University of Alberta

When Aspirations Aren't Enough: Educational Aspirations and University Participation Among Canadian Youth

by

Julie Beth Hudson

A thesis submitted to the Faculty of Graduate Studies and Research
in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

Department of Sociology

Fall 2011
Edmonton, Alberta

For every young person who aspired to something more.

Abstract

This study asks *are educational aspirations enough?* Specifically, this dissertation enquires whether educational aspirations have the potential to allow young people to overcome traditional class-based and other sources of inequality and achieve educational parity with their non-disadvantaged peers. This research utilized Statistics Canada's Youth in Transition Survey (YITS), a nationally representative longitudinal study that collected data from approximately 26,000 15-year old youth in 2000, as well as from their parents and schools, with follow-up studies in 2002 and 2004.

This study used both Pierre Bourdieu's theory of practice and status attainment theory to help explain both the micro- and macro-level processes involved in the perpetuation of educational inequality using young people's educational aspirations as the nexus for linking these theoretical approaches.

This study showed that educational aspirations at age 15 and educational participation by age 19 systematically vary between groups of youth who come from more or less advantaged backgrounds. Educational aspirations have a strong impact on educational participation. Educational aspirations and grade 12 marks have the strongest direct effect on educational participation. Using path analysis, we find that the sum of the direct and indirect effects of socio-economic, individual demographic and geographic factors, along with parents' aspirations exceeds the independent effect exerted by both educational aspirations and grade 12 marks. Finally, while school type and quality affect a number of relationships

between predictor variables and educational participation at age 19, the role of educational aspirations is not affected by either school quality or type.

In conclusion, this research found that *yes, educational aspirations do matter*. However, despite substantial changes in Canada's social structure, economy, labour market, and education systems in the past decades, they continue to be shaped and operate within the larger constellation of other socio-economic, individual demographic, geographical, and educational factors. Thus, while elevating educational aspirations alone is not enough to ensure that youth make successful post-secondary transitions, policies and programs that that inform young people and their parents about the variety of post-secondary options and what is required to be successful in them would help make educational aspirations a more meaningful mechanism for future educational success.

Acknowledgments

Having come from circumstances not unlike many of the youth portrayed in this research, I submit this dissertation with deep gratitude for all the support extended to me throughout this process. The completion of this dissertation would not have been possible if it had not been for the support, advice, and guidance of a number of people. First, I want to thank all the young people who participated in the Youth and Transition Survey. By sharing your lives, I was able to fulfill my educational aspirations to the fullest.

I want to extend a sincere thank you to my supervisory committee, Dr. Harvey Krahn, Dr. Michael Haan, Dr. Alison Taylor, Dr. Bryan Hogeveen, and Dr. Neil Guppy, who have been incredibly supportive throughout this process. But most of all, my heartfelt thanks go to Harvey, who has been an amazing supervisor, mentor, and sometimes, counsellor over the past six years. He deserves more thanks than can be expressed in words.

A special thank you is extended to all the new friends and old who have supported me throughout this process. And to my parents, who supported my move to Edmonton and continue to encourage me to exceed my own expectations. I love you both. And finally, to Jason, who came into my life unexpectedly, and found himself caught up in a graduate student's world. Thank you for hanging in there!

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Chapter 1: Introduction

Most Canadian youth know it is important to graduate from high school and receive a post-secondary education (PSE) in order to successfully compete in today's knowledge economy. It has been well-documented that participation in PSE is increasing (Hango & de Broucker, 2007) and the variety of educational options within Canada is expanding to encompass an increasingly diverse array of programs and institutions. Some of these expansions have been designed to help youth who have traditionally been excluded from participating in higher education, such as visible minorities, women, and low-income youth, to have the opportunity to do so. Unfortunately, a variety of social, economic, and demographic barriers still exist for those who seek to obtain a post-secondary education, particularly among the socially and economically disadvantaged.

However, we can all think of examples where a young person from a disadvantaged background defied the odds and made a successful transition from high school into university. Such examples lead us to wonder what is it about those young people that allowed them to do so? Did this young person have higher educational aspirations than his or her peers that allowed for higher levels of educational participation? If so, were these aspirations a result of active and reflective engagement with their social and educational environment? Or, were their educational aspirations and their eventual educational success largely random occurrences, an exception to the social pattern? A core question addressed in this dissertation is whether educational aspirations have the potential

to allow young people to overcome traditional class-based and other sources of inequality and achieve educational parity with their non-disadvantaged peers?

This dissertation contributes to the growing body of educational research in a variety of ways. First, this research is a replication of existing research, some of which was conducted decades ago. As argued by Edgerton, Peter, and Roberts (2008), because of the plethora of educational, labour market, immigration, and technological trends which have significantly affected the Canadian cultural and social landscape, it is important to reassess the extent to which traditional dimensions of social inequality continue to manifest themselves in the educational attainment process. This research, much like that undertaken by Edgerton, Peter, and Roberts (2008), contributes to the literature by updating the existing data on Canadian educational inequality and extending the policy agenda to focus on the role of educational aspirations.

Secondly, while contemporary research in this area, including this study, often focuses on the various mechanisms which either contribute to the continuance or dissolution of class-based inequality, this project also focuses on educational aspirations as a possible site for social policy intervention. As my literature review will show, children from lower socioeconomic backgrounds tend to be educationally disadvantaged, due to disparities in familial resources, such as economic and educational capital. However, despite their limited access to familial resources, this dissertation will show that working-class youth, while not to the same extent as their middle-class peers, nevertheless indicate that they want to attain higher levels of post-secondary education, particularly university. So

while it is expected that, consistent with previous research, socio-economic status will continue to be positively correlated with initial post-secondary educational participation, the association between educational aspirations and socioeconomic status may not be as straight forward as the previous relationship. For example, as Edgerton, Peter, and Roberts (2008) posit, "might [educational] expectations have a different impact at different levels of socio-economic status?" While research has illustrated that the social factors contributing to educational disparities between working- and middle-class youth are abundant, a potential finding that suggests that educational aspirations may help traditionally disadvantaged youth achieve higher levels of educational attainment holds interesting policy implications.

Specifically, from an educational policy perspective, a better understanding of the role educational aspirations play in potentially influencing educational participation may help policy makers, school staff, and parents provide students with the information and experiences to make more informed educational choices. Since post-secondary education has become increasingly important for the long-term economic and occupational success of today's youth, finding ways to make school experiences more meaningful may help encourage traditionally disadvantaged youth to participate in post-secondary education. Therefore, policy makers, school staff, and parents should be interested in learning about the role educational aspirations play in shaping patterns of post-secondary educational participation.

Third, this dissertation utilizes the Youth in Transition Survey (YITS), which is a contemporary, national, longitudinal multi-level dataset. While many researchers have previously explored various aspects of educational inequality in Canada (see, for example, Finnie, Mueller, Sweetman, Usher (2009) for a review of various elements of educational inequality using Canadian data), the YITS data allow for a unique opportunity not afforded by many datasets. For example, the National Graduate Survey and the School Leavers Survey and Follow-up study, while both valuable Statistics Canada datasets, do not contain multi-level data provided by students, parents, and school officials. Additionally, many other studies on the topic of educational aspirations have not had access to national data. Such research includes Dr. Harvey Krahn's School-Work Transition Project (SWT) which focuses on young from Alberta (Krahn and Hudson, 2006), Dr. Lesley Andres' Paths on Life's Way (Andres and Adamuti-Trache, 2008) data which focuses on a graduating class from 1988 in British Columbia, and Dr. Dianne Looker and Dr. Victor Thiessen's Nova Scotia School-to-Work Transition Project (Thiessen and Looker, 1998).

Furthermore, among academic researchers, the Youth in Transition Survey has been under-utilized with the exception of a few noteworthy examples, which will be discussed later in this dissertation (see, for example, Edgerton, Peter, and Roberts (2008), Foley, Gallipoli, and Green (2009), Kamanzi, Doray, Murdoch, Moulin, Comoé, Croleau, Leroy, and Dufresne (2009), Krahn and Taylor (2005)). While policy researchers, such as those from Statistics Canada, have been active in their use of the YITS data (see, among others, Cheung (2007),

Diallo, Trottier, and Doray (2009), Finnie and Mueller (2007a), Finnie and Mueller (2007b), Finnie, Mueller, Sweetman, and Usher (2008), Shaienks and Gluszynski (2007), Shaienks, Gluszynski (2009), their focus has primarily been on issues of access and persistence in post-secondary education, the gender and socioeconomic status gap in university attendance, and student transitions.

Moreover, my dissertation helps fill a theoretical gap in the educational inequality and status attainment literature. There continues to be much debate about the mechanisms that reproduce educational inequality. One of the more prominent explanatory systems in the area of educational inequality is Pierre Bourdieu's theory of practice (Bourdieu & Passeron, 1977; Bourdieu, 1977, 1986, 1987). Canadian researchers who have utilized this approach include, among others, Andres, Adamuti-Trache, Yoon, Pidgeon, Thomsen (2007), Krahn and Taylor (2005), Lehmann (2009), Looker (2010a), Looker and Naylor (2010), Taylor (2008), Thiessen (2009), and Thiessen and Looker (2009). From this perspective, educational inequality is a by-product of an institutionalized system established to maintain a privileged status quo. Central to Bourdieu's theory are the concepts of *habitus*, *field*, and *capital* which help illuminate the simultaneous operation of both macro- and micro-level processes. Bourdieu's theory of practice maintains that the transfer of capital occurs within the family and has lasting effects on the educational trajectories of youth as the education system reinforces the cultural tastes and dispositions of a privileged middle and upper-class.

Bourdieu's work, while rich in detail and theoretical insights, has not been the prevailing approach to studying educational inequality among North American quantitative researchers. They have often relied on alternative theoretical approaches, such as status attainment theory. Status attainment theory focuses on family socio-economic status, in conjunction with academic ability and peer groups, as the primary factors for explaining the perpetuation of social and educational inequality. The Wisconsin status attainment model, as conceived by Sewell, Haller, and Portes (1969), is most relevant to this dissertation. It places students' educational aspirations at the center of the educational status attainment process. While family background and mental ability are argued to inform educational performance, these factors combine to shape students' educational (and occupational) expectations, which in turn inform educational (and occupational) attainment.

But the status attainment model, while very good at providing an empirical description of persistent patterns of inequality across generations, does not adequately illuminate the micro-level processes which explain *why* this occurs despite individual experiences of upward social mobility. Furthermore, substantial social and economic changes in North America over the past four decades have caused some researchers to question its continued value.

For example, Domina, Conley and Farkas's (2011) examine the link between aspirations, effort, and educational attainment and argue, "if rising educational expectations have undermined the link between expectations and

effort, [as they posit is the position taken by Rosenbaum (2001)] fundamental revisions to the Wisconsin status attainment model may be necessary" (p. 94).

While Rosenbaum (2011) disputes Domina et al's (2011) conclusion on the basis of their sample and the age cohort on which they focus, [1] he does maintain that their use of the status attainment model illustrates that, while this approach has not been dominant in recent decades, its utility has not been lost. I would argue further that positioning the Wisconsin model within a Bourdieuian context would provide a more nuanced explanation as to if and why college expectations, while nearly universal among American high school students, are a powerful motivator for student effort. As will be shown throughout this dissertation, educational aspirations do appear to be a powerful motivator for educational participation, However, their power is largely due to a larger constellation of socio-familial effects which are clearly articulated within Bourdieu's theory of practice.

This study begins with the key question of whether educational aspirations are in fact meaningful. Building on the status attainment literature, I present a more holistic approach to studying educational inequality where educational aspirations become the nexus which links Bourdieu's theory of practice and status attainment theory. At the core of status attainment theory is the assumption that

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[1] Rosenbaum (2011) also responds that this is not the position he took in his 2001 research. Rather, he stressed that by simply having students raise their educational plans without providing them with the necessary information required to allow them to realize these plans is unreasonable. In fact, he states, "my contention is that poor articulation and information make it difficult for some seniors to see incentives for effect or school, and they will be less likely to exert effort" (p.114)

youth adjust their educational and career ambitions based on experiences both within the home and within schools. However, the nuances of how aspirations are shaped and come to affect subsequent behaviours are not explicitly discussed within this theoretical approach. At the same time, as I will argue in the next chapter, educational aspirations can be seen as a way of operationalizing Bourdieu's concept of the habitus which recognizes the cultural components of educational inequality reproduction. In other words, aspirations are a reflection of not only family socio-economic status but also the larger social context in which youth are located. By bridging the gap between these two perspectives, I propose a theoretical approach which recognizes both the structural components and the individual negotiation that comprise social reproduction.

As there is still much to learn about the nature of educational inequality and how educational aspirations may or may not be an element which could help ameliorate inter-generational disadvantage, this research asks three central theoretical/research questions: First, are educational aspirations meaningful? That is to say, are they simply ephemeral and fleeting attitudes? Or are they systematically consistent across time within individuals, and do they vary in consistent ways within and between groups of youth in a manner that can help us understand patterns of social inequality? Second, are there direct and indirect relationships between educational aspirations at age 15 and prior socio-economic status variables as well as subsequent educational attainment that would help us explain how patterns of social inequality are reproduced across generations? And finally, are schools with different characteristics and different levels of resources a

site where the reproduction of social inequality across generations can be partially ameliorated?

Chapter 2 explores the gap between current empirical and theoretical approaches to the study of educational inequality and will argue that Bourdieu's theory of practice effectively complements the empirical focus of status attainment theory. Chapter 3 outlines the research methods and statistical procedures. Chapter 4 explores the nature of educational aspirations and participation among Canadian youth and begins to examine the potential relationship between them. Chapter 5, drawing on the findings from Chapter 4, proposes a temporal model of educational attainment where educational attainment at age 19 is positioned as a function of Grade 12 marks, educational aspirations at age 15, and parental educational aspirations. In turn, all of these intervening variables are modeled as a function of exogenous individual and family-level variables, including parental education, gender, visible minority-immigrant status, and living in a rural or urban community and in different Canadian regions. Chapter 6 replicates the analysis presented in Chapter 5 but asks about the additional effects of school quality. Chapter 7, drawing on the analyses presented in Chapters 4 through 6, returns to the overarching question of this dissertation, *are educational aspirations enough?*

Chapter 2: Social Reproduction and Educational Inequalities: Using Bourdieu to Study Educational Aspirations and Attainment

Theories of social and cultural reproduction focus on the ways in which social class is reproduced from one generation to the next, from parent to child. By exploring the nature of social reproduction within a capitalist society, researchers have invariably been led to one common site: the education system. They have illustrated that the education system does not act as a 'level playing field' in which youth from different socio-economic statuses compete equally; rather, the education system has been shown to both reinforce and illuminate class-based inequalities. While many agree that processes of reproduction are occurring, there is much debate as to the mechanisms that encourage and maintain them. One of the more prominent explanatory systems in the area of educational inequality is Pierre Bourdieu's theory of practice which views the education system as the primary mechanism for the perpetuation of social inequality (Bourdieu & Passeron, 1977; Bourdieu, 1977, 1986, 1987).

From this perspective, educational inequality is a by-product of an institutionalized system established to maintain a privileged status quo. To explain how this comes to be, Bourdieu uses the concepts of *habitus*, *field*, and *capital* to illuminate the simultaneous involvement of both macro- and micro-level processes. Bourdieu's theory of practice maintains that the transfer of capital occurs within the family and has lasting effects on the educational

trajectories of youth as the education system reinforces the cultural tastes and dispositions of a privileged middle and upper-class.

Bourdieu's work, while rich in detail and theoretical insights, has not been the prevailing approach to studying educational inequality among North American quantitative researchers. While some have tried to quantify Bourdieu's work (for example, McClelland, 1990; Dumais, 2002), these attempts remain varied and fraught with empirical and theoretical inconsistencies. Empirical researchers have instead relied on alternative theoretical approaches, namely, status attainment theory, primarily developed by William H. Sewell and his colleagues (see, Sewell, 1971; Sewell, Haller, & Ohlendorf, 1970; Sewell, Haller, & Portes, 1969; Haller & Portes, 1973). Status attainment theory views social origins, in conjunction with academic ability and peer groups, as the primary mechanisms perpetuating social and educational inequality. As argued by Haller and Portes (1973), "the place of status attainment research in the study of social stratification lies in the effort to specify the causal sequence through which individuals reach their positions in status hierarchies" (p. 55). The status attainment model, while very good at providing an empirical description of why patterns of inequality persist in society, does not adequately illuminate the micro-level processes which explain *why* social inequality is persistent across generations despite individual experiences of upward social mobility.

Educational aspirations, as will be argued throughout this chapter, are essential for linking Bourdieu's theory of practice and status attainment theory into a more inclusive theoretical framework for explaining educational inequality.

Educational aspirations are a key variable in the status attainment literature. At the core of the status attainment theories is the argument that youth adjust their thinking about status attainment based on experiences both within the home and within schools. "Attitudes – including levels of aspiration – are formed and altered through two basic mechanisms: interpersonal influence, including reflexive adjustment of others' expectations, and including self-reflection" (Haller & Portes, 1973, p. 55). However, the nuances of how aspirations are shaped and come to affect subsequent behaviours is not explicitly discussed within this theoretical approach. Status attainment theory, in this way, takes a primarily structural approach to understanding educational reproduction where differences are a reflection of social allocation based on family socio-economic status. At the same time, aspirations can be seen as a way of operationalizing Bourdieu's concept of the habitus. Habitus recognizes the cultural components of educational reproduction where aspirations are a reflection of not only family socio-economic status but also the larger social context in which the youth is located. In this way, educational aspirations become the nexus which links these two theoretical approaches to thinking about social and cultural reproduction and provide a more complete explanation for the perpetuation of educational inequality.

This chapter will explore the gap between current empirical and theoretical approaches to the study of educational inequality, and will argue that Bourdieu's theory of practice effectively complements the empirical focus of status attainment theory. In so doing, it will highlight the three central theoretical/research questions to be explored in this dissertation: First, are

educational aspirations meaningful? That is to say, are they simply ephemeral and fleeting attitudes? Or are they systemically consistent across time within individuals, and do they vary in consistent ways within and between groups of youth in a manner that can help us understand patterns of social inequality? Second, are there direct and indirect relationships between educational aspirations at age 15 and prior socio-economic status variables as well as subsequent educational attainment that would help us explain how patterns of social inequality is reproduced across generations? And finally, are schools with different characteristics and different levels of resources a site where the reproduction of social inequality across generations can be partially ameliorated?

Aspirations and Social Reproduction of Inequality

In the sociological literature, educational and occupational aspirations[2] are often viewed as the product of socialization, which can differ between social classes. In other words, the aspirations young people come to hold are seen as a reflection of their family background, informed by their parents and other key role models (Garg, Melanson, & Levin, 2007; Glick & White, 2004; Kandel & Lesser, 1968). However, Kerckhoff (1976, 1977, 1984) has argued that the observed link between social background, aspirations, and outcomes could also be explained by a process of allocation in which socially-disadvantaged individuals, who may

[2] While occupational aspirations are an important area of inquiry among those studying social reproduction of inequality, the current research focuses only on educational aspirations. Given that YITS participants were only 19 years old by the third cycle of the survey, they were not far enough along in their life course to allow us to accurately assess possible (dis)continuity between occupational aspirations and eventual occupational status. However, this is clearly an area for future research.

initially hold high aspirations, come to recognize or encounter barriers that lead them to lower their initial highly-ambitious aspirations. In this way, compared to their middle-class peers, working-class youth may initially aspire to similar educational and occupational levels. However, differences in eventual outcomes are more a reflection of socio-economic obstacles that individual deficits.

These two perspectives, the first positing that differences in aspirations are a reflection of family socialization and the second arguing that aspirations are a reflection of social allocation, offer two competing explanations of how social background exerts its effect on educational attainment. The first perspective focuses on cultural explanations for the perpetuation of social disadvantage, which stems from socialization, particularly within the family. The second explanation focuses on the structural characteristics of a capitalist society that lead to disadvantages, such as access to educational resources and knowledge of the means necessary for achieving higher levels of education. Rather than choose one over the other, what is required, as argued by McClelland (1990), is a theoretical framework that integrates these two approaches to understanding social inequality. Such an approach would allow for a more complete understanding of the social psychological processes that lead to macro-level outcomes, such as educational attainment, which help to explain educational inequality. It is the position of this dissertation that integrating Bourdieu's theoretical approach with the original tenets of status attainment theory creates a synthesized theoretical paradigm which can meet these ends.

