursue a career in their home region after completing their postsecondary education. We propose that another factor—perception of the quality of services (e.g., health and recreation services) in the community—may also be related to such intentions (Figure 2.4). It is also possible that the geographic concentration of Anglophones will be related to the intentions to pursue a career in their home region. Students who aspire to work mainly in English may prefer to move to regions in Quebec that provide more opportunities to work and live in English or, even, to work outside of Quebec.



Figure 2.4
Model of Factors Related to Strength of Intention to Pursue a Career in Home Region after Postsecondary Studies



Note: Adapted from Allard, Landry, & Deveau, 2009a, p. 33

In this chapter we presented a model of factors which may be related to students' educational aspirations and to their intentions to pursue a postsecondary education. We also presented a model of factors which may

be related to students' intentions to pursue a career in their home region. In the following chapter, we describe the methodology we used to conduct this study.

Chapter 3—Methodology

3.1 Population and Sample

Using data provided by the Province of Quebec’s Anglophone School Boards, we calculated that some 7,802 Secondary V students attended Quebec Anglophone schools in 2010-2011. A total of 4,366 students took part in the survey, 4,006 (92.6%) of whom were in Secondary V, which amounts to 51.3% of the Secondary V target population. Students from all of the Anglophone School Districts in the province of Quebec participated in the survey. In all, 54 of 69 Anglophone schools (78.3%) participated in the study.⁴

During the administration of the questionnaire, we found that in some schools, a very few Secondary III and some Secondary IV students participated, possibly because they were enrolled in the same classes as the Secondary V students. For the purposes of this study, however, only the data of the Secondary V students are analyzed.

⁴ Quebec’s Anglophone communities administer a total of 10 English School Districts, There are a total of 69 secondary schools (or schools with some classes at the secondary level).

3.2 Questionnaires^{5,6}

A booklet containing a variety of questions and questionnaires was administered in order to collect information that would allow us to describe student educational aspirations and factors which may influence them. The questionnaires covered several different themes: demographic profile, family characteristics, family and school context, attitudes regarding postsecondary education, postsecondary aspirations and plans, etc. These questions are described in section 4.1 of Chapter 4, to introduce the presentation of the descriptive statistics.

3.3 Procedures for Questionnaire Administration

The survey was conducted during the Spring and Autumn semesters of 2011. Completion of the questionnaire took approximately one hour. The person responsible for the administration began with a word of introduction

⁵ Most of the questions and questionnaires were prepared by the authors. Certain questions were translated or adapted from questionnaires developed by other researchers (see RCCFC, 2003, 2005; Garg *et al.*, 2002; Marsh, 1990, 2000; Guay & Vallerand, 1997; Blais, Vallerand & Lachance, cited in Guay & Vallerand, 1997; and Losier, Vallerand & Blais, 1993).

⁶ To obtain a copy of the questionnaire, contact the first author of this report: Réal Allard, Centre de recherche et de développement en éducation, Université de Moncton, Moncton, NB, E1A 3E9 (real.allard@umoncton.ca).

which provided the students with information about the study's objectives, as well as the fact that it was anonymous and their answers would remain confidential. Prior to data entry, each booklet was labeled with an identification number made up of a number for the province of Quebec, and numbers for each School District, school, and student. The booklets contained no information which would make it possible to identify the students.

3.4 Data Analysis

The present report contains the results of two types of statistical analysis. The first provides descriptive statistics for all the variables (see Chapter 4, section 4.1). The second type of analysis provides the results of correlations (see Chapter 4, section 4.2) between the explanatory or independent variables, and the dependent variables we wish to explain, that is, student educational aspirations and intentions to pursue a postsecondary education, and student intentions to pursue a career in their home region after their postsecondary studies.

3.4.1 Descriptive Analyses

Descriptive statistics (means, percentages) were calculated for each of four geographical regions and for the sample as a whole. The four regions were defined using data from the 2006 Canadian Census on the proportion of Anglophones in the census subdivisions of the province of Quebec and an

estimation of large urban versus smaller urban and rural contexts. Two of the regions grouped students from municipalities in which Anglophones represent more than 30% of the population; they are in Greater Montreal and vicinity (Mtl Anglos > 30) and in other regions of the province (Qc Anglos > 30). The remaining two regions grouped students from municipalities where Anglophones represent less than or are equal to 30% of the population; they are also in Greater Montreal and vicinity (Mtl Anglos ≤ 30) and in the other regions of Quebec where Anglophones are a relatively small or very small minority (Qc Anglos ≤ 30). Before beginning our analyses, the data were weighted to reflect the number of Secondary 5 students in each participating district in order to ensure that each School District was equitably represented.

Variables relating to the same concept were assigned to a principal components analysis with varimax rotation, in order to reduce the number of analyses of individual variables. This allowed us to identify those components which, after rotation, were orthogonal, that is, independent of each other. These components include variables which define a concept, permitting us to construct scales based on these variables. As mentioned above, the frequency analyses and the mean scores of these variables are presented for each region and for the entire sample. To facilitate the reading of the results, we reduced nine-point rating



scales to three-point scales for frequency analyses. For example, scales consisting of nine categories, where students were required to indicate to what extent a statement corresponded to their attitude or experiences (1 = “Does not correspond at all”; 3 = “Corresponds slightly”; 5 = “Corresponds moderately”; 7 = “Corresponds strongly”; 9 = “Corresponds exactly”) were reduced to the following three categories: 1 = “Slightly” (scores under 3.5), 2 = “Moderately” (scores from 3.5 to 6.4999) and 3 = “Strongly” (scores of 6.5 and more). Using this method, we obtained the percentage of students whose scores are located in each category. Average scores are on a nine-point scale unless otherwise indicated (e.g., when they are on a five-point or a seven-point scale).

3.4.2 Correlational Analyses

Educational aspirations being the primary focus of this study, we performed statistical analyses which allowed us to calculate the correlation between the independent variables and the dependent variable (i.e., educational aspirations). We also aimed to study students’ intentions to pursue a career in their home region after their postsecondary education. To this end, we took an exploratory approach, performing correlational analyses which allowed us to calculate the correlation between independent variables and this second dependent variable.

These correlational analyses were performed in two steps. First, we

submitted the survey’s various independent variables to a principal components analysis with orthogonal rotation in order to reduce the number of independent variables and to obtain orthogonal factors and factorial scores (i.e., that are not correlated). Thus, the variance in the dependent variable explained by an orthogonal factor is completely independent of the variance explained by the other factors of the analysis. In the second step, the factorial were used in a stepwise multiple regression analysis between the factors (independent variables) and the dependent variable. Stepwise regression analysis indicates the correlation of each factor with the dependent variable or the variance in the dependent variable which is explained by each factor. Based on the explained variance, we were able to estimate the significance of each factor in the prediction of educational aspirations and students’ intentions to pursue a career in their region. We used the criteria suggested by Wang, Haertel and Walberg (1993) when they evaluated the significance of various factors relating to school-based learning.

All statistical analyses were performed using SPSS (Statistical Package for the Social Sciences) software. In the following chapter, we present the results of these analyses.





ICRML
Institut canadien
de recherche
sur les minorités
linguistiques

CIRLM
Canadian Institute
for Research
on Linguistic
Minorities

Chapter 4—Results

This chapter is divided into two sections. The results of the descriptive data analyses are presented in section 4.1, followed by the results of the regression analyses in section 4.2.

4.1 Results of the Descriptive Data Analyses

4.1.1 Student Sample Characteristics

For the purposes of this study, the student data were grouped into four regions: Montreal (Montreal Anglos > 30), (Montreal Anglos ≤ 30), Rest of QC (QC Anglos > 30), and Rest of QC (QC Anglos ≤ 30). The mean percentage of Anglophones in each of these regions is respectively 45.4%, 13.4%, 53%, and 9.2%. The reasons for the delimitation of these regions are given in section 3.4.1 of Chapter 3. For the four regions combined, the mean percentage of Anglophones in the census subdivisions in which the students reside is 20.3%.

4.1.1.1 Number of students, age and gender

Table 4.1 presents the number and percentage of students from each region, their average age, and the proportion of students of each gender. A majority of the students are from the Montreal (Montreal Anglos ≤ 30) and the Rest of QC (QC Anglos ≤ 30) regions (38% and 37% of the sample,

respectively, for a total of 76%⁷). Students from regions where Anglophones represent 30% or more of the population therefore constitute 24% of the sample. The average age of the students is 16.2 years. There is very little variation between regions since they are all Secondary 5 students. Girls represent 51% and boys 49% of the total sample. There is a slight predominance of female students in the two Montreal regions and in the Rest of QC Anglos > 30 region. The proportions of girls and boys are almost equal (roughly 50%) in the Rest of QC (QC Anglos ≤ 30) region.

⁷ In order to increase readability, percentages reported in the text are rounded off to the nearest unit, but they are rounded off to the first decimal in the tables.



Table 4.1 Number and Percentage of Students by Region, Average Age and Gender

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Number and Percentage					
Number of students	602	1,535	368	1,494	3,999
Proportion of sample (%)	15.1	38.4	9.2	37.4	100.0
Âge					
Average age in years	16.2	16.2	16.1	16.2	16.2
Gender					
Female (%)	52.1	51.1	51.8	49.6	51.1
Male (%)	47.9	48.9	48.2	50.4	48.9

4.1.1.2 Mother Tongue, Second Language, and Other Languages

Overall, approximately 70% of the students have English as their mother tongue, 14% have French as their mother tongue, and 16% have neither English nor French as their mother tongue (Table 4.2). Between 80 and 90% of the students who reside in regions where Anglophones represent more than 30% of the population have English as their mother tongue. This is considerably more than in the two regions where Anglophones are 30% or less of the population. Outside of Montreal, in regions where Anglophones are 30% or less of the population, slightly more than one third of the students (35%) have French as their mother tongue. It is in those parts of Montreal where Anglophones are 30% or less of the population that the

percentage of students who have neither English nor French as their mother tongue is highest, i.e., 24%. Less than 10% of the students have neither English nor French as their mother tongue in the three remaining regions. In the two regions where Anglophones represent 30% or more of the population, 63% and 53% of the students have French as a second language. Where Anglophones represent less than 30% of the population, approximately 85% of the students have French as a second language. Overall, nearly 45% of the students claim to know another language as well. More students from the Montreal ≤30 (55%) and Montreal ≥30 regions (43%) than from the Rest of QC regions (30% and 20% respectively) claim to know another language.



Table 4.2 Student Mother Tongue, Second Language, and Other Language

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Mother tongue					
English (%)	84.6	66.4	85.1	55.9	69.7
French (%)	6.3	9.5	8.1	34.9	14.2
Other (%)	9.2	24.1	6.8	9.2	16.0
Second language					
English (%)	13.6	31.6	16.7	43.2	28.7
French (%)	82.7	63.0	83.3	53.1	67.0
Other (%)	3.7	5.4	0.0	3.7	4.3
Other language					
Yes (%)	43.3	54.8	19.5	30.3	44.7
No (%)	56.7	45.2	80.5	69.7	55.3

4.1.1.3 Current program of study in high school

Slightly more than 73% of the students are in a regular program (39%) or a regular academic program (34%), 25% are in an enriched or advanced program, and approximately 2% are in pre-employment or other programs (Table 4.3). Significantly more students in the Montreal regions are in enriched or advanced programs (28%) than in the Rest of Quebec regions (17% to 18%). This may be due to the interaction of factors such as school size and number of Secondary V students in some schools, along with the lesser availability

of the human and material resources needed to offer enriched or advanced programs.

The students were asked if their current program of study would make it possible for them to undertake a program of study in a trade or technical school, a CEGEP, and a university. More than 90% of the students estimate that their current program of study would permit them to pursue their education in a trade or technical school or in a CEGEP, while 74% of the students believe that their program of study allows them to pursue university studies.

Table 4.3 Current Program of Study

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Enriched or advanced (%)	28.0	27.7	17.1	18.1	25.1
Regular program (%)	35.9	35.5	46.5	49.3	39.2
Regular academic	33.0	34.6	35.9	31.4	33.6
Pre-employment or modified (%)	0.5	0.33	-	0.3	0.3
Other (%)	2.6	1.9	0.5	0.9	1.8

4.1.1.4 Enrollment in a Bilingual Program of Study

In total, slightly more than 62% of the students consider themselves to be in a bilingual program of study, and 38% believe they are in a unilingual program of study (Table 4.4). Here again, the percentage of students who stated they

are in a bilingual program is much higher in the Montreal regions (66% to 79%) than in the Rest of Quebec regions (34% to 41%). The factors we invoked above relative to the observed differences in programs of study may come into play here as well.

Table 4.4 Enrollment in a Bilingual Program of Study

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Yes (%)	78.5	65.5	33.7	40.8	61.8
No (%)	21.5	34.5	66.3	59.2	38.2

4.1.1.5 Summary

A total of 4006 Secondary V students in 10 Anglophone School Districts participated in the survey. The data was analyzed for the entire sample and for four Quebec regions defined on the basis of the proportion of Anglophones in each region. Two regions, one comprising 30% or more of Anglophones, the second with less than 30% of Anglophones, were in the Greater Montreal area, and two regions with the same percentages of Anglophones, covered the remainder of the province.

- The average age of the students in the sample is 16.2 years. A slight majority, 51%, are girls.
- Seventy percent of the students have English as their mother tongue, 14% have French as their mother tongue, and 16% have neither English nor French as their mother tongue. In the two regions where Anglophones represent 30% or more of the population, 50 to 60% of the students have French as a second language. Where Anglophones represent less than 30% of the population, more than 80% of the students have French as a second language. Nearly half the students (45%) state they also know another language.
- Slightly more than 60% of the students state that they are in a bilingual program of studies. More than 70% are in a regular program and 25% are in an enriched or advanced program.
- More than 90% of the students consider that their current program of study will make it possible for them to pursue postsecondary studies in a CEGEP or the equivalent, and approximately 75% believe that their current program will allow them to pursue studies in a university.

4.1.2 Family Characteristics

4.1.2.1 Family Structure and Student Place of Residence

Students were asked to answer a few questions pertaining to family composition. These questions required students to indicate with which of their parents they reside (family structure), how many brothers and sisters they have, how many brothers and sisters are younger than they are, parent mother

tongue and education, and number of books in the home.

Table 4.5 shows that family structure varies slightly from region to region. Approximately two thirds of the students live with both their father and mother (66%), while nearly 16% live with one parent. An additional 9% live with their mother and father who reside in different homes and 8% reside with one of their parents and her or his partner.



Table 4.5 Family Structure and Student Place of Residence

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
My mother and my father (%)	69.5	65.7	67.3	59.9	65.5
One of my parents and his/her partner (%)	5.5	7.3	10.6	10.1	7.6
My mother and father who live in different homes (%)	9.4	7.5	7.9	10.3	8.7
One of my parents (single parent) (%)	13.5	17.3	11.9	15.9	15.7
Other (%)	2.1	2.2	2.4	3.8	2.5

Table 4.6 provides information about the number of student siblings. Slightly more than two thirds of the students (68%) have one or two siblings, nearly 20% have three or four, and less than

10% have none or five or more. On average, the students have two brothers or sisters, and less than two younger brothers or sisters.

Table 4.6 Percentage of Students by Number of Brothers and Sisters, Number of Younger Brothers and Sisters and Number of Brothers and Sisters Who Live in the Same Household as the Student

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Brothers and sisters					
None (%)	8.2	8.8	7.5	7.7	8.3
1 or 2 (%)	72.6	68.4	62.7	63.8	68.2
3 or 4 (%)	14.6	16.4	21.1	19.9	17.0
5 or more (%)	4.6	6.4	8.6	8.6	6.6
Mean score	1.8	1.9	2.2	2.2	2.0
Younger brothers and sisters					
None (%)	44.7	46.0	43.8	42.5	44.8
1 or 2 (%)	49.5	46.6	48.5	47.5	47.6
3 or 4 (%)	5.1	5.9	6.6	8.1	6.2
5 or more (%)	0.8	1.5	1.2	2.0	1.4
Mean score	1.5	1.6	1.7	1.7	1.6
Brothers and sisters living with student					
None (%)	21.1	20.8	28.4	25.4	22.3
1 or 2 (%)	70.5	69.2	62.1	62.8	67.7
3 or 4 (%)	7.9	8.6	8.6	10.1	8.7
5 or more (%)	0.6	1.5	0.9	1.7	1.3
Mean score	1.5	1.6	1.6	1.6	1.6

4.1.2.2 Mother Tongue of Fathers and Mothers

Overall, approximately 56% of the mothers and 52% of the fathers have English as their mother tongue, 18% of the mothers and 20% of the fathers have French as their mother tongue, and 26% of the mothers and 28% of the fathers have neither English nor French as their mother tongue (Table 4.7). The proportions of mothers and fathers who have English as their mother tongue are much greater in the two regions where

Anglophones represent more than 30% of the population than in the two regions where Anglophones are 30% or less of the population. It is in those parts of Montreal where Anglophones are 30% or less of the population that the percentage of parents who have neither English nor French as their mother tongue is highest: 36% of mothers and 37% of fathers. In the total sample, 18% of the mothers and 20% of the fathers have French as their mother tongue. In the Rest of Quebec region which has



30% or less of Anglophones, the percentage of mothers and fathers who have French as their mother tongue (39%) is much higher than in the three other regions. In the total sample, 26% of the mothers and 28% of the fathers have neither English nor French as their mother tongue. Overall, less than 2% of the students did not answer the question on their mother's mother tongue or on their father's mother tongue.

The linguistic composition of the couples whose children participated in the survey is presented in the lower part of Table 4.7. Overall, 39% of the couples are endogamous English, i.e. both the mother and the father have English as their mother tongue. The proportions of endogamous English couples are considerably greater in the two regions in which Anglophones represent more than 30% of the population (55 and 48% respectively) than in the regions where they represent 30% or less of the population (38 and 26% respectively). Twenty percent of the couples are exogamous English-French, i.e. one of the parents has English as mother

tongue while the other parent has French as mother tongue. The proportions of exogamous English-French couples are greater in the two Rest of Qc regions (31 and 28% respectively) than in the two Montreal regions (19 and 15% respectively). Overall, 9% of the couples are exogamous English-Other languages. The proportions of these couples are greater in the Montreal regions (13 and 10%) than in the Rest of Quebec regions (6 and 3%). Approximately 7% of the couples are endogamous French. A much greater proportion of these couples is found in the Rest of Qc Anglos ≤ 30 region (21%) than in the remaining regions (4% or less). Couples in which both the father and the mother have other languages than English or French as their mother tongues represent 21% of the couples. The proportion of such couples in the Montreal Anglos ≤ 30 region (30%) is much greater than in the other regions where they represent 13 to 8% of these couples. It is important to note that the individuals in these couples may, or may not, have the same 'Other language' as mother tongues.



Table 4.7 Mother Tongue of Mothers and Fathers

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Mother					
English (%)	67.8	52.7	74.9	45.4	56.1
French (%)	12.8	11.6	15.0	38.5	18.0
Other language (%)	19.5	35.7	10.1	16.1	25.9
Father					
English (%)	62.4	48.9	69.4	43.4	52.2
French (%)	14.2	13.7	19.7	39.4	19.8
Other language (%)	23.3	37.3	11.0	17.2	27.9
Linguistic composition of father-mother pairs					
English-English	48.1	37.7	55.4	25.5	38.6
English-French	18.7	14.6	27.5	30.5	19.8
English-Other languages	12.7	10.0	3.4	5.5	9.4
French-French	2.6	4.0	3.0	21.1	7.4
French-Other languages	2.8	2.4	0.6	3.5	2.6
Other languages-Other	13.3	29.8	7.9	11.7	20.5

4.1.2.3 Parental Education

Table 4.8 presents information about maternal and paternal education. The questions relating to parental education required students to choose one of seven categories of education which best described the educational attainment of each of their parents (see Column 1 of the table). It is important to note that 15% of the students did not

answer the question on their mother’s education and 17% did not answer the question on their father’s education. This may indicate that these students consider that they do not have precise information on their parent’s education. The percentages in Table 4.8 could be different had all students provided answers to these questions.