Sociologists interested in educational inequality have grappled with the sources of the perpetuation of class inequality. Researchers, particularly Paul Willis (1977) in his landmark study *Learning to Labour* which has inspired a plethora of global research in this area, have struggled to understand these longstanding class divisions and specifically, why low-income youth, despite contemporary advances in financial aid and social policies meant to ameliorate educational disadvantages, continue to experience inequalities at all levels of the education system[3]. As argued by Davies (1995), sub-theories within this area can be grouped into two general areas: mainstream theories and critical approaches. Mainstream theories include cultural deprivation theory, sub-cultural theory, and status attainment research, while the critical approaches include reproduction theory, resistance theory, and Post-Marxism. However, I would also include Bourdieu's theory of practice in this second list based on its critical focus on the processes that lead to educational inequality, including a critique of the education system itself.

Critical and mainstream approaches, as outlined by Davies (1995), are "fragmented into self-enclosed, non-communicating camps" (p.1448) and offer competing explanations of the sources of educational inequality. While these paradigms focus on a shared explanatory outcome, their arguments regarding the processes which determine these outcomes are widely diverse. Mainstream theories offer more generalized structural explanations to the processes of

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[3] Recent examples that utilize Willis's (1977) work include: Dolby & Dimitriadis, 2004; Dunk, 1991; Lehmann, 2007; MacLeod, 1995; Willis, 2004.

educational inequality that focus on the inevitability of class-based inequalities whereas critical approaches examine the education system itself as a site of class struggle and problematize the cultural processes that lead to the perpetuation of these struggles. These scholarly divisions have often led researchers to "pick" one single approach rather than seeking a more holistic approach which encompasses both the family-level and societal (structural) influences that shape educational outcomes. The following section will outline these two theoretical approaches and offer an alternative approach which will attempt to bridge the mainstream and critical approaches by linking status attainment theory and Bourdieu's theory of practice.

Mainstream Theories

Cultural deprivation theory is grounded in functionalist modernization theory (McClelland, 1960) and argues that there are certain common values shared within society that are necessary to the proper functioning of an industrialized society. Failure of the working class to achieve educational success is based on their inability or unwillingness to embrace middle-class values. These values include, as outlined by Davies (1995), individualism, need for achievement, competitiveness, ability to defer gratification, and future orientation. Key educational researchers in this area are Banks (1976) and Hyman (1953). In 1944, free compulsory education was introduced to Britain, resulting in a stratified education system where youth whose parents could afford school fees attended private schools and those whose parents could not were streamed into skill-specific public schools which were either academically- or vocationally

focused. Those streamed into the latter schools often left school by the age of 15, which marked the end of compulsory education. Inspired by these changes, Olive Banks began her research on educational disparities within the English school system (Banks, 1955). Her work focused on the cultural and social realities which, at that time, led to educational disparities; either parents were too poor to send their children to private grammar schools or parents felt education would be wasted on girls (Delamont, 2008). Banks' work provided important insight into the connection between educational participation patterns and social class and the connection between political systems and their involvement with the education system.

Complementary to this approach is sub-cultural theory. Following cultural deprivation theory, this approach argues that while working class youth, particularly boys, desire the same material goods as their middle-class peers, their educational failures have prompted a common set of class values that emphasize the irrelevancy of school success to achieve these ends. Albert Cohen (1955) presented the first major piece of research in this area, arguing that the cultural deficits which limit their educational chances have led working class males to embrace anti-school values, further establishing their socially-disadvantaged position. Stinchcombe (1964) furthered this theory by disentangling differences by gender. He argued that working-class males embrace expressions of masculinity through drinking, smoking, and overt sexuality, while working-class females embrace femininity through dating and a desire for marriage, which are often also at odds with pro-school values. Through these claims, sub-cultural

theorists follow Cohen's lead in arguing that when faced with educational obstacles limiting success, working-class youth experience status deprivation leading them to embrace alternative cultural values which further their disadvantaged position within society. In this way, sub-cultural theory differs from cultural deprivation theory in that the disadvantage of the working-class is argued to originate from encountering barriers rather than from a class ethos that appears to have seemingly developed in and of itself.

Since the mid-1970s, the predominant mainstream approach to understanding class inequalities within the sociology of education has been status attainment theory. Based primarily on the initial work of Blau and Duncan (1967), and refined in the Wisconsin models (Sewell & Hauser, 1980), this theory maintains that both achieved factors, such as educational attainment, and ascribed factors, such as parental income, play an important role in socializing youth in such a way as to maintain hierarchy between social classes. Specifically, this theory argues that one's position in the social hierarchy and ability to achieve upward mobility is a function of parental socio-economic status, personal ambition, and luck. For example, Krahn, Lowe, and Hughes (2011, p.135), referencing the work of Wanner (1999), note that Canadians with higher levels of educational attainment and occupational status tend to come from families who also have higher levels of educational attainment and occupational status, reproducing their privileged social position.

The primary questions asked by status attainment theorists are about social mobility and intergenerational social inequality. This has led to questions about

whether ascribed factors that a young person is born into or whether personal ambitions, such as educational and occupational aspirations, most determine the likelihood of status mobility or maintain intergenerational social inequality. The original status attainment models focused on occupational prestige as a final outcome variable with which to measure status mobility from one generation to the next. Educational attainment was not the primary focus of the original models but was eventually proposed as another dimension of status attainment (Svalastoga, 1965) as it became recognized as an important intervening determinant of occupational prestige.

Status attainment theory was seen as a move from highly descriptive research on the extent and direction to which social movement occurs in a society into more causal explanations of social mobility (Haller & Portes, 1973). Within this theoretical approach, the Blau and Duncan model first emerged as the prominent paradigm, and then from this, the Wisconsin model was developed. The Blau and Duncan model was derived from data collected in 1962 from a cross-sectional sample of the adult male population as part of the American census (Haller & Portes, 1973). The Blau and Duncan model primarily focused on the extent to which parental social status determines the social status of offspring and the extent to which early social status affects subsequent levels of attainment and position in the social hierarchy. In essence, the Blau and Duncan model argues that while parental social position has some significant direct effects on occupational attainment, the primary influence of parental social position on occupational attainment was found to be indirect via educational attainment

(Haller & Portes, 1973). The major contribution of the Blau and Duncan model was systematizing the causal relationships observed in the process of status attainment through the usage of "difference scores".

However, this model has two major shortcomings, as noted by Haller and Portes (1973). First, it does not address the mediating processes by which parental status affects education educational and to a lesser extent, occupational attainment. Second, there is no discussion about the impact that cognitive ability and academic performance have on status attainment.

An enhanced model was originally developed by researchers from the University of Wisconsin who used a data set collected by Little (1958) and Sewell (1971) from a random sample of male high school seniors from Wisconsin (Haller & Portes, 1973). Much like the Blau and Duncan model, the Wisconsin model focused on measures of parental status. But it also included such factors as the role of significant others and the respondents' own educational and occupational aspirations. When the original sample of respondents was re-interviewed in 1964 to 1965, information gathered on their early educational and occupational attainment allowed the researchers to begin making links to prior family background and aspiration-based information. Both the Blau and Duncan model and the Wisconsin model came to the same conclusion with regards to causal ordering of effects. That is, early occupational attainment was found to be a function of both educational and occupational aspirations and to a lesser extent occupational attainment was found to be a function of parental status. However, in an attempt to further refine the Blau and Duncan model, the Wisconsin model

began specifying a series of mediating variables, such as the role of both educational and occupational aspirations. For example, the direct effect of parental status on educational attainment was found to disappear when significant others' influences and status aspirations were introduced as intervening variables (Haller & Portes, 1973).

Moreover, the Blau and Duncan model used only father's occupation and education as exogenous variables, examining their effects as separate measures. In contrast, the Wisconsin model used a single measure of parental socioeconomic status which encompassed father's occupation and education, mother's education, and family income. Haller and Portes (1973) argue that while both models show promise in the field of status attainment, the Blau and Duncan model may be more appropriately employed in the study of processes of occupational attainment and to diagnose significant deviations among particular subgroups. On the other hand, the Wisconsin model may be better at identifying the steps in the status attainment sequence where such deviations occur. This type of analysis would allow for timely social interventions to help particular subgroups avoid the negative outcomes that such deviations may hold in the transition from education to employment.

The findings which arose from status attainment research generated new debates about educational inequality. Hauser (1983) argued that such findings suggest that class structure is malleable and social mobility is an open-possibility as the effects of family background could be overcome through educational participation and achievement. On the other hand, Jencks (1983) argued that

these findings undermine the notion of an open system of opportunity as socio-economic status continued to play a large role in shaping social mobility and educational opportunities. Arguably, the collection of variables used in the status attainment research, particularly the Wisconsin model, may be out of order and I would argue that serious consideration was not given to this in the original model. For example, in the original models, academic performance is hypothesized to influence educational aspirations; however, the opposite may be true. Educational aspirations may motivate a young person's performance in such a way as to ensure such aspirations are met. Haller and Portes (1973) refer to these processes as "circles of causality" as it is not clear as to the casual order of the relationship between academic performance, the influence of significant others, and educational and occupational aspirations.

As aspirations appear to be a mediating factor for educational and occupational attainment in the Wisconsin model, informed by significant others, family socioeconomic status, and cognitive ability, their importance to the model is crucial. As Haller and Portes (1973) argue, "status aspirations are complex forms of attitudes whose translation into attainment levels is affected by the context in which individuals attempt to enact them" (p. 68-69). They go on to argue that, "attitudes – including levels of aspiration – are formed and altered through two basic mechanisms: interpersonal influence, including reflexive adjustment of others' expectations, and including self-reflection" (ibid, p. 69). So while individuals may initially set personal goals, the Wisconsin model argues that both the individual and the significant others in their life come to play a large

role in helping to both set the initial educational and occupational goals and to alter them as time passes. This has led to subsequent research under the Wisconsin model focusing on aspirations and their role in processes of status attainment (for example, Jencks, Crouse, & Mueser, 1983; Saltiel, 1988; Goldthorpe, 2010), specifically, the processes by which aspirations are formed and enacted, via the role of others and via self-assessment.

What is the exact form in which contextual factors affect the relationship between personal goals and status attainment? Sewell, Haller and Porte (1969) and Sewell, Haller, and Ohlendork (1970) hypothesize that "behaviour" (attainment) is a function of the individual (aspirations) plus each variable contextualizing his situation (facilitators) (Haller & Portes, 1973). While the Wisconsin model acknowledges the holistic nature of a young person's social world, the model stops short of explaining *why*. Empirically, the Wisconsin model is fairly exhaustive in its identification of causally-relevant variables. However, as addressed by Haller and Portes (1973) in their discussion of "circles of causality", the Wisconsin model forces a sequential ordering which may lead to ill-informed conclusions among novice researchers. Therefore, researchers must be careful when interpreting such results given that once the effect of aspirations and the encouragement of significant others are controlled for in the model, the effect of family socioeconomic status in shaping occupational status disappears suggesting that poverty, in and of itself, perpetuates poverty. It is not so much the economics of poverty that lead to the perpetuation of this disadvantaged social position but rather, the social psychological component is the underlying cause.

Researchers who draw these types of conclusions may be inclined to blame the individual rather than the social structures that encourage such a class ethos.

However, despite these critiques, status attainment theory began an important discussion on the role aspirations play in shaping patterns of educational and occupational attainment. As noted by Krahn, Lowe, and Hughes (2011, p.134-136), status attainment studies clearly illustrate that education influences occupational outcomes and parents' occupational status is transmitted to their children via differences in educational attainment. While these studies do not explicitly outline how this happens on a micro-level, this theory does identify the role of social and economic advantage and individual-level aspirations as key to shaping outcomes. It is the causal patterns of influence and identification of aspirations in a model of status attainment that make this theoretical approach ideal for addressing the key research questions in this dissertation.

Critical Approaches

After the mid-1970s, a number of more critical approaches to studying the role of education in the reproduction of social inequality emerged (Davies, 1995). One of the first to emerge was reproduction theory, as developed by Bowles and Gintis (1976). Social reproductionists argue that working-class youth are passive victims of the sorting mechanisms and pervasive socialization that is present within schools. Specifically, Bowles and Gintis (1976) argued that social relations within the education system correspond with those of the means of production. In other words, in order to replicate the hierarchal division of labour that exists within society, the education system socializes youth to this hierarchy,

making it appear like a natural part of society. Schools and learning environments stream students into different school types and programs, as a mechanism to reproduce the internal organization of capitalist enterprises by focusing either on academic programs or vocational training. Research has clearly shown that educational streaming and school placement is highly related to social class, with working-class youth more likely to be streamed into less challenging, less academically-oriented programs (Krahn, Lowe, & Lehmann 2002; Lehmann 2000, 2005b; Taylor & Krahn, 2009).

While reproduction theory was seen as an advancement in studies of social inequality, critics argued that class inequalities were not un-problematically reproduced by the education system. Rather, working-class youth actively rebel against the class structure. Resistance theory, primarily advanced by Willis (1977), argues that working-class youth actively reject dominant forms of middle-class culture, such as participating in higher education, following school rules, and avoiding deviant behaviours such as smoking and swearing. In doing so, these young people actually end up perpetuating their disadvantaged positions in society and help maintain a stratified hierarchal class system of inequality. Resistance theory reproduces the original premise of sub-cultural theory. That is, both theories maintain that working class youth embrace a series of shared values which are contrary to middle class values which encourage active participation in educational structures, thereby leading to the perpetuation of a stratified class structure. The major difference lies in reproduction theory's position that shared working class values are not simply passively absorbed but are an active rebellion

against middle-class values. For example, the youth in Willis' (1977) study never aspired to middle-class status symbols; rather, they actively rejected middle-class values, particularly those related to education and conformity, from a young age.

More recently, drawing on resistance theory, a post-Marxist variant has emerged as the predominant critical approach to studying educational inequality (Davies, 1995). Researchers in this tradition include Aronowitz and Giroux (1985, 1991, 1993) and Giroux and McLaren (1989). Post-Marxists, embracing the original tenets of Marxist theories, broadened earlier critical theories to include discussions of race and gender. The original Marxist theories from which post-Marxism developed, argued that schooling in a capitalist society perpetuates social inequality and legitimizes the established social hierarchy. Education is argued to be shaped by the needs of the upper class, or bourgeoisie, to reproduce the conditions necessary to create surplus value from the working class or proletariat. Since educational structures are created by the upper class, educational patterns reflect class boundaries whereby working-class youth pursue working class educational and occupational options and upper class youth pursue those which allow them to occupy positions of power. Universities, in this way, were traditionally sites where upper-class values were perpetuated, while access was limited to very few working-class individuals.

While each of these critical theories offer reasonable explanations for the perpetuation of class inequality via the education system, they are not completely adequate for interpreting or understanding educational inequality, particularly the role of educational aspirations, within contemporary Canadian society. Over

time, educational aspirations have increased among working class and other socially-disadvantaged youth, coming to resemble those of middle class youth (Krahn & Taylor, 2005; Lowe & Krahn, 2000) . A strict post-Marxist framework would expect educational aspirations to vary much more, particularly between the working and middle class, across genders, and between White and visible-minority groups. It would also be theoretically expected that differences in educational attainment levels should exist between groups of youth with the most privileged attending university and the socially-marginalized attending community college and vocational schools.

However, if such a strict relationship is predicted, it leaves little room for individual agency and personal negotiation of the education system (Lehmann, 2004; Lehmann, 2005a). Reproduction theory puts too much emphasis on the role of schools, again inadequately addressing the role of aspirations. Schools are viewed as a sorting mechanism where working class youth are streamed in such a way that they will occupy similar social and occupational positions as their parents. Such a theory removes the individual from the equation, viewing them as passive agents of a larger system. While there is some validity to this theory as working class youth, or first generation university students, do have a more difficult time adjusting to the education system (Lehmann, 2004, 2005a) and working class youth have been observed to be streamed into less academically challenging educational programs (Lehmann, 2007), the process is not as rigid and deterministic as Bowles and Gintis lead us to believe.

In contrast, status attainment theory does leave space for individual agency, it leaves room for debate regarding the role of structural factors and individual attributes on educational and occupational outcomes. But this theory does not adequately account for the ways in which educational aspirations come to be developed at both an individual and structural level. Furthermore, status attainment research has not seriously considered the simultaneous role of the family, access to various forms of cultural and educational resources, peer networks, the influence of schools and neighbourhoods, and individual aspirations and agency.

Bourdieu, through his theory of practice, allows for a reconciliation of these theoretical shortcomings by focusing on how differences in the social hierarchy persist over time, and yet can be challenged. Specifically, the issue of class-based differential educational outcomes is central to Bourdieu's theory of practice which examines processes of structural and cultural reproduction. The post-Marxist framework, for example, cannot account for why some working-class youth make successful transitions into the post-secondary education system. Similarly, status attainment models, particularly the Wisconsin Model, cannot account for why more youth do not pursue PSE because access is argued to be less limited by socio-economic status and more so by an individual's personal attributes and willingness to participate in higher education. In contrast, Bourdieu's theory of practice, focusing on the complex interplay of capital, field, and habitus, allows for a more complete discussion on why some youth make this transition while others do not.

Bourdieu's Theory of Practice

Bourdieu's theory of practice can complement status attainment theory, particularly the Wisconsin model, by putting the emphasis on contextualizing micro-level processes at a macro or individual level. As previously argued, status attainment theory sequentially links a series of causal factors in the attainment process, but the potential for "causal circles" forces us to question how these particular factors affect one another and whether it is really feasible to describe processes of status attainment in a linear model. Bourdieu's theory of cultural reproduction helps to contextualize the various factors identified in the Wisconsin model and to describe the underlying processes and influences which link them. Bourdieu's concepts of habitus, field, and capital provide a theoretical foundation with which to understand why and how these factors are connected and to disentangle the role of the individual from structural determinants or, stated differently, ascribed factors. At the heart of Pierre Bourdieu's theory of educational inequality is his attempt to expose cultural capital as one of the primary sources of achievement differences within the education system.

Within the sociology of education, concepts such as capital, field, and habitus provide a means for understanding the cognitive and structural mechanisms that mediate the processes of social stratification. The interplay of these concepts allows one to understand why differential educational outcomes among contemporary youth are socially-constructed via individual actions. While individuals make decisions that appear to be reflective of purely individual choices, these decisions, following Bourdieu's theoretical framework, are in fact,

informed by their social location. For example, as is shown within this dissertation, the levels of education young people aspire towards may at first appear to be reflective of individual interests and personal ambitions but these individual interests and ambitions, following Bourdieu, are a reflection of social location and family background. It is through his concepts of capital, field, and habitus that Bourdieu is able to explain how individual interests and ambitions are deeply rooted in a young person's socio-familial background.

Capital

According to Bourdieu, capital can be defined as, "accumulated labor (in its materialized form or its 'incorporated," embodied form) which, when appropriated on a private (i.e., exclusive) basis by agents or groups of agents, enables them to appropriate social energy in the form of reified or living labor" (Bourdieu, 1986). For Bourdieu, capital presents itself under three main forms: economic, social, and cultural.

Economic capital can be defined as an individual's or family's financial resources. It is through economic capital that Bourdieu so clearly illustrates the convertibility of capital from one state to another. For example, economic capital can be converted into cultural capital by attending private schools rather than public schools. As Bourdieu (1986, p. 248) states,

> the strategies for converting economic capital into cultural capital, which are among the short-term factors of the schooling explosion and the inflation of qualifications, are governed by changes in the structure of the chances of profit offered by the different types of capital.

As implicitly suggested, an agent's proficiency and familiarity with capital acquisition and exchange is often based on their socioeconomic status. In this context, Bourdieu uses economic capital to locate individuals within a given social class based on their ability to convert one form of capital, in this case, economic capital, into the various other forms of capital.