Table 4.8 Parents' Education

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Mother's education					
Less than 7 years (%)	1.8	4.6	1.6	4.6	3.7
Sec 1, 2 or 3 (%)	0.4	3.6	2.0	2.8	2.5
Sec 4 or 5 (%)	2.0	5.9	10.2	5.6	5.0
H. S. diploma (%)	15.9	21.5	23.8	21.2	20.1
CEGEP (%)	29.5	24.5	29.6	27.9	26.8
University diploma (%)	26.3	19.8	20.1	19.0	21.3
Postgraduate degree (%)	7.8	4.6	3.3	5.8	5.6
Missing (%)	16.2	15.6	9.4	13.2	14.9
Mean score	4.3	3.9	4.2	4.0	4.0
Father's education					
Less than 7 years (%)	1.4	3.8	3.7	4.0	3.2
Sec 1, 2 or 3 (%)	1.1	3.8	3.4	4.9	3.3
Sec 4 or 5 (%)	4.3	9.3	15.2	9.4	8.3
H. S. diploma (%)	14.6	21.1	24.1	21.1	19.6
CEGEP (%)	23.7	21.9	20.0	22.3	22.4
University diploma (%)	25.6	16.3	13.6	14.6	18.2
Postgraduate degree (%)	11.2	5.7	8.8	7.4	7.6
Missing (%)	18.1	18.1	11.2	16.3	17.3
Mean score	4.3	3.7	4.0	3.8	3.9

Overall, students' mothers have a slightly higher level of educational attainment than their fathers. For the total sample, the percentage of fathers who have a high school diploma or less (34%) is higher than it is for mothers (31%), and a higher percentage of mothers (27%) than fathers (22%) have done studies at the CEGEP or college level. In terms of university education,

more mothers (21%) than fathers (18%) have obtained an undergraduate university diploma, but slightly more fathers (8%) than mothers (6%) have obtained a post graduate degree, i.e., a master's or a doctoral degree. There are important differences between regions. The proportion of mothers and fathers who have a high school diploma or less is significantly lower in the Montreal

Anglos > 30 region than in the other regions, and the proportion of mothers and fathers who have a university diploma is much higher in the Montreal Anglos > 30 region than in the other regions.

4.1.2.4 Number of Books in the Household

The estimate of the number of books in the household, without counting schoolbooks, was used as an additional indicator of socio-economic status (Table 4.9). Roughly 21% of the students estimate that the number of books in their home is somewhere between 40 and 199. An additional 19% estimate that there are less than 40 books in the home while 12% of the students

estimate that there are more than 400 books in the home. In total, no less than 33% of the students did not answer this question. The differences between regions in this respect are important; while 37% of the students from the Montreal Anglos ≤ 30 region did not provide an estimate, 17% of the students from the Rest of QC >30 did not. Overall, one third of the students did not answer this question. It was therefore not possible to use this data as one of the indices of family socio-economic status. Also, the percentages in Table 4.9 could be quite different had all students provided answers to these questions.

Table 4.9 Estimation of the Number of Books in the Home, Without Counting Schoolbooks

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
None (%)	1.4	2.0	2.4	3.0	2.1
Less than 40 (%)	15.2	20.2	23.3	20.4	19.1
40 to less than 200 (%)	19.4	20.5	27.4	24.4	21.4
200 to less than 400 (%)	14.2	9.4	11.8	13.5	11.7
400 or more (%)	13.0	10.5	17.9	13.7	12.2
Missing (%)	36.9	37.3	17.2	25.0	33.4



4.1.2.5 Summary

The students were asked questions about their family.

- Nearly two thirds of the students live with both of their parents and between 10 and 20% of the students live with one parent. Ten percent of the students live with their mother and father, both of whom have separate residences. Finally, nearly 10% of the students reside with one parent and her or his partner.
- Slightly more than 66% of the students have one or two siblings, nearly 20% have three or four, and less than 10% have none, or five or more.
- Just over 50% of the fathers and mothers have English as their mother tongue. Twenty percent of the parents have French as their mother tongue, and just over 25% of the parents have neither French nor English as their mother tongue.

Parent education is used as an indicator of socio-economic status.

- The CEGEP diploma is the highest level of education attained by 27% of mothers and less than 22% of fathers. A total of approximately 25% of the parents have a university diploma or a postgraduate degree. Twenty percent of the mothers and fathers have a high school diploma and 11% of mothers and 15% of fathers have not obtained a high school diploma. Approximately 15% of the students did not answer the questions on the highest level of education attained by their parents.
- The number of books in the home is sometimes used as an additional indicator of socio-economic status. Approximately one of five students (20%) estimate that there are less than 40 books in their home. Another 21% of students estimate that there are 40 or more books in their home, but less than 200 books. However, one third of the students did not answer this question. This precludes the possibility of using this information as one of the indicators of socio-economic status.

4.1.3 Student Educational Aspirations, Postsecondary Plans and Intentions to Pursue a Postsecondary Education

Three questions dealt with different aspects of student educational aspirations.

4.1.3.1 Educational Aspirations

The first question gave students the opportunity to indicate to what extent they hoped to pursue their education

(How far do you want to go in your studies?). Answers were given on a seven-point scale (1 = discontinued secondary studies; 2 = completed secondary studies; 3 = college studies of less than two years; 4 = college program of two or three years; 5 = university program of three, four or five years (e.g., bachelor's degree); 6 = Master's or equivalent (one or two years following a bachelor's degree); 7 = doctoral studies (Ph.D., M.D. or other advanced degree).



Table 4.10 provides information on the students' educational aspirations. A very small percentage of students do not intend to obtain a High School diploma (less than 1%), while 16% intend to do so. Three percent of the students want to complete a program that requires less than two years of study and training, while a significantly larger percentage of students (18%) want to complete a two-year or three-year program of study at the CEGEP level. Relatively similar proportions of students want to obtain a university

bachelor's degree (23%) or a master's degree (25%). The proportion of students from the Montreal regions who want to pursue their studies beyond the baccalaureate degree (over 41 to 45%) is larger than in the Rest of Quebec regions (30 to 35%). Sixteen percent of the students want to obtain a doctoral degree. Many students could have doctoral degrees in the health sciences in mind when they selected this answer, but additional analyses would be required to verify if this is indeed the case.

Table 4.10 Students' Educational Aspirations

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Some high school (%)	0.5	0.5	-	0.7	0.5
High school diploma (%)	13.4	16.7	12.8	16.7	15.6
Less than 2 years program (%)	1.5	2.7	4.7	4.9	3.0
2-3 years program (%)	13.2	18.8	24.5	20.1	17.9
Bachelor (%)	26.0	20.5	28.0	22.5	22.7
Masters (%)	31.4	24.2	16.5	20.1	24.8
Doctorate (%)	14.0	16.6	13.5	15.2	15.5
Mean score	4.8	4.6	4.5	4.3	4.6

In Table 4.11, we see that for the total sample, a significant percentage of students hope to obtain a high school diploma or less (16%). A slightly larger percentage of students want to complete a one-year program of study or training or a two-year or three-year

program of study at the CEGEP level (21%). A large majority of students would want to obtain a university degree (63%). The differences between some regions are substantial, particularly for CEGEP and university education.



Table 4.11 Educational Aspirations by Level of Educational Attainment

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Secondary education or less (%)	13.9%	17.2%	12.8%	17.4%	16.1%
CEGEP or college education (%)	14.7%	21.5%	29.2%	25.0%	20.9%
University education (%)	71.4%	61.3%	58.0%	57.8%	63.0%

Table 4.12 presents the results of the analysis of student educational aspirations by gender. Larger percentages of girls than boys want to obtain a university diploma at the bachelors, masters and doctoral levels (65% vs. 54% overall). Overall, 16% of the girls and 14% of the boys claim they will not pursue their education after

obtaining their high school diploma. Twenty percent of the boys (20%) and 14% of the girls (14%) state that they aim to obtain a two to three year CEGEP or college diploma. Overall, slightly more than 3% of the females and slightly less than 8% of the males did not answer this question.

Table 4.12 Educational Aspirations by Gender

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Females					
Some high school (%)	1.0	0.5	-	0.7	0.7
High school diploma (%)	16.8	14.9	11.3	17.0	15.7
Less than 2 years program (%)	0.7	1.8	2.0	2.8	1.7
2-3 years program (%)	11.0	13.7	21.0	15.7	13.8
Bachelor (%)	26.1	22.0	30.6	23.4	23.8
Masters (%)	28.3	26.4	17.5	22.4	25.6
Doctorate (%)	13.4	16.8	14.0	14.8	15.3
Missing (%)	2.7	3.8	3.6	3.3	3.4
Mean score	4.8	4.8	4.7	4.6	4.7
Males					
Some high school (%)	-	0.5	-	0.5	0.4
High school diploma (%)	8.2	16.6	12.4	13.7	13.6
Less than 2 years program (%)	2.2	3.4	7.2	6.3	3.9
2-3 years program (%)	14.6	22.2	25.7	21.6	20.3
Bachelor (%)	23.5	16.8	22.8	18.4	19.1
Masters (%)	31.4	19.5	13.9	14.8	21.1
Doctorate (%)	13.3	14.6	11.8	13.5	13.9
Missing (%)	6.7	6.5	6.2	11.2	7.6
Mean score	4.8	4.4	4.3	4.1	4.4

4.1.3.2 Short-Term Postsecondary Plans

The second question on aspirations dealt with students' plans immediately following high school. They were asked to choose which answer among the nine proposed best described their plans (see Column 1 of Table 4.13). The students whose plans did not approximate those

proposed were invited to provide their own answer. Detailed results for the latter were not analyzed. Table 4.13 shows that approximately 76% of the students intend to go to CEGEP or college in the fall following their graduation from high school. Roughly 6% of the students intend to start



working while pursuing postsecondary studies, and approximately 4% intend to pursue university studies (probably in another province since they cannot go directly from high school to university in Quebec), or to undertake a job-related internship. Approximately 65 to 70% of the students from the QC > 30 and QC ≤ 30 regions claim that they will go on immediately to CEGEP-level studies after high school, compared to 75 to

84% or the students from the Montreal Anglos > 30 and Montreal Anglos ≤ 30 regions. The proportions of students planning to start working while pursuing their studies are of roughly 10% in the QC > 30 and QC ≤ 30 regions and of approximately 5% in the Montreal Anglos > 30 and Montreal Anglos ≤ 30 regions. Overall, 5% of the students did not answer this question.

Table 4.13 Short-Term Postsecondary Plans

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
CEGEP (%)	83.5	74.6	64.8	70.7	75.5
Internship (%)	1.8	4.1	5.4	5.7	3.9
University studies (%)	3.9	4.2	5.2	4.4	4.2
Start working without plans (%)	0.2	1.6	2.3	2.3	1.4
Start working and pursue studies (%)	3.3	6.1	10.5	8.9	6.2
Stop working or studying (%)	0.9	0.6	2.5	1.4	1.0
Start my own business (%)	0.9	1.6	2.3	1.3	1.4
Work in family business (%)	0.2	0.9	1.1	0.5	0.6
Start a family (%)	0.5	1.1	0.4	0.7	0.8
Missing (%)	4.9	5.2	5.5	4.0	4.9

4.1.3.3 Summary

The students were asked how far they wanted to go in their studies.

- Approximately 16% of the students want to go no further than a high school diploma.
- Slightly more than 20% of the students want to obtain a CEGEP diploma or complete a one-year program of study or training.
- Approximately 23% of the students want to obtain a university undergraduate degree and a nearly equal proportion (25%) aims to complete a masters' degree.
- Roughly 16% of the students want to obtain a doctoral degree. Many of these students could have had doctoral degrees in the health sciences in mind when they gave this answer.
- Overall, 63% of the students want to obtain a university degree.

There are differences in aspirations in terms of gender.

- Higher percentages of females (65%) than males (54%) want to obtain a university diploma at the bachelors, masters and doctoral levels.
- More boys (20%) than girls (14%) want to go no further than a CEGEP diploma.
- The proportions of students of each gender who do not wish to pursue studies beyond high school are nearly the same (approximately 15%).

Student short-term postsecondary plans were also studied.

- A large majority of students (75%) intend to pursue studies in a CEGEP soon after graduating from high school. There are significant differences between some regions.
- Approximately 6% of the students intend to start working and to pursue studies at the same time. Again, the differences between regions are noteworthy.

4.1.4 Family and Education

The third section of the questionnaire pertained to the family in relation to education. The questions deal with family cohesion and solidarity, parental encouragement of feelings of autonomy, competence and relatedness, frequency of parental communication relating to school and social issues, parental involvement in schoolwork, parental expectations

regarding postsecondary education, family influence in relation to postsecondary studies.

4.1.4.1 Family Cohesion and Solidarity

Students were asked to respond to six statements designed to measure their perception of their family's cohesion and solidarity. They were required to give their answers on a nine-point scale (1 = does not correspond at all; 5 =



corresponds moderately; 9 = corresponds exactly). The mean scores in Table 4.14 show that approximately half of the students for the total sample and for each of the regions consider that their family's cohesion and solidarity is strong. The Montreal Anglos ≤30 region has the lowest percentage of students who indicate that family

communication reflecting cohesion and solidarity is average (36%) and the highest percentage of students who feel that such communication is strong (55%). Overall, weak family cohesion and solidarity, as reflected in family communication, corresponds to the experience of 9% of the students.

Table 4.14 Family Communication Reflecting Cohesion and Solidarity

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Weak (%)	7.8	8.8	10.1	10.7	9.0
Average (%)	39.7	35.9	41.9	39.9	38.1
Strong (%)	52.5	55.3	48.1	49.4	52.9
Mean score	6.4	6.4	6.2	6.2	6.4

4.1.4.2 Parental Promotion of Feelings of Autonomy, Competence and Relatedness

Students were asked to respond to nine statements relating to their perception of certain elements of their mother's and father's behaviour. Their answers were given on a nine-point scale (1 = does not correspond at all; 5 = corresponds moderately; 9 = corresponds exactly). Three different types of parental behaviour promoting autonomy, competence and relatedness were identified. The principal components analysis of students' answers revealed two factors. We have named these factors "maternal support for autonomy, competence and relatedness" and "paternal support for autonomy, competence and relatedness." Two scales were created, each consisting of nine items.

The mean scores for mothers in Table 4.15 vary between 7.5 and 7.6, which indicates that students generally consider that their mother's behaviour has had a positive effect on their feelings of autonomy, competence and relatedness. Overall, 81% of the students believe this positive maternal behaviour is consistent with their experience. The highest percentage of such positive maternal behaviour is in the Montreal Anglos > 30 region (82%). The region where the highest percentage of students responded that such positive behaviour corresponds moderately to their experience is the Rest of QC > 30 region (23%).

The mean scores for paternal behaviour promoting feelings of autonomy, competence, and relatedness vary between 7.0 and 7.3, which is slightly weaker than those for mothers. Profiles



of the percentages of paternal behaviour supportive of feelings of autonomy, competence, and

relatedness are similar to those for maternal behaviour, although slightly weaker.

Table 4.15 Maternal and Paternal Behaviour Promoting Feelings of Autonomy, Competence and Relatedness

Agreement	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Maternal support					
Weak (%)	2.9	3.4	2.1	4.3	3.4
Average (%)	14.9	15.8	22.5	16.7	16.1
Strong (%)	82.2	80.8	75.4	79.0	80.5
Mean score	7.6	7.5	7.5	7.5	7.5
Paternal support					
Weak (%)	3.6	5.7	5.4	8.3	5.7
Average (%)	18.6	19.7	17.2	20.1	19.4
Strong (%)	77.8	74.6	77.4	71.6	74.9
Mean score	7.3	7.1	7.3	7.0	7.2

4.1.4.3 Parental Communication about School and Social Issues

Students were asked to answer 13 questions regarding the frequency with which their mother spoke to them about school and other social issues. The same questions were asked about the frequency of such talks with their father. They were required to answer on a nine-point scale (1 = never; 5 = occasionally; 9 = regularly). The principal components analyses of the answers regarding maternal communication and paternal communication, respectively, identified the two same factors: the first factor is defined as communication about school and after-school experiences and the second as communication about social issues.

Table 4.16 shows that communication about school and after-school experiences with the student is more frequent among mothers (mean score = 6.7) than among fathers (6.1). This observation applies to all regions. The profile of the frequency of paternal communication is similar to that of mothers, although frequent communication about school and after-school experiences by fathers is more than 20 percentage points lower than that of mothers in three of the four regions. Overall, nearly 65% of the mothers often have conversations with their children about school, compared to 43% of the fathers. The largest proportions of students having received scores of frequent maternal communication about school and after school



experiences are in the two Montreal regions (68% and 66% respectively). The region in which a significantly smaller proportion of students received frequent maternal communication on these subjects is to be found in the Rest

of QC Anglos ≤ 30 region (60%). The pattern for paternal communication about school and after school experiences is similar to that for maternal communication.

Table 4.16 Frequency of Parental Communication about School and After-School Experiences

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Mother					
Rarely (%)	2.9	5.6	5.5	7.0	5.2
Occasionally (%)	29.3	28.8	33.4	33.1	30.1
Often (%)	67.8	65.6	61.1	59.8	64.7
Mean score	6.8	6.7	6.7	6.5	6.7
Father					
Rarely (%)	7.0	12.1	12.1	13.4	11.1
Occasionally (%)	49.2	43.1	43.0	48.1	45.8
Often (%)	43.8	44.8	44.9	38.5	43.2
Mean score	6.3	6.1	6.1	5.8	6.1

Table 4.17 shows that the average frequency of communication about social issues is moderate and that it is identical for mothers and fathers (mean score = 4.6 for both parents). Approximately 19% of the students consider that their parents frequently discuss social issues with them. Overall,

32% of the students claim that their parents discuss social issues with them rather infrequently. The largest proportion of students who claim their parents communicate rarely with them about social issues is in the Rest of Quebec Anglo >30 and ≤ 30 regions (roughly 35%).

Table 4.17 Frequency of Parental Communication with Student about Social Issues

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Mother					
Rarely (%)	30.7	30.7	36.3	34.9	31.9
Occasionally (%)	52.5	48.9	47.0	46.7	49.2
Often (%)	16.8	20.3	16.8	18.5	18.8
Mean score	4.6	4.6	4.4	4.4	4.6
Father					
Rarely (%)	28.3	30.7	35.0	32.6	30.7
Occasionally (%)	53.3	49.3	48.6	49.1	50.3
Often (%)	18.4	19.9	16.4	18.2	19.0
Mean score	4.7	4.6	4.4	4.4	4.6

4.1.4.4 Parental Involvement in School

Students were asked to respond to 20 statements about the frequency of their mother's involvement in school activities and homework. The same questions were asked about their father's involvement. The students were required to give their answers on a nine-point scale (1 = never; 5 = occasionally; 9 = regularly). Separate principal components analyses of their answers regarding their mother's involvement and their father's involvement revealed the same three factors: the first is defined as parental encouragement in relation to academic performance; the second as parental involvement in school-related activities; and the third as parental expectations regarding academic success.

Results of the analysis of maternal and paternal encouragement are presented in Table 4.18. The mean score for maternal encouragement is 7.3 on a nine-point scale. Overall, nearly 78% of students believe that their mother encourages them very often to perform well in school. Such behaviour also seems to be quite frequent among fathers, as nearly 72% of students report that they receive paternal encouragement very often. For the total sample, the mean score for fathers is 6.9 and that for mothers is 7.3. On average, larger proportions of Montreal area students receive frequent encouragement from their mothers and fathers than their Rest of Qc counterparts.