Social capital refers to those interactions that provide access to and control over various resources. Social capital is that which "exists in the relations among persons" (Caspi, 1998, p. 428) and is a reflection of the time and attention social actors spend interacting with each other. For Bourdieu (1988, p. 248), social capital is the "aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition". Furthermore, "the volume of social capital possessed by a given agent thus depends on the size of the network of connections he or she can effectively mobilize and on the volume of capital…possessed in his own right" (ibid, p. 249). Therefore, for Bourdieu, social capital is more than simply the social relationships between actors, it is, instead, embodied in a network of relationships that is the product of investment strategies that is consciously or unconsciously aimed at reproducing social networks.

Perhaps Bourdieu's most important insight into the specification of capital comes via his concept of *cultural capital*. Cultural capital is a complex phenomenon in Bourdieu's theory of social reproduction. It calls attention to how cultural dispositions, such as an appreciation of dominant cultural tastes and knowledge, are associated with social origin and develop into educational and

occupational advantage. Aschaffenburg and Maas (1997, p. 573), citing the work of Bourdieu, define cultural capital as a "proficiency in and familiarity with dominant cultural codes and practices". Differentiating between the cultural capital of the upper class and that of the working class is central to understanding that, within Bourdieu's theory of practice, culture is a power resource. It is through this argument that Bourdieu is able to explain how the education system comes to value the cultural capital of the upper-class and devalue that of the working-class. In other words, the education system acts as a mechanism for sorting and streaming youth into class-appropriate positions based on endowments of cultural capital.

Bourdieu's theory of practice argues that it is through the systematic devaluing of working-class culture that working-class youth become alienated from the educational experiences and knowledge being presented to them. These differences are not reduced over one's educational career; rather, they are intensified. So, as a young person makes the transition into post-secondary education, particularly into university, their working-class culture and dispositions may create a situation where they feel increasingly alienated from their peers and the university experience at large. Social inequalities are perpetuated, as initial differences in cultural capital become systematically encoded in educational credentials, which then channel individuals into class positions similar to those of their parents. Although cultural capital is an important part of Bourdieu's theory of social reproduction, it is only one part of his theory of practice. As noted in

Distinction (1984), social action is generated through a combination of capital, field, and habitus.

Field

The notions of *field*, together with habitus and cultural capital, are the organizing principles within Bourdieu's theoretical framework. Bourdieu states, "to think in terms of field is to *think relationally*" (Bourdieu and Wacquant 1992) and defines the field as "a network, or a configuration, of objective relations between positions" (ibid, p. 97). To help clarify this theoretical construct, Bourdieu often uses the analogy of a "game". Each of us have a role to play and competency in the game's methods yields positive results for those with this knowledge. However, the field is unlike a game in that it is not the product of a deliberate act of creation and it does not follow explicit or coded rules and regularities (ibid, p. 98). So while the comparison is not perfect, Bourdieu elaborates on the concept of the field within the game analogy:

> Thus we have stakes (*enjeux*) which are for the most part the product of competition between players. We have an *investment in the game, illusio* (from luidus, the game): players are taken in by the game, they oppose one another, sometimes with ferocity, only to the extent that they concur in their belief (*doxa*) in the game and its stakes; they grant these a recognition that escapes questioning. Players agree, by the mere fact of playing, and not by way of "contract," that the game is worth playing, that it is "worth the candle," and this *collusion* is the very basis of their competition. We also have *trump cards*, that is, master cards whose force varies depending on the game: just as the relative values of those cards changes with each game, the hierarchy of the different species of capital (economic, social, cultural, and symbolic) varies across the various fields. In other words, there are cards that are varied, efficacious in all fields – these are the fundamental species of capital – but their relative values as trump cards is determined by each field and even by successive states of the same field (ibid, p. 98, emphasis in original).

Bourdieu would like us to envision social actors, or "players," as possessing a pile of tokens, each of a different color representing the type of capital they hold. This in turn, determines their position and relative power in the game. To be more precise,

> the strategies of a "player" and everything that defines his "game" are a function not only of the volume and structure of his capital *at the moment under consideration* and of the game chances they guarantee him, but also of the *evolution over time* of the volume and structure of this capital, that is, of his social trajectory and of the dispositions (habitus) constituted in the prolonged relation to a definite distribution of objective chances (ibid, p. 99, emphasis in original).

However, this is not all. Players can increase or convert their tokens, or capital, through specific moves within the game, depending on the structure or volume of their capital.

Keeping with the analogy of the game, the education system would constitute a field as it has objective structures and regularities that comprise a set of rules for play that have been consistent over time. Individuals in the field (i.e., teachers, parents, and students) are consistently engaged in a process of play. In visualizing the dynamics of and interactions that occur within the education system, such as students competing for top grades and academic resources, it becomes possible to merge notions of individual agency, structural/ institutional constraints, and how individual access to capital can affect the ways in which individuals play the "game". For example, students with high levels of cultural capital are often better equipped to manoeuvre within the education system to achieve top merits and academic rewards that will further their privileged social position. Therefore, the notion of the field, through the analogy of the game,

implies an implicit power struggle, while also implying the possibility of change through strategies employed by individual players.

In sum, the concept of field helps us to understand that the nature of social scientific research and the true object of inquiry is not the individual agent, regardless of their role in constructing fields. Rather, Bourdieu (1992, p. 107) argues that, "it is the field which is primary and must be the focus of the research operations". However, he does not mean to imply that individuals are simply passive beings within the social playing field: "they do exist as *agents*… who are socially constituted as active and acting in the field under consideration by the fact that they possess the necessary properties to be effective, to produce effects, in this field" (ibid. page 107, emphasis in original). In other words, it is knowledge of the field itself that allows individuals to understand the origins of their singularity, or their *point of view* within the field from which their perspective is constructed.

Habitus

A third central concept within Bourdieu's theory of practice is the *habitus*, which can be described as a series of structured dispositions. Bourdieu himself defines the habitus as "an acquired system of generative schemes objectively adjusted to the particular conditions in which it is constituted" (Bourdieu, 1977). In general, the habitus is one's view of the world and one's view of their place in it. It is the dispositions one possesses that influence one's subsequent behaviours. Through this process of internalization, one comes to determine what are possible

accomplishments and one develops aspirations and practices accordingly (Dumais, 2002).

Bourdieu's concept of habitus is composed of the attitudes, beliefs, and experiences of those inhabiting the social world. This combination of internalized values and dispositions can define a young person's attitudes towards educational attainment. The institution of schooling, with its high value on the cultural capital of the privileged classes, is seen as promoting a belief among working-class youth that high levels of academic attainment are not necessarily a realistic option. Thus, as noted by MacLeod (1995, p. 15), "there is a correlation between objective probabilities and subjective aspirations, between institutional structures and cultural practices".

Educational aspirations can be defined as reflective of an individual's view of his or her odds of achieving high levels of education and to be based on the internalization of objective probabilities. However, following Bourdieu's logic, aspirations are not based on some form of rational choice on the part of the youth. Rather, they are acquired through the habitus of the individual. "The habitus is the universalizing mediation which causes an individual agent's practices, without either explicit reason or signifying intent, to be none the less 'sensible' and 'reasonable" (Bourdieu, 1977, p. 79). The habitus produces attitudes and patterns of conduct that enable objective social structures to successfully reproduce. Essentially, Bourdieu theorizes a reciprocal relationship between practices and structures, in which, structures tend to produce structured dispositions that produce structured actions which, in turn, tend to reproduce

objective structures (Swartz, 1997). In sum, Bourdieu argues that the habitus is shaped by social forces, which are experienced within specific fields, and thereby predispose individuals to think and act in certain ways.

Through the concepts of cultural capital and habitus, Bourdieu is seeking to explain how social inequality and educational reproduction occurs within specific social fields. His explanation is grounded in traditional class-based arguments that view the family as the primary site of socialization. The family as a key unit within the capitalist class structure exposes youth to a way of thinking and being that is embodied within the habitus. As noted by Miller (2003, p. 87-88):

> Cultural competence and effectiveness on any particular field of action is dependent on the accumulation of the relevant cultural capital, the cultural resources that they can strategically expend on the interweaving fields of their practice. Those with privileged access to restricted cultural capital exercise symbolic violence upon those who cannot access the cultural capital required to succeed in those fields of practice, such as education, which yield potent symbolic capital.

Following Bourdieu's theoretical framework, the field informs the habitus and the habitus contributes to constituting the field as a "meaning world, a world endowed with sense and value" (Bourdieu & Wacquant 1992, p.127). As Bourdieu is quick to acknowledge, individuals are most likely to encounter experiences that correspond with their habitus, thereby explaining the perpetuation of social inequality. In other words, people stick with what they are comfortable with. So, youth whose parents are working class, who might be defined as educationally "at risk," would be more likely to pursue educational and occupational choices that

correspond with their parents' socio-economic status (SES). But, with the expansion of post-secondary options and the mass dispersion of information via the Internet and mass media which expose youth to a larger array of choices and information, is university participation still outside the realm of the working-class habitus?

As young people are increasingly exposed to information stressing the importance of higher education, particularly a university education, this message becomes highly normalized. In this sense, youth in their early high school years see university as a real possibility and form their aspirations accordingly. In the past, the connection between family background and educational attainment was much clearer, but as youth are exposed to information in volumes that previous generations were not, and as they interact within local schools and communities with a variety of peers from different socio-economic backgrounds, the nature of social fields, as Bourdieu conceptualized them, changes. Within these changing social fields, contemporary youth become increasingly aware of the educational and occupational options available to them as expanding beyond those which were achieved by their parents.

As Bourdieu argues, the habitus, or one's outlook on and perspective about their social position, is influenced and shaped by experiences in the field. Lehmann (2003) points out that "if the field and habitus constitute each other mutually, and education systems, labour markets, and systems of school-work transitions are interpreted as fields, then young people's experiences within different school systems and in differently structured labour markets certainly

must have strong influences on the formation of their dispositions toward post-secondary education and employment" (p.89). In this way, local communities are no longer isolated sites where the flow of information is limited. As youth are exposed to information and knowledge that is not provided directly from their parents, they begin to imagine possibilities that extend beyond that to which they have been immediately exposed.

Moreover, changes in the economy which began in the late 1970s, characterized by a decentralization of production to foreign countries, meant a loss of 'good' jobs across many industrialized nations, including both Canada and the United States. The emergence of the dot.com industry in the late 1990s, which generated employment across all levels of the pay-scale, also experienced a bust in the early years of the new millennium. Many of these jobs were transported to India and China where highly-educated and trained employees could be paid a far smaller salary than their North American counterparts (Aronowitz, 2004, p.xi).

In addition to job migration, the expansion of community colleges, technical schools, and universities has also led to a state of depressed salaries and a surplus of educated workers (ibid, p.xi). Equipped with their post-secondary educational qualifications, many of these recent graduates have been unable to secure permanent, well-paying jobs in their fields of specialization, resulting in a situation where many graduates were precariously underemployed.

The new 'working class' are a group of highly educated individuals who have been inducted into the value system of the middle class but without the good

wages or job benefits which are afforded to the middle class. Given these changes, working class culture has become ambiguous. As the working class seek professional and technical jobs, they become frustrated with the lack of "good" jobs. However, they continue to embrace the notion that higher levels of education will lead to increased chances of economic success. These economic changes may help explain the exceedingly high educational aspirations observed among Canadian youth in a way that was not demonstrated among Willis' "lads" in the 1960s, for whom maintaining their working-class roots meant rebellion against their understandings of middle-class values.

However, despite the high aspirations observed among today's youth, educational attainment, while on the rise, is still not equal across all social strata. While aspirations can represent a form of agency since all youth, regardless of socio-economic status, can hold aspirations to any life course outcome, it is important to recognize that their agency, according to Bourdieu, is bound by their social space, knowledge of the social world, and early life course experiences. In this way, researchers need to recognize that while school-work transitions do involve reflexive and knowledgeable agents, their knowledge about these transitions is in fact constrained by very real structured conditions that exist in and of themselves. Bourdieu suggests that 'knowledge' is informed by fields and access to cultural capital which is more limited for working-class youth. So, perhaps youth from traditionally "at risk" groups, while aspiring to education levels that were often restricted to the middle and upper classes, are forming such aspirations on limited knowledge about what the experience will be like and the

mechanisms that will facilitate this transition. A lack of knowledge about the costs, both economic and social, the time commitment, and the nature of learning within a university setting, may still discourage full participation by these young people.

Bourdieu's framework, particularly his conceptualization of *structured structures and structuring structures*, provides researchers with a means for understanding the sustainability of social reproduction. The habitus, as both a structured structure and a structuring structure, an apparatus for producing and resulting from practices, provides researchers with insights into why social reproduction has become so ingrained into society that resistance can actually support the status quo and perpetuate social hierarchy. *Horizons of action*, as defined by Hodkinson and Sparkes (1997) expand Bourdieu's concept of the field to include, "the arena within which actions can be taken and decisions made" (p. 34). A young person's horizon of action is informed by both their habitus and the opportunity structures of the labour market. Their interrelation informs notions of what options are available and which of those options are more or less appropriate

In this way, Bourdieu's theory of practice provides an excellent framework to help us understand the variety of possible educational aspirations and outcomes observed among youth. Understanding the balance of influence exerted by capital, fields, and habitus on a young person allows us to begin to appreciate how a variety of educational pathways are created and, in turn, navigated by an increasingly diverse group of youth. Furthermore, Bourdieu's theoretical arguments provide an explanation of how aspirations among young

people are developed by recognizing both the role of the family and the larger social context in which the youth is situated. Taking into account the influence of social context and the family, along with aspirations, Bourdieu's framework helps explain disparities in educational attainment between middle- and working-class youth, as well as among working-class youth themselves. It is because of these strengths that Bourdieu's theoretical framework is an ideal complement to the status attainment empirical model.

Contextualizing the Status Attainment Model with Bourdieu's Theory of Practice

Bourdieu's theory of practice (Bourdieu, 1977, 1986, 1987; Bourdieu & Passeron, 1977) argues that the diffusion of capital, specifically, cultural, social, and economic capital, occurs at the level of the family and has a lasting impact on the life course trajectories of youth. That is, parents provide their children with various forms of capital which, in turn, shape their "habitus" (i.e., tastes, dispositions, and attitudes). The result is a reproduction of society's class structure, with social inequalities being reproduced through educational attainment, employment, and ultimately, social status.

The Wisconsin model of status attainment posits that family SES indirectly shapes educational and occupational attainment, via aspirations, academic achievement, and peer groups. However, empirical tests of this model have not been able to fully explicate exactly how this happens, in large part because they have not analyzed longitudinal data. Bourdieu's theoretical approach can help explain the processes which lead to direct and indirect

connections between SES, aspirations, and outcomes. It provides important insights into why youth make the choices they do and how those choices are formed within the larger structural context of the family, school, and community, processes which are empirically demonstrated in the status attainment literature but not explicitly theorized.

A weakness of Bourdieu's theory is the difficulty encountered when trying to quantify his key concepts, particularly cultural capital, which plays an essential role in shaping the habitus and informing interactions within the field. Specifically, is cultural capital dependent or independent of skill or ability (Lareau & Weininger, 2003)? Within the status attainment model, socio-economic status is shown to be distinct of academic ability and skill but Bourdieu's work does not make this distinction clear by arguing that cultural capital may, in fact, affect all aspects of the educational and occupational attainment process, including academic ability.

The following section will explore the connection between SES and educational outcomes by, first, examining a number of studies which have attempted to quantify Bourdieu's theoretical approach and then, second, putting forth an argument for why Bourdieu's work may be better suited for interpretive rather than strictly empirical purposes. Within this literature, two dominant approaches to operationalizing Bourdieu's work, particularly cultural capital, have emerged. The first approach views cultural capital (i.e. "high brow" or elite culture) as a directly correlated with educational success where increased engagement with cultural capital translates into increased engagement with the

education system. The second approach assumes that cultural capital is a mediator which bridges family background with educational engagement and outcomes.

In his 1982 article, Paul DiMaggio attempted to place cultural capital in the status attainment model by defining and measuring cultural capital as the extent of students' involvement in "high brow" art, music, and literature. He hypothesized that cultural capital will encourage increased school success and will mediate the relationship between family background and school outcomes, particularly in "non-technical" subjects (ibid, p. 199). DiMaggio's use of "highbrow" culture as a proxy for cultural capital has been emulated by many other researchers including De Graaf (1986), De Graff, De Graaf, and Kraaykaamp (2000), Dumais (2002), and Eitle and Eitle (2002). For example, Dumais (2002) defines cultural capital as knowledge and competence of upper class culture and is measured using participation in "highbrow" activities. De Graaf (1986) defines cultural capital as "appropriate manners" and familiarity with the "*beaux-arts*" (p. 237-246).

But should cultural capital perhaps be defined more broadly? Generally speaking, over 30 years have passed since Bourdieu first conceptualized cultural capital. Arguably, culture has changed, definitions of educationally-relevant tastes and dispositions have shifted, and access to "highbrow" culture has become more open with the advent of the mass media. Specifically, youth are exposed to large amounts of information at a much younger age than was previously the case. This has meant that young people are no longer limited to information found

within the home or in their local communities. Technological change has resulted in drastic changes to the nature of learning and educational exposure.

While many researchers support DiMaggio's conceptualization of cultural capital, others propose that cultural capital is independent of skills and ability. That is, in a model of educational and occupational outcomes, cultural capital is positioned as a mediator between family background and some measure of performance, such as grades or test scores, not as a measure of skills themselves. For example, Farkas, Grobe, Sheehan, and Shaun (1990) argue that participation and knowledge of elite culture influences students' grades indirectly as teachers reward these types of upper-class skills and dispositions. In this way, it is engagement in and with elite culture that allows students to excel in school as they possess a shared experiential knowledge with educators. This experiential knowledge is reproduced through the educational curriculum.

In short, attempts to quantify Bourdieu's work demonstrate that his theoretical arguments can help researchers contextualize and understand why inequality exists and is perpetuated within the education system. However, the wide array of ways in which researchers have operationalzed Bourdieu's concepts, specifically cultural capital, suggests that consideration must be given to approaching his work in an alternative manner as the empirical findings arising out of such work are varied and fraught with inconsistencies.

With respect to the tradition of operationalizing cultural capital as elite culture, did Bourdieu really intend to operationalize cultural capital in terms of upper class tastes and dispositions? Lareau and Weininger (2003), referencing

Karabel and Halsey's (1977) collection of essays which contained a translation of Bourdieu's 1971 article, "Cultural Reproduction and Social Reproduction," note that Bourdieu provides a definition of cultural capital that makes no reference to preferences for "highbrow" culture. In fact, Bourdieu defines cultural capital as, "instruments for the appropriation of symbolic wealth worthy of being sought and possessed" (Bourdieu, 1971, p. 488). However, the tendency to equate cultural capital with high culture likely comes from the examples Bourdieu used, including museum visits, classical music appreciation, and reading habits. As noted by Lareau and Weininger (2003), Lamont and Lareau (1988) argued that before the *effects* of cultural capital could be analyzed in a given context, its *content* had to be empirically specified (p. 579). Given that Bourdieu theorized under the context of a rigid French system, not an open North American education system, it is important to ask whether cultural capital in one context may not be relevant in another.