Table 4.18 Frequency of Parental Encouragement to Perform Well in School

Encouragement	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Mother					
Rarely (%)	2.7	3.5	4.6	6.1	3.9
Occasionally (%)	18.5	15.9	21.4	21.8	18.2
Often (%)	78.8	80.6	74.0	72.1	77.9
Mean score	7.4	7.4	7.2	7.1	7.3
Father					
Rarely (%)	4.7	7.1	9.5	10.6	7.4
Occasionally (%)	20.1	18.7	24.2	25.8	20.9
Often (%)	75.2	74.2	66.2	63.6	71.7
Mean score	7.0	6.9	6.7	6.6	6.9

Although the “Often” category is predominant (over 70%) in the descriptive data on parental encouragement to perform well in school, it is the “Occasionally” category which appears most often (at 56%) in relation to parental involvement in school and after-school activities (Table 4.19). The mean scores are 5.5 and 5.1

for mother involvement and father involvement respectively. For the total sample, 30% of mothers and 24% of fathers often participate in these activities, while 56% of both mothers and fathers participate occasionally. Finally, 15% of the mothers and 20% of the fathers rarely participate in these activities, according to their children.

Table 4.19 Frequency of Parental Involvement in School and After-School Activities

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Mother Involvement					
Rarely (%)	11.1	14.0	15.0	20.3	14.7
Occasionally (%)	59.5	54.3	56.5	54.1	55.7
Often (%)	29.4	31.7	28.5	25.6	29.6
Mean score	5.6	5.6	5.4	5.1	5.5
Father Involvement					
Rarely (%)	15.5	18.3	24.3	28.6	20.2
Occasionally (%)	61.1	56.4	52.4	51.5	56.3
Often (%)	23.4	25.3	23.3	19.9	23.5
Mean score	5.2	5.2	5.0	4.7	5.1

Table 4.20 presents the data on parental communication of expectations of academic success. According to the students, their mothers express their expectations slightly more often (average score of 7.0) than do their fathers (mean score of 6.7). Overall, more than 50% of parents (71% of mothers and 64% of fathers) express

their expectations very often. On the other hand, 11% of fathers and 8% of mothers do so only rarely. For each parent, the proportions of students in the Montreal regions who report frequent parental expression of expectations regarding academic success are slightly larger than in the Rest of Quebec regions.

Table 4.20 Frequency with Which Parents Express Expectations of Academic Success

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Mother expectations					
Rarely (%)	6.0	7.0	12.0	9.4	7.5
Occasionally (%)	22.3	19.2	22.6	24.9	21.4
Often (%)	71.7	73.8	65.4	65.7	71.1
Mean score	7.0	7.1	6.7	6.8	7.0
Father expectations					
Rarely (%)	8.8	10.4	15.4	13.5	10.9
Occasionally (%)	21.3	22.0	29.0	34.1	24.8
Often (%)	69.9	67.5	55.6	52.4	64.2
Mean score	6.8	6.7	6.4	6.4	6.7

4.1.4.5 Parental Expectations Regarding Postsecondary Studies

Students answered five questions about the expectations of various people regarding their educational attainment. They responded on a seven-point scale (1 = discontinued secondary; 4 = college studies of two or three years; 7 = doctorate (Ph.D., M.D. or other advanced degree). The principal components analysis allowed us to extract one factor. We present here only the results of the descriptive

analyses of maternal and paternal expectations; statistics relating to school staff and friends' expectations will be presented in the following section.

Maternal and paternal expectations regarding their child's postsecondary education are presented in Table 4.21. Maternal and paternal expectations regarding their child's postsecondary education are similar. According to students, 54% of mothers and 52% of fathers expect their child to pursue



university studies. The percentages are also very similar in terms of maternal and paternal expectations (approximately 15%) regarding CEGEP studies. Overall, again according to the students, 70% of mothers and 67% of fathers expect their child to pursue a postsecondary education, and slightly more than ten percent of mothers (11%) and fathers (12%) expect their child to

obtain no more than a high school diploma. The fact that 19% of the students did not answer the questions relative to their parents' expectations could mean that they had no relatively precise idea of their mothers' or fathers' expectations regarding their postsecondary education when they answered the questionnaire.

Table 4.21 Parent Expectations Regarding Postsecondary Education

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Mother expectations					
Some high school (%)	1.7	3.5	3.8	3.3	3.0
High school diploma (%)	4.1	9.7	8.0	10.7	8.4
Less than 2 years program (%)	1.9	2.1	5.2	3.8	2.6
2-3 year program (%)	11.6	11.2	21.6	15.6	12.8
Bachelor (%)	27.5	20.8	26.2	23.6	23.4
Master's (%)	20.2	16.4	11.2	14.3	16.7
Doctorate (%)	10.3	15.7	15.4	14.2	14.0
Missing (%)	22.7	20.6	8.6	14.5	19.2
Mean score	3.9	3.9	4.3	4.0	3.9
Father expectations					
Some high school (%)	1.7	3.1	2.3	2.7	2.6
High school diploma (%)	6.0	9.6	7.7	11.6	9.0
Less than 2 years program (%)	1.7	3.0	4.8	3.9	3.0
2-3 year program (%)	9.7	10.6	20.0	15.4	11.9
Bachelor (%)	25.9	19.2	27.4	20.8	21.7
Master's (%)	20.2	15.7	11.5	13.7	16.2
Doctorate (%)	11.7	15.2	15.2	14.0	14.0
Missing (%)	23.2	23.7	11.1	17.9	21.6
Mean score	3.9	3.7	4.2	3.8	3.8



4.1.4.6 Family Influence on Decisions Concerning Postsecondary Education

Students were asked to indicate to what extent various people had influenced their goals regarding their educational aspirations. Their answers were given on a nine-point scale (1 = no influence at all; 5 = moderate influence; 9 = very strong influence). We present below the results of the descriptive analyses of the influence of mothers, fathers and relatives on student postsecondary plans. The statistics on the perceived influence of school staff, friends (who are probably other students for the most part), and other individuals are presented in the next section, which deals with school context.

Nearly 63% of the students state that their mother has a strong influence on their postsecondary plans (Table 4.22). This is considerably more than for their

father (53%), sibling or siblings (31%), and aunts, uncles and grandparents (27%). Overall, 13% and 15% of the students claim that their mother and father have little influence and 25% and 32% of the students believe they have moderate influence. The largest proportions of students who state that their mother has little influence are in the Rest of Quebec region: 17% and 15% respectively, compared to 11% and 12% in the Montreal Anglos > 30 and ≤ 30 regions. The largest proportions of students who state that their father has little influence are in the Rest of Quebec region: 19% and 18% respectively, compared to 11% in the Montreal Anglos > 30 region. Students in the Rest of Quebec regions also were least likely to state that their parents had a strong influence on their postsecondary education plans.



Table 4.22 Mother, Father and Other Family Member Influence on Postsecondary Education Plans

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Mother Influence					
Weak (%)	10.6	11.8	17.3	15.2	12.5
Moderate (%)	25.4	20.6	24.9	32.7	24.7
Strong (%)	64.0	67.6	57.8	52.1	62.7
Mean score	6.6	6.6	6.3	6.2	6.5
Father Influence					
Weak (%)	11.2	15.1	17.8	19.1	15,1
Moderate (%)	29.6	31.1	30.3	35.8	31,7
Strong (%)	59.2	53.8	51.9	45.1	53,2
Mean score	6.5	6.3	6.1	5.9	6.2
Sibling Influence					
Weak (%)	27.2	25.9	33.0	35.1	28.6
Moderate (%)	43.3	40.0	34.2	38.0	40.1
Strong (%)	29.5	34.1	32.8	26.9	31.2
Mean score	5.0	5.2	4.8	4.5	5.0
Aunts, Uncles, and Grandparents Influence					
Weak (%)	25.3	24.9	29.0	33.7	27.1
Moderate (%)	50.6	45.4	43.6	40.6	45.6
Strong (%)	24.1	29.8	27.5	25.7	27.3
Mean score	4.8	5.1	4.9	4.6	4.9

4.1.4.7 Summary

A third component of the questionnaire pertained to the family in relation to education. The questions deal with family cohesion and solidarity, parental encouragement of feelings of autonomy, competence and relatedness, frequency of parental communication relating to school and social issues, parental involvement in schoolwork, parental expectations regarding postsecondary education, family influence in relation to postsecondary studies.

- Just over half of the students (53%) consider that their family's cohesion and solidarity are strong. An additional 38% of the students estimate that they are moderate and 9% of the students consider them weak.

According to self-determination theory, parents play an important role in the development of their child's feelings of autonomy, competence and relatedness.

-
- A large majority of the students consider that the behaviour of both of their mother (81%) and father (75%) towards them strongly contributed to the development of their feelings of autonomy, competence, and relatedness, in other words, to their capacity for self-determination.

In order to estimate parent interest for their child's education, students were asked how frequently their parents communicated with them about their school and after school experiences, and about a variety of social issues.

- More students estimate that their mother has talked with them frequently (65%) about their school and after school experiences, compared to 43% for their father.
- A minority of students (close to 20%) estimate that their mother and father have frequently discussed social issues with them.

Student perceptions of the degree of their parents' involvement in school activities and homework were also surveyed. This involvement is reflected in parental encouragement in relation to academic performance, parental involvement in school-related activities, and parental expectations regarding academic success.

- Nearly 78% of the students report that they very often receive encouragement from their mother to perform well in school. Nearly 72% of the students report receiving the same encouragement from their fathers.
- Nearly 30% of the students report that their mother often participates in school and after school activities, and 24% of the students report that their father does so.
- Slightly more than 70% of the students report that their mother often expresses her expectations regarding their academic success, and 64% of the students state that their father has often done the same.

Parental involvement in their child's preschool, primary school and high school education often translates into expectations regarding their child's postsecondary education.

- According to the students, 54% of the mothers and 52% of the fathers expect them to pursue university studies. Again, according to students, slightly more than 12% of mothers and fathers expect them to pursue a two or three year program at the CEGEP, and approximately 3% of parents expect them to undertake a one-year program of studies or training after high school. Nearly the same percentage of mothers and fathers (approximately 11%), according to the students, expect them to go no further than high school.
- Roughly 20% of the students did not answer this question. One wonders if this is because the student has no clear idea of his parents' expectations. It is possible that the parents have not discussed their expectations with their child.



Parent and family expectations may influence student decisions concerning their postsecondary education.

- Nearly 63% of the students state that their mother has a strong influence on their postsecondary plans, while 53% of them consider that their father has a strong influence. Yet smaller percentages of students consider that their sibling or siblings (31%) and aunts, uncles and grandparents (27%) have a strong influence on their postsecondary plans.

4.1.5 School Context

The fourth part of the questionnaire focused on students' school experiences and included questions about their educators' support for the development of self-determination and their encouragement regarding postsecondary education.

4.1.5.1 Teachers' Encouragement of Feelings of Autonomy, Competence and Relatedness (development of self-determination)

Students were asked to respond to nine statements relating to their perception of certain elements of elementary and high school teachers' behaviour promoting autonomy, competence and relatedness. Their answers were given on a nine-point scale (1 = does not correspond at all; 5 = corresponds moderately; 9 = corresponds exactly). The principal components analysis of students' answers identified two factors. We have named these factors "elementary school teachers' support for autonomy, competence and

relatedness" and "high school teachers' support for autonomy, competence and relatedness." We constructed a scale consisting of the nine items in question for each group of educators. The results of these analyses are presented in Table 4.23.

According to the students, their elementary and high school teachers' behaviour encouraged their feelings of autonomy, competence and relatedness nearly equally (mean scores of 6.6 for elementary school teachers and 6.5 for high school teachers). Overall, the proportion of students stating that the behaviour of their elementary school teachers strongly promoted their feelings of autonomy, competence and relatedness (58%) is close to the proportion of students stating that their secondary school teachers did the same (56%). The proportions of students who perceived these elementary and high school teacher behaviours as average or weak are also quite similar.



Table 4.23 Elementary and High School Teachers' Behaviour Promoting Feelings of Autonomy, Competence and Relatedness

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Elementary School Teachers					
Weak (%)	6.0	5.2	7.7	9.4	6.4
Average (%)	38.5	32.8	35.1	38.9	35.7
Strong (%)	55.6	62.1	57.2	51.7	57.8
Mean score	6.5	6.7	6.5	6.3	6.6
High School Teachers					
Weak (%)	3.8	4.5	8.8	7.9	5.3
Average (%)	39.5	36.6	40.1	42.3	38.8
Strong (%)	56.6	58.9	51.1	49.8	55.9
Mean score	6.6	6.6	6.4	6.3	6.5

4.1.5.2 School Staff and Friends' Expectations Regarding Postsecondary Education

As mentioned in Section 4.1.4.5, students answered five questions relating to the expectations of various people regarding their educational attainment. They were required to give their responses on a seven-point scale (1 = discontinued secondary; 4 = college studies of two or three years; 7 = doctorate (Ph.D., M.D. or other advanced studies). We present here the results of the descriptive analyses of school staff and friends' expectations.

Overall, between 43 and 49% of the students consider that their teachers and guidance counsellors expect them to pursue a university education (Table 4.24), while 15% of the students feel their educators and counsellors expect them to pursue college studies. The

percentages are similar with respect to their friends' expectations. The lowest percentages of students who believe their educators, guidance counsellors and friends expect them to pursue university studies are in the Rest of Qc ≤ 30 region; it is also in this region that the highest percentages of students who believe these people expect them to go no further than high school are to be found. Overall, no less than 23% of the students did not answer the question on teacher expectations, 30% did not provide an answer for counselor expectations, and 22% did not answer concerning friends' expectations. This is quite possibly an indication that these students have no idea of the expectations of these educators or friends regarding their postsecondary education aspirations.



Table 4.24 School Staff and Friends' Expectations Regarding Educational Attainment

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Teachers					
Secondary studies (%)	7.5	13.6	13.0	17.4	12.8
College studies (%)	14.9	13.6	23.8	17.0	15.2
University studies (%)	50.7	49.3	47.3	45.6	48.8
Missing (%)	27.0	23.4	15.0	20.0	23.1
Mean score	3.6	3.7	3.9	3.6	3.6
Guidance Counsellors					
Secondary studies (%)	7.1	12.6	9.1	16.1	11.8
College studies (%)	15.2	12.8	22.1	16.6	14.7
University studies (%)	45.3	45.4	41.4	36.3	43.2
Missing (%)	32.4	29.2	27.4	30.9	30.3
Mean score	3.3	3.4	3.3	3.0	3.3
Friends					
Secondary studies (%)	7.2	14.2	11.5	17.7	13.0
College studies (%)	21.7	19.2	32.3	23.9	21.5
University studies (%)	57.7	48.3	45.3	40.8	43.8
Missing (%)	25.2	22.7	10.8	17.8	21.7
Mean score	3.5	3.5	4.1	3.5	3.5

4.1.5.3 Influence of Educational Staff and Others on Postsecondary Education Plans

We mentioned in Section 4.1.4.6 that students had been asked to indicate to what extent various groups of people have influenced their goals regarding educational attainment. Their answers were given on a nine-point scale (1 = no influence at all; 5 = moderate influence; 9 = very strong influence). We present here the results of the descriptive analyses of the influence of educational staff, friends, and role models on student postsecondary education plans.

Overall, 20% of the students report that teachers have had a strong influence on their postsecondary plans (Table 4.25). Approximately half of the students (49%) feel that their teachers have moderately influenced their postsecondary plans. However, nearly a third of them (31%) also claim that their teachers have only had a weak influence on these plans. The proportion of students who claim that teachers have had a great deal of influence is highest in the Montreal Anglos ≤ 30 region (23%) and lowest in the Rest of Quebec ≤ 30 region (16%), and the proportion of students who believe they have had



very little influence is highest in the latter region (44%).

According to the students, the degree of influence of friends, university and college representatives, and guidance counselors on their postsecondary plans is more or less similar to that of their

teachers. In all of the above, none of the groups have strongly influenced more than 22% of the students' postsecondary plans. There is one notable exception, however, since 37% of the students consider that their role models have strongly influenced these plans.

Table 4.25 Influence of Educational Staff, Role Models, and Friends on Postsecondary Plans

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Teachers					
Weak (%)	28.7	26.1	33.6	43.5	31.0
Moderate (%)	52.5	51.0	46.9	40.7	48.9
Strong (%)	18.8	22.9	19.5	15.8	20.1
Mean score	4.5	4.8	4.4	3.9	4.5
Guidance Counsellors					
Weak (%)	34.7	33.3	49.4	53.9	39.0
Moderate (%)	50.3	48.0	35.7	31.2	44.3
Strong (%)	14.9	18.7	14.8	14.9	16.7
Mean score	4.0	4.4	3.7	3.6	4.1
University or College Representatives					
Weak (%)	29.9	30.2	41.2	46.6	34.3
Moderate (%)	51.3	47.3	39.4	36.4	45.5
Strong (%)	18.8	22.5	19.4	17.0	20.2
Mean score	4.4	4.6	4.1	3.8	4.3
Role Models					
Weak (%)	24.4	23.2	27.4	33.8	26.0
Moderate (%)	38.6	38.4	32.9	32.7	36.9
Strong (%)	37.0	38.4	39.7	33.5	37.0
Mean score	5.4	5.5	5.3	4.8	5.3
Friends					
Weak (%)	27.6	29.6	33.7	38.0	31.2
Moderate (%)	51.1	47.6	42.6	43.7	47.4
Strong (%)	21.3	22.8	23.6	18.3	21.5
Mean score	4.7	4.7	4.6	4.2	4.6



4.1.5.4 Summary

According to self-determination theory, teachers play an important role in the development of a student's feelings of autonomy, competence and relatedness.

- Elementary and high school teacher behaviour encouraged student feelings of autonomy, competence and relatedness nearly equally (mean scores on a nine-point scale of 6.6 for elementary school teachers and 6.5 for high school teachers). According to 58% of the students, the behaviours of their elementary school teachers strongly promoted their feelings of autonomy, competence, and relatedness. Nearly the same percentage of students (56%) said the same of their high school teachers.
- Nearly 50% of students report that their teachers expect them to pursue university studies, approximately 15% that their teachers expect them to obtain a CEGEP diploma, and 13% that their teachers expect them to discontinue formal education after high school. Approximately 43% of students report that the guidance counselors and their friends expect them to go to university. More students say that their friends (22%) expect them to pursue postsecondary studies at the CEGEP than there are who say that their teachers (15%) and counselors (15%) expect them to do so.

Within the school context, who has most strongly influenced student postsecondary education plans?

- Well over one third of the students (37%) report that their role models have strongly influenced their postsecondary education plans. This in comparison to slightly more than 20% of the students who report that teachers, university or college representatives, and friends have had a great deal of influence on their postsecondary plans. Just under half of the students feel that teachers, counsellors, university or college personnel, and friends have moderately influenced their postsecondary plans.

4.1.6 Student Psychological Characteristics and School Context

4.1.6.1 Learning and Feelings of Autonomy and Competence

Students were asked to respond to ten statements relating to their feelings of autonomy, competence and relatedness in a learning context. Their answers were given on a nine-point scale (1 = do

not agree at all; 5 = neither agree nor disagree; 9 = agree completely). The scales are: feelings of competence, feelings of autonomy, and feelings of being controlled or incompetent during learning activities.

The results are presented in Table 4.26. For the total sample, the mean scores for feelings of competence (mean score = 6.8) and autonomy (6.2) are moderately high. It is also apparent that



a higher percentage of students agree with the idea that they experience strong feelings of competence (64%) and autonomy (41%) during learning activities. A much smaller proportion of

students reports having strong feelings of being controlled or incompetent during learning activities (13%). On the whole, differences between regions are not very large.

Table 4.26 Feelings of Autonomy, of Competence, and of Being Controlled or Incompetent During Learning Activities

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Autonomy					
Weak (%)	4.0	4.7	3.5	5.8	4.7
Moderate (%)	60.4	51.5	58.6	51.5	54.1
Strong (%)	35.6	43.8	37.9	42.7	41.2
Mean score	6.1	6.2	6.1	6.2	6.2
Competence					
Weak (%)	1.1	2.5	2.3	2.7	2.2
Moderate (%)	33.9	34.5	34.8	30.8	33.5
Strong (%)	65.0	62.9	62.9	66.6	64.3
Mean score	6.8	6.7	6.8	6.8	6.8
Controlled or Incompetent					
Weak (%)	29.4	33.4	27.1	36.8	32.8
Moderate (%)	57.8	54.5	58.0	49.3	54.4
Strong (%)	12.8	12.2	14.9	14.0	12.9
Mean score	5.4	5.5	5.3	5.6	5.5

4.1.6.2 Feelings of Relatedness with Teachers and Classmates

Students were asked to respond to ten statements designed to measure to what extent they had developed feelings of relatedness with their teachers and schoolmates. They answered on a nine-point scale (1 = does not correspond at all; 5 = corresponds moderately; 9 = corresponds exactly).

For the total sample, feelings of relatedness with teachers (Table 4.27) are rather moderate (mean score = 5.9; 48%), although 40% of the students report having strong feelings of relatedness with their teachers. The lowest proportion of students expressing such feelings is found in the Rest of QC ≤30 region (34%). Overall, 12% of the students claim they have weak feelings of relatedness with their



teachers. The highest proportions of students claiming that their feelings of relatedness to their teachers are weak

are in the Rest of QC >30 and QC ≤30 regions.

Table 4.27 Feelings of Relatedness with Teachers and Schoolmates

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Classmates					
Weak (%)	10.9	11.2	13.4	12.7	11.6
Moderate (%)	41.3	40.8	41.7	39.9	40.8
Strong (%)	47.8	48.0	45.0	47.4	47.7
Mean score	6.1	6.2	6.1	6.1	6.1
Teachers					
Weak (%)	9.4	11.3	14.6	16.3	12.0
Moderate (%)	51.0	46.5	46.0	49.5	48.3
Strong (%)	39.6	42.2	39.4	34.3	39.6
Mean score	6.0	6.0	5.7	5.6	5.9

Table 4.27 also shows that 48% of the students report strong feelings of relatedness with their classmates and that 12% claim to have weak feelings of relatedness with their classmates. The differences between regions are not large.

4.1.6.3 Feelings about Academic Performance

Students responded to 30 statements relating to their school subjects and gave their answers on a nine-point scale (1 = does not correspond at all; 5 = corresponds moderately; 9 = corresponds exactly). Six scales measured satisfaction with academic performance in six different subjects,

one scale measured the importance they ascribe to academic success and one scale measured their feelings of discouragement with the school subjects. The results of the analyses of these scales are presented in Tables 4.28, 4.29 and 4.30, respectively.

The subjects in which the highest percentages of students expressed strong satisfaction with their performance are social studies (54%), English (55%) and “other subjects” (74%); see Table 4.28 for details. For the entire sample, less than 50% of the students expressed strong feelings of satisfaction with their performance in French (48%), Science (46%), and

Mathematics (42%). The subjects in which a majority of the students from each region expressed strong feelings of satisfaction are English and Other subjects. A majority of the students from three regions (Mtl < 30, and the Rest of Quebec regions) expressed strong feelings of satisfaction with their performance in Social Studies, and a majority of the students in the Rest of Quebec regions expressed strong

feelings of satisfaction with their performance in Science. The subject for which the percentage of students expressing weak feelings of satisfaction is highest is Mathematics. Overall, 14% of the students express weak feelings of satisfaction with their performance in this subject. Between 12 and 16% of the students in each of the four regions express little satisfaction with their performance in Mathematics.



Table 4.28 Feelings of Satisfaction with Academic Performance and Learning by Subject

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Social sciences					
Weak (%)	6.9	6.4	6.4	6.2	6.5
Moderate (%)	44.7	39.0	39.0	36.7	39.9
Strong (%)	48.4	54.7	54.6	57.2	53.7
Mean score	6.4	6.5	6.5	6.5	6.5
Mathematics					
Weak (%)	13.0	14.9	11.7	15.8	14.4
Moderate (%)	44.8	42.6	42.1	43.9	43.4
Strong (%)	42.2	42.5	46.2	40.3	42.1
Mean score	6.0	5.9	6.1	5.8	5.9
Science					
Weak (%)	10.8	7.2	7.7	8.3	8.4
Moderate (%)	51.7	44.9	38.7	40.1	45.3
Strong (%)	37.5	47.9	53.7	51.6	46.3
Mean score	5.9	6.3	6.5	6.3	6.2
French					
Weak (%)	9.9	8.8	12.2	11.7	9.9
Moderate (%)	42.7	42.0	44.8	43.0	42.6
Strong (%)	47.4	49.2	43.0	45.3	47.5
Mean score	6.2	6.3	6.0	6.1	6.2
English					
Weak (%)	4.0	4.2	3.2	4.6	4.2
Moderate (%)	42.7	39.4	40.8	43.0	41.1
Strong (%)	53.3	56.4	56.0	52.5	54.7
Mean score	6.5	6.6	6.6	6.5	6.5
Other subjects					
Weak (%)	2.0	1.7	0.9	2.0	1.8
Moderate (%)	23.5	23.7	27.1	27.0	24.6
Strong (%)	74.5	74.5	72.0	71.1	73.6
Mean score	7.2	7.2	7.2	7.1	7.2

As we can see in Table 4.29, 80% of the students place much importance on academic success. The percentages of

students who view academic success as very important are high and fairly similar in all regions.

Table 4.29 Importance of Academic Success

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Low (%)	1.0	0.6	1.0	1.5	0.9
Moderate (%)	21.3	18.0	19.3	17.8	18.9
High (%)	77.7	81.4	79.6	80.7	80.2
Mean score	7.4	7.6	7.4	7.5	7.5

Table 4.30 presents the results on feelings of discouragement with school subjects. For the total sample, the mean score is 3.4, indicating a relatively weak level of feelings of discouragement with school subjects. Such feelings are of relatively equal strength in all regions. Approximately 39% of the students

report moderate feelings of discouragement with their studies, and 3% have strong feelings of discouragement. Nearly 58% of the students report weak or no feelings of discouragement with their school subjects. In general, differences between regions are relatively slight.

Table 4.30 Feelings of Discouragement with School Subjects

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Weak (%)	60.3	56.4	57.8	56.9	57.6
Moderate (%)	36.7	40.4	39.1	40.0	39.3
Strong (%)	3.0	3.2	3.1	3.2	3.1
Mean score	3.3	3.4	3.3	3.4	3.4

A student's perceived ability to learn and understand can also influence her or his intentions to pursue postsecondary education. Slightly more than one half of the students (53%) consider their ability to learn as being in the average range (Table 4.31). More surprising, however, is that 45% of the students consider their learning ability

as stronger than average, and that only 2% consider their ability to learn as weaker than average. One possible explanation for this is that some students may not be comparing their abilities to students who are also in Secondary V at the time of the survey, but to all students who should have been in Secondary V, including those



who have dropped out of school before Secondary V and/or those who have experienced problems in school and who have dropped behind. The pattern

of results is the same in all regions. The percentages vary only slightly between regions.

Table 4.31 Student Self-Evaluation of Ability to Learn in Comparison to Perceived Learning Ability of Peers

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Weaker than average (%)	2.4	1.8	3.0	3.1	2.3
Average (%)	55.9	49.9	52.8	56.4	53.0
Stronger than average (%)	41.7	48.3	44.2	40.5	44.7
Mean score	6.3	6.4	6.3	6.3	6.3

4.1.6.4 Feelings of Inclusion at School

Students responded to four statements designed to measure their feelings of inclusion at school. They answered on a nine-point scale (1 = disagree completely; 5 = neither agree nor disagree; 9 = agree completely). The results of the analysis are presented in Table 4.32. The average score, 6.9 on a nine-point scale, indicates that feelings of inclusion are moderately strong. Slightly more than two thirds of the

students (69%) have strong feelings of inclusion at school, approximately 27% of the students report moderate feelings of inclusion, and less than 4% report weak feelings of inclusion at school. The highest percentage of students expressing strong feelings of inclusion (75%) is in the Montreal Anglos > 30 region, in comparison to between 62% and 68% of students in the other regions.

Table 4.32 Feelings of Inclusion at School

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Weak (%)	4.1	4.0	5.6	3.6	4.0
Moderate (%)	21.0	27.7	32.4	29.4	26.6
Strong (%)	74.9	68.3	62.1	67.0	69.4
Mean score	7.0	6.9	6.7	6.8	6.9



4.1.6.5 Self-Esteem

Students were asked to respond to ten statements aimed at measuring self-esteem. Answers were given on a nine-point scale (1 = disagree completely; 5 = neither agree nor disagree; 9 = agree completely). The results of the analyses are presented in Table 4.33. Overall, 66% of the students report strong positive self-esteem, and the mean score for the total sample is 6.9. Depending on the region, between 63% and 68% of students claim to have strong self-esteem. For the total sample, approximately 32% of the students believe their self-esteem is moderately positive. In each of the regions, the percentage of students claiming to have weak self-esteem is very low (2% to 3%).

Regarding feelings of failure or uselessness (Table 4.33), the results of the analyses paint a very different picture than that given in the previous paragraph. Overall, 46% of the students claim to have weak feelings of failure or uselessness. In each of the four regions, the percentages of those reporting such feelings are quite similar (40 to 46%) Notably, however, the percentage of student who report moderate (or occasional) feelings of failure or uselessness is also considerable (45%), and the percentages of students reporting strong feelings of failure or uselessness are not negligible. Indeed, approximately 10% of the students report such feelings. Differences between regions are generally small.

Table 4.33 Self-Esteem and Feelings of Failure and Uselessness

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Self-Esteem					
Weak (%)	3.0	2.5	3.0	2.1	2.6
Moderate (%)	29.0	32.0	33.7	32.5	31.5
Strong (%)	67.9	65.5	63.3	65.3	66.0
Mean score	7.0	6.9	6.9	6.9	6.9
Feelings of Failure and Uselessness					
Weak (%)	46.3	44.5	49.6	46.7	45.7
Moderate (%)	44.6	45.7	40.1	44.1	44.8
Strong (%)	9.2	9.8	10.3	9.1	9.5
Mean score	3.7	3.8	3.7	3.8	3.8



4.1.6.6 Summary

The students were asked to answer several questions pertaining to their feelings in a learning environment

A first group of questions were on their feelings of autonomy and competence during learning activities.

- A majority of students (64%) report the experience of strong feelings of competence, but a minority of the students (41%) report strong feelings of autonomy.
- A small minority of students (13%) report feelings of being controlled or incompetent.

Students were also asked to say to what extent they had developed feelings of relatedness with their teachers and schoolmates.

- Overall, 40% of the students reported having strong feelings of relatedness with their teachers.
- Nearly half of the students (48%) reported having strong feelings of relatedness with their schoolmates.

The students were asked to answer questions concerning their degree of satisfaction with their academic performance and learning in their school subjects.

- Slim majorities of students were very satisfied with their performance and learning in English (55%) and in Social Sciences (54%). A larger majority (74%) were very satisfied with their performance in other, probably optional, subjects.
- Fairly large minorities of subjects were highly satisfied with their performances and learning in French (48%), Science (46%), and Mathematics (42%).
- Save for Mathematics (mean score of 5.9 on a nine-point scale) and for Other subjects (mean score of 7.2), the mean scores vary between 6.2 and 6.5 and are indicative of moderate to moderately strong satisfaction.

The students were asked to compare their ability to learn to that of other students.

- More than half of the students (53%) estimate that their learning ability is average. Nearly as many students (45%) believe their learning ability is stronger than average.

Students were asked about their feelings of inclusion at school.

- No less than 69% of the students report strong feelings of inclusion at school. A very small minority (4%) report very weak or weak feelings of inclusion.

Finally, students were asked about their self-esteem.

- Nearly two-thirds of the students (66%) report strong levels of self-esteem. Those who report low self-esteem are very few (2%).

4.1.7 Student Dispositions towards Postsecondary Education

4.1.7.1 Motivations for Pursuing a Postsecondary Education

Students were asked to answer 26 questions on their reasons for pursuing a postsecondary education. They were required to answer on a nine-point scale (1 = disagree completely; 5 = neither agree nor disagree; 9 = agree completely). Their answers allowed us to determine to what extent any of the four types of extrinsic motivation, intrinsic motivation, or the absence of motivation had a role in their attitudes regarding postsecondary education.

These are based on the motivational continuum (Figure 2.1) described in Chapter 2.

The results of these analyses are presented in Table 4.34. The means show that very few students report feelings of amotivation regarding postsecondary education (mean score = 2.2 on a nine-point scale for the total sample). This finding is supported by the very large percentage of students (80%) who responded that an absence of motivation to pursue postsecondary studies corresponds weakly to their feelings.



Table 4.34 Types of Motivation for Postsecondary Education

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Amotivation					
Weak (%)	82.8	78.6	81.7	79.3	80.0
Moderate (%)	15.1	18.8	15.1	17.1	17.3
Strong (%)	2.1	2.6	3.1	3.6	2.7
Mean score	2.1	2.3	2.3	2.3	2.2
Extrinsic Motivation: External Regulation					
Weak (%)	2.6	1.9	3.9	3.2	2.5
Moderate (%)	25.0	24.6	27.5	27.4	25.5
Strong (%)	72.4	73.5	68.6	69.4	72.1
Mean score	7.2	7.3	7.1	7.1	7.2
Extrinsic Motivation: Introjected Regulation					
Weak (%)	39.1	35.9	41.1	39.5	37.8
Moderate (%)	48.0	48.3	48.6	48.8	48.3
Strong (%)	12.9	15.8	10.3	11.8	13.8
Mean score	4.2	4.3	4.1	4.1	4.2
Extrinsic Motivation: Identified Regulation					
Weak (%)	4.0	4.1	1.6	4.7	4.1
Moderate (%)	28.4	27.1	32.1	27.9	27.9
Strong (%)	67.6	68.8	66.3	67.4	68.1
Mean score	6.8	6.9	6.9	6.8	6.9
Extrinsic Motivation: Integrated Regulation					
Weak (%)	13.3	10.5	10.2	14.9	12.2
Moderate (%)	46.8	47.2	53.5	49.1	47.8
Strong (%)	40.0	42.2	36.3	36.0	40.0
Mean score	5.6	5.8	5.8	5.5	5.7
Intrinsic Regulation					
Weak (%)	13.2	12.2	12.0	14.8	13.0
Moderate (%)	55.0	53.8	58.4	56.8	55.0
Strong (%)	31.8	34.0	29.7	28.4	31.9
Mean score	5.5	5.5	5.5	5.3	5.5

Extrinsic motivation by external regulation received the highest mean (7.2). Just over 72% of the students feel that instrumental or utilitarian reasons related to better employment, a more comfortable financial situation, and a higher social standing, correspond strongly to their attitudes toward postsecondary education.

The reasons linked to extrinsic motivation by introjected regulation relate to students' wishes to not disappoint people close to them, such as parents or teachers. Nearly 14% of students estimate that these reasons correspond strongly to their motivations for pursuing postsecondary studies. The mean for this type of motivation is 4.2 on a nine-point scale.

Extrinsic motivation by identified regulation refers to reasons related to the pursuit of personal goals. Slightly more than two thirds of the students (68%) state they intend to pursue a postsecondary education for reasons such as accomplishing their personal goals and perfecting skills related to their fields of interest. This type of motivation received the second highest mean for the total sample (6.9 on a nine-point scale).

Extrinsic motivation by integrated regulation indicates that a student has interiorized the value of a postsecondary education and therefore aims to pursue his or her studies because this corresponds to who he or she is and to his or her self-definition (40% of students; mean of 5.7). On the

other hand, students whose motivations for pursuing a postsecondary education are intrinsic choose to continue their studies for the sheer pleasure or stimulation of doing so. Overall, 32% of students feel the reasons related to the latter type of motivation correspond strongly to who they are. The mean for the total sample is 5.5.

We noted certain differences by region and by type of motivation. Notably, feelings of amotivation regarding postsecondary education are very slightly more common among students in the Rest of QC regions than in the Montreal regions. Slightly larger proportions of students in the Montreal regions than in the Rest of QC regions report strong external, identified, integrated, and intrinsic regulations, i.e., reasons for wanting to pursue a postsecondary education.

4.1.7.2 Confidence in Ability to Complete Postsecondary Studies

Students were asked to indicate to what extent they are confident in their ability to complete a postsecondary education. They were required to answer on a nine-point scale (1 = not at all confident; 5 = moderately confident; 9 = very confident). The mean score for the total sample (7.0) indicates students have a high level of confidence in their ability to complete postsecondary studies (Table 4.35). Overall, 69% of the students consider that they are very confident, while just over 25% are moderately confident. Only approximately 6% of the students are not confident in their ability to obtain a



postsecondary education diploma. The largest percentage of students who claim to be very confident is in the Montreal Anglos > 30 region (74% and 68%). In comparison, the students from

the Montreal Anglos ≤ 30 and Rest of Quebec regions are somewhat less likely to say they are very confident in their ability to obtain a postsecondary diploma (68% to 66%).

Table 4.35 Confidence in Ability to Obtain a CEGEP or University Diploma

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Weak (%)	4.5	5.3	5.7	7.8	5.7
Moderate (%)	21.9	26.6	27.8	25.9	25.3
Strong (%)	73.5	68.1	66.5	66.2	69.0
Mean score	7.2	7.0	7.0	6.9	7.0

4.1.7.3 Strength of Intentions to Pursue a Postsecondary Education

The third question dealt with the strength of student intentions to pursue college or university studies. Students were required to give their answers on a nine-point scale (1 = no intention at all; 5 = moderate intention; 9 = very strong intention). The overall mean score was 7.8, indicating that their intentions to pursue a postsecondary education are

very strong (Table 4.36). Overall, 83% of students have strong intentions to pursue postsecondary studies, 11.4% have moderate intentions, and only 5% have weak intentions. Just over 88% of the students in the Montreal Anglos > 30 region have strong intentions to pursue a postsecondary education, in comparison to 79% or less in the Rest of QC Anglos >30 and ≤30 regions.

Table 4.36 Strength of Students' Intentions to Pursue Postsecondary Studies

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Weak (%)	2.9	5.3	8.3	7.7	5.4
Moderate (%)	8.7	11.7	14.7	13.3	11.4
Strong (%)	88.4	83.0	76.9	79.0	83.2
Mean score	8.0	7.8	7.5	7.5	7.8



4.1.7.4 Location of Preferred Program of Postsecondary Studies

Students were asked to indicate the location of their preferred program of postsecondary studies. Their answers are presented in the first column of Table 4.37. Overall, 58% of students responded that the program that is of most interest to them is located in their home province. Slightly less than 11% of the students indicated that their preferred program is located in Canada, but not in their home province, while for slightly more than 6% of the students, the preferred program is located outside Canada. Overall, 18% of students are unsure or ambivalent with respect to the geographic location of

the program of study which interests them most. The proportions of students from the Montreal regions who intend to study in the province of Quebec (59 and 61% respectively) are larger than those of the Rest of QC regions (45 and 56% respectively). Inversely, the proportions of students from the Rest of QC regions who intend to study outside of their province but in Canada are higher (27 and 15% respectively) than those of the Montreal regions (8 and 9%). Nearly two of ten students (18%) are rather uncertain concerning the location of their preferred program of study. Overall, 4% of the students did not answer this question.

Table 4.37 Location of Student Preferred Program of Postsecondary Studies

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
In home province (%)	59.1	60.6	44.8	55.6	58.3
Outside home province but inside Canada (%)	7.7	8.6	27.3	15.3	10.8
Outside Canada (%)	8.9	5.5	4.2	6.0	6.4
Unsure (%)	18.1	18.6	18.7	18.1	18.4
No intention to pursue postsecondary studies (%)	1.0	2.7	1.3	2.0	2.1
Missing (%)	5.1	4.0	3.7	3.0	4.0

4.1.7.5 Barriers to Postsecondary Education

Students were presented with 14 potential barriers to postsecondary education and asked to indicate to what extent each of them, in their opinion, was for them a barrier to postsecondary

studies. They answered on a nine-point scale (1 = not a barrier at all; 5 = moderate barrier; 9 = major barrier). Three scales were constructed based on these items: 1) lack of encouragement from family members and friends, accompanied by family obligations, 2)



high cost and fear of indebtedness, and 3) uncertainty about goals, accompanied by lack of knowledge about employment and careers and lack of interest.