The second dominant approach to quantifying Bourdieu's theoretical approach assumes that cultural capital is conceptually distinct of skills and ability. Lareau and Weininger (2003) argued that none of Bourdieu's writing suggests that there is a distinction between cultural capital and ability; rather, they argue that Bourdieu would consider them to be "irrevocably fused" (p. 580). In reaction to human capital theorists who apply his concept of cultural capital to their work, Bourdieu asserts, "studies of the relationship between academic ability and academic investment show that they are unaware that ability or talent is itself the product of an investment in time and cultural capital" (1986, p. 244). Lareau

and Weininger (2003) note that Bourdieu maintains that to attempt to differentiate between the effects of factors linked to status from those linked to a pure "technical competence" is to "fall into a trap" (p. 581). For Bourdieu, evaluations of technical competence are reflective of the status of the person being assessed rather than inherent quantifiable objective competencies. In one of Bourdieu's last pieces on education, "The State Nobility" (1996), in a section entitled, "The Ambiguities of Competence", referenced by Lareau and Weininger (2003), Bourdieu undertakes a discussion of credentials, or, what he refers to as "institutionalized" cultural capital. Following the writing of Lareau and Weininger (2003), Bourdieu argues that credentials must be understood as certifying two simultaneous forms of competence, technical capacity and social competence (p. 581). In other words, earning a specific educational qualification does denote a certain level of technical knowledge, however, educational qualifications also denote a certain level of social competence in that they provide a sense of social dignity to the holder in which to set oneself apart from others.

Given these debates, is it really possible to quantify Bourdieu's theoretical concepts? Qualitative studies have been quite successful in utilizing Bourdieu's theory of practice, to understand social inequality. For example, in his ethnographic study of inner-city youth in the United States, MacLeod (1995) uses Bourdieu's theory to help interpret the relationship between structure and agency and examine how social reproduction is occurring under conditions of extreme poverty and illegal underground economies. Even so, as McLeod notes, "Bourdieu's concept of habitus captures the interpenetration of structure and

agency, but habitus is more of a label for a site than an explanation of what goes on with in it" (p. 254).

Similarly, in his study of Canadian and German high school apprentices, Lehmann (2007) uses Bourdieu's work to help understand the decisions and strategies these young people employ when deciding to pursue a trade and participate in high school apprenticeship programs. Much like McLeod, Lehmann draws heavily on Bourdieu's concept of habitus to understand how these young people negotiate structure and agency. Lehmann (2007) suggests that Nash (2003) provides a very lucid explanation of Bourdieu's notion of socialized dispositions when he states, "Bourdieu's sociological theory requires an agency endowed with dispositions able to translate structural principles of the culture into lived practice, with sufficient autonomy to allow observed social transformations to take place, but sufficiently conditioned as to effect the actual reproduction of social institutions" (p.49).

In another qualitative study that employs Bourdieu's concepts, McDonough (1997) uses the concept of cultural capital to help interpret the role of school resources in shaping student decisions regarding college choice. She goes beyond Bourdieu to discuss two inter-related concepts which she calls, "organizational habitus" and "parental cultural capital". According to Lareau and Weininger (2003), McDonough defines cultural capital as the "first hand" knowledge that parents may or may not possess regarding the college admission process, particularly that generated from experiences not related to attending

school themselves, such as the significance of SAT scores, the utility of private tutors and college counsellors.

Instead of utilizing a limited definition of cultural capital and habitus, two key concepts in Bourdieu's theory of practice, these three studies employ a broader definition of these concepts, allowing the researchers to carefully examine both the institutional and individual-level effects that play into processes of social reproduction. As Lareau and Weininger (2003) argue, "the prospect that teachers reward students' competence in highbrow aesthetic culture becomes merely *one* empirical possibility among others" (p. 586, emphasis in original). Recognizing that there is a multitude of possible interpretations of Bourdieu's work further supports the argument that quantitative researchers using Bourdieu's concepts also need to reconsider the construction of a single measure of cultural capital, or habitus, as the case may be. Rather, these concepts are more a general term given to a variety of measures that present themselves throughout the status attainment process.

Up to this point, my literature review has followed the tradition of grouping theories of cultural and social reproduction into two, distinct approaches: mainstream and critical (Davies, 1995). The former view processes of social reproduction as an inevitable consequence of the organization of the social structure, while critical approaches challenge these processes and question particular institutional structures which are central in perpetuating social inequality, namely the education system. Within these two approaches, one theoretical approach emerges from each as ideally suited for studying young

people's educational aspirations and their role in the reproduction of educational inequality. From the mainstream approaches, status attainment theory provides an empirical model that connects family socio-economic status with educational attainment, via aspirations and academic abilities. From the critical approaches, Bourdieu's theory of practice provides insight into the cultural and social processes that comprise the status attainment model. Specifically, through his concepts of cultural capital and habitus, Bourdieu explains the importance of educational aspirations in a model of reproduction linking them both to family SES and outcomes. Together, these two approaches provide a way to more clearly operationalize the processes of social and cultural reproduction, incorporating educational aspirations as a key variable, and to understand the mechanisms that lead to the reproduction of class-based inequalities.

Developing the Analytical Research Model: Incorporating a Life Course Perspective

Having reviewed the various theoretical traditions that have focused on the role of education in the reproduction of social inequality, and having made the argument that Bourdieu's theory of practice can help contextualize and interpret status attainment research, it is time to explicate the analytic model used in this study. While so doing, I will also review a number of relevant empirical (primarily quantitative) studies. It is apparent that, in this research tradition, researchers have taken an implicit, if not explicit, life course approach, focusing on the various stages which a young person must negotiate to make it to the next

phase of their life, for example, completing high school in order to transition into post-secondary education

A life course perspective describes the interweaving of age-specific, time-sensitive pathways, such as family and work careers, that are affected by changing social and economic conditions, and also specific role transitions, such as marriage or school completion. Typically defined as a sequence of connected transitions and changes in social roles that occur as an individual gets older, the life course is enacted by individuals but is also structured by larger social institutions and organizations that offer opportunities and put in place constraints (Elder, 1997; Heinz, 2001). Furthermore, the life course is particularly sensitive to the historical and cultural context in which the individual is situated, in terms of social traditions, political structures, and labour market opportunities.

As a methodological technique, Elder argues (1997) that this perspective views human development as a coactive process in which socio-cultural, biological, and psychological forces interact over time. In this way, social structures and cultural constraints constitute key elements in shaping the life course, although an individual's choices and actions may be constrained by these same social structures. Elder (1997) maintains that "the life course is conceived as an age-graded sequence of socially defined roles and events that are enacted and even recast over time. It consists of multiple, interlocking trajectories, such as work and family, with their transitions or changes in states" (p. 983).

Historically, age-graded sequences of socially-defined roles meant something very different from what they mean now. The end of World War II

(WWII) marked the beginning of a series of global economic and educational shifts. Prior to WWII, individuals left schooling much earlier than is now the case and began adult roles, such as labour market participation, much younger. When Elder first began studying the life course in the 1960s, the highly normative youth trajectories of the pre-WWII era began to shift to the highly diverse and multifaceted trajectories of contemporary society. Globalization, neo-liberalism, the emergence of non-standard work, along with the national recession of the early 1980s and 1990s radically changed the life course from the post-WWII social structure as an increasing number of young people were opting to remain in school rather than face the uncertainty of the labour market (Statistics Canada, 2003). The expansion of labour market opportunities, the introduction of information technology, and the emergence of the knowledge economy, alongside the wide array of postsecondary options which are now available to youth, have made contemporary life course trajectories increasingly complicated, harder to predict, and highly individualized (Anisef et al., 2000).

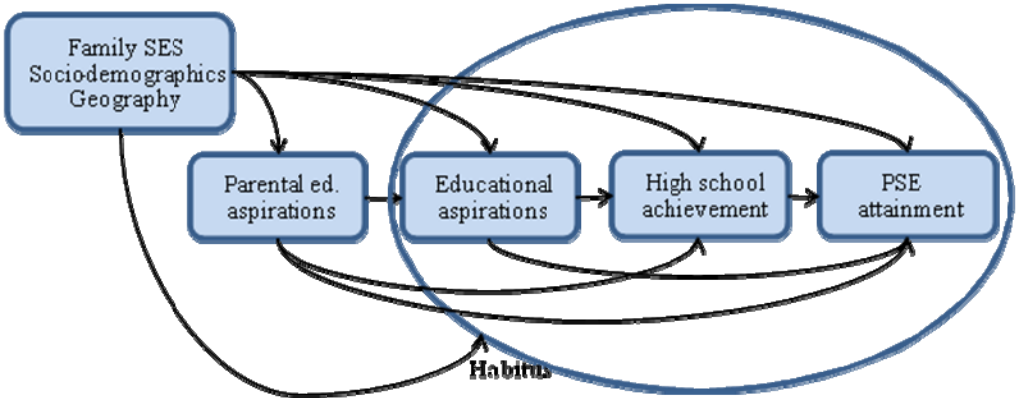
The life course approach, stressing the link between social mobility and socio-familial background, also incorporates an intergenerational component. Understanding educational outcomes among youth, such as high school graduation or enrolment in a post-secondary institution, is often made by connecting experiences within and social conditions of the family (e.g., income levels, and parental education) with experiences and availability of institutional programs (e.g., size of high school, student-teacher ratio, or availability of post-secondary institutions within rural communities) with the eventual outcome. The

primary objective of research incorporating an intergenerational life course perspective is to connect time A with time B, focusing on the variety of pathways that intersect these two moments. Generally speaking, the strength of this approach is based on its focus on the process and significance of historical and contemporary context by placing individuals within a specific time period and social location, complemented by its ability to highlight the importance of family context, socio-economic variables, and socio-institutional influences.

The Analytic Model

My basic analytic model appears in Figure 2.1. The arrows represent the effect of one variable on another. The model reflects a normative or typical life course sequence which can lead to either a successful outcome or one that is less successful because of personal choices and barriers encountered. The following section will outline the various relationships in the model while also reviewing a variety of relevant quantitative studies.

Figure 2.1: Analytic model



Family Socio-economic Status, Socio-demographics, and Geography/Context

The life course, as argued by many researchers (e.g., Andres, 2002b; Krahn & Hudson, 2006; Lehmann, 2005a; Looker, 2002), has become increasingly complex as society has become more demographically, economically, and institutionally diverse. Differences in socio-economic status and demographic characteristics, in particular, have been associated with differential access to varying degrees of opportunities, with those who are socially disadvantaged having more limited educational choices. As argued by Andres (2002b), "as the paths through societal institutions become more diverse and decisions regarding these routes become more individualized, vigilant monitoring of the outcomes of paths taken – by social class, gender, and race/ethnicity – is essential" (p. 26). Consequently, this heterogeneity holds the potential to increase the polarization between certain segments of the population, particularly between society's 'haves' and 'have-nots'.

Research on educational attainment in particular has identified a wide array of factors that have been associated with differential achievement outcomes. Much of this research can be divided into two general categories, the first with an individual perspective and second with an institutional perspective. In the first category, studies have focused on demographic variables (e.g., gender, ethnicity), family background, school experiences, peers, and the community. Studies with an institutional perspective have concerned themselves with the characteristics or influences within the school that influence educational attainment, including student composition, as well as school resources, organization, and climate.

Within Figure 2.1, family SES background, demographic characteristics, and community-context are captured in the left-hand side of the model. The arrows originating from this exogenous category of predictor variables illustrate the highly influential role these variables have on all the others within the model. As defined within the status attainment literature, these ascribed factors are external to the young person in that she or he is typically born into these circumstances. Other researchers refer to such variables as structural constraints (e.g., Lehmann, 2007; Edgerton, 2010; Davies & Guppy, 2006), in contrast to agency, which is understood to be those factors which a young person can exercise some control over, such as school attendance, avoidance of delinquent behaviours, and aspirations.

Family Socio-Economic Status

Socio-economic disadvantage, in the form of low family income, is still a strong predictor of university attendance and instances of continued disadvantage throughout the life course. For example, Frenette (2007b) found that approximately half (50.2%) of youth from families in the top quartile of the income distribution were attending university by age 19, compared to less than a third (31.0%) of youth from the bottom quartile. Even youth from families in the third quartile have distinct advantages over youth in the bottom two quartiles with 43.4% attending university by age 19 (p. 5). However, Christofides, Cirello, and Hoy (2001) show that while attendance rates for postsecondary education (PSE) continue to be lower for youth from low-income families, compared to those from higher income families, this gap has been narrowing. From 1975 to 1993, the

overall percentage of youth, ages 18 to 24, who were attending university rose from 33% to 45%, with an increase from 18% to 44% among youth from the lowest income quintile (p. 181). That said, youth from higher income families not only experience advantage with respect to university participation but they also perform better on standardized testing in the areas of reading, mathematics, and science, generally report higher marks, attend high schools with more university-bound peers, and are less likely to report financial reasons as the primary barrier to not attending university (ibid, p. 5).

Family SES and income have been shown to be highly correlated with parents' education levels, which have been shown to have an influence on the educational attainment of youth. In fact, the proportion of youth involved in PSE increases as the level of parental education rises (Statistics Canada, 2007). In a study of first-generation university students at York University, Grayson (1997) found that traditional university students (i.e., those who have at least one parent with a university degree) had a slightly higher GPA (5.70) than those of first-generation university students (5.37) (p. 664). Additionally, Lehmann (2007) found that first-generation students were more likely to discontinue their post-secondary studies early in their first semester, often within the first two months, and did so despite having solid academic performance. They cited not "fitting in" and not being able to "relate to these people" as the primary reasons for withdrawing (p. 105). Lehmann notes that, for many of the working-class, first-generation students, attending university confirmed for them the need to pursue a more hands-on, applied post-secondary program which many found at community

colleges or in apprenticeships. As these studies suggest, it is not necessarily income alone that determines lower participation rates among lower income youth. Rather, it is a combination of limited resources and knowledge and a disposition at odds with that typically found within the university environment.

Geography/Community Context

Equality of educational opportunity is strongly connected with proximity to post-secondary institutions. For those youth who live within commuting distance to post-secondary educational institutions, such as universities, the likelihood of pursuing formal educational past high school increases (Frenette, 2007a). This is why geography, in the form of region, rural versus urban, and communities/neighbourhoods, has been identified as one of the primary factors influencing educational participation and life course trajectories (Andres & Looker, 2001; Butlin, 1999; Christofides, Cirello, & Hoy, 2001; Looker, 1993, 2001, 2002; Looker & Dwyer, 1998). Generally speaking, urban youth have greater access to post-secondary institutions, including a wide array of universities, technical institutes, and community colleges. For rural youth, pursuing education beyond high school requires leaving the parental home, which can be quite costly. Almost a decade ago, Barr-Telford et. al. (2003) estimated the costs associated with moving away from home to pursue PSE to be approximately $5,400 per year, which surpassed the costs associated with tuition, school fees, and books, which were estimated to be approximately $3,700 per year. This helps to explain why youth from lower SES families are less likely to pursue post-secondary studies than youth from higher SES families, particularly

when they are from rural areas where educational access is limited. Not only does being from a rural community translate into lower post-secondary participation rates but, among those who do pursue PSE, it has been found that they are more likely to attend college or CECEP instead of university (Frenette 2007a).[4]

Neighbourhoods, as another geographical unit of analysis, are an important area of inquiry since communities often vary in terms of affluence, ethnic compositions, and availability of resources. In communities where the population is better educated, the mean family income is higher, schools have increased access to resources such as funding and technology, and students perform better academically (Astone a& McLanahan, 1991; Kaplan, 1999; Lareau, 1987; Muller, 1993; Parcel & Dufur, 2001) Research has shown that the composition of students attending a school, such as their average socioeconomic background, can have an effect on the achievement level of the school population, over and above the effects on individual students. Within the educational literature, this is referred to as 'school mix' - "the social class composition of a school's student intake" (Thrupp, 1999, p.5). Thrupp suggests that the idea that school mix has an independent effect on student performance and outcomes challenges much of our understanding about the value added by schools in the so-

[4] CEGEP is a French acronym for *Collège d'enseignement général et professionnel*, meaning "College of General and Vocational Education". This system has the potential to affect youth from Quebec differently than those from the rest of Canada in that these youth finish their high school studies in grade 11 then spend an additional two years in CEGEP taking either 'pre-university' or technical classes. For those who want to pursue university studies outside the province of Quebec, CEGEP courses, while recognized by most Canadian universities, will only give credit of up to one year.

called ‘school effect’. Thrupp argues that, “aspects of schooling such as student relations, classroom instruction and school organization and management may be powerfully influenced by school mix” (p. 5). Structural factors, including type of school (i.e., private or public), size, and availability of programs (e.g., apprenticeships, language immersion), have also been shown to contribute to school achievement, although the magnitude of the difference is still under debate (Lehmann, 2000, 2005b) . School organization (i.e. rules and practices) and climate (i.e. discipline and academic pressure) have also been shown to exert an influence on school achievement (Abbott et al., 1998; Paulson, Marchant, & Rothlisberg, 1998). Structural factors and school organization have taken priority in the school effectiveness research, whereas school mix has often been downplayed within much of this research (Thrupp, 1999, p.5).

Socio-Demographics

Gender inequality has been shown to exist in educational and occupational choices, experiences, and attainment (for additional information, refer to Krahn, Lowe, & Hughes, 2011, Chapter 4). Alongside the additional pressures that familial responsibility and marriage can play for women, gender differences can lead to variations in life course trajectories and problematize the sequencing of their transitions. For example, research has consistently demonstrated, whether in relation to participation in particular academic subjects, employment status and income levels, or in relation to career/family balance, the different choices and experiences of men and women can lead to persistent social inequalities. However, the educational situation of women is improving in some areas. As

reported by Statistics Canada (2007), more women than men are participating in PSE, in both universities and colleges indicating that the gender balance may be shifting. Although, it is important to note that while females are participating in post-secondary studies more frequently than their male counterparts, there is still a large gender divide with respect to field of study. Males are still overrepresented in graduate studies, particular doctoral studies, where they account for 54% of doctorate registrations (The Daily, 2008). And females are still widely underrepresented in the areas of mathematics, computer and information sciences, and architecture, engineering, and related technologies (ibid. 2008), fields of study that lead to higher incomes following graduation.

Visible minority status, or race and ethnicity, have also been shown to affect the educational transitions made by Canadian youth. The difficulties visible minorities encounter during their educational transitions may be a function of living in low income households which, as previously illustrated, can have a lasting impact on the life course trajectories of youth. Millan and Tran (2004) show that 44% of Black children live in low-income families, compared to only 19% of non-Black children. However, recent reports have shown that visible minority groups are more likely to participate in post-secondary education, particularly university (Statistics Canada, 2007). In fact, 62% of visible minority youth enrolled in university compared to 48% of non-visible minorities (ibid, 2007). Anisef and Kilbridge (2004) associate the ability of visible minority immigrant youth to achieve so well academically to "ethnic resilience," which can be defined as the ability to foster personal achievement despite the social stress

and familial instability associated with immigrating to a new country. According to Chow (2004), greater academic achievement has been associated with close community ties and ethnic capital, which Borjas (1992) defines as "the average quality of the ethnic environment in which parents make their investments" (p. 124).

On the other hand, among adult immigrants, disparities in labour market performance have been shown to be a consequence of foreign qualifications and occupational training (Alboim, Finnie, & Meng, 2005; Li, 2001b; Reitz, 2005; Tran, 2004; Worswick, 2004). In fact, studies have documented that these difficulties have led to greater instances of poverty among immigrants in the past few decades (Picot & Sweetman, 2005). Among refugee youth in particular, the presence of pre-migration factors, such as reaction to trauma, separation and loss, in combination with the intergenerational conflict that occurs between parents and children due to role reversal where youth often adapt to their host country much quicker than their parents, have all been shown to have a lasting effect on academic success (Wilkinson, 2002). Given the relationship between socio-economic disadvantages associated with low-income, lower levels of educational attainment, and language barriers, one could assume that these disadvantages should translate into disadvantages across the life course for many of these young people. However, as previously noted, immigrant youth, in general, often academically outperform their native-born counterparts (Krahn & Taylor, 2005).

However, not all visible minority youth are experiencing increased levels of educational success. There is extensive research that illustrates the precarious

relationship between being a visible minority youth and encountering various educational barriers (Anisef & Kilbride, 2004; Davies & Guppy, 1998; MacLeod, 1995). Most researchers suggest that elements such as lower academic expectations held by teachers and school authorities, the absence of visible-minority teachers, Eurocentric curricula that do not reflect the history or experiences of ethnic groups, language barriers, and possible conflict in value systems all contribute to difficulties visible minority youth face within the education system. For example, using 1991 Census data, Davies and Guppy (1998) found that young Black Canadians experience mixed academic attainment, in the form of above-average high school completion rates but below-average university completion rates.