The results of the analyses are presented in Table 4.38. Overall, the means on these nine-point scales are rather small, ranging from 3.8 for vocational indecision to 2.7 for lack of encouragement. Overall, these indicate that these are strong barriers for rather small percentages of students. Indeed, a lack of encouragement from family members and friends accompanied by family obligations is considered a major barrier by only 4% of the students and a minor barrier for 76% of students.

Nevertheless, the percentage of students who view it as a moderate barrier is not negligible (20%).

The high cost of schooling and fear of indebtedness is considered a major barrier by 10% of students and a moderate barrier by 41%. And 48% of students consider costs to be a minor barrier.

Finally, uncertainty about their goals accompanied by a lack of knowledge about employment and careers, and a lack of interest in pursuing postsecondary studies is a major barrier for 10% of students. We should mention, however, that no less than 38% of students see this as a moderate barrier.

Table 4.38 Barriers to Postsecondary Education

Obstacle	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Lack of encouragement					
Weak (%)	77.0	74.8	78.7	74.5	75.5
Average (%)	19.6	19.9	17.8	22.2	20.2
Strong (%)	3.5	5.3	3.5	3.2	4.3
Mean score	2.6	2.7	2.6	2.7	2.7
Lack of funds and fear of indebtedness					
Weak (%)	48.4	49.9	39.9	47.5	48.5
Average (%)	41.6	40.2	48.4	41.7	41.3
Strong (%)	10.0	10.0	11.6	10.8	10.2
Mean score	3.8	3.7	4.1	3.8	3.8
Vocational indecision					
Weak (%)	52.5	52.2	55.0	50.5	52.1
Average (%)	37.4	37.1	34.4	39.4	37.6
Strong (%)	10.0	10.7	10.6	10.1	10.4
Mean score	3.6	3.5	3.5	3.6	3.6

4.1.7.6 Summary

- A majority of students (72%) strongly invoke reasons related to better employment, a more comfortable financial situation, and a higher social standing to pursue their postsecondary studies. Slightly more than two-thirds of students (68%) strongly invoke reasons such as accomplishing their personal goals and perfecting skills related to their fields of interest. No less than 40% of the students have strongly interiorized the value of a postsecondary education and therefore aim to pursue their studies because this corresponds to who they are, to the manner in which they define themselves. Close to one third of the students (32%) strongly invoke reasons related to the sheer pleasure or stimulation of pursuing postsecondary studies. However, 14% of the students strongly invoke reasons related to their feeling of being obliged to not disappoint people close to them, such as parents or teachers. Finally, less than 3% of the students strongly invoked reasons related to amotivation, i.e., no motivation relative to the pursuit of postsecondary studies.
- Slightly more than 83% of the students report strong intentions to pursue postsecondary studies. Just over ten percent of the students (11%) report moderately strong intentions, and 5% report having weak intentions or no intention to pursue postsecondary studies.
- A large proportion of the students (69%) are very confident in their ability to obtain a postsecondary education diploma. Slightly more than 25% of the students are moderately confident, and only 6% are not confident.
- Overall, 58% of the students consider that the program that is of most interest to them is located in their home province. Just over 10% of the students indicate that their preferred program is located outside of Quebec, but in Canada. Close to one in five students (18%) are unsure as to the location of their preferred postsecondary education program.
- Relatively small percentages of students report strong barriers to their pursuit of postsecondary studies. Just over 10% of the students report strong barriers related to vocational indecision and to lack of funds and fear of indebtedness. Slightly more than 4% report a strong barrier in relation to a lack of encouragement to pursue postsecondary studies.

4.1.8 Student Preferred Language for Postsecondary Studies

4.1.8.1 Desired Proportion of Postsecondary Studies in English

Students were asked to indicate the proportion of their postsecondary

courses they would prefer in English and in French, if given the choice. The scale consisted of seven possible answers (1 = 100% of courses in French; 2 = all courses in French except for mandatory English-language courses; 3 = approximately two-thirds of courses in French; 4 = approximately 50% of



courses in English and 50% in French; 5 = approximately two-thirds of courses in English; 6 = all courses in English except for mandatory French-language courses; 7 = 100% of courses in English). Overall, just under 80% of the students prefer that two-thirds or more of their postsecondary education courses be in English (Table 4.39). Nearly 16% would prefer that half of their courses be in English, with the other half in French. A

very small percentage of students (5%) want two-thirds or more of their courses in French, with the remainder in English. Students from the two regions in which Anglophones represent more than 30% of the population are slightly more inclined than the students in the regions where 30% of the population or less is Anglophone to prefer that two-thirds or more of their courses be taught in English.

Table 4.39 Desired Proportion of Postsecondary Courses in English, Given the Choice

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
2/3 or more in French (%)	2.8	5.2	2.7	7.5	4.9
Half/half (%)	14.9	15.8	14.0	17.2	15.8
2/3 or more in English (%)	82.3	79.0	83.3	75.3	79.3
Mean score	5.7	5.6	5.9	5.5	5.6

Students also indicated the likelihood that they would pursue their postsecondary education in English. They gave their answers on a nine-point scale (1 = 10% or less; 5 = 50%; 9 = 90% or more). The mean score for the

sample (8.0) indicates a very high probability of pursuing postsecondary studies in English. Indeed, 87% of the students estimate that the probability that they will do so is equal to or greater than 66% (Table 4.40).

Table 4.40 Likelihood of Pursuing Postsecondary Education in English

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
0%-35%	2.1	2.3	2.8	5.0	2.9
36%-65%	8.4	10.7	7.2	13.0	10.4
66%-100%	89.6	87.0	90.0	82.0	86.7
Mean score	8.1	8.1	8.2	7.7	8.0

4.1.8.2 Linguistic Character of Preferred Postsecondary Institution

Students were asked to indicate their preference concerning the linguistic character of the postsecondary institution they hope to attend. The choice of possible answers are presented in the first column of Table

4.41, which shows that 50% of the students state they would prefer an Anglophone institution, while 46% would prefer a bilingual institution and 1%, a Francophone institution. Less than 3% of the students did not answer this question.

Table 4.41 Linguistic Character of Preferred Postsecondary Institution

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Anglophone (%)	51.6	50.2	58.3	46.1	50.1
Bilingual (%)	45.3	46.3	38.6	48.6	46.2
Francophone (%)	0.3	1.1	1.0	2.7	1.2
Missing (%)	2.7	2.4	2.2	2.5	2.5

4.1.8.3 Barriers to Postsecondary Education in English

Students were asked to indicate to what extent they considered 17 different reasons as barriers to the possibility of pursuing a postsecondary education in English. They were required to answer on a nine-point scale (1 = Not a barrier at all; 5 = Moderate barrier; 9 = Major barrier). The principal components analysis of their answers allowed us to group these reasons into three factors. Three scales were constructed on the

basis of these factors: 1) academic results in English, 2) distance from an English-language institution, 3) preference for French.

The mean scores on these three scales (Table 4.42) are rather weak overall. In general, the students consider the barriers to English-language postsecondary studies rather minor, on average. The mean scores for the total sample are 2.8 and 2.9 on nine-point scales. Moreover, the majority of students, although only slightly for



certain obstacles, consider each barrier as rather minor (from 66% to 70% of the students, depending on the obstacle). These same obstacles, however, are considered moderate by approximately

25% of the students, and major by 4% to 10% of the students.

The differences between the mean scores of the regions are small.

Table 4.42 Barriers to Pursuing a Postsecondary Education in English

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Distance from Anglophone institution					
Minor (%)	72.7	69.9	68.7	65.9	69.7
Average (%)	24.6	25.9	25.4	29.8	26.4
Major (%)	2.7	4.2	5.8	4.2	3.9
Mean score	2.6	2.8	2.9	3.0	2.8
Preference for French					
Minor (%)	71.7	65.5	73.0	67.8	68.0
Average (%)	23.3	27.4	22.7	25.8	25.8
Major (%)	5.0	7.1	4.3	6.4	6.2
Mean score	2.8	3.0	2.7	2.9	2.9
Poor grades in English					
Minor (%)	66.7	67.9	68.6	67.4	67.5
Average (%)	24.7	21.9	20.4	23.1	22.8
Major (%)	8.6	10.3	11.1	9.4	9.7
Mean score	2.9	2.9	2.8	2.9	2.9

4.1.8.4 Perceived Availability of Bursaries for Postsecondary Education in English or French

Students were asked to indicate their perception of the availability of bursaries for postsecondary education in French, as opposed to the availability of bursaries for studies in English. They were required to answer on a nine-point scale (1 = More available for French; 5 = Equally for both languages; 9 = More available for English) A majority of the

students (54%) consider bursaries as being equally available for study in English or in French (Table 4.43). The proportion of students believing that bursaries are more readily available in English than in French is greater (27%) than the proportion of students believing that bursaries are more readily available for study in French than in English (19%).

Table 4.43 Perceived Availability of Bursaries by Language of Study

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
More for French (%)	16.4	18.1	22.9	22.4	18.9
Equal for English and French (%)	52.4	55.7	48.7	53.7	54.1
More for English (%)	31.2	26.2	28.4	23.9	27.1
Mean score	5.5	5.3	5.3	5.1	5.3

4.1.8.5 Summary

The students were asked a number of questions concerning the language of their postsecondary studies. They were also asked to estimate the probability that they would pursue their postsecondary studies in English. Finally, they were to indicate the linguistic character of their chosen postsecondary institution.

- A large majority of students (79%) would like to take a program of studies in which two-thirds or more of their courses would be in English. Sixteen percent of the students would prefer a program in which approximately half of their courses would be in English and half in French.
- Nearly 87% of the students estimate that the probability of pursuing postsecondary studies in English is 66% or more.
- One half of the students (50%) state that they would prefer attending an Anglophone institution, 46% indicate their preference for a bilingual institution. Very few students indicate a preference for a Francophone institution.

The students were asked to indicate potential barriers to their pursuit of postsecondary studies in English. Each of the potential barriers is of minor importance for slightly more than two-thirds of the students.

- Poor grades in English is seen as a barrier of major importance by nearly 10% of the students. A preference for studies in French is seen as a major barrier by 6% of the students and the distance from an Anglophone postsecondary institution is seen as a major barrier by 4% of the students. Each of these barriers is considered to be moderate by slightly more or less than 25% of the students.

The perceived availability of bursaries for studies in each language may influence the choice of postsecondary institution.

- A majority of the students (54%) estimate that the availability of bursaries in English and in French is the same. More than one quarter of the students (27%) think more bursaries are available for study in English than in French and nearly 19% of the students believe more bursaries are available for study in French than in English.



4.1.9 Financing of Student Postsecondary Education

4.1.9.1 Knowledge of Sources of Financing for Postsecondary Education

The mean score for the sample (4.3) on a nine-point scale (1 = no knowledge at all; 5 = moderate knowledge; 9 = very good knowledge) shows that student self-estimated knowledge of the various sources of financing for postsecondary studies is moderately weak. As shown in

Table 4.44, 31% of the students estimate that their knowledge of these sources is poor. Only 11.4% of the students consider that they have a good knowledge of the sources of financing. Nearly 58% of the students estimate that their knowledge of these sources is moderate. The percentages within categories are relatively similar across regions.

Table 4.44 Knowledge of Sources of Financing for Postsecondary Education

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Poor (%)	32.3	28.8	33.3	33.9	31.0
Average (%)	56.8	58.7	58.9	55.6	57.5
Good (%)	10.9	12.5	7.8	10.5	11.4
Mean score	4.2	4.4	4.1	4.2	4.3

4.1.9.2 Sources and Amounts of Financing Expected for Postsecondary Education

A total of 12 questions addressed the issue of expected sources and amounts of financing for every year of postsecondary studies. Students gave their answers on a seven-point scale: 1 = \$0, 2 = \$1-\$4,000, 3 = \$4,001-\$8,000, 4 = \$8,001-\$12,000, 5 = \$12,001-\$16,000, 6 = \$16,001-\$20,000 and 7 = \$20,001 and over. We constructed the following three scales of expected sources of financing: 1) parents or family, 2)

students' savings, and 3) loans and bursaries.

The three mean scores (on a seven-point scale) are relatively low (Table 4.45). They indicate that students believe they will receive more money from their families (mean score = 2.9) and put forward more money from their own savings (mean score = 2.8) than they will receive from loans and bursaries (mean score = 2.1). The trends between regions are quite similar.

Table 4.45 Amounts Expected from Various Sources of Financing for Postsecondary Education

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Bursaries, loans					
Less than 4000\$ (%)	88.2	83.3	88.1	88.0	85.8
4001\$ to 12000\$ (%)	10.1	15.4	10.0	10.9	12.8
More than 12000\$ (%)	1.7	1.3	1.9	1.1	1.4
Mean score	2.0	2.2	2.1	2.0	2.1
Personal savings					
Less than 4000\$ (%)	76.2	70.6	70.6	76.9	73.4
4001\$ to 12000\$ (%)	21.7	25.5	25.3	19.3	23.2
More than 12000\$ (%)	2.1	3.9	4.1	3.8	3.4
Mean score	2.7	2.9	2.9	2.8	2.8
Parents					
Less than 4000\$ (%)	70.7	70.3	76.9	78.2	72.5
4001\$ to 12000\$ (%)	26.8	27.0	20.6	19.5	25.0
More than 12000\$ (%)	2.5	2.7	2.5	2.3	2.5
Mean score	3.0	3.0	2.7	2.7	2.9

One question asked students whether someone had put money aside for their postsecondary education. Less than two-thirds of them (61%) replied in the

affirmative, 25% replied that they didn't know, and 11% said no (Table 4.46). Approximately 3% of the students did not answer this question.

Table 4.46 Savings for Postsecondary Education

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Yes (%)	65.3	61.7	57.7	55.3	61.0
No (%)	7.4	10.4	12.9	15.7	10.9
I don't know (%)	24.1	25.1	27.2	26.2	25.2
Missing (%)	3.2	2.8	2.2	2.8	2.9

When asked who had put these savings aside, 12% of students replied that they had done so, and 57% replied that it was their parents or guardians who had

done so (Table 4.47). Other family members were also responsible for these savings (15%).

Table 4.47 Person Responsible for Postsecondary Education Savings

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Student (%)	11.4	11.6	18.1	14.1	12.4
Student's parents or guardians (%)	61.5	58.2	52.0	50.5	57.0
Other members of student's family (%)	18.8	12.9	15.1	15.7	15.1
Other (%)	2.4	2.4	3.6	2.6	2.5

4.1.9.3 Financial Worries about Postsecondary Education

Three questions were designed to evaluate the extent to which students were concerned about the financing of their postsecondary education. They were required to answer on a nine-point scale (1 = Not at all concerned; 5 = Uncertain; 9 = Very concerned). One quarter of the students (25%) answered that they are very worried about having enough money to finish their postsecondary studies, whereas nearly one half of them (48%) express little concern (Table 4.48). Slightly more than

one quarter of the students (27%) are moderately concerned. More students in the Rest of Quebec regions (close to 30%) than in the Montreal regions (from 21 % to 26%) express strong concern. This may well be related to the fact that smaller percentages of students from the Rest of Quebec regions (29% and 40%) than from the Montreal regions (48% and 51%) consider it is very likely that they will be residing at home with their parents during their postsecondary studies (Table 4.50).

Table 4.48 Concerns about Financing Postsecondary Studies

	Montreal Anglos > 3 0	Montreal Anglos ≤ 3 0	Rest of QC Anglos > 3 0	Rest of QC Anglos ≤ 3 0	Total
Slight concerns (%)	51.5	47.5	41.2	44.9	47.7
Moderate concerns (%)	28.0	27.0	30.0	25.3	27.0
Strong concerns (%)	20.5	25.5	28.7	29.8	25.3
Mean score	4.0	4.2	4.6	4.5	4.2

Results show that slightly more students are very concerned about indebtedness at the end of their postsecondary studies (28%) than about financing these studies (25%). Very slightly more students in the Rest of Quebec regions (30 and 31%) than in the Montreal

regions (from 26 % and 28%) express strong concern about indebtedness (Table 4.49). Interestingly, none of the students expressed strong or moderate concern about their ability to repay their student loans within a reasonable amount of time.

Table 4.49 Concerns about Indebtedness at End of Postsecondary Studies

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Slight concerns (%)	42.8	44.3	36.7	42.1	43.0
Moderate concerns (%)	31.5	28.0	33.8	27.2	29.0
Strong concerns (%)	25.7	27.7	29.5	30.6	27.9
Mean score	4.4	4.4	4.7	4.6	4.5

4.1.9.4 Likelihood of Living with Parents During Postsecondary Studies

One question asked students to indicate the likelihood that they would live with their parents or guardians during their

postsecondary studies. They were required to answer on a nine-point scale (1 = Not at all likely; 5 = More or less likely; 9 = Very likely). Overall, the percentage of students who believe that it is very likely that they will live with



their parents or guardians is slightly higher (46%) than the percentage of students who are unsure (36%) or who believe it is not very likely (18%), as shown in Table 4.50.

There are significant differences between regions. It is in the Rest of Quebec regions that we find the highest percentages of students who think it is very unlikely that they will live with their

parents or guardians (32% and 23%, respectively), compared to 15 to 16% in the Montreal regions. Understandably, it is in the Montreal regions that we find the highest proportions of students who state that it is very likely that they will reside with their parents or guardians (51% and 48%, respectively) while pursuing their postsecondary education.

Table 4.50 Likelihood of Living with Parents During Postsecondary Studies

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Very unlikely (%)	15.0	15.9	31.7	23.0	18.0
Unsure (%)	33.7	35.8	39.3	37.5	35.8
Very likely (%)	51.3	48.3	29.0	39.5	46.2
Mean score	6.0	6.0	4.9	5.5	5.8

4.1.9.5 Summary

The students were asked several questions on the financing of their postsecondary education. These questions touched on the topics of knowledge about sources of financing for postsecondary studies, sources and the amounts expected from different sources, financial worries relative to postsecondary education, and likelihood of living with parents during postsecondary studies.

- Only 11% of the students consider that their knowledge of sources of financing for postsecondary education are good. A majority of students (58%) estimate their knowledge of these sources as moderate, and 31% of the students consider their knowledge is poor.
- A strong majority of students expect the amounts they will receive yearly from bursaries and loans (86%), that they will contribute from their personal savings (73%), and that their parents will contribute (73%), will be rather small, i.e. 4 000\$ or less.



- A majority of students (61%) say that money has been set aside for their postsecondary education. One quarter of the students (25%) do not know, and 11% state that no money had been set aside.
- According to 57% of the students, this money has been set aside by their parents or guardians. Fifteen percent of students say other family members have done so, and 12% of the students said they have done so themselves.
- Just over 25% of the students judge that they are very worried about having enough money to finish their postsecondary studies, slightly more than one quarter of the students (27%) express moderate concern, whereas nearly 48% express little concern. The results are nearly the same for worries about student indebtedness at the end of their postsecondary studies.
- Students who have the possibility of living with their parents during their postsecondary studies probably have a lesser degree of preoccupation with the financing of their studies. Nearly half of the students (46%) say it is very likely that they will be living with their parents during their postsecondary studies. More than one third of the students (36%) are unsure, and nearly one of five (18%) consider it is unlikely.

4.1.10 Student Plans to Pursue a Career in Home Region after Completing Postsecondary Education

4.1.10.1 Intentions Regarding Eventual Region of Employment

As Table 4.51 shows, 34% of the students intend to find employment in their home region. Approximately 17% of the students intend to work outside their home region but inside their home province or territory. Approximately 12% of the students intend to work in Canada but outside their home province or territory. Finally, just under 14% of

the students foresee finding employment outside of Canada. Students from the Rest of QC > 30 region who intend to work outside of their province or territory are more than twice as numerous (27%) than those from the two Montreal regions (10%). Overall, close to one quarter of the students (24%) did not answer this question. It is possible that they have not given much thought to their eventual region of employment prior to the survey and are uncertain as to their intentions concerning where they would pursue their career.



Table 4.51 Intentions Regarding Eventual Region of Employment

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Home region (%)	29.2	38.9	26.2	30.1	33.8
Inside province but not in home region (%)	14.7	14.4	22.1	23.5	16.9
Outside province but inside Canada (%)	10.0	9.5	26.6	15.8	11.9
Outside Canada (%)	18.4	11.8	9.9	12.1	13.5
Missing (%)	27.6	25.5	15.1	18.6	24.0

4.1.10.2 Strength of Student Intentions to Pursue their Career in their Home Region

Students were asked to indicate the strength of their intention to pursue a career in their home region. They were required to answer on a nine-point scale (1 = no intention at all; 5 = moderate intention; 9 = very strong intention). For the total sample (Table 4.52), the strength of student intentions to pursue a career in their home region is moderate (mean score = 5.4). The mean is lowest in the QC >30 region (mean score = 4.7) and highest in the Montreal ≤30 region (mean score = 5.8). Less than one-third of the students

(30%) have strong intentions to pursue a career in their home region, compared to 52% who have moderate intentions and 18% whose intentions are weak. The percentage of students who express strong intentions to pursue a career in their home region is higher in the Montreal Anglos ≤ 30 region (35%) than in the other regions, where roughly one quarter of the students have strong intentions to pursue a career in their home region. It is in the Rest of QC Anglos >30 region that we find the highest percentage of students who express weak intentions to pursue a career in their home region (31%).

Table 4.52 Strength of Intentions to Pursue a Career in the Home Region

Intention	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Weak (%)	20.0	12.8	31.2	22.8	17.8
Average (%)	55.5	51.9	45.7	50.1	52.1
Strong (%)	24.5	35.3	23.1	27.1	30.1
Mean score	5.1	5.8	4.7	5.1	5.4

4.1.10.3 Confidence in Ability to Find Employment in Home Region

One question asked students to indicate to what extent they are confident in their ability to find employment in their region. Students were required to answer on a nine-point scale (1 = not at all confident; 5 = moderately confident; 9 = extremely confident). Nearly 40% of the students (38%) are very confident they will find employment in their region (Table 4.53), compared to 50% who are moderately confident and 12% whose confidence is weak.

There are differences between regions. The proportion of students who are very confident of finding work in their home region is greater in the Montreal Anglos ≤ 30 region (41%) than in the other regions (33%, 33%, and 38%, respectively). The proportion of students who are not confident or who are weakly confident of finding a job in their home region is much higher in the Rest of QC >30 region (22%) than in the three other regions (15%, 12%, and 9%).

Table 4.53 Confidence in Ability to Find Employment in the Home Region

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Weak (%)	11.6	8.7	22.5	15.2	11.6
Moderate (%)	55.0	49.8	44.1	46.4	50.1
Strong (%)	33.4	41.4	33.4	38.3	38.3
Mean score	5.7	6.1	5.3	5.7	5.9

4.1.10.4 Likelihood of Finding Employment in Home Region

One question asked students to indicate their perceived likelihood of finding employment in their home region. They were required to answer on a nine-point scale (1 = ten% or less; 5 = 50%; 9 = 90% or more). Understandably, the profile of their answers to this question is somewhat similar to that of their confidence in finding employment in their home region (Table 4.54), but there are differences. Indeed, while 55% of the students estimate that the probability of their finding

employment in their home region is 66% or better, it is 38% of the students who are very confident in their ability to find employment in their home region. Furthermore, while 58% of the students from the Montreal regions consider that it is quite likely that they will find employment in their home region, it is somewhat less than 50% of the students who are of this opinion in the Rest of Quebec regions (42% and 46% respectively). Finally, the proportions of students from the Rest of Quebec regions who believe that the likelihood



of finding work in their home regions is rather weak (15% and 11% respectively) are two to three times

higher than in the Montreal regions (6% and 5% respectively).

Table 4.54 Likelihood of Finding Employment in the Home Region

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
0%-35%	5.5	4.9	14.8	11.1	6.9
36%-65%	36.1	37.4	43.2	43.2	38.7
66%-100%	58.4	57.6	42.0	45.7	54.4
Mean score	6.5	6.6	5.9	6.2	6.4

4.1.10.5 Perception of Home Region’s Current Economic Situation and Attractiveness as a Place to Work and Live

Nine statements aimed to measure students’ perceptions of the current state of their home region as a place to work and live. They were required to answer on a nine-point scale (1 = extremely difficult; 5 = acceptable; 9 = excellent).

The results are presented in Table 4.55. More than half of the students (53%)

believe the region’s economic situation and attractiveness as a place to live is very good, compared to 44% who consider it acceptable and 3% who think it is difficult. The differences between regions are considerable. Much larger proportions of students from the Montreal regions (60 and 58% respectively) than from the Rest of QC regions (37%) consider that the situation in their region is very good.

Table 4.55 Perception of Current Regional Context

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Difficult or poor (%)	1.5	2.5	6.3	5.2	3.0
Acceptable (%)	38.4	39.3	56.3	58.4	44.1
Very good (%)	60.2	58.2	37.4	36.5	52.8
Mean score	6.5	6.5	6.1	6.1	6.4

4.1.10.6 Barriers to Pursuing a Career in the Home Region

Students responded to nine statements aimed at describing their perception of the barriers to their plans to settle in

their home region to live and work. They were required to answer on a nine-point scale (1 = not a barrier at all; 5 = moderate barrier; 9 = major barrier).

Overall, 11% of students feel that barriers related to the economic context are major, while 31% of the students consider these barriers minor and 58%

consider them moderate (Table 4.56). The proportions do not vary importantly from region to region.

Table 4.56 Perception of Barriers to Pursuing a Career in Home Region

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
Minor (%)	30.6	29.0	33.0	35.6	31.1
Moderate (%)	59.1	59.4	54.1	55.6	58.2
Major (%)	10.2	11.6	12.8	8.8	10.7
Mean score	4.1	4.2	4.2	4.0	4.1

4.1.10.7 Percentage of Working Time in English

Overall, slightly more than half the students (55%) estimate that two-thirds or more of their working time will be in English if they work in their region (Table 4.57). An additional 38% of students estimate that 30 to 65% of their working time will be in English. In both of the Montreal regions, slightly more than 60% of the students are of this opinion. It is only in the Rest of

QC ≤ 30 regions that less than half of the students (32%) estimate that two-thirds or more of their working time will be in English if they work in their region. The Rest of QC ≤ 30 region has the highest percentage of students who estimate that between thirty-six and sixty-five percent of their working time will be in English (51%) and that 35% or less of their working time will be in English (17%).

Table 4.57 Percentage of Working Time in English, if Working in Home Region

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
0%-35%	3.4	5.0	8.1	16.9	7.4
36%-65%	35.2	31.6	40.4	51.4	37.4
66%-100%	61.4	63.4	51.5	31.8	55.3
Mean score	6.7	6.7	6.4	5.7	6.5



4.1.10.8 Summary

The third objective of the survey was to study student intentions to work in their home region after their postsecondary studies.

- Approximately one third of the students (34%) answered that they intend to work in their home region. Just over half the students (51%) chose to answer that they intend to work in their home province. Approximately 12% of the students intend to work in Canada but outside their home province or territory, while 14% of the students foresee finding employment outside of Canada. Nearly a quarter of the students (24%) chose not to answer the question, perhaps because they are undecided.
- Overall, 30% of the students report strong intentions to find employment in their home region. Slightly more than half the students (52%) have moderate intentions to do so and the remaining 18% report that their intention to find employment in their home region is weak.
- Nearly four of ten students (38%) are very confident in their ability to find employment in their home region, but a majority of students (50%) report being moderately confident. Finally, 12% of the students report that they are not confident of finding employment in their home region.
- Students were asked how they perceive their home region's current economic situation and its attractiveness as a place to work and live. More than half the students (53%) perceive the region's economic situation and attractiveness as a place to live is very good, compared to 44% who consider it acceptable and 3% who believe it is poor.
- Asked to give their perception of the barriers to settling in their home region to live and work, a majority of students (58%) answered they considered the barriers moderate. Just over one of ten students (11%) perceive the barriers as major, and slightly more than three of ten students (31%) consider them minor.
- The students were asked to what degree the English language could be used in their place of work, if they were to work in the home region. A majority of the students (55%) estimate that they would be able to work in English 66% or more of the time. Another 37% of the students estimate that they would be able to work in English more or less half of the time, on average. Finally, 7% of the students estimate that they would be able to work in English approximately 35% or less of the time.



4.1.11 Student Willingness to Participate in a Follow-Up Interview

We wanted to know if the students who participated in this survey would be willing to be interviewed two or three years later, in order for us to follow up on their situation and the extent to which they had accomplished the plans

they had in mind at the time of the survey (Table 4.58). Slightly more than 12% of the students agreed to participate in a follow-up interview. The highest percentage of students who were willing to participate in such an interview is in the QC > 30 region (21%) and the lowest in the Montreal ≤ 30 region (9%).

Table 4.58 Willingness to Participate in a Follow-Up Interview

	Montreal Anglos > 30	Montreal Anglos ≤ 30	Rest of QC Anglos > 30	Rest of QC Anglos ≤ 30	Total
No (%)	85.4	90.9	79.3	84.9	87.6
Yes (%)	14.6	9.1	20.7	15.1	12.4

4.2 Results of Correlational Analyses

In this section of the report, we present the results of several correlational analyses. As mentioned in Chapter 3, we use factorial analysis (in principal components) with varimax rotation in order to define factors and calculate factor scores for each of the factors. The orthogonal nature of the factors allows us to calculate the variance explained by each factor, while also ensuring that it is independent of the variance explained by each of the other factors—the

stronger the relationship between a given factor and the dependent variable, the greater the variance explained by this factor. In short, the stronger the relationship, the more important the factor is in explaining the dependent variable.

The factorial analysis with varimax rotation of the 71 potentially explanatory variables extracted a total of 19 orthogonal, i.e. independent, factors explaining 67% of the variance (Table 4.59).



Table 4.59 The 19 Factors and their Variables with Loadings Greater than .50.

	Factor name	Factor content
1	Ability to learn and academic self-concept	Self-evaluation of learning ability, satisfaction with results in several subjects, importance of success in subjects
2	Father support for self-determination	Father: 1) encouragement to succeed in school subjects, 2) interest in school, friends, career and plans; 3) self-determination support; 4) encouragement and advice
3	Self-determined motivation for pursuing a postsecondary education	Integrated, identified, intrinsic and extrinsic regulations
4	Parent and family expectations and parent education	Parent expectations, mother's education, expectations of other family members, father's education, number of books in household
5	Mother support for self-determination	Mother: 1) support for self-determination; 2) interest in school, friends, career and plans; 3) encouragement to succeed in school subjects
6	Financial and other barriers to postsecondary education	No money, no support, no information, financial anxiety, distance from postsecondary institution
7	Sense of obligation to pursue a postsecondary education while unmotivated	No idea why completing education in English; sense of obligation; amotivation regulation; discouraged in school subjects; introjected regulation
8	Teacher support for student self-determination and classmate relatedness	High school teacher support for student self-determination; teacher and classmate relatedness
9	Influence of parents and other family members on postsecondary plans	Parent and other family member influence on postsecondary plans; influence of professionals on postsecondary education plans

10	Communication with parents on social issues	Communication with mother and father on social issues; mother involvement and advice
11	Probability and confidence of finding employment in home region	Odds of finding a job in home region, confidence in finding a job in home region, current situation in home region
12	Sources of financing for postsecondary education	Personal savings, bursaries and loans, parent savings
13	Inclusion at school and positive self-concept	Feelings of inclusion at school, negative self, positive self
14	English language use by friends	English language use by friends, French language use by friends
15	Parent expectations of success in secondary and postsecondary studies	Mother and father expectations of success in high school and in postsecondary studies
16	Proportion of Anglophones in home region	Proportion of Anglophones in home region, proportion of Francophones in home region
17	Linguistic barriers to postsecondary education in English	Preference for studies in French, unsatisfactory grades in English
18	Future and legitimate vitalities of Anglophone community	Future vitality of Anglophone community, legitimate vitality of Anglophone community
19	Anglophone identity as reason to attend Anglophone institution	Anglophone identity as reason to attend Anglophone high school

In the following sections, the results of stepwise multiple regression analyses allow us to analyze the relationships between the 19 independent factors and each of the dependent variables. We begin with the regression analysis of the factors on student educational aspirations. We then present the results of the regression analysis on student intentions to undertake postsecondary studies in English. Lastly, we analyse the results of the regression analysis on student intentions to work in their

home region following their high school or postsecondary education. As mentioned in Chapter 3, we adopt the criteria proposed by Wang, Haertel and Walberg (1993) to evaluate the significance of the factors in the prediction of the dependent variable in these analyses. They propose that standardized regression coefficients above .4 (explaining more than 16% of the variance) be considered strong, that those from .15 to less than .4 (explaining between 2.3 and 16% of the



variance) be considered moderate, and that standardized regression coefficients of less than .15 (explaining less than 2.3% of the variance) be considered weak. In the following section, we present the factors whose standardized Beta (β) coefficients with the dependent variable are .10 or more.

4.2.1 Regression Analyses on Educational Aspirations

In this section, we begin with a presentation and discussion of the results of the stepwise multiple regression analysis between the 19 independent factors derived from the analysis of the complete set of variables or scales (including those containing a “language” aspect) and the dependent variable, student educational aspirations. We then present the same analysis by gender, in order to determine whether the factors have the same importance among female students and male students.

4.2.1.1 Results of the Regression Analysis between Factor Scores and Student Educational Aspirations

Student educational aspirations, the dependent variable we wish to predict, were defined as the mean of their postsecondary educational aspirations and the strength of their intentions to pursue postsecondary education.

The stepwise regression analysis of the 19 independent factors on postsecondary aspirations produced a model containing 6 factors explaining one percent or more of the variance.

Together, these six factors explain 29% of the variance in student educational aspirations (Table 4.60).

The first factor in order of importance is that of student motivations for learning and pursuing a postsecondary education. Included in this motivational factor are identified regulation, integrated regulation, internal regulation, and external regulation. Definitions and examples of Deci and Ryan’s (2000, 2002) six types of regulation are provided in section 2.1.1 of chapter 2. The relationship between this factor and educational aspirations is moderately strong (.35) and explains 12% of the variance).

The second factor consists of parent and family expectations relative to student postsecondary education and parent education. Its relationship to student educational aspirations is moderate (.28) and explains 8% of the variance.

A third factor comprised of student evaluation of learning ability and academic self-concept 4% of the variance: its β coefficient with educational aspirations is .19, a moderate relationship.

The relationship between educational aspirations and a fourth factor, student amotivation and feelings of obligation to study, is also moderate but negative (-.18). This negative relationship means higher scores on this factor are related to weaker educational aspirations. It explains 3% of the variance. The relationships of two other factors with educational aspirations are weak. The

first of these factors — proportion of Anglophones in the region — explains 1% of the variance and its standardized beta coefficient is 0.10. The relationship of the sixth factor — financial and other

barriers to postsecondary education — with educational aspirations is also negative (-0.11), and it explains 1% of the variance.

Table 4.60 Summary of Results of Multiple Regression Analysis Between Factor Scores and Students’ Postsecondary Education Aspirations

Orthogonal Factors	R	Standardized β	R ²	R ² change
Total sample				
Self-determined motivation for pursuing postsecondary education	.35	.35	.12	.12
Parental and family expectations and parental education	.45	.28	.20	.08
Perceived learning ability and academic self-concept	.49	.19	.24	.04
Sense of obligation to pursue postsecondary education while unmotivated to do so	.52	-.18	.27	.03
Proportion of Anglophones in home region	.53	.11	.28	.01
Financial and other barriers to postsecondary education	.54	-.11	.29	.01

4.2.1.2 Results of Regression Analyses between Factor Scores and Female and Male Student Educational Aspirations

The stepwise regression analysis of female student educational aspirations produced a model of five factors explaining 2% or more of the variance (Table 4.61). In total, these factors explain 25% of the variance in female educational aspirations.

For the female students, the factor with the strongest relationship (standardized Beta) to their educational aspirations is that of their motivations for pursuing a

postsecondary education ($\beta = .30$). This is a moderately strong relationship which explains 9% of the variance in the postsecondary aspirations of the female students. This factor is followed by three more factors with moderate relationships to girls’ educational aspirations. In order of importance of their relationship to female postsecondary educational aspirations, these are parental and family expectations and parental education (.26), learning ability and academic self-concept (.22), and feelings of obligation



to pursue postsecondary education while unmotivated to do so (-.17). These factors are followed by the financial and other barriers to postsecondary education factor, whose relationship to female student educational aspirations

is weak and negative (-.14). The relationship of a final factor – inclusion at school and positive self-concept – to female educational aspirations is positive but weak (.10).

Table 4.61 Summary of Results of Multiple Regression Analysis Between Factor Scores and Female Student Educational Aspirations

Orthogonal Factors	R	Standardized β	R ²	R ² change
Motivations for pursuing postsecondary education	.30	.30	.09	.09
Parental and family expectations and parental education	.39	.26	.16	.07
Perceived learning ability and academic self-concept	.45	.22	.20	.05
Sense of obligation to pursue postsecondary education while unmotivated to do so	.48	-.17	.23	.03
Financial and other barriers to postsecondary education	.50	-.14	.25	.02
Inclusion at school and positive self-concept	.51	.10	.26	.01

The stepwise regression analysis of male student educational aspirations produced a model of six factors explaining one percent or more of the variance. Together, they explain a total of 30% of the variance in male student educational aspirations (Table 4.62). The three most important factors in terms of the strength of their relationships with educational aspirations are the same as those which have moderately strong relationships with the educational aspirations of female students. These are self-determined motivations for pursuing postsecondary education (.36), parental and family expectations and

parental education (.28), and perceived learning ability and academic self-concept (.18). A fourth factor – proportion of Anglophones in the region – is also moderately correlated with male postsecondary education aspirations (.16). A fifth factor – feelings of obligation to pursue postsecondary education while unmotivated to do so – has a moderate negative relationship with male student educational aspirations (-.16). Finally, a sixth factor – financial and other barriers to postsecondary education – is weakly and negatively related (-.10) to male student educational aspirations.



Table 4.62 Summary of Results of Multiple Regression Analysis Between Factor Scores and Male Student Educational Aspirations

Orthogonal Factors	R	Standardized β	R ²	R ² change
Self-determined motivation for pursuing postsecondary education	.35	.36	.12	.12
Parental and family expectations and parental education	.45	.28	.21	.08
Perceived learning ability and academic self-concept	.48	.18	.24	.03
Proportion of Anglophones in home region	.51	.16	.26	.03
Sense of obligation to pursue postsecondary education while unmotivated to do so	.54	-.16	.29	.02
Financial and other barriers to postsecondary education	.55	-.10	.30	.01

The three factors which are most strongly correlated with educational aspirations are the same for female and male students. There are, however, slight differences in the strength of the relationships with educational aspirations and in the variance explained by the same factors. For example, for the self-determined motivation factor, the relationship and variance explained with respect to female aspirations are .30 and .09 respectively, while they are .35 and .12 for the male students. It is interesting to note that the proportion of Anglophones in the home region is related to male student educational aspirations (.16), but not to female student aspirations. This may be due to perceptions that studies in English are available in the home region, or that the proportion of Anglophones in the region

is indicative of the effects of a socio-economic factor, but we prefer not to speculate any further on the possible reasons for this. Other analyses may shed more light on the reasons for the presence of this relationship in the male sample.

In the next section, the results of regression analyses allow us to analyze the relationships between the 19 independent factors and a second dependent variable, the intention to pursue postsecondary education in English.

4.2.2 Analysis of Probability of Pursuing Postsecondary Studies in English

At the outset of the project in Quebec's Anglophone school districts, the research team's intention was to collect



data on the same high school students in two consecutive school years, i.e., while they were in Secondary IV and the following year when they were in Secondary V. Two distinct survey questionnaires were prepared for administration to these students. While the principal objective of the survey conducted while they were in Secondary IV was to prepare a sociolinguistic profile describing the students' linguistic characteristics and factors related thereto (see Landry, Allard, & Deveau, 2013, for the results of this survey), the second objective of this, the second survey, was to study the relationships between the factors related to linguistic development and competencies analyzed in the first survey and their choice of language for their postsecondary studies as analyzed in the second survey. However, since it was not possible, due to a variety of factors, to survey the same students in two consecutive years, we are therefore limited in this section to the data collected in the second survey and to the analysis of the relationships between second survey variables and student intention to pursue postsecondary studies in English.