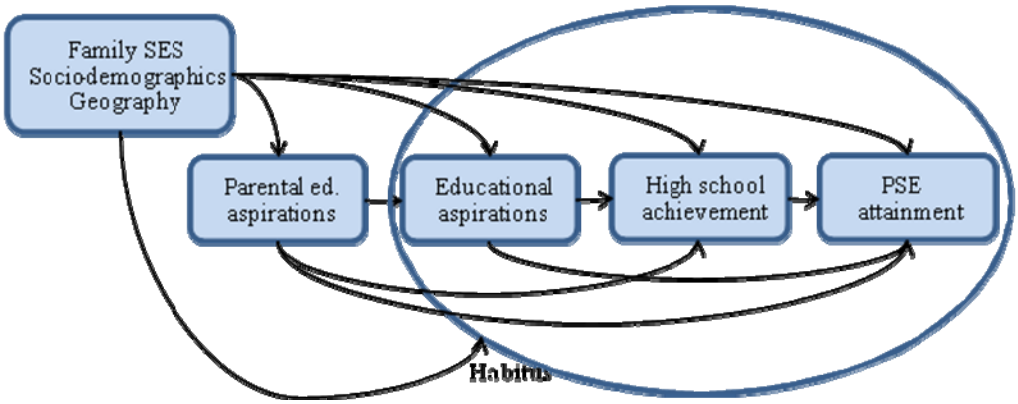
Unfortunately, while particular visible minority youth are experiencing mixed levels education success, Aboriginal youth are experiencing disadvantage across all measures of educational achievement. Although the percentage of Aboriginal youth attending university has steadily increased in recent years, these percentages are still much lower than the overall Canadian percentages of university attendance (Statistics Canada 1995) Furthermore, it has been shown that only 9% of those youth who initially attend university will subsequently graduate, compared to 18% of non-First Nations students (Frideres, 1998). Understanding the educational experiences of First Nations students requires a sensitivity to the impact of racism and how historical events affect Aboriginal students on an individual and systemic basis (Clark et al., 1999). In their research on facilitating educational success among Aboriginal students in Canada,

Hampton and Roy (2002) found that most students noted experiences of racism from both non-native students and instructors, as well as from institutional policies. Hampton and Roy conclude that being aware of historical racism and inequalities will help instructors minimize these effects and in turn may encourage higher rates of educational attainment among First Nations students.

Explicating the Analytic Model

The differences in educational participation and attainment found between different groups of youth, as presented in this overview, are often associated with differential access to varying degrees of opportunities. The inter-connectivity of multiple disadvantages, such as being a low-income member of a visible minority, can further limit the transitional choices available to many youth. For this reason, it becomes increasingly important to understand which routes such groups of youth are negotiating and what the outcomes of these paths will be. As it is an unfortunate reality of Canadian society that access to post-secondary education is not equal across all social strata, it is imperative that researchers understand the connection between education and socio-economic determinants, between access to resources and life course trajectories, and the ability of particular groups of youth to overcome social barriers in their pursuit of post-secondary education.

Figure 2.1: Analytic model



In Figure 2.1 (also presented earlier on page 48), the arrows from family socio-economic status (SES), socio-demographics, and geography to parental educational aspirations, to youth's educational aspirations, to high school achievement (grade 12 marks), and to post-secondary educational attainment represent the profound effect these exogenous variables can have. They are highly influential in informing the habitus of youth. Unequal distribution of family resources, living in a lower SES community within an economically disadvantaged region, and being a member of a disadvantaged socio-demographic group can all shape the way in which one comes to view the social world and one's odds of achieving particular goals, and can shape educational and occupational aspirations. In this study, family SES is operationalized using parental educational attainment, household income, and occupational classification (more details are provided in Chapter 3).

Parental Educational Aspirations

The arrows in Figure 2.1 from parental educational aspirations represent the effect this variable has on their children's educational aspirations, grade 12 marks, and educational attainment. The assumption is that higher parental educational aspirations, operationalized as a three-category measure (university, college, high school or less) will lead to increased aspiration levels among the youths themselves and, in turn, create educational success. Following Bourdieu, parental cultural capital and habitus, contextualized by family SES, socio-demographics, and geography, influence the level of importance parents place on education. Parents who place high levels of importance on education are more likely to encourage their children to do well in high school and to aspire to higher levels of post-secondary education.

Youth's Educational Aspirations

The arrows from youth's educational aspirations to high school achievement (ie., grade 12 marks) and to post-secondary educational attainment represent the impacts that educational aspirations are hypothesized to have on educational outcomes via grades and post-secondary attainment. Aspirations, the central concept explored in this dissertation, are hypothesized to be positively associated with high school grades and post-secondary educational attainment. Again, following Bourdieu, aspirations are a reflection of habitus. So, stated differently, habitus influences educational aspirations. From family resources, socio-demographics, and geography comes a class ethos or habitus. Habitus comes to be acted out in young people's aspirations and goals, and through their

educational participation and attainment. However, this is where the first major research question of this dissertation becomes critically important: are young people's educational aspirations really meaningful? Can we consider them to be a reflection of habitus vis-à-vis social class, social demographics, and geography?

High School Achievement

The arrow from high school achievement (grade 12 marks) to educational attainment represents the effect that grade 12 marks have on post-secondary educational attainment. Colleges and universities set specific admission standards and these standards are correlated with the status of the credentials these post-secondary institutions provide, so students with higher grades have an increased array of PSE options available to them. Moreover, it could be argued that youth who have higher PSE aspirations, particularly university attendance, will be more focused during their high school years and achieve higher levels of high school educational success, measured through high school grades. Recall that family SES, demographics, and geography are modeled as contributing factors for high school achievement. Family resources, particularly parental education, can have a large effect on how well a young person performs within the high school system. Earlier in this chapter, cultural capital was explored as a concept reflecting educationally-relevant tastes and dispositions, or more broadly, as "an instrument for the appropriation of symbolic wealth" (Bourdieu, 1971, p. 488). Given this definition, in a home where educationally-relevant cultural capital is limited, youth will be less likely to focus and succeed in the education system. Furthermore, even if youth in such families aspire to do well, they may encounter

difficulties translating their aspirations into reality. This discussion highlights the second major research question of this dissertation, do higher educational aspirations translate into higher levels of post-secondary attainment?

Habitus

As already noted several times, in Figure 2.1 the circle surrounding the endogenous variables in the analytic model represents Bourdieu's concept of habitus. As habitus is shaped by family socio-economic status, social-demographics, and geography and, in turn, affects a young person's familial and social experiences, it is represented by a larger circle. While habitus, a complex and multi-dimensional theoretical concept, is not directly operationalized in this study, the data analyses in subsequent chapters, guided by the analytic model in Figure 2.1, are nevertheless focusing directly on, and will be interpreted through, this concept.

Research Questions

Chapter 3 discusses the data set analyzed in this dissertation, along with the operationalization of key variables. In Chapter 4, the following research questions will be addressed:

1. Are educational aspirations meaningful? That is to say, are they simply ephemeral and fleeting attitudes, or are they consistent across time within individuals and do they vary in consistent ways within and between groups of youth in a manner that can help us understand patterns of social inequality?

2. Does post-secondary educational participation systematically vary in predictable ways among youth, particularly with respect to university participation?

3. Do educational aspirations at age 15 inform patterns of educational participation at age 19?

The analysis continues in Chapter 5 which asks the following questions:

1. Do family socio-economic, individual demographic, and geographic factors, along with parents' aspirations for their children, have direct or indirect (via aspirations at age 15) effects on educational participation at age 19?

2. Do the educational aspirations young people have at age 15 have a direct effect on educational participation at age 19, over and above the indirect effects they have via grade 12 grades, which were shown in Chapter 4 to affect post-secondary educational participation?

3. Are young people who have acquired more post-secondary education by age 19 more likely to have maintained their educational aspirations by age 19?

Another level of analysis is introduced in Chapter 6, where I attempt to answer two additional research questions:

1. What effect, if any, does high school quality have on the educational attainment process? In other words, controlling on the socio-economic, attitudinal, and demographic variables already examined in Chapters 4 and 5, are schools with different characteristics and different levels of resources a site where the reproduction of social inequality across generations can be ameliorated?

2. Does school quality affect the relationships between socio-economic, attitudinal, and demographic variables and educational aspirations at age 15, as well as educational participation at age 19?

Chapter 3: Research Methods and Statistical Procedures

This chapter provides information about how the data used in this study were collected and about the statistical analyses employed. It begins with a discussion of the project design, the survey content, and the sampling procedures of the Youth in Transition Survey. This is followed by a description of the variables used in this study and the statistical models and analysis strategies undertaken.

Overview of the Youth in Transition Survey Project Design and Data Base

Canada's ongoing policy interest in youth and education, with particular focus on the costs and benefits of education for both individuals and society and the long-term inequalities that arise from unequal levels of educational attainment among youth, highlighted a need for a longitudinal survey of young Canadians. The Youth in Transition Survey (YITS) was developed in partnership by Human Resources and Skills Development Canada (HRSDC) and Statistics Canada, in consultation with provincial and territorial ministries and departments of labour and education, to address this need and to focus on the measurement of major transitions in young people's lives, including educational and labour market experiences (Statistics Canada, 2005, p. 7).

The YITS was designed to allow researchers to examine the school-work transitions of youth and the factors which may discourage the successfulness of said transitions. Central to accomplishing this goal was the creation of a longitudinal dataset that would allow an in-depth analysis of young peoples' experiences within secondary schooling, the formation of educational and

occupational aspirations, and the effect of family background and schools on educational outcomes (Statistics Canada, 2000). To accomplish this, a survey that began with an exploration of early high school experiences, accompanied by a series of follow-up surveys that had the potential to explore such issues as high school retention, accessibility of post-secondary education, post-secondary retention, was required.

Age 15 was selected as the starting point for Cycle One data collection as many youth within this age group are beginning their transition into high school, are beginning to form educational and occupational aspirations, and are beginning to establish independence from their parents. These realities, in conjunction with the fact that compulsory education ends at age 16 in Canada, means that age 15 is the best choice for capturing the largest proportion of youth in their early high school years (Statistics Canada, 2000, p.12). Using age 15 as a starting point for the YITS also allowed the data to be integrated with the Programme for International Student Assessment (PISA), a project of the Organisation for Economic Co-operation and Development (OECD) [5]. The focus of the PISA project was to undertake an international assessment of the skills and knowledge of 15-year-olds in the areas of reading, science and mathematics (Statistics Canada, 2005).

While the young people themselves were the focus of the Youth in Transition Survey, questionnaires were also administered to both the parents and

[5] More information on PISA can be found at www.pisa.oecd.org

school principals of participating youth during Cycle One. The parent survey was used to collect information about the parents and their household, including family socio-economic status and early childhood experiences, such as parental divorce or repeating a grade in school. The school questionnaire included questions about the type of school attended and the types of academic programs that are offered, such as French Immersion (Statistics Canada, 2005, p. 9).

The YITS was chosen for this study over other large-scale Canadian datasets with an education focus, such as the National Longitudinal Survey of Children and Youth or the Postsecondary Student Information System, because of its structure and focus. The YITS focuses on the educational and career pathways of youth, with particular emphasis on the variety and timing of key transitions which shape these pathways. Major life transitions, as defined by Schlossberg (1989), provide a new role and involve four key changes: a new set of responsibilities, a change in relationships with others, a change in daily routine, and an adjustment of assumptions about oneself or the world (Statistics Canada, 2000, p.19). The key school-work transitions measured in the YITS, which are central to this dissertation, include completing high school, entering post-secondary education, and dropping out of either secondary or post-secondary schooling. Additionally, the YITS includes measures of the following factors which are crucial for obtaining answers to my primary research questions: socio-demographic information; school characteristics; academic achievement; school engagement; parental socio-economic status; social and cultural capital; family history; and educational aspirations.

The YITS is a longitudinal dataset which, to date, consists of five cycles, collected every two years starting in the year 2000 when the youth were 15 years old.[6] The current research uses data from the first three cycles, collected in 2000, 2002, and 2004, to explore links between family background, youth aspirations, school setting, and initial post-secondary participation. The decision to focus on only the first three cycles rather than all five cycles was based, in part, on the timing of Statistics Canada data releases relative to the stage I was at in my doctoral studies[7], but also because of the substantive focus of my dissertation. This study is an exploration of the relationship between educational aspirations at age 15 years and *initial* post-secondary educational enrolment. The inclusion of a fourth cycle of data would not substantially advance this focus as the youth would only be 21 years of age and very few would have finished university. Including cycle 5 data, when sample members were 23, would have shifted the focus to the attainment of post-secondary credentials, an equally important and interesting topic, but not the topic I chose for my dissertation.

During these three cycles, survey content changed to reflect movement of youth into a new stage of the life course. In Cycle One, when the young people

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[6] In addition to the current five cycles of the YITS 15 year-old cohort, the Youth in Transition Survey project also surveyed an older cohort of youth who were 18 to 20 years of age (born between 1979 and 1981).

[7] I defended my dissertation proposal (a plan to analyze cycle 1 to 3) in April of 2008, after already becoming familiar with the complex YITS data base. Cycle 4 became available soon after, but writing a new Research Data Centre (RDC) proposal and waiting for Statistics Canada approval would have set me back a number of additional months. Cycle 5 data became available in the University of Alberta RDC in spring of 2010, about the time I was completing the first draft of my dissertation.

were 15 years of age, the YITS focused on factors which might influence future transitions, such as academic achievement, school experiences, early labour market participation, the influence of peers, educational and labour market aspirations, and family background and parental aspirations and expectations for their child (Statistics Canada, 2000, p. 21).

In Cycles Two and Three, when the youth were 17 and 19 years of age respectively, the focus shifted to include questions about educational and occupational expectations, the linkages between education and career choice, participation in programs which focus on work preparation and preparation for post-secondary education, and barriers to participation in post-secondary education. This shift in focus reflects life course transition changes which can occur during these crucial years (ages 15 to 19), including the possibility of having left secondary schooling, entering the labour market full-time, or having progressed into post-secondary education. In addition, for many youth of this age, establishing independence from their parents is a major focus which may include leaving the parental home and establishing themselves as emerging adults.

Sampling and Data Collection Methods

The target population for the YITS 15 year-old cohort included youth born in 1984 who were attending a Canadian school at the time the survey was administered. Home-schooled youth were excluded. A two-staged sampling design was used with the first stage focusing on individual schools (a total of 1,200 were selected; information on 1,117 is available in the data set). The second stage of the sampling design focused on individual students within the

selected schools. Schools were selected from the ten Canadian provinces, with the exception of schools located on First Nations Reserves[8] and various other types of schools where administration of the survey would not be feasible, such as schools for children with severe learning disabilities, and schools for the blind and deaf. Thus, as discussed in more detail below, while the population surveyed included a very large majority of Canadian 15 year-olds, some of the most significantly disadvantaged were excluded from the sampling frame.

Given that one of the objectives of the YITS was to examine the role schools play in determining particular student outcomes, the measurement of school effects had major implications for the survey design. Schools were first targeted as the primary sampling unit and then classrooms within those schools were selected as a means for generating a representative sample of youth. As data collection commenced in the spring of 2000, Ministries and Departments of Education were asked to provide an enrolment list from the fall term to capture those youth who may have dropped out during the current school year. Since dropping out of school is often more of a process than an event, using school records from the fall as the basis for the survey's sampling frame was hoped to reduce potential bias in the same (Statistics Canada, 2000, p.14). However, in the majority of provinces, information was only available on enrolment for the previous school year. In addition, two provinces did not have information on

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[8] While this data collected information from First Nations students who live off-reserve, the exclusion of students living on-reserve represents a significant deficiency in the data. Students living on reserve represent some of Canada's most vulnerable youth who experience educational disadvantages that differ from those living off-reserve.

enrolment by age; therefore, information by grade was used as a proxy for age for such cases. Within each school, across classrooms, a minimum of thirty-five students were randomly selected to participate; all students aged 15 were selected in those schools with fewer than thirty-five students within that age group. Nova Scotia, New Brunswick, Quebec, Ontario, and Manitoba required separate PISA (Programme for International Student Assessment) assessments according to whether English or French was the language of instruction in the school. This meant that in some provinces where there was a small population of 15-year old students, or small populations of students in a particular language group, samples of more than thirty-five students per school were necessary.

Students who were selected to participate completed the YITS student questionnaire, as well as the PISA assessment and PISA student questionnaire during class time. Following the completion of the student questionnaires, parents of selected students were asked to participate in the YITS parent interview. This survey was completed by telephone. School principals were also asked to complete the PISA School Administrator's Questionnaire.

In Cycle Two, collected in 2002 and Cycle Three, collected in 2004, attempts were made by telephone to contact the original respondents from the preceding cycle. To facilitate this process, the sample file included the respondent's name, address and telephone number, as well as additional addresses and phone numbers where possible (Statistics Canada, 2006, p. 27). This provided the interviewer with potential leads to help contact the original respondent. If the respondent could not be contacted, the interview could not take

place as proxy interviews were not permitted. The following table shows the sample size by province and by cycle.[9]

Table 3.1: YITS sample allocation by province, by survey cycle

Province	Sample Size at Cycle 1	Sample Size at Cycle 2	Sample Size at Cycle 3
Newfoundland and Labrador	2,555	2,281	2,161
Prince Edward Island	1,844	1,632	1,482
Nova Scotia	3,320	2,930	2,612
New Brunswick	3,301	2,963	2,518
Quebec	5,024	4,497	4,124
Ontario	5,557	4,290	3,859
Manitoba	2,955	2,599	2,428
Saskatchewan	2,971	2,716	2,526
Alberta	3,137	2,742	2,487
British Columbia	3,611	3,037	2,648
All Provinces	**34,275**	**29,687**	**26,845**

Source: Statistics Canada, Youth in Transition - 19 year-olds User Guide - Cycle 3, p. 61

The sample sizes in Table 3.1 include respondents who participated in either the YITS study, the PISA study, or both studies. For this research, those youth who did not participate in both studies (4,945 cases affected), whose parents did not participate (2,769 cases affected), who were not in grade 10 during the first cycle (6,268 cases affected), or who had conflicting information about their sex across the three cycles (102 cases affected) were not included in the analyses. Hence, the final sample size was 16,842.

[9] Note that some respondents may have moved to another province or outside of Canada between cycles. Table 3.1 shows the sample distribution based on province of residence at the time of data collection. In addition, as the target population during Cycle One was individuals living in Canada, respondents who moved out-of-country between cycles remained eligible for future cycles. There were few such cases (Statistics Canada, 2006, p. 61).

Potential Study Limitations

This section outlines issues concerning data quality, in terms of sampling error and non-response, as well as addressing issues of sample representativeness.

Sampling Error

As previously stated, the sample derived in this survey comes first from schools, and then secondly, from students. Due to the inherent error that arises from all survey data, from over- and under-sampling, as well as from attrition across waves of data collection, the Statistics Canada research team assigned to the YITS program computed cycle weights which were used throughout this analysis. These weights allowed for the use of various tests of significance to evaluate whether the results of this study could be generalized to Canadian youth within the same age cohort. In this study, results were evaluated at the $p<.001$ level of statistical significance unless otherwise noted.

Non-Sampling Error

Errors not associated with the sampling frame are inherent to every survey; however, measures were taken with the YITS to minimize such errors. Examples of non-sampling errors include such things as interviewer or data entry errors. Quality assurance measures were implemented at each stage of the data collection process and included the use of highly skilled interviewers, extensive interviewer training, and observation to detect problems of questionnaire design or misunderstanding questionnaire instructions (Statistics Canada, 2006, p. 66).

The largest source of non-sampling error for the YITS data was associated with non-response. The extent of non-response encompasses both failure to

answer particular questions or total non-response due to the interviewer being unable to contact the respondent or the respondent declining to participate. In general, partial non-response was not a problem with the exception of a few questions (Statistics Canada, 2006, p. 66). However, it should be noted that questions which were prone to non-response did not include income variables or derived variables computed from more than one variable. The current research was not adversely affected by non-response.[10] Total overall non-response was addressed by adjusting the weight of responding individuals to compensate for those which did not respond.