In the next section, we begin with a descriptive analysis of student language preferences for their postsecondary education and other variables pertaining to language of postsecondary education. We then analyze in section 4.2.2.2 the relationships between those second survey variables which we found to be more strongly related to the

probability of pursuing a postsecondary education in the English language.

4.2.2.1 Results of the Regression Analysis Between Factor Scores and Student Intentions to Pursue a Postsecondary Education in English

In the following paragraphs, we present the results of a regression analysis of the relationships between the 19 independent factors and a second dependent variable, the intention to pursue postsecondary studies in English. This intention was defined as the mean of the desired proportion of English courses in the program in which the student manifests interest and the probability of pursuing postsecondary studies in English.

The results of the three regression analyses – one for the total sample, and separate analyses for female and male students (Table 4.63)– show that Anglophone identity as a reason for studying in an Anglophone institution is the only factor which is consistently and strongly related ($\beta = .42$ and $.40$) to student intentions to pursue a postsecondary education in English. This factor explains from 17% to 19% of the variance in these student intentions. Two factors, the first reflecting linguistic barriers (a preference for studies in French and unsatisfactory English grades), the second primarily reflecting financial concerns relative to pursuing postsecondary education, are negatively related to student intentions to pursue a postsecondary education in English in the total sample as well as in the female student sample (β varies from $-.16$ to $-.16$).

.10); the variance explained by each of these factors is generally small (1 to 2%). While the negative relationship between the linguistic barriers to a postsecondary education in English and intentions to pursue a postsecondary education in English is also present in the male sample ($\beta = -.10$), the same cannot be said for concerns about financial barriers ($\beta = .11$). This is

surprising and difficult to explain since one would expect that financial preoccupations would play a negative role in both female and male intentions to pursue a postsecondary education in English, or in French for that matter. The positive relationship is weak and could be the result of a spurious correlation or relationship.

Table 4.63 Summary of Results of Multiple Regression Analysis Relating Factor Scores and Strength of Student Intentions to Pursue a Postsecondary Education in English

Orthogonal Factors	R	Standardized β	R ²	R ² change
Total sample				
Anglophone identity as a reason for studying in Anglophone institution	.42	.42	.17	.17
Preference for studies in French and unsatisfactory English grades	.43	-.12	.19	.01
Sources of financing for postsecondary education	.44	-.10	.20	.01
Female students				
Anglophone identity as reason for studying in Anglophone institution	.43	.42	.19	.19
Preference for studies in French and unsatisfactory English grades.	.46	-.16	.21	.02
Sources of financing for postsecondary education	.47	-.13	.22	.02
Male students				
Anglophone identity as reason for studying in Anglophone institution	.40	.40	.16	.16
Conversations with parents on social issues	.42	-.11	.18	.01
Proportion of Anglophones in home region	.43	.11	.19	.01



In the last section of this chapter, the results of a third group of regression analyses allow us to analyze the relationships between independent variables and a second dependent variable, the intention to pursue a career in one's region of residence.

4.2.3 Regression Analysis on Strength of Intention to Pursue a Career in One's Home Region

The stepwise regression analysis of the 19 orthogonal factors on the strength of student intentions to pursue a career in their home region identified four factors which explained a total of 29% of the variance in this dependent variable. The results of this stepwise multiple regression analysis are presented in Table 4.64. The factor consisting of student perceptions of the likelihood of finding employment in their home

region and their confidence in finding employment in this region is strongly related to the strength of their intentions ($\beta = .48$). This factor explains 23% of the variance in student intentions to pursue a career in their home region. The relationship of the second factor – parent and other family member influence on postsecondary plans – to student intentions to pursue a career in their home region is moderate ($\beta = .18$) and explains an additional 3% of the variance. Two additional factors are weakly related to these student intentions: teacher support for student self-determination and classmate relatedness ($\beta = .12$), and linguistic barriers to a postsecondary education in English ($\beta = .10$). Each of these factors explains little variance in student intentions to pursue a career in the home region (2% and 1% respectively).



Table 4.64 Summary of Results of Multiple Regression Analysis Relating Factor Scores and Strength of Student Intentions to Pursue a Career in the Home Region

Orthogonal Factors	R	Standardized β	R ²	R ² change
Total sample				
Probability and confidence of finding employment	.48	.48	.23	.23
Parent and other family member influence on postsecondary plans	.52	.18	.27	.03
Teacher support for student self-determination and classmate relatedness	.53	.12	.28	.02
Linguistic barriers to a postsecondary education in English	.54	.10	.29	.01
Female students				
Probability and confidence of finding employment	.49	.49	.24	.24
Parent and other family member influence on postsecondary plans	.52	.19	.28	.04
Teacher support for student self-determination and classmate relatedness	.55	.16	.30	.02
Linguistic barriers to a postsecondary education in English	.56	.10	.31	.01
Male students				
Probability and confidence of finding employment	.48	.48	.23	.23
Parent and other family member influence on postsecondary plans	.51	.16	.26	.03
Father support for self-determination	.52	.11	.27	.01
Self-determined motivation for postsecondary education	.53	.10	.28	.01
English language use by friends	.54	.10	.29	.01

The results of separate multiple regression analyses for female students and male students yield results very

similar to those reported for the total sample, particularly for the two first factors. In both cases, the first factor,



i.e. student estimation of the probability of finding employment in their home region and their confidence in finding such employment, has a strong relationship with intentions to work in the home region ($\beta = .49$ for females and $\beta = .48$ for males), and explains 23 to 24% of the variance. The second factor – parent and other family member influence on postsecondary

plans – is the same for both groups, but its moderately strong correlation with intentions to work in the home region is slightly larger for the female sample ($\beta = .19$) than for the male sample ($\beta = .16$).

We present and discuss our main findings in the following chapter.



Chapter 5—Discussion and Conclusion

Some 4,000 Secondary 5 students attending 54 high schools in 10 Anglophone school districts in the province of Quebec took part in this study. This survey, as mentioned in Chapter 1, focuses on subjects of particular importance for the vitality of Anglophone communities in Quebec, namely students' educational aspirations, their intentions to pursue a postsecondary education in English, and their intentions to eventually pursue a career in their home region. The students were on average 16.2 years old, and 51 percent were female. We analyzed their answers for the total sample, as well as for four different regions. Two regions grouped students from municipalities in which Anglophones represent 30% or more of the population; they are in Greater Montreal and vicinity (Mtl Anglos > 30; n = 602) and in other regions of the province of Quebec (Qc Anglos > 30; n = 368). The remaining two regions grouped students from municipalities where Anglophones represent 30% or less of the population; they are in Greater Montreal and vicinity (Mtl Anglos ≤ 30; n = 1,535) and in the other regions of Quebec where Anglophones are a relatively small or very small minority (Qc Anglos ≤ 30; n = 1494).

Slightly less than 70% of the participating students have English as

their mother tongue, 14% have French as their mother tongue and 16% have another language as their mother tongue. Twenty-nine percent of the students have English as their second language and two-thirds of the students (67%) have French as their second language. Overall, 73% of the students are in a regular program in high school, while 25% of the students consider themselves to be in an enriched or advanced program. The remaining 2% say they are in pre-employment, modified or other programs. Finally, no less than 62% of the students are in what they consider to be a bilingual program.

Survey results are presented in detail in Chapter 4. Summaries of the main findings for the entire sample are presented at the end of each section of the same chapter. Finally, readers interested in the results of the students of a specific region are invited to see the detailed presentation of the results in Chapter 4.

In this chapter, we revisit the principal results in relation to our three objectives and explore their significance, before offering our conclusions.

5.1 First objective: study student educational aspirations and the factors related thereto

We first review and discuss in this first section the results concerning student educational aspirations. We then



present and discuss the factors which we found to be related to these aspirations.

5.1.1 Students' Educational Aspirations

A very large majority (84%) of secondary 5 students in Quebec's English school districts want to pursue a postsecondary education. More students hope to obtain a university diploma than there are who aim to have a CEGEP or trade school diploma. Indeed, slightly over six of ten students (63%) aspire to a university diploma, compared to slightly more than two of ten (21%) who aspire to no more than a college diploma, and less than two of ten (16%) who do not aspire to more than a high school diploma. A large majority of the students (slightly more than 83%) indicated that their intention to pursue a postsecondary education is strong.

All of these results are very much in line with the findings of surveys conducted on Canadian high school students in the past decade.

Also consistent with recent survey findings is the fact that for the total sample, more female students (65%) than male (54%) students hope to pursue a university education. However, more male students than female students aim to pursue no more than a two to three year CEGEP education (20% in contrast to 14%, respectively). Finally, relatively similar percentages of female (16%) and male students (14%) state they will not pursue their

education after obtaining their high school diploma.

5.1.2 Variables related to student educational aspirations

A first multiple regression analysis aimed to determine which factors were most closely related to student educational aspirations. Six distinct factors (uncorrelated because they were subjected to orthogonal rotation), each explaining more than one percent of the variance, explain together 29% of the variance in student educational aspirations for the total sample.

The results of the regression analyses performed by student gender reveal that for both girls and boys, three of the factors which are most strongly related to their educational aspirations are the same, and in the same order of importance. These factors are: (1) self-determined motivation for pursuing postsecondary education; (2) parental and family expectations and parental education; and (3) perceived learning ability and academic self-concept. In the following paragraphs, we recall the results for the total sample only.

The most important factor in the prediction of student postsecondary education aspirations is that pertaining to student self-determined motivation for pursuing a postsecondary education. Its correlation with student educational aspirations is .35, and it explains 12% of the variance in student aspirations to pursue postsecondary education

The results presented in Chapter 4 provide a profile of the six types of motivational regulation defined in Chapter 2. Four of these six types of motivational regulation are positively related to student aspirations to pursue postsecondary education. These are three types of regulation associated with extrinsic motivation (external, identified and integrated regulation) and one type of regulation associated with intrinsic motivation. The mean scores for external regulation (wanting to learn and pursue a postsecondary education for instrumental reasons, such as career, economic status, etc.) and for identified regulation (motives primarily related to the accomplishment of personal goals) are strong, with scores of 7.2 and 6.9, respectively. The mean score for integrated regulation (motives interiorized and integrated into the student's sense of self) is moderately strong at 5.7, as is the score for intrinsic motivation (wanting to learn and pursue a postsecondary education for the sheer pleasure and feeling of accomplishment it brings), at 5.5.

The second most important factor in the prediction of student postsecondary aspirations is that pertaining to parental and family expectations and parental education. Its correlation with educational aspirations is .28, and it explains 8% of the variance in student educational aspirations.

Slightly less than seven of ten students who answered the questions on their parents' expectations concerning their child's postsecondary education

(approximately one of five students (20%) did not answer the questions) state their parents expect them to pursue a postsecondary education. Slightly more than 50% of mothers (54%) and fathers (52%) of the students who answered the question expect their child to pursue a university education, and approximately 15% expect their child to pursue a college education. This leaves slightly more than 10% of parents who do not expect their child to pursue studies beyond high school.

Parent expectations concerning their child's postsecondary education have been found to be related to their own degree of education. This explains the presence of father education and expectations and mother education and expectations on the same factor.

A third factor of some importance in the prediction of student postsecondary education aspirations consists of student perceived learning ability and academic self-concept. The correlation of this factor to postsecondary education aspirations is .19 and explains 4% of the variance in student aspirations. Slightly less than half of the students (45%) evaluate their learning ability as stronger than average, and more than one half of the students (53%) evaluate their ability to learn as being in the average range when they compare themselves to others in their age group (Table 4.31).

The mean scores on satisfaction with learning and academic performance generally indicate moderately strong



satisfaction in terms of performance and learning in social sciences (mean score = 6.5) and English (mean score = 6.5), and moderate levels of satisfaction in terms of performance and learning in mathematics (mean score = 5.9 on a nine-point scale), French (mean score = 6.2) and science (mean score = 6.2). The proportion of students who are very satisfied with their performance and learning in English is higher (by 7%) than the proportion of students who state they are very satisfied with their performance and learning in French. Eighty percent of the students give a high degree of importance to academic success.

A factor consisting of a sense of obligation to pursue postsecondary education while unmotivated to do so consists of two types of motivational regulation. This factor is negatively related (-.18) to student aspirations to pursue postsecondary education. It explains 3% of the variance in student postsecondary education aspirations to pursue. The mean scores for amotivation (i.e., absence of motivation) and introjected regulation (motives reflecting a feeling of obligation to pursue postsecondary studies, or feelings of guilt if they do not do so) are, however, very weak for the total sample, at 2.2 and 4.2, respectively. The stronger these types of motivation are, the weaker the aspirations to pursue postsecondary education. Less than 3% of the students report a strong degree of amotivation, but 14% of the students report a strong degree of introjected regulation.

The proportion of Anglophones in the student's home region is weakly related to student postsecondary aspirations (.11) and explains only 1% of the variance. The percentage of Anglophones in the census subdivisions in which the students reside ranges from a low of two tenths of 1% to a high of 95.6%, and the mean is 20.3%.

Student perceptions of barriers to postsecondary education can have an impact on their decisions regarding their postsecondary education. We name two such barriers here since they form a second factor which impacts negatively on postsecondary education aspirations, the other being the amotivation and introjected regulation factor defined above. This factor consists of financial and other barriers to postsecondary education. It is weakly related to student postsecondary education aspirations (-.11) and explains 1% of the variance.

5.2 Second Objective: Students' Preferred Language of Postsecondary Education

As stated in section 4.2.2, at the outset of this project with Quebec's Anglophone school districts, two different questionnaires were prepared for administration to the same students, the first while they were in Secondary 4 and the second while they were in Secondary 5. While the main objective of the survey conducted while they were in Secondary IV was to prepare a sociolinguistic profile describing the



students' linguistic characteristics and factors related thereto (Landry, Allard, & Deveau, 2013), the second objective of this, the second survey, was to study the relationships between factors related to the student linguistic development and competencies analyzed in the first survey and their choice of language for postsecondary studies as analyzed in the present survey. Due to a variety of factors, it was not possible to survey the same students in two consecutive years. We are therefore limited here to the second survey results and, therefore, to the analysis of their relationship to the intention of pursuing postsecondary studies in English or primarily in English.

5.2.1 Likelihood of Pursuing a Postsecondary Education in English

The mean score of 8.0 for the total sample indicates that a majority of students state that there is a strong probability (66% or more) they will pursue a postsecondary education in English. Overall, 87% of the students consider it is highly likely they will pursue postsecondary studies in English. More precisely, some 79% of the students would prefer that two-thirds or more of their postsecondary education program be provided in English, in comparison to 5% of the students who would prefer that the same proportion of their program (two-thirds or more) be taught in French. Approximately 16% of the students would like to have half of their courses in English, and half in French. The latter figures are not

surprising, given that 14% of the students have French as their mother tongue, which two-thirds of them have French as a second language, and that important proportions of students reside in regions in which they are in daily contact with French.

5.2.2 Variables of interest in relation to the probability of pursuing postsecondary studies in English

Three separate stepwise multiple regression analyses (total sample, females, males) were conducted to determine which of the 19 factors identified in the factor analysis of the survey variables are related to student intentions to pursue postsecondary education in English.

In the analyses for the total sample and the female students, the three factors related to the pursuit of a postsecondary education in English are the same, and in the same order of importance: Anglophone identity as a reason for studying in an Anglophone institution, preference for studies in French and unsatisfactory grades in English, and sources of financing for postsecondary education. Of these factors, the only one which is strongly correlated to postsecondary studies in English is that of Anglophone identity as a reason to study in an Anglophone institution. The relationship is .42 for the total sample, .44 for the female sample, and .40 for the male sample. The percentage of the variance in the intention to pursue postsecondary



studies in English explained by this factor is 18%, 19%, and 16% for the total sample, male students, and female students, respectively.

Three of the four remaining factors are negatively and weakly related to studies in English. For the total sample and the female students, the factors which are negatively related to the intention to pursue postsecondary studies in English are the preference for studying in French and unsatisfactory grades in English, and financial considerations. For the male students, the factor which is negatively related to this intention is that of conversations with mother and father on social issues. Each of these negatively related factors explains one or two percent of the variance in the preference to pursue postsecondary studies in English. For the male student sample, one factor, the proportion of Anglophones in the home region, is positively but weakly related to the preference to pursue postsecondary education in English. This factor explains 1% of the variance.

Since it was not possible for us to link the data obtained with the questionnaire used in this survey to the data of the Secondary IV students who had participated in the sociolinguistic profile study the year before this survey (Landry, Allard, & Deveau, 2013), it is not surprising to note that only one factor derived from this survey's results – Anglophone identity as a reason for attending an Anglophone institution – is strongly related to student intentions to pursue their postsecondary studies in

English. Two items loaded on this factor, Anglophone identity as a reason for attending an Anglophone institution, and enjoying studying in English. The factor was named as it was because the saturation of Anglophone identity on the factor was much larger than that of enjoying studying in English. Fifty-nine percent of the students have strong Anglophone identity scores.

It is noteworthy that the percentage of Quebec students in Anglophone school districts who would prefer a postsecondary program where two-thirds or more of the courses are in English is very high (80%). This proportion is much higher than the corresponding figure of 56% of Francophone students in Francophone linguistic minority contexts who would prefer a postsecondary program where two-thirds or more of the courses are in French (Allard, Landry & Deveau, 2009a).

Recent publications show that most of Quebec's Anglophone adults pursued their university studies in English. In one study in which data collected during Statistics Canada's Survey on the Vitality of Official Language Minorities (SVOLM) were analyzed, Pilote and Magnan (2014) found that nearly 89% of Quebec Anglophone adults who had studied at the university had done so entirely in English, in comparison to approximately 52% of Francophone adults outside of Quebec who had done so nearly entirely in French.

A majority of Quebec's Anglophone parents of elementary and secondary school students believe their child will pursue her/his postsecondary education in English. In an analysis of other data collected during the SVOLM, Landry (2014) analyzed parent perceptions of their children's choice of language for their postsecondary studies. He found that in spite of the fact that only 38% of the children of Quebec's Anglophone community are receiving their elementary and secondary education in English, nearly 74% of Anglophone children will, according to their parents, pursue their postsecondary education in English. This in contrast to 50% of Remainder of Canada Francophone community children who are receiving their elementary and secondary education in French, and to only 40% of Francophone children who, according to their parents, wish to do their postsecondary education in French.

5.3 Third Objective: Strength of Student Intentions to Pursue a Career in Their Home Region

We first present a synthesis of the principal findings with respect to student intentions to pursue a career in their home region and to the strength of these intentions. We then present a synthesis of our main findings with respect to the variables which are most strongly related to the strength of the intention to pursue a career in one's home region.

5.3.1 Intentions to Pursue a Career in Home Region

In total, only 34% of the students who participated in the study intend to remain in their home region, or to return to it, to find employment and pursue a career. An additional 17% of the students intend to pursue their career in the province of Quebec, but not in their home region. The remainder plan to remain in Canada (12%) or to move outside of Canada (14%). It is important, however, to mention that 24% of the students did not answer this question, quite possibly because they have not given much thought to this decision.

Overall, the strength of student intentions to pursue a career in their home region is moderate (mean score = 5.4). Thirty percent of the students claim to have strong intentions to pursue a career in their home region. Nearly twenty percent of the students (18%) have weak intentions to do so, and the intentions of the remaining 52% are moderate.

These results are hardly reassuring for those who wish to maintain or increase the vitality of the English-speaking community in their region. Quite certainly, the desire to be autonomous or 'get away from home', to travel, and to live experiences in other regions are typical of adolescents. As such, these intentions are susceptible to change, especially when opportunities to find work and pursue a career in one's home region are present.



5.3.2 Factors correlated with student intention to pursue a career in the home region following postsecondary studies

A multiple regression analysis was carried out to determine which factors were most strongly related to students' intentions to pursue a career in their home region. For the total sample, four factors (uncorrelated because they are statistically orthogonal) explain a total of 29% of the variance in student intentions to pursue a career in their home region.

As expected, the factor combining student perceived likelihood of finding employment in their home region and student confidence in their ability to find employment there is strongly related (.48) to their intentions to pursue a career in their home region. This factor explains 23% of the variance in the intention to pursue a career in the home region. The second factor, parent and other family member influence on postsecondary plans, is moderately related to intentions to pursue a career in the home region (.18). It explains 3% of the variance. A third factor – high school teacher support for student self-determination and teacher and classmate relatedness – is weakly related to intentions to pursue a career in the home region (.12), as is the fourth factor – preference for studying in French and unsatisfactory English grades (.10). These factors explain 2% and 1% of the variance, respectively.

In the following paragraphs, we review some of the results presented in chapter 4 relative to the two factors with the strongest relationships to student intentions to pursue a career in their home region.

For the total sample, students are moderately confident in their ability to find employment in their home region (mean score = 5.9). Thirty-eight percent of the students feel very confident in this respect. Strongly related to student confidence of finding employment in their region is student perception of the likelihood or probability of finding employment there. More than half the students (54%) believe it is very likely (likelihood of 66 percent or more) that they will be able to find employment in their region.

Student perceptions of their home regions in terms of possibilities for work and advancement, cultural activities, health care, sports and leisure activities, and of the possibility of working and living in English also play a role in their decision to return to their home region for work after completing their postsecondary education. Overall, students feel that the overall attractiveness of their home region is moderately good (mean score = 6.4 on a nine-point scale). Fifty-three percent of the students perceive it as being very good. An additional 44% of the students perceive it as acceptable. Other survey results show that students consider that the overall situation in their region represents a moderate barrier (mean score = 4.1) to their pursuing a career



there. Approximately one of ten students (11%) consider the overall situation in their region is a major barrier to their pursuing a career there, and 58% consider it a moderate barrier.

Finally, a majority of the students consider that their mother (63%) and father (53%) both have a strong influence on their postsecondary plans. Important percentages of students estimate that aunts, uncles, and grandparents (46%) and siblings (40%) have a moderate degree of influence on their postsecondary plans. These results could reflect the significance of the role of relatedness, or the satisfaction of one's needs for affiliation, in postsecondary planning.

Conclusion

Quebec's Anglophone communities are striving to develop and participate as distinct entities within what are primarily English-French intergroup contexts where they are at times a small demographic minority. They are, and have long been, fully aware of the high value they must place on their children's education if they hope to achieve and maintain a level of cultural autonomy (Landry, 2014; Lamarre, 2013) that will allow them to flourish while contributing to the development of their respective regions, their province, and the country.

Postsecondary education aspirations. In this era dominated by the knowledge economy, Anglophone communities in a minority setting are keenly interested,

as are their Quebecois Francophone majority counterparts, in the educational aspirations of their students regarding postsecondary studies and the accessibility of postsecondary education. The results of the present study show that these communities need not be concerned about their students' interest in postsecondary education. Indeed, the results of our survey indicate that educational aspirations among Secondary V students in Quebec's Anglophone communities are generally very high, with 84 percent of these students hoping to pursue a postsecondary education. Overall, there are slightly more than three times as many students who intend to pursue university studies (63%) than there are students who plan to pursue no more than college studies (20%). These results are similar to those found in pan-Canadian studies done in the past decade on the educational aspirations of large samples of high school students (Looker & Thiessen, 2004) and Francophone minority students (RCCFC, 2003, 2005; Allard, Landry, & Deveau, 2009a, 2009b) and in reviews of the research literature (Cheung, 2007) which have also shown that very significant proportions of Canadian students want to pursue postsecondary studies. These studies also show that a majority of students have their sights set on a university education and diploma. Nevertheless, a significant proportion of students plan to obtain a CEGEP or community college diploma. Finally, more female than male students intend to pursue university studies, and



more males than females plan to pursue no more than a CEGEP education or the equivalent.

The present study shows that Quebec Anglophone high school student educational aspirations are generally quite similar to those of high school students who participated in similar studies. The study also indicates that for a majority of students, loans and bursaries must be considered as complementary to the financial resources set aside by their families and themselves. This reflects the fact that a significant proportion of students are counting mainly on their parents and on their own savings to finance their postsecondary education.

Given that 84% of the students intend to pursue a postsecondary education, and given the importance of financial resources to achieve this goal, one surprising finding of our study is that nearly a third of the students believe their knowledge of sources of financing for postsecondary education is poor, while only 10% of the students believe their knowledge of these sources is very good. This may be one of the reasons why nearly 33% of the students say they are worried about issues related to the financing of their postsecondary education and indebtedness. The latter percentage is congruent with results of the pan-Canadian Youth in Transition Survey in which youths answered questions on access and barriers to postsecondary education (Finnie, Mueller & Wismer, 2012). A recent study of the effect of rising fees on

access to university studies in Quebec and Ontario also shows that student access to university studies is hampered by rising tuition fees (Bastien, Chenard, Doray & Laplante, 2014).

Pursuit of a career in home region. If they are to maintain or increase their vitality in the diverse regions of Quebec where they are established, the Anglophone communities depend to a significant degree on the number of their children who stay in their home region after high school, or return to it upon completion of their postsecondary education elsewhere. They have great hopes that these graduates will serve as the communities' leaders of tomorrow, fostering social, economic, political and cultural development. The results of this study show, however, that approximately 33% of the students intend to remain in their home region, or return to it, to start a career upon completion of their postsecondary studies, and that only 30% of the students have a strong intention to work in their home region. Moreover, while we have noted variations between regions in some respects, it is clear that across the province, it is a minority of students who express, at the time of the survey, a strong intention of returning to, or of remaining in their home region, to pursue their career after their postsecondary studies.

As such, many minority Anglophone communities are faced with the significant challenge of attracting and keeping those graduates of their high schools who have left their region after



high school in order to pursue their postsecondary studies in other regions of their province, in other provinces, and in other countries. Rural communities in particular are feeling the impact of this exodus, largely because economic sectors such as agriculture, forestry, fisheries and mining, to name only a few, are experiencing serious upheavals and challenges. Moreover, the rural exodus affects not only a large proportion of high school graduates, but also parents and entire families who find themselves, through lack of employment, forced to move to find work in urban centres in their province or in other provinces.

Language of postsecondary education.

Access to French-language postsecondary education is indeed very limited for francophone students in almost all of the provinces and territories where Francophones are a minority. As such, francophone communities are concerned that their students often have little choice but to enroll in English-language postsecondary institutions which contribute to the enculturation and assimilation of many students. Our study (Allard, Landry, & Deveau, 2009a, 2009b) showed that their concerns are well founded: in the absence of Francophone or bilingual institutions offering programs in French, a very significant percentage of Grade 12 students in French-language schools choose to pursue postsecondary studies in Anglophone institutions or in programs offered only in English in bilingual institutions.

This situation is not unlike that of Quebec Anglophone students in the regions furthest to the East and Northeast of the province of Quebec, whose access to Anglophone postsecondary institutions and programs within these regions is impossible or, at best, problematic. According to Anglophone communities in these regions, there is a lack of Anglophone or bilingual postsecondary institutions wherein programs corresponding to students' desired fields of study are offered in English. For a large percentage of the students from these regions, the considerable distances separating them from Anglophone postsecondary institutions offering the programs they wish to follow remain a serious problem. Invariably, distance implies an extra financial burden, and our study clearly shows that a non-negligible percentage of students already have concerns relative to the financing of their postsecondary education.

The motives at work in these students' decisions are varied and complex, and further studies would be required to better understand the myriad reasons behind their choices. The following issues, among many others, would need to be explored in greater depth: the relationship between language of study and eventual working language; the greater distance needing to be covered in order to attend an Anglophone institution or program; and the relationship between cost and distance.



English-language institutions in minority contexts, like their French-language counterparts, are engines of renewal, contributing to the cultural, economic and political vitality of their respective communities. It is therefore critical that Anglophone communities continue to

be creative in finding ways to provide their students who are motivated to pursue postsecondary education with access to English-language programs and institutions.



References

- Allard, Réal (2005). L'accessibilité aux études postsecondaires en français pour les élèves francophones en milieu minoritaire : une recension de recherches empiriques. Moncton, NB : Institut canadien de recherche sur les minorités linguistiques.
- Allard, Réal, Rodrigue Landry, & Kenneth Deveau (2009a). *And after high school? A pan-Canadian study of grade 12 students in French-language schools in minority settings: Educational aspirations and plans to pursue a career in their home region*. Moncton, NB: Canadian Institute for Research on Linguistic Minorities. Upcoming online at: www.icrml.ca/en/. Also available in French: *Et après le secondaire? Étude pancanadienne des aspirations éducationnelles et intentions de faire carrière dans leur communauté des élèves de 12^e année d'écoles de langue française en situation minoritaire*.
- Allard, Réal, Rodrigue Landry, & Kenneth Deveau (2009b). *And after high school? A pan-Canadian study of grade 12 students in French-language schools in minority settings: Educational aspirations and plans to pursue a career in their home region. Executive summary*. Montreal: The Canadian Millenium Scholarship Foundation.
- Upcoming online at: www.icrml.ca/en/.
- Allard, Réal, Rodrigue Landry, & Kenneth Deveau (2010). Aspirations éducationnelles et intentions de faire vie-carrière dans leur communauté des élèves de 12^e année des écoles de langue française de l'Ontario. Moncton, NB : Institut canadien de recherche sur les minorités linguistiques.
- Bandura, Albert (1976). *L'apprentissage social*. Brussels: Mardaga.
- (1978). "The self system in reciprocal determinism." *American Psychologist* 33 (April): 344-58.
- Bastien, Nicolas, Pierre Chenard, Pierre Doray, & Benoît Laplante (2014). *Économie, société et éducation : l'effet des droits de scolarité sur l'accès aux études universitaires au Québec et en Ontario*. Montréal : Université du Québec à Montréal, Université de Montréal, Université de Sherbrooke, Centre inter-universitaire de recherche sur la science et la technologie.
- Berger, Joseph, Anne Motte and Andrew Parkin (2009). *The price of knowledge: Access and student finance in Canada* (4th Edition). Montreal: Canada Millenium Scholarship Foundation.



-
- (2007). *The price of knowledge: Access and student finance in Canada* (3rd ed.). Montreal: Canada Millennium Scholarship Foundation.
- Bourhis, Richard (Ed.) (2013). *Decline and prospects of the English-speaking communities of Quebec*. Ottawa: Canadian Heritage, and Moncton: Canadian Institute for Research on Linguistic Minorities.
- Calvet, Jean-Louis (1999). *L'écologie des langues: Pour une écologie des langues du monde*. Paris: Plon.
- Cheung, Serena (2007). *Education decisions of Canadian youth. A synthesis report on access to post-secondary education*. Toronto: The Higher Education Quality Council of Ontario.
- Corbeil, Jean-Pierre, Brigitte Chavez & Daniel Pereira (2010), *Portrait des minorités de langue officielle au Canada: les anglophones du Québec*. Ottawa: Statistique Canada.
- Crystal, David (2004). *The language revolution*. Cambridge, UK: Polity Press.
- De Swaan, Abram (1997). *Langue et culture dans la société transnationale*. Leçon inaugurale du 24 octobre 1997. Collège de France. En ligne: <http://deswaan.com/langue-et-culture-dans-la-societe-transnationale/>
- Deci, Edward L., & Richard M. Ryan (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum Press.
- (2000). "The 'what' and 'why' of goal pursuits: Human needs and the self-determination of behavior." *Psychological Inquiry* 11 (4): 227-68.
- (2002). *Handbook of self-determination research*. Rochester, NY: University of Rochester Press.
- Farmer, Helen S. (1985). "Model of career and achievement motivation for women and men." *Journal of Counseling Psychology* 32: 363-90.
- Finnie, Ross, Richard E. Mueller, & Andrew Wismer (2012). *Access and barriers to post-secondary education: Evidence from the YITS*. Education policy research initiative working paper (2012 - 01).
- Floch, William, & Joanne Pocock, (2013). The socio-economic status of English-speaking Quebec: Those who left and those who stayed. In Richard Bourhis (Ed.). *Decline and prospects of the English-speaking communities of Quebec* (pp. 129-173). Ottawa: Canadian Heritage, and Moncton: Canadian Institute for Research on Linguistic Minorities.
- Frenette, Marc (2002). *Too far to go on? Distance to school and university*



-
- participation. Ottawa, ON: Statistics Canada.
- (2003). *Access to college and university: Does distance matter?* Ottawa, ON: Statistics Canada.
- Garg, Rashmi, Carol Kauppi, John Lewko, & Diana Urajnik, (2002). "A structural model of educational aspirations." *Journal of Career Development* 29 (2): 87-108.
- Giles, Howard, Richard Y. Bourhis & Donald Taylor, (1977). Towards a theory of language in ethnic group relations. In Howard Giles (Ed.), *Language, ethnicity and intergroup relations* (p. 307-348). London: Academic Press.
- Goldberg, Erin, & Kimberly A. Noëls, (2006). "Motivation, ethnic identity, and post-secondary education language choices of graduates of intensive French language programs." *The Canadian Modern Language Review* 62 (3): 423-47.
- Goyette, Kimberly, & Yu Xie (1999). "Educational expectations of Asian American youths: Determinants and ethnic differences." *Sociology of Education* 72: 22-36.
- Guay, Frédéric, & Robert J. Vallerand (1997). "Social context, student's motivation, and academic achievement: Toward a process model." *Social Psychology of Education* 1: 211-33.
- Jedwab, Jack (2006). *Unpacking the diversity of Quebec Anglophones*. Moncton, NB: Canadian Institute for Research on Linguistic Minorities.
- (2005). What do Quebec Anglophones want? Governance, leadership and engagement in an evolving community. Moncton: Canadian Institute for Research on Linguistic Minorities.
- Junor, Sean & Alex Usher, (2004). *The price of knowledge: Access and student finance in Canada* (2nd ed.). Montreal: Canada Millenium Scholarship Foundation.
- (2002). *The price of knowledge: Access and student finance in Canada*. Montreal: Canada Millenium Scholarship Foundation.
- Foucher, Pierre (2013). Legal status of Anglophone communities in Quebec: Options and some recommendations. In Richard Bourhis (Ed.). *Decline and prospects of the English-speaking communities of Quebec* (pp. 71-97). Ottawa: Canadian Heritage, and Moncton: Canadian Institute for Research on Linguistic Minorities.
- Khattab, Nabil (2003). "Explaining educational aspirations of minority students: The role of social capital and students' perceptions." *Social Psychology of Education* 6: 283-302.



-
- Krahn, Harvey, & Alison Taylor (2005). "Resilient teenagers: Explaining the high educational aspirations of visible minority immigrant youth in Canada." *Journal of International Migration and Immigration* 6: 405-34.
- Koestner, Richard, & Gaëtan Losier (2002). "Distinguishing three says of being highly motivated: A closer look at introjection, identification, and intrinsic motivation." In E.L. Deci and R.M. Ryan (Eds.), *Handbook of self-determination research*. Rochester, NY: University of Rochester Press, 101-21.
- Lachapelle, Réjean & Jean-François Lepage (2010), *Les langues au Canada. Recensement de 2006*, Ottawa, Patrimoine canadien.
- Lamarre, Patricia (2013). English education in Quebec: Issues and challenges. In Richard Bourhis (Ed.). *Decline and prospects of the English-speaking communities of Quebec* (pp. 175-214). Ottawa: Canadian Heritage, and Moncton: Canadian Institute for Research on Linguistic Minorities.
- Landry, Rodrigue. (Ed.) (2014). [Life in an official minority language in Canada](#). Also available in French: *La vie dans une langue officielle minoritaire au Canada*. Québec: Presses de l'Université Laval. (Consulted 10 october, 2014).
- (2014). [From preschool to post-secondary education: Enrolments of OLMC'S children in minority language institutions](#). Also available in French: *De la garderie aux études postsecondaires : L'éducation des enfants des CLOSM dans les établissements d'enseignement de la minorité*, In R. Landry (dir.), *La vie dans une langue officielle minoritaire au Canada* (pp. 95-145). Québec: Presses de l'Université Laval. (Consulted 10 october, 2014).
- Landry, Rodrigue, Réal Allard, & Kenneth Deveau (2013). *The vitality of the English-speaking community of Quebec. A sociolinguistic profile of secondary 4 students in Quebec English schools*. New Canadian Perspectives. Gatineau: Canadian Heritage, and Moncton: Canadian Institute for Research on Linguistic Minorities.
- (2010). Schooling and cultural autonomy – A Canada-wide study in Francophone minority schools. New Canadian Perspectives. Gatineau: Canadian Heritage, and Moncton: Canadian Institute for Research on Linguistic Minorities.
- (2009). Self-determination and bilingualism. *Theory in Education*, 7: 203-213.
- Lent, Robert W., Steven D. Brown, & Gail Hackett (1994). "Toward a unifying social cognitive theory of career and academic interest, choice and performance." *Journal of Vocational Behavior* 45: 79-122.



-
- Looker, Dianne, & Victor Thiessen (2004). *Aspirations of Canadian youth for higher education—Final report*. Ottawa, ON: Learning Policy Directorate, Human Resources and Skills Development Canada.
- Losier, Gaëtan F., Robert J. Vallerand, & Marc R. Blais (1993). "Construction et validation de l'Échelle des perceptions de compétence dans les domaines de vie (EPCDV)." *Science et comportement* 23: 1-16.
- Marjoribanks, Kevin (1985). "A longitudinal study of adolescents' aspirations as assessed by Seginer's model." *Merrill-Palmer Quarterly* 32 (3): 211-30.
- (1998). "Family background, social and academic capital, and adolescents' aspirations: A mediational analysis." *Social Psychology of Education* 2: 177-97.
- (2003). "Learning environments, family contexts, educational aspirations and attainment: A moderation-mediation model extended." *Learning Environments Research* 6: 247-65.
- Marsh, Herbert W. (2000). *Self-Description Questionnaire-II Manual*. Campbelltown, NSW, Australia: University of Western Sydney.
- Marsh, Herbert W. (1990). "The structure of academic self-concept: The Marsh/Shavelson model." *Journal of Educational Psychology* 82: 623-36.
- Niemiec, Christopher P., & Richard M. Ryan (2009). Autonomy, competence, and relatedness in the classroom: Applying self-determination theory to educational practice. *Theory and Research in Education*, 7, 133-144.
- Pilote, Annie, & Marie-Odile Magnan (2014). [University attendance: Comparison of Canada's official language minorities](#). In Rodrigue Landry (Ed.) *Life in an official minority language in Canada*. Also available in French: *La fréquentation universitaire : comparaison entre les communautés de langue officielle au Canada*. In Rodrigue Landry (dir.), *La vie dans une langue officielle minoritaire au Canada* (pp. 147-172). Québec : Presses de l'Université Laval. (Consulted 10 october, 2014).
- Réseau des cégeps et des collèges francophones du Canada (RCCFC). 2003. *Poursuite des études postsecondaires en milieu minoritaire francophone: Intentions des diplômés du secondaire en 2003. Rapport final*. Ottawa, ON: RCCFC.
- (2005). *Recherche sur les intentions d'études postsecondaires chez les élèves en milieu francophone minoritaire*. Ottawa, ON: RCCFC and Canadian Heritage.



Ryan, Richard M., & Edward L. Deci (2002). "Overview of self-determination theory: An organismic dialectical perspective." In E.L. Deci and R.M. Ryan (eds.), *Handbook of self-determination research*. Rochester, NY: University of Rochester Press, 3-33.

Ryan, Richard M., & Christopher P. Niemiec (Guest Editors, 2009). *Theory and Research in Education*, 7.

Wang, Margaret C., Geneva D. Haertel, & Herbert J. Walberg (1993). "Toward a knowledge base for school learning." *Review of Educational Research* 63 (3): 249-94.