Table 3.2 presents the response rates by province. These rates are not weighted and are based on the initial YITS sample count. Due to sampling which employed a funnelling approach where only those who responded to the previous cycle were eligible to participate, the final sample size for cycle three was 26,845 (Statistics Canada, 2006, p. 67). Respondent counts include those individuals who were interviewed, persons who were contacted but were confirmed to be outside the YITS target population based on year of birth, and those who were confirmed to be deceased. Individuals in the last two groups were included in the respondent counts and designated as 'special status' because all relevant information, such as their inability to participate in the study based on valid information, was provided.

[10] Information on non-response for specific variables can be found within the corresponding codebook for each cycle.

Table 3.2: Provincial response rates - cycles 1 through 3

Province	Response Rate at Cycle 1 (%)	Response Rate at Cycle 2 (%)	Response Rate at Cycle 3 (%)	Longitudinal Response Rate (%)
Newfoundland and Labrador	89.7	94.8	83.6	71.1
Prince Edward Island	88.5	91.1	84.6	68.2
Nova Scotia	88.3	89.2	83.7	65.9
New Brunswick	89.8	85.0	83.9	64.1
Quebec	89.5	91.8	84.1	69.1
Ontario	78.2	90.0	84.3	59.3
Manitoba	88.0	93.5	82.2	67.6
Saskatchewan	91.4	93.3	90.6	77.2
Alberta	87.4	90.8	88.7	70.4
British Columbia	84.1	87.3	77.4	56.8
All Provinces	**86.6**	**90.5**	**84.3**	**66.1**

Source: Youth in Transition - 19 year-olds User Guide - Cycle 3, p. 67

Sample Representativeness

Despite careful attention given to collecting the YITS data through random sampling of schools and students, the final YITS sample was not fully representative of the Canadian student population. To account for this, survey weights were incorporated into the analysis so results would be representative of the population of students who were attending school in the year 2000. The weights did not correct for the omission of on-reserve First Nations students and those in other specialized schools, such as schools for the blind, as these schools were not included in the original sampling frame. The initial weight for each student was calculated based on the probability of selection of schools in the sample and the probability of a student being selected within each school. This weight was then adjusted a total of three times to account for various forms of

non-response, school non-response, student non-response, and Ontario non-consent form adjustment (Statistics Canada, 2005, p. 61).[11] An additional three adjustments were made in order to obtain the final parent weights (ibid, p. 61).

School, student, and parent non-response adjustment

As schools which declined to participate were not replaced by another school and were generally not typical of those schools which did participate, it was necessary to adjust for school-level non-response. This was accomplished by grouping schools into comparable categories by using measures of stratification, such as whether the school was a public or private institution or was in a rural or urban community; as such measures have been shown to affect student outcomes (Statistics Canada, 2005, p. 61). Then, within each grouping, weights were calculated to compensate for the missing schools. At the student level, adjustments were made within schools for those who were eligible but decided not to participate. In most cases, student non-response was corrected by using students from the same school (ibid, p. 61). The non-response among parents was approximately 10%, with family structure, index of wealth, and the reading ability of the student all found to significantly impact the likelihood of the parent to

[11] The various forms of non-response included school non-response, as schools which declined to participate were not replaced by another school. Student non-response came in the form of those who were eligible to participate but declined to do so. In most cases, such students were represented by students from the same school. The third form of non-response came from students in Ontario. These students were required to provide a signed parental consent form permitting their data to be shared. As a result, data collected from students who did not provide a signed consent form could not be used. Exploratory analysis, conducted by the Statistics Canada research team, revealed that there were differences between students who provided signed consent forms compared to those who did not. As such, a separate adjustment was made in the weighting process. Affected variables included: type of school (public/private), scores in PISA skills assessment, parents' participation in the parent survey and family structure (Statistics Canada, 2005, p. 61).

participate in the survey (Statistics Canada, 2005, p.62). These measures were then used to calculate the weight adjustment for parental non-response.

As this study uses data from the first three waves of the Youth in Transition Survey, Cycle Three weights, adjusting for non-response that occurred after cycle 2, were employed. To account for respondents who participated in Cycle Two but did not participate in Cycle Three, the Cycle Two weights were proportionally increased so that the sum of their adjusted weights would equal the sum of the Cycle Two weights (Statistics Canada, 2006, p.75). Although the response rate for Cycle Three was high (see Table 3.2 above), analysis of non-response patterns undertaken by Statistics Canada revealed that non-response adjustment should focus on certain variables, specifically, province, language, reading scale at cycle 1, overall marks at Cycle One, family structure, and a dichotomous variable identifying acceptance by the parents to share their data at Cycle One (ibid, p. 75). Although there was no parent questionnaire in Cycle Three, a parent weight was derived to allow the parent data collected in Cycle One to be combined with the Cycle Three data. A subset of the Cycle Three student sample containing only those records where the parents participated in the Cycle One questionnaire was created. This subset contained 24,397 respondents. This dataset was weighted using the same approach used for the full sample weights (Statistics Canada, 2006, p.75).

The final weight for the Cycle Three contains respondents who participated at Cycle Three and whose parents participated at Cycle One (Statistics Canada, 2006, p.76). Additionally, those students who were coded

inconsistently on the sex variable across the three waves of data were also dropped from the final analysis. This final weight was then translated into a normalized weight to deflate the dataset back down to the final number of respondents rather than the total population of 15-year old Canadian youth attending grade 10 in the year 2000. This was necessary since, if the population N was used for statistical analyses rather than the sample N, virtually all relationships would be statistically significant, no matter how small they might be. The normalized weight was calculated using the following formula:

$$\text{Normalized Weight} = \frac{\text{Cycle Three weight}}{(\text{Population N} \div \text{sample N})}$$

Differential Age of Respondents

As previously stated, the sample for the current study has been limited to exclude those youth whose parents did not respond to the parent questionnaire, and who were mismatched in their response to the sex variable (i.e., responded inconsistently between waves of data collection), and to only include youth who were 15 years old and in grade 10 when Cycle One data were collected. By including only those youth who were in grade 10 in the first wave of the study, I was able to avoid some of the potential problems associated with achievement bias. Because of the month in which they were born or because of provincial policies regarding when a young person can enter the school system, some youth might have an advantage or disadvantage because they are either older or younger than their peers. By focusing only on those who were in grade ten during the first

wave of data collection, my goal was to create an equal starting point in which to evaluate subsequent transitions.

Exclusion of Aboriginal Youth

Another potential limitation of the YITS is the exclusion of particular groups of research subjects. In particular, data collection was limited to schools where questionnaire dissemination was feasible, therefore excluding schools for the blind and disabled, as well as those youth who were home schooled. Furthermore, schools in the northern territories were also excluded in the sampling frame. In addition, schools on Indian Reserves were not surveyed, thereby excluding Canada's most vulnerable youth. Aboriginal youth under the age of 25 represent more than half of today's Canada's Aboriginal population (Townsend &Wernick, 2008, p.4). The reality of this demographic shift means that in upcoming years, these young people will come to influence the social fabric of Canada's cultural, political, and economic landscape in a very substantial way. The median age among Aboriginal Canadians was 24.5 years, compared to 37.2 for the Canadian population in general. By 2026, it is projected that the median age of the Aboriginal population will be 31.0 years, compared to 43.3 years for the Canadian population in general (Steffler, 2008, p.15). Therefore, it becomes increasingly important to understand current patterns of educational participation among First Nations youth and the various educational pathways they follow between adolescence and early adulthood when decisions to graduate high school and possibly pursue post-secondary studies either do or do not translate into a reality.

As of 2001, there was still a substantial divide between the registered Aboriginal population and other Canadians with respect to educational attainment. This is particularly true among 20 to 24 year olds who hold a high school diploma or higher. As seen in Table 3.3, approximately 50% of registered Aboriginals hold at least a high school diploma compared to 84% of all other Canadians. This represents an almost 35% gap between Aboriginal and non-Aboriginal groups. With quantitative differences such as these, one can clearly see the differences that exist between these two groups with respect to educational participation and attainment.

Table 3.3: Educational attainment, Registered Indians and other Canadian youth (15-29), 1981 and 2001

	1981	2001
High School Certificate or higher: Age 20-24		
Registered Indians	34.5	50.5
Other Canadians	69.5	84.4
Gap	35	33.9

Source: Hope or Heartbreak: Aboriginal Youth and Canada's Future (March 2008), *Horizons*. Vol.10, No.1, p.28.

Similar trends of educational attainment were observed among those First Nations and Registered Indians who live on or off reserves. For those who live on a reserve, regardless of whether they are First Nations or Registered Indians, educational attainment levels are lower than among those who live off reserve. In particular, as observed in Table 3.4, 50% of those living on reserve have less than a high school diploma compared to 30% of those who live off reserve. On the opposite end of the spectrum, those individuals who live off-reserve are more likely than those living on reserve to have a university degree (5% difference).

However, among both on and off reserve populations, less than 10% have a university degree compared to 23% of the overall Canadian population. As well, among the general Canadian population, the frequency of those who obtained less than a high school diploma is significantly lower than the on and off reserve populations (15% compared to 50% and 31% respectively). Findings such as these highlight the significant differences that exist between Canada's Aboriginal populations compared to the Canadian population at large.

Table 3.4: Proportion of the First Nations people and Registered Indians aged 25 to 64 living on and off reserve by level of educational attainment, Canada, 2006

	< high school	High school	Trades certifi-cates	College diploma	University below bachelor	Univer-sity degree
First Nations/ Registered Indians			%			
First Nations people[1] living on reserve	50	15	13	14	4	4
First Nations people[1] living off reserve	30	24	14	20	4	9
Registered Indians living[2] on reserve	50	15	13	14	4	4
Registered Indians living[2] off reserve	31	23	13	19	4	9
Canadian Population as a whole	**15**	**24**	**12**	**20**	**5**	**23**

Notes:

1. Includes person who reported a North American Indian Identity only.
2. Includes persons who reported being Registered or Treaty Indians as defined by the *Indian Act* of Canada, regardless of their Aboriginal Identity.

Source: Statistics Canada, Aboriginal Peoples in Canada in 2006: Inuit, Metis, and First Nations, 2006 Census Catalogue no. 97-558-XIE

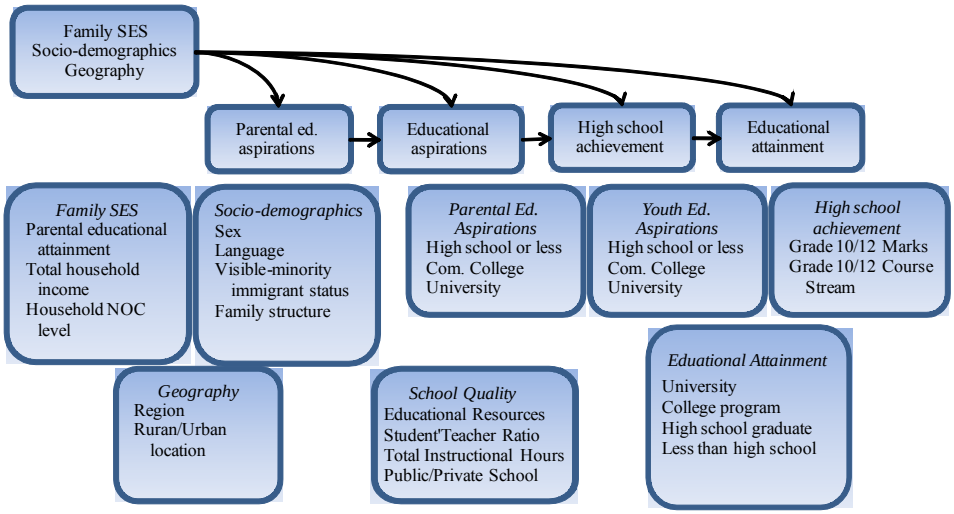
Within YITS, off-reserve Aboriginal youth are not categorized as members of visible minority groups; instead, they have been included in the

'Caucasian' category on all measures of visible minority status. But as the above data demonstrate, on many measures of educational attainment and participation Aboriginal youth are not comparable to their Caucasian counterparts. Nevertheless, Aboriginal youth living off reserve are not as severely disadvantaged as their on-reserve counterparts, thereby minimizing the negative impact of Statistics Canada having not maintained an "Aboriginal" indicator within the YITS database.

Operationalizing Variables

The following section specifies which questionnaire items will be used to measure the concepts discussed in Chapter 2. Figure 3.1 identifies both the concepts and the operationalized variables for this study.

Figure 3.1: The conceptual model with indicators



Exogenous Variables

As outlined below, the exogenous variables used in this study are standard demographic measures employed in educational status attainment research.

Family Socio-economic Status

Socio-economic status was initially measured in this study using three indicators, parental education, household income, and occupational classification. All three variables were calculated at the household level, thus reflecting levels of various types of capital to which the youth in this study were exposed on a daily basis as they were growing up.

Parental Educational Attainment

Parental educational attainment was operationalized by computing a single variable that measured the highest level of education ever completed by either parent, as reported by the "person most knowledgeable" (PMK). The final computed variable distinguished those households where neither parent had completed a university degree, from those where only one parent had completed a university degree, and those where both parents completed a university degree. Within this variable, there was a fair amount of missing information for both the responding parent and for the spouse/partner of the responding parent. Specifically, in the original data, 662 responding parents indicated they did not know, refused to answer, or did not state their highest level of education. An additional 328 cases were missing for the spouse/partner of the responding parent due to do not know, refused to answer, or not stated. The final distribution is

presented in Table 3.5 which shows that just under one-third of the youth in this study came from families where at least one parent had a university degree.

Table 3.5: Highest level of parental educational attainment within the household

Education levels	N	%
No degrees	9015	68.1
One degree	2480	18.7
Two degrees	1738	13.1
Total	13232	100.0

Total household income

The YITS database includes a combined total household income measure as a derived variable, reflecting the total income of both the PMK and their spouse (if applicable). This variable was calculated by the Statistics Canada research team from responses to nine income-related questions collected during the parent interview. The final variable was a continuous variable ranging from no-income (or zero dollars) to over $90,000. For the current analysis, this variable was collapsed into 6 discrete categories. The final distribution is presented in Table 3.6. It shows that 12.3% of youth come from families where the annual household income is less than $30,000 and over 20% come from families where the household income is $90,000 or more. Approximately less than half of the YITS respondents come from households where the annual income is less than $60,000.

Table 3.6: Total household income

Income categories	N	%
>$30,000	2068	12.3
$30K - $44,999	2409	14.3
$45K - $59,999	2861	17.0
$60K - $74,999"	2876	17.1
$75K - $89,999	3064	18.2
$90K +	3565	21.2
Total	16842	100.0

Family Structure

The YITS database includes a question on the family structure in which the youth is currently residing. The original Statistics Canada variable contained 23 categories. For the current analysis, this variable was collapsed into 4 discrete categories. The final distribution is presented in Table 3.7. It shows that the majority of youth reside in 'intact' families (these are dual-biological or dual-adoptive parent families). Only a small percentage (0.9%) lives in 'other' arrangements which include those youth living in foster homes.

Table 3.7: Family structure

	N	%
Intact	12301	73.2
Step-parent	1838	10.9
Lone-parent	2523	15.0
Other	147	.90
Total	16809	100.0

Household National Occupational Classification (NOC) Level

Using the 2001 National Occupational Classification (NOC) matrix (Human Resources Development Canada, 2001), the four-digit occupation codes accessible through the YITS data for both the PMK and their spouse were coded

into four skill-level categories (A through D), alongside management occupations, as defined by Human Resources Development Canada. The National Occupational Classification (NOC) is the nationally accepted taxonomy of occupations in the Canadian labour market. It is used to analyze information about occupations by identifying both skill type and skill levels, which is generally defined as the amount of education and training required to participate in a specific occupation. Skill Level A is defined as that which requires a university degree. Skill Level B generally requires some form of post-secondary education (two to three years) or apprenticeship training and may include occupations with supervisory or significant health and safety responsibilities. Those defined as Skill Level C require approximately one year of post-secondary education or up to two years of on-the-job training. Occupations that fall within Skill Level D require only short on-the-job training and have no formal educational requirements.

Within the original data, both Standard Occupational Classification (SOC) and North American Industry Classification (NAICS) were provided by Statistics Canada and these were used to determine the NOC coding. Given the wide range of skills and qualifications required for occupations in management, I undertook additional analysis to determine which skill level these respondents' occupations most resembled. It was decided that these respondents would be collapsed into the skill level category A. The final variable reflects the highest occupational skill level in the household (Table 3.8) and shows that approximately 57% of youth have at least one parent in a class A occupation or in management. Only

1.2% of youth have both parents working in a class D occupation, which is defined as an unskilled occupation.

Table 3.8 Household occupational level

	N	%
At least one A or Management	9570	57.2
At least one B	5243	31.4
At least one C	1701	10.2
Both parents D	205	1.2
Total	16719	100.0

Socio-demographic Variables

Sex

Sex of the respondent was coded as a dichotomous variable. As Table 3.9 highlights, a slightly higher proportion of the sample was male.

Table 3.9 Sex of respondent

	N	%
Female	8651	51.4
Male	8192	48.6
Total	16842	100.0

First Language of Youth

In the parent questionnaire, the PMK was asked to assess the youth's ability to conduct a conversation in one or more languages. The derived YITS variable contains the following seven categories:

01 English only
02 French only
03 Non-official language(s) only
04 English and French
05 English and non-official language
06 French and non-official language
07 English, French and non-official language

Using the province variable (outlined later in this chapter), the following language variable was created for this analysis. Almost three-quarters of the sample spoke English as their primary language (Table 3.10).

Table 3.10 Language spoken well enough to conduct a conversation

	N	%
English	12044	71.5
French – Quebec	2266	13.5
French	493	2.9
Other	2039	12.1
Total	16842	100.0

Visible Minority-Immigrant Status

For the final socio-demographic measure used in this study, two variables from the original Cycle One data were combined. The first variable, taken from the parent data, measured whether the youth is a member of a visible minority group. This derived variable, created by the Statistics Canada research team, applies the concept of visible minority to persons who are identified according to the Employment Equity Act as being non-Caucasian in race or non-white in colour. As specified earlier, Aboriginal persons were not considered to be members of visible minority groups. The second variable was also obtained from the parent data and contains responses to three questions, "Of what countries is this person (child, respondent, spouse) a citizen?" The responses were coded as binary variables where the respondent would answer yes or no.

Using combinations of these four variables, visible minority-immigrant status measured whether the youth was born outside Canada and was also a member of a visible minority group. The conceptualization of this variable

follows the approach used by Krahn and Taylor (2005). As Table 3.11 reveals, one in eight (12.3%) of respondents were visible minority immigrant youth.

Table 3.11 Visible minority immigrant status

	N	%
Visible-minority immigrant	2032	12.3
All else	14511	87.7
Total	16543	100.0

Geography

Province of Residence

Province of residence was recoded into a single six-category variable which measured region of residence rather than province since sample sizes for individual Atlantic Provinces were relatively low. Combining these four provinces can be justified because they have maintained relatively similar education systems in terms of programming and resources. Similarly, Manitoba and Saskatchewan were combined. Table 3.12 displays the distribution of YITS respondents across the six regions.

Table 3.12 Region of residence

	N	%
Atlantic	1356	8.0
Quebec	2697	16.0
Ontario	7190	42.7
Manitoba/Saskatchewan	1332	7.9
Alberta	1788	10.6
British Columbia	2478	14.7
Total	16842	100.0

Rural or Urban Community

The variable used in this study to measure whether or not the youth was from a rural or urban community was a derived variable computed by the Statistics Canada research team and based on the Statistical Area Classification (SATYPEP) from the 1996 Census.[12] Three-quarters of the YITS respondents (76.1%) were classified as urban youth.

Table 3.13 Urban/rural residence

	N	%
Urban	12580	76.1
Rural	3961	23.9
Total	16541	100.0

School Quality

Measures of school quality were taken from responses to the school questionnaire administered to school principals or designates. The questionnaire sought to gain information regarding the school's resources, the number of teachers in the school and their qualifications, characteristics of the student body, the relationship the school had with its students, aspects of the administrative structure, and some of the pedagogical practices of the school. Since school-level data are measured at the aggregate level, the same scores for school-level variables were assigned to each individual student within each particular school. As will be discussed in more detail in Chapter 6, the specific measures of school

[12] The variable is derived from the PMK's address as of date of interview.

quality that were chosen for this study are those which could arguably be incorporated into educational policies in a timely and cost-effective way.

Index of the quality of the schools' educational resources

This index, computed by the Statistics Canada research team, was derived from the principal's report on the extent to which learning by the students (at age 15) was hindered by a lack of instructional material, not enough computers for instruction, lack of instructional materials in the library, lack of multi-media resources for instruction, inadequate science laboratory equipment, and, inadequate facilities for the fine arts. This index was inverted so that low values indicate a low quality of educational resources. Values ranged from -1.900 to 3.220 with a total of 1,096 schools included in the final calculation.[13]

Student-Teaching Staff Ratio

This index, computed by the Statistics Canada Research team, was derived using the school size variable (measured as the number of students attending the school) divided by the total number of teachers, which was calculated using both full-time and part-time instructors. To differentiate between full-time and part-time teachers in the total number of instructors within a given school, part-time teachers were calculated as 0.5 and full-time teachers as 1.0. A higher value on

[13] Total sample data was taken from the School Codebook provided by Statistics Canada. Therefore, the total sample size may differ from the final sub-sample included in my analysis, however, the differences, if any, are marginal.

this variable indicates more students per teacher. Values ranged from 0.5800 to 47.000 with a total of 958 schools included in the final calculation.[14]

Total Hours of Schooling per Year

This index, calculated by the Statistics Canada research team, was derived from the information which principals provided on: the number of weeks in the school year for which the school operates; the number of class periods in the school week; and the number of teaching minutes in a single class period. The final value consists of the total number of 60-minute hours of schooling per year. It was based on the product of the three factors noted above, divided by sixty. Values ranged from 100.000 to 1625.000 with a total of 1,023 schools included in the final calculation.[15]

Public or Private School

The dichotomous variable distinguishes whether the school attended by the youth was a public or a private institution. A public school is defined as one that is managed directly or indirectly by a public education authority, government agency, or governing board appointed by government or elected by public franchise. A private school is defined as one which is managed directly or indirectly by a non-government organization, such as a church, trade union, business, other private institution. At the school-level, there were 1,037 schools identified as a public school (94%) and 64 identified as a private school (6%).

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[14] Information on non-response for specific variables can be found within the corresponding codebook for each cycle.

[15] Information on non-response for specific variables can be found within the corresponding codebook for each cycle.

Outcome Variables

The outcome variables used in this analysis, as outlined in Figure 3.1, include parental educational aspirations, educational aspirations of the youth, high school achievement, and post-secondary educational participation by age 19. The variables are described below.

Parental Educational Expectations

Parental educational expectations are measured using a 3-category variable. The PMK was asked to indicate the highest level of education they hoped their child would get. The values ranged from less than a high school diploma to a university degree. The final variable used in this analysis was collapsed into three categories: (1) high school diploma; (2) community college/technical school; and (3) one or more university degrees. As can be seen in Table 3.14, almost three-quarters of parents wanted their children to get a university degree.

Table 3.14: Parental educational expectations

Levels of educational aspirations	N	%
High school or less	331	2.1
Community college/technical school	4095	26.3
University	11151	71.6
Total	15576	100.0

Youth's Educational Aspirations

This variable measures how much education the young person would like to get. During each cycle of the longitudinal study, all respondents were asked, "What is the highest level of education you would like to get?" Respondents were

asked to select one of the following response categories for this forced choice question:

1 Less than a high school diploma
2 High school diploma or graduation equivalency
3 Trade or vocational certificate or diploma or an apprenticeship
4 College or CEGEP (Québec) certificate or diploma
5 One university degree
6 More than one university degree

For Cycles Two and Three, this variable was expanded into an 11-category variable to include more detailed educational options. Again, this was a forced-choice question where respondents were asked to select one of the following categories:

1 Less than a high school diploma
2 High school diploma or graduation equivalency
3 Some post-secondary (no certificate, diploma or degree)
4 Private business school or commercial school diploma or certificate
5 College, CEGEP, trade/vocational certificate or diploma or registered apprenticeship
6 University bachelor's degree (eg. BA, BSc,B.Ed.)
7 University first professional degree (eg. medicine, dentistry, veterinary medicine, law, optometry, divinity)
8 University Master's degree
9 Ph.D. (University earned doctorate)
10 Other - Specify
11 Undecided

To maintain consistency across the three cycles of the study, within this study youth's educational aspirations were coded into the following three categories for each time point:

1 High school diploma, graduation equivalency or less
2 College, CEGEP, trade/vocational certificate/diploma, or apprenticeship
3 One or more university degrees

The decision to use only three categories was based, in part, on the frequency of responses, but also to reflect both educational and labour market realities. Young people who have a high school education or less have been shown to experience difficulties competing in the labour market. On the other hand, among those who decide to make the transition from high school into post-secondary education, the two basic choices available across Canada are community colleges/technical institutes or university. These two types of institutions vary in the kind of education and programs they offer and also differ in the types of students who traditionally attend. Specifically, community colleges have historically been predominantly attended by working-class youth, whereas universities have more often been attended by middle- and upper-class youth (Davies and Guppy, 2006, p. 75-76).

The decision to include those who aspire to two or more university degrees with those who want only one degree is based on the assumption that the theoretical difference between the two responses is negligible. Both responses reflect a university-oriented habitus. Furthermore, if a young person is able to obtain one university degree, the option to pursue additional degrees is present. As can be seen in Table 3.15, a very large majority of youth indicate wanting to attend university. This proportion remains quite consistent between the ages of 15 to 19. The final distribution, by cycle of data collection, is as follows:

Table 3.15: Youth's educational aspirations - cycles 1 through 3, ages 15, 17, and 19

Aspired levels of education	Age 15		Age 17		Age 19	
	N	%	N	%	N	%
High school diploma, graduation equivalency or less	855	5.7	708	4.5	652	4.3
College, CEGEP, trade/vocational certificate or diploma or apprenticeship	3391	22.5	4052	25.9	4129	27.0
One or more university degrees	10855	71.9	10879	69.6	10541	68.8
Total	15101	100%	15640	100%	15323	100%

High School Achievement/Participation

Measures of high school achievement and participation were obtained from the first and second cycles of the youth surveys when the majority of respondents were in grades 10 and 12.[16]

High School Grades

Obtained from both the first and second waves of data, high school grades are a self-reported measure where respondents were asked, "In your last year of high school, (junior high or elementary school), what was your overall grade average, as a percentage?" This variable was re-coded from a seven-category variable into a binary variable for this study. Additional analysis (not shown here) was undertaken to determine the effect of high school grades on both educational aspirations and educational participation. The largest differences were observed between those who achieved 69% or less and those earning 70% of

[16] While the reliability and, hence, validity of self-reported grades might be questioned, in theory, any over-, and possibly under-reporting of grades, should be randomly distributed across the sample.

higher. In fact, as can be seen in Table 3.16, over three-quarters of the students achieve grades 70% or higher in both grade 10 and again in grade 12. The distribution of students in each category is as follows:

Table 3.16: Grade 10 and grade 12 marks

	Grade 10 Marks		Grade 12 Marks	
	N	**%**	**N**	**%**
69% or less	3944	25.0	3518	21.4
70 to 100%	11823	75.0	12969	78.7
Total	15766	100.0	16487	100.0

Course Stream

In high school, students can begin to make choices regarding the types of courses they are interested in taking. The rationale behind offering different types of courses is to direct students with different academic abilities and interests into courses which will allow them to take advantage of their strengths. However, as observed in Chapter 2, more critical assessments of the education system would say that such streaming strategies help reproduce social inequalities. The different types of classes typically available to high school students can be classified into four basic categories: (1) No destination focus for grade level; (2) University preparatory; (3) College/work preparatory; and (4) Work preparatory.[17]

[17] University preparatory: Courses which are generally those with the greatest academic challenge, designed primarily for students planning entry into university, into certain programs and colleges and technical schools, or into colleges offering University Transfer programs. College/Work preparatory: Courses which are less academic and intended primarily for students planning entry into colleges, technical schools, trades or entry into the workplace. Educational experiences which are broadly based and appropriate for all students and which may lead to further studies beyond senior high school years (e.g., apprenticeship, college and university). Work preparatory: Basic level courses designed for preparation into the world of work. These courses provide a good

In this study, the variable used to operationalize course stream focuses on math and English (French for Quebec) classes as these are required courses for graduation and are most often prerequisites for university and college admission. Given that the focus of this dissertation is on the transition into PSE, this derived variable, calculated by the Statistics Canada research team, was collapsed into a dichotomous variable where youth were either taking courses with restricted PSE options (categories one and four) or had PSE options available to them (categories two and three), measured separately for both math and language courses. As can be seen in Table 3.17, almost equal proportions of students are participating in either restricted options or open-option math classes and approximately 65% of students are taking restricted option language classes. However, by grade 12, the majority of students are taking open-option courses. This suggests that the majority of students will be able to meet the admission standards of universities by grade 12. The percentage break-down is as follows:

Table 3.17: PSE options in math and language courses in grade 10

	Math Courses		Language Courses	
PSE Options	**Grade 10 (%)**	**Grade 12 (%)**	**Grade 10 (%)**	**Grade 12 (%)**
PSE options	**%**	**%**	**%**	**%**
Restricted options	54.5	32.9	62.4	34.5
Options open	45.5	67.1	37.6	65.6
Total %	100%	100%	100%	100%
Total	15714	16656	15847	16644

preparation for direct entry into employment and serve the needs of a student who may not participate in post-secondary education.

Educational Participation

To measure educational participation by age 19, two measures of educational attainment were combined to capture the highest level of education a young person had participated in by December 2003 (age 19, Cycle Three). The first variable focused on highest program completed (i.e. less than high school, high school, post-secondary institution) and the second broke down the final category of this variable into types of post-secondary programs. The final derived variable used in this research is as follows:

1 Those who did not graduate from high school
2 Those who have graduated from high school
3 Those who have participated in a college program
4 Those who have participated in a university bachelor's degree program or higher

The decision to use these four categories was made based on the same logic used when computing the measure for educational aspirations, with one important distinction; highest level of educational participation requires a more detailed measure to capture the various stages of educational transitions. By age 19, those youth who are still actively engaged in some form of educational program are not likely to have completed it. Therefore, it is important to evaluate the various levels of educational activity in which these youth may be involved. This may range from those who have discontinued their high school studies to those who have gone onto post-secondary studies, albeit community college or university. Table 3.18 provides a breakdown of the percentages of youth at the various stages of educational involvement. In this table we can see that compared

to the approximately 70% who indicated they wanted to attend university, only 37.6% indicated they had actually attended university by age 19.

Table 3.18: Educational participation, cycle 3, age 19 years

Education levels	%	N
Less than high school	8.1	1356
High school	26.5	4427
College	27.8	4639
University	37.6	6291
Total	100%	16713

Next Steps

The next chapter provides an exploratory, foundational analysis where frequency distributions and basic cross-tabulations will assess the merits of exploring the hypothesized link between educational aspirations and educational participation. Upon establishing variations in both educational aspirations and participation among the YITS participants, more advanced statistical techniques will be employed to begin to unravel the possible causal factors shaping both aspirations and enrolment patterns. In particular, Chapter 4 will present a series of logistic regression equations where both educational aspirations and educational participation are used as the dependent variables.

Chapter 4: Unlikely Plans or Decisive Decisions? Patterns of Educational Aspirations and Participation

Introduction

Returning to the theoretical model proposed in Chapter 2, this chapter will begin to explore the distribution and determinants of educational aspirations and educational participation among Canadian youth. The focus of this chapter, as suggested in the title, is to explore whether educational aspirations are unlikely plans or decisive decisions. To begin to answer this question, some basic questions must first be addressed, all of which stem from the general question asked in this dissertation, are educational aspirations meaningful?

Drawing on the theoretical model presented in Chapter 2, this chapter will begin to explore the basic relationship between family SES, individual socio-demographic characteristics, and geography, educational aspirations, and educational participation. While all aspects of the model presented in Figure 3.1 (see page 86), will be included in the analyses presented within this chapter, the primary focus is on establishing the nature of the basic relationship between educational aspirations at age 15 and educational participation at age 19. Specifically, this chapter will address the following research questions:

1. Are educational aspirations meaningful? That is to say, are they simply ephemeral and fleeting attitudes, or are they consistent across time within individuals and do they vary in consistent ways within and between groups of youth in a manner that can help us understand patterns of social inequality?

2. Does post-secondary educational participation vary in predictable ways among youth, particularly with respect to university participation?

3. Do educational aspirations at age 15 inform patterns of educational participation at age 19?

The analyses in this chapter will be conducted in three steps. The first will focus on the relationship between educational aspirations at age 15 and various types of predictor variables, such as family SES, individual socio-demographic characteristics, and geography. I will begin with a series of basic bivariate analyses, and then follow up with a multivariate logistic regression analysis with educational aspirations at age 15 as the dependent variable. The second step will employ a similar methodological approach; however, educational participation by age 19 will now be used as the dependent variable. The third step, again using a multivariate logistic regression analysis, will evaluate the relationship between educational aspirations and subsequent educational participation, controlling for a variety of factors, such as family SES, individual socio-demographic characteristics, and geography.

Post-secondary Educational Aspirations at Age 15

As presented in Table 4.1, the YITS participants, at the onset of their high school years, have very high educational aspirations with 72% aspiring to attain at least one university degree. An additional 23% report wanting to attend college, earn a trade/vocational certificate, or participate in an apprenticeship program. Only 6% indicate that they would be satisfied with obtaining a high school diploma or less. The ambitious educational aspirations observed among this group of 15-year old youth further supports the growing body of research which has demonstrated that North American youth today are aiming high (Christofides,

Hoy, Li, & Stengos, 2008; HRSDC, 2004; Krahn & Taylor, 2005). Such findings suggest that youth are actively accepting the claim that higher levels of educational attainment are a necessary part of economic success later in life.

Table 4.1: Educational aspirations among 15 year old Canadian youth, 2000

Aspired levels of education	N	%
High school diploma, graduation equivalency or less	855	5.7
College	3,391	22.5
One or more university degrees	10,855	71.9
Total	15,101	100%

This pattern of high aspirations raises the question of whether some or many of these youth will fall victim to the 'high-aspiration, low-attainment paradox' observed by a variety of researchers, particularly those in the United States (see, among others, Kao & Tienda, 1998; Mickelson, 1990; McDonough, 1997; Hossler et al., 1999; MacLeod, 1995). Despite the fact that youth may initially hold high educational aspirations, will many of them be unable to turn these high aspirations into reality? For example, Mickelson (1990) observed that while young Black youth living in the United States consistently demonstrated positive attitudes towards educational attainment, these young people were often unable to translate their aspirations into attainment. Mickelson goes on to hypothesize that this paradox exists because of two distinct sets of attitudes towards schooling, those attitudes which are concrete and those which are abstract. As argued by Lakshmana (2004), "abstract attitudes reflect the general notions that schooling is a vehicle for success, while concrete attitudes are based on actual experiences" (p. 7).

The concept of abstract-concrete aspirations may be more pronounced among those interested in university participation. In particular, while certain groups of students, such as low-income, rural, and visible minority youth, may be shown to have high educational aspirations at age 15, these "abstract" aspirations may decrease over time due to concrete personal experiences. However, it is also possible that even if their aspirations remain stable or increase overtime, these aspirations may not translate into university attendance. Post-secondary educational attendance, particularly university attendance, requires a series of specific actions, such as maintaining certain high school grades, selecting post-secondary institutions in which to apply, and determining how to finance one's studies, through, for example, student loans, scholarships, or bursaries. A lack of understanding or non-completion of the necessary actions required to participate in PSE can lead to non-participation or difficulties in realizing university aspirations. Therefore, while some students may express interest in pursuing a university education, their aspirations may not be actualized as they gain knowledge about what is actually required in order to attend.

The connection between "concrete" aspirations and post-secondary educational participation is consistent with both the status attainment literature and Bourdieu's theory of practice. As discussed in Chapter 2, status attainment theory links family socio-economic status with education and occupational outcomes, via educational and occupational aspirations and peer influences. In fact, when mediating factors such as educational aspirations and peer groups are considered, the direct effect of family status diminishes (Haller & Portes, 1973).

This suggests that educational aspirations have a strong effect on attainment. However, in order for aspirations to become actualized, they need to be grounded in some sense of objective reality or, following Mickelson's (1990) argument, be concrete aspirations.

Bourdieu's theory of practice helps us to understand the nature of aspiration formation. Through his concepts of cultural capital and habitus, he provides an explanation of aspirations which can account for variations in the aspirations held by a diverse group of youth, while speaking to the patterns which may also be present among relatively homogenous groups. For example, Bourdieu can help to explain why differences may exist between middle- and working-class youth, while also speaking to the differences which may emerge among working class youth themselves. Generally speaking, Bourdieu can help us understand why Canadian youth as a group have such high educational aspirations (Table 4.1) by connecting the influences of both the family and peer groups on habitus formation, which is exemplified through educational aspirations themselves.

Research Question 1: Do educational aspirations vary in predictable ways across socio-economic and demographic groups and are they consistent over time?

While aspirations at age 15 were shown to be very high, they might not be consistently so across different groups of youth. Bourdieu's theory of practice would suggest that differences in habitus should yield differences in the aspirations expressed by youth. Differences in habitus, as previously discussed, primarily reflect differences in socialization arising from varying degrees of

exposure to culture, economic, and social capital. Recognizing that exposure to capital can vary by social class, social demographic groups, and by geography, the following section begins to explore these potential patterns of difference.

Family Socio-Economic Status

The children of highly educated parents have been shown in previous research to experience high levels of educational success (Davies &Guppy, 2006). Specifically, research on first-generation students, defined as those who are the first in their family to go to university, have been shown to experience difficulties in their transition from high school into university. For example, Lehmann (2007) found that first-generation students were more likely to discontinue their post-secondary studies early in their first semester, often within the first two months, and did so despite having solid academic performance. Grayson and Grayson (2003) found that approximately twenty to twenty-five percent of all first-year students do not proceed onto their second-year of university. Reasons for discontinuing, as noted by Lehmann (2007) often include feelings of a lack of fit between university culture and the culture of the familial household. It would not be unrealistic to expect that working class youth may be less inclined to want to participate in university given that for many of those who do attempt to make this transition, attrition is a major problem, a pattern that may be demonstrated among older siblings and peers. Not surprisingly, Table 4.2 shows that as parental education increases, so do the aspirations held by teenagers in their families. Among those youth who come from families where both parents have a university degree, 94.3% report wanting to attain at least one university degree compared to

only 65.1% of those whose parents have not attended university. Even so, the fact that two out of three 15 year olds from non-university educated families aspire to university is noteworthy, since it indicates that despite a lack of human capital within the home, the culture of aspiring towards higher levels of education has become generally widespread within Canadian society.

Socio-economic disadvantage, in the form of low family income, is also a strong predictor of educational inequality and has been found in previous research to be associated with instances of disadvantage throughout the life course (Frenette, 2008; Carmichael & Finnie, 2008). In this study, 65% of youth from households with low annual incomes (less than $45,000 a year) aspire to at least one university degree compared to 82.1% of youth from households with an annual income of $90,000 or higher (Table 4.2).

Another component of family socio-economic status is the type of occupation in which parents are employed. Following Bourdieu's theoretical ideas, different occupations or professions are associated with differences in cultural capital, which is in turn associated with differences in habitus, demonstrated through educational values. As previous researchers have shown, most notably Paul Willis (1977), particular occupations are associated with different class values, which are often embraced by youth via the intergenerational transmission of work values. Table 4.2 shows that over three-quarters (77.6%) of teenagers who have at least one parent working in a high skill and high status occupations report aspiring to complete a university degree

compared to less than 65% of youth whose parents work in occupations from the three other skill levels.

Table 4.2: Educational aspirations by family socio-economic status

Predictor variables	High school diploma or less	College	1+ university degrees	Total %	Total N
Parental Education					
No degrees	6.7%	28.2%	65.1%	100%	7974
1 Degree	3.1%	10.3%	86.6%	100%	2271
2 Degrees	1.2%	4.5%	94.3%	100%	1651
Household Income					
<$30,000	9.3%	26.2%	64.5%	100%	1816
$30K-$44,999	7.8%	27.9%	64.3%	100%	2143
$45k-$59,999	6.2%	27.9%	65.9%	100%	2554
$60K-$74,999	5.2%	22.8%	72.1%	100%	2591
$75K-$89,999	4.7%	19.2%	76.1%	100%	2769
$90K+	2.9%	15.0%	82.1%	100%	3227
Parental NOC Classification					
At least one manager or A class	4.5%	17.8%	77.6%	100%	8642
At least one B class	6.8%	28.9%	64.3%	100%	4660
At least one C class	8.8%	28.4%	62.9%	100%	1506
Both D class	7.2%	28.7%	64.1%	100%	181

Overall, all three indicators of family SES demonstrate essentially the same pattern: youth from more privileged social backgrounds are more likely to have higher educational aspirations than their less socially-privileged peers. However, consistently across all three measures of family SES, two out of three youth aspire to a university education suggesting that youth are embracing the notion that PSE is an important vehicle to occupational and economic success later in life.

Individual-level Socio-Demographic Variables and Educational Aspirations

Table 4.3 reveals that females have higher educational aspirations than their male peers. Approximately three-quarters of female respondents (77.4%)

report aspiring to obtain one or more university degrees compared to 66.0% of males. This is consistent with previous findings where females are shown to not only have higher aspirations than males (Garg, Melanson, & Levin, 2007) but also to have higher rates of post-secondary participation (Bowlby & McMullen, 2002).

Visible minority-immigrant youth, defined as those who are first or second generation immigrants and are members of a visible minority group, are shown in the current analysis to have higher educational aspirations than their Canadian-born peers. Specifically, 88.9% of visible minority-immigrant youth indicate that they want to complete at least one university degree compared to 69.3% of their Canadian-born peers. This is consistent with the available research which finds that while Canadian-born youth have high aspirations, visible-minority immigrant youth have exceptionally high aspirations (Krahn & Taylor, 2005; Wilkinson, 2002; Boyd, 2002).

Youth living in both single-parent households and dual-parent households are shown to have similar educational aspirations, with 69.3% and 72.4% respectively, aspiring to obtain at least one university degree. These findings, at first glance, appear to be inconsistent with research which suggests that youth who come from single-parent families, particularly single-mother families, often face educational disadvantages. Garg, Melanson, and Levin (2007) found that among youth who were not aiming for university, approximately 10% more come from single parent families (p.1020). However, much of the differences observed between youth from single-parent families compared to intact families may be a

function of family involvement, parental expectations, and the value placed on educational achievement by parents.

As the majority of Canadian schools hold instruction in either French or English, speaking a language other than these can lead to educational and occupational disadvantages. However, youth who indicated their first language was something other than French or English had higher educational aspirations with 85.4% indicating they wanted to complete at least one university degree. This may be due to the overwhelming number of non-English and French speaking youth who are immigrants. As was previously shown, these youth generally have higher educational aspirations than their Canadian-born peers.

Table 4.3: Educational aspirations by individual-level variables

Predictor variables	High school diploma or less	College	1+ university degrees	Total %	Total N
Sex of Youth					
Females	4.8%	17.8%	77.4%	100%	7799
Males	6.6%	27.4%	66.0%	100%	7301
Visible-Minority Immigrant Status of youth					
Visible-minority immigrant youth	2.6%	8.5%	88.9%	100%	1837
All else	6.1%	24.6%	69.3%	100%	12989
Family Structure					
Two parent	5.6%	22.1%	72.4%	100%	12718
Single parent	6.2%	24.5%	69.3%	100%	2353
First language of youth					
English	6.6%	21.4%	71.9%	100%	10605
French	2.3%	36.7%	61.0%	100%	2166
French Quebec	7.4%	27.0%	65.6%	100%	433
Other	3.6%	11.0%	85.4%	100%	1897

Geography and Educational Aspirations

Each Canadian region has a different approach to facilitating access to post-secondary education; furthermore, regions vary with respect to economic prosperity. For example, compared to the Atlantic Provinces, Alberta has generally had a much stronger economy over the past decades. This might provide more post-secondary educational alternatives for youth. But Alberta also has a more integrated post-secondary system that would make it easier for disadvantaged youth to continue past high school (Krahn & Hudson, 2006).

Table 4.4 examines the relationship between geography and educational aspirations. Youth living in Quebec were found to be the least likely to aspire to a university education (64.3%). In contrast, those living in the Atlantic Provinces were found to be the most likely to aspire to a university education (78.0%). However, it is important to note that approximately one-third of Quebec teenagers (33.8%) aspired to complete college, compared to less than a quarter of all other Canadian youth. The differences between youth from Quebec compared to other Canadian youth can likely be explained by the unique education system found in Quebec which requires students to complete an additional year of high school before proceeding onto post-secondary education[18].

Urban labour markets often require higher levels of formal educational training compared to rural labour markets (Krahn, Lowe, & Hughes, 2011, p. 77).

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[18] CEGEP, a program unique to Quebec, has students finish their high school studies in grade 11 then spend an additional two years in CEGEP taking either 'pre-university' or technical classes. For those who want to pursue university studies outside the province of Quebec, CEGEP courses, while recognized by most Canadian universities, will only give credit of up to one year.

Such differences could lead to habitus differences similar to those observed by qualitative researchers to be present among the working class compared to their middle and upper class peers (Lehmann, 2007; MacLeod, 1995; Willis, 1977). Given these factors, it is not surprising that 74.7% of urban teenagers, compared to 62.6% of rural teenagers report wanting to attend university.

Table 4.4: Educational aspirations by geographical variables, 2000

Predictor variables	High school diploma or less	College	1+ university degrees	Total %	Total N
Canadian Regions					
Atlantic Canada	6.8%	15.2%	78.0%	100%	1200
Quebec	2.0%	33.8%	64.3%	100%	2571
Ontario	5.5%	22.3%	72.2%	100%	6410
Manitoba/Saskatchewan	9.2%	16.4%	74.3%	100%	1146
Alberta	6.5%	22.0%	71.4%	100%	1575
British Columbia	7.2%	17.2%	75.6%	100%	2197
Rural/Urban					
Urban	5.1%	20.2%	74.7%	100%	11333
Rural	7.8%	29.6%	62.6%	100%	3493

Interrelated Predictors of Teenagers' Educational Aspirations

The analysis to this point has examined only bivariate relationships to explore the nature of educational aspirations. But many of the variables previously examined are correlated with one another; for example, parents with higher levels of education often have higher household incomes and are clustered within higher occupational classifications. For this reason, it is necessary to utilize a more complex multivariate analysis to examine the net effects of various predictor variables on educational aspirations. Using a logistic regression equation where aspirations are coded as a binary variable (where the respondent

either did or did not have aspirations to attend university), the independent effects of the selected variables are examined in relation to this outcome. The equation for the final analysis is as follows:

$$f(z) = B_0 + B_1X_1 + B_2X_2 + B_3X_3 \ldots + B_kX_k$$

f(z) represents the probability of a particular outcome, in this case, whether a particular youth has university aspirations or not, given the particular set of explanatory variables. B_0 is the intercept and is the value of z when all the independent variables equal zero. In other words, it is the value of someone who has no risk factors which would either encourage or discourage having aspirations to attend university.

In the multivariate equation, each coefficient describes the effect each explanatory variable has on the dependent variable, controlling for the effects of all the other predictor variables included in the equation. These values are expressed as odds ratios. An odds ratio is the ratio of the odds of an event occurring in one group compared to another. An odds ratio of one means an event is equally likely to happen to both groups being studied. An odds ratio greater than one means the event is more likely to occur to the first group than to the second. For example, as is shown in Table 4.5, females have an odds ratio of 1.605 indicating that females are 60.5% more likely than males to have university aspirations. On the other hand, an odds ratio less than one means the event is less likely to occur in the first group. The inclusion of the various predictor variables in the logistic regression equation is based on the arguments put forth in the previous section, following the theoretical model presented in Chapter 2.

Beginning first with measures of familial socio-economic status, Bourdieu's theoretical framework would suggest that such influences play a large role in shaping the dispositions young people have towards the social world. Parental education and household income are found to have significant independent effects on youth aspirations (Table 4.5). Specifically, youth who have two university-educated parents are 3.2 times more likely to aspire to a university education compared to youth whose parents are not university educated. In addition, as parental income increases, so do the odds of having higher educational aspirations.

Visible minority-immigrant status emerges as the strongest demographic predictor of having aspirations to attend university (Table 4.5). Young people in this category are 92.4% more likely to aspire to university than their White native-born peers. The equation also shows that 15 year old females are 60.5% more likely than their male counterparts to aspire to university. Youth whose parents aspire for them to obtain a university degree are 3.2 times more likely to aspire to university themselves as compared to those youth whose parents only want them to obtain a high school diploma. Family structure is not found to have a net significant effect.

Bourdieu's theoretical framework encourages us to interpret factors such as classes young people take in high school and how well they do in those classes as reflective of cultural capital and habitus. As Table 4.5 indicates, taking university preparatory mathematics and English courses in grade 10 and achieving

grades of over 70% were both associated with increased likelihood of aspiring to participate in university.

Canada is characterized by considerable regional diversity, so it is not unreasonable to expect that educational aspirations may systematically differ across regions and by rural/urban communities. Compared to youth living in Ontario, youth in Manitoba/Saskatchewan, Alberta, and British Columbia are less likely to aspire to university. Rural youth, when compared to urban youth, are approximately 20% less likely to aspire to university.

Table 4.5 Logistic regression predicting students' university aspirations at age 15[19]

	Predictor Variables	Odds Ratio	
Sex:	Female	1.605	***
	Male		
Visible Minority-Immigrant Status:	Visible Minority Immigrant	1.924	***
	All Else		
Family Structure:	Step-parent	.926	
	Single parent	1.178	
	Other	1.240	
	Two parent		
First Language of Youth	French – Quebec	.543	***
	French	.805	
	Other	1.241	*
	English		
University Preparatory Classes	English – Yes	1.246	*
	No		
University Preparatory Classes	Math – Yes	2.190	***
	No		
Overall Grades	70% or higher	2.752	***
	69% or less		
Parental Education:	1 Degree	1.749	***
	2 Degrees	3.186	***

[19] For each variable included in this analysis, the value highlighted in italics is the reference category.

	No Degrees		
Parental Occupation	Skilled	.780	***
	Semi-skilled	.721	***
	Un-skilled	.792	
	Managerial/professional		
Household Income:	$30K - $44,999	1.244	*
	$45K - $59,999	1.297	**
	$60k - $74,999	1.500	***
	$75K - $89,999	1.598	***
	$90K +	1.864	***
	<$30,000		
Parental PSE Aspirations for Youth	College	.623	***
	1+ University Degrees	3.237	***
	High School Diploma or Less		
Canadian Regions	Atlantic Canada	.921	
	Quebec	.757	
	Manitoba/Saskatchewan	.755	*
	Alberta	.627	***
	British Columbia	.605	***
	Ontario		
Rural/Urban	Rural	.815	***
	Urban		
Nagelkerke R Square		**.376**	
N=13531			

Collectively, these findings suggest that there are systematic differences across groups of youth with respect to their educational aspirations. Generally speaking, while Canadian youth are aiming high, various subgroups of youth appear to be less likely to aspire to higher levels of post-secondary education. For example, those with parents who have lower levels of educational attainment, youth from low-income families, and males appear to aim lower than their peers. However, these observations were taken during the early stages of their high school career, at age 15 years. Perhaps as these young people get further into

their high school years, their aspirations may become more homogeneous. Alternatively, they may diverge even further with age.

Turning our attention from those with lower aspirations to those who aspire to higher levels of PSE, we see that those whose parents have high educational aspirations for them are more likely to have high aspirations for themselves. Additionally, high school grades were also found to be highly influential in informing educational aspirations.

Taken in their entirety, these findings are in line with Bourdieu's theoretical framework, particularly with his arguments regarding habitus formation. The generally high educational aspirations observed among the YITS participants suggests that social influences play a large role in shaping habitus, reflected in the aspirations held by the youths themselves. Given that post-secondary education, particularly university, is heavily emphasized within the secondary education system and in educational policies, it is not surprising that a very large majority of youth are aspiring to this ideal. However, when examining potential differences between subgroups of youth, it was found that some traditionally disadvantaged groups were not as likely to aspire to university as their peers. Following Bourdieu, these differences could be explained through differences in access to cultural capital, thereby creating differences in habitus. Differences in familial socialization, in goals and values favoured within the household, have resulted in different post-secondary educational aspirations.

The data analyzed to this point were collected from 15 year olds. But are aspirations ephemeral and fleeting attitudes or are they consistent across time? If

aspirations at age 15 are really partial determinants of educational participation four years later, they would presumably be relatively stable over the teenage years. But if they are highly variable, subject to change at any given time, their utility as predictors of educational participation is much more limited. The next section of this chapter will explore the issue of consistency of post-secondary aspirations across the three cycles of the YITS data collection.

Evaluating Consistency in Educational Aspirations across Time

Consistency in educational aspirations is an important criteria if they are to be seen as valid predictors of educational attainment four years later. Inconsistency may mean that aspirations are constantly being modified and altered to reflect the momentary interests of youth; that they are more meaningless than meaningful. Alternatively, consistency in aspirations suggests a more solidified goal, one which youth can work towards starting in early high school. Consistency within some groups and not in others suggests that aspirations are more meaningful for some and more meaningless for others who may not understand what it will take to achieve higher levels of education. In short, from a methodological perspective, aspirations will ideally be relatively consistent across time, increasing their reliability as a predictor variable for educational participation at a later date.

Drawing on all three cycles of YITS data collection, Table 4.6 presents the distribution of educational aspirations at ages 15, 17, and 19. At age 15, 71.9% report that they aspire to attend university, compared to 68.5% at age 19. The very slight decline (approximately 3%) is somewhat surprising, given the

extensive research on barriers to educational attainment faced by young people from less advantaged families and on their poorer high school performance (Davies & Guppy, 2006, Chapter 9). We might expect that, by age 19, the remarkably high post-secondary aspirations of Canadian youth, whether working class or middle class, would have declined further. As young Canadians begin to make the transition from high school to PSE, it would seem that more would be adjusting their educational aspirations to match career qualifications.

Table 4.6: Educational aspirations across time, age 15, 17, and 19, Canada, 2000, 2002, 2004

Aspired levels of education	Age 15		Age 17		Age 19	
	N	%	N	%	N	%
High school or less	855	5.7	708	4.5	652	4.3
College	3391	22.5	4052	25.9	4129	27
University	10855	71.9	10879	69.6	10541	68.8
Total	15101	100%	15640	100%	15323	100%

Are particular groups of youth more or less likely to be inconsistent in their aspirations from age 15 to 19? Specifically, who is more likely to lower their aspirations? Previous research has shown that elevated aspirations are often related to individual characteristics and familial influences; can the same be said for consistency in aspirations? Alexander, Entwisle, and Bedinger (1994) found that among students from Baltimore, educational expectations were most accurate among White students and those from higher income families. As consistency in educational aspirations has been shown to result in corresponding levels of educational attainment, identifying which groups of youth are more likely to

change their aspirations can help us understand the role played by educational aspirations in educational attainment.

Table 4.7 displays the proportion of university-aspiring youth who either changed or maintained their aspirations between the ages of 15 and 19. As university was the highest level of education to which a young person could aspire, a change in aspirations at age 19 means the young person has lowered their aspirations. The predictor variables used in this analysis are those which were previously found to have a significant net effect on the level of post-secondary aspirations at age 15 (Table 4.5).

Males are shown to be more likely than females to lower their educational aspirations between ages 15 and 19. Specifically, 20.9% of males compared to 14.9% of females report no longer wanting to obtain a university degree. Visible-minority youth are shown to be far less likely to lower their educational aspirations by the time they are 19 years old compared to their non-visible minority immigrant peers. Specifically, 19.5% of non-visible-minority immigrant youth report by age 19 that they no longer wished to pursue a university education compared to only 7.5% of visible-minority immigrant youth. These findings indicate that not only do visible-minority immigrant youth have higher educational aspirations than their peers but they remain consistently high rather than diminishing over time.

Youth whose parents have higher levels of education were also more likely to maintain their higher educational aspirations between age 15 and 19. For example, among youth whose parents did not attend university, 22.7% report no

longer wanting to attend university compared to only 6.6% of those whose parents both completed university. Furthermore, rural youth were more likely to lower their aspirations over time. Specifically, 27.1% of rural youth who initially aspired to a university education lowered their aspirations by age 19 compared to only 15.0% of urban youth.

Table 4.7 Consistency in maintaining university aspirations between ages 15 and 19 years, Canada, 2000 and 2004, by selected variables

Predictor variables	Change	No Change	Total %	Total N
Sex of Youth				
Females	14.9%	85.1%	100%	5576
Males	20.9%	79.1%	100%	4454
Visible-Minority Immigrant Status of youth				
Visible-minority immigrant youth	7.5%	92.5%	100%	1501
All else	19.5%	80.5%	100%	8340
Parental Education				
No degrees	22.7%	77.3%	100%	4799
1 Degree	10.2%	89.8%	100%	1836
2 Degrees	6.6%	93.4%	100%	1462
Parents' Educational Aspirations for youth				
High school or less	49.2%	50.8%	100%	61
College	39.1%	60.9%	100%	1187
University	13.6%	86.4%	100%	8139
Rural/Urban				
Urban	15.0%	85.0%	100%	7827
Rural	27.1%	72.9%	100%	2011

While we have observed some change in aspirations between age 15 and 19 (Table 4.6), the majority of young Canadians are consistent in their post-secondary aspirations over time. Furthermore, the findings in Table 4.7 demonstrate that young Canadians who aim highest with respect to attending university – females, visible-minority immigrants, urban youth, and those from

more advantaged families – generally maintain their aspirations. Thus, while there is some movement up and down in aspirations, it is movement that is interpretable, rather than random. Consequently, we can feel more confident in assessing the impact of aspirations at age 15 on subsequent educational participation at age 19. This may be particularly important as post-secondary goals could have an impact on course selection and academic achievement in high school which, ultimately affect admission into various types of post-secondary institutions.

Research Question 2: Does educational participation systematically vary among youth, particularly with respect to university participation?

Is there a connection between educational aspirations and post-secondary educational participation? While the majority of young people in this study aspire to a university education at age 15, do these aspirations translate into corresponding levels of educational participation at age 19? Returning to the "high aspirations, low attainment" paradox, will this pattern also be observed among the YITS participants? Educational attainment disparities have long been observed across different subgroups of youth. For example, working class youth and those from visible minority groups have historically been under-represented within universities. A strict reading of Bourdieu's theory of practice would suggest that these differences arise from an unequal distribution of capital within the familial home, yielding differences in habitus which predispose some youth to view university as an impossibility. Yet we have found very high levels of university aspirations even among young people from less advantaged families.

While some youth may be able to transcend class boundaries, is it also possible that the initially high aspirations for these less-advantaged youth are less likely to translate into post-secondary participation four years later? Is having a habitus that is oriented towards wanting to attend university enough, or will existing disparities in social, economic, and cultural capital continue to create educational participation differences between specific groups of youth?

In Cycles 2 and 3 of the YITS, participants were asked about their current educational engagement and the highest level of education they had either completed or were currently participating in. For the following analysis, I have constructed a four-category variable that distinguishes between:

(1) those who did not graduate from high school by age 19;
(2) those who graduated from high school;
(3) those who have participated in a college program[20]
(4) those who have participated in a university bachelor's degree program or higher.

The distinction between the third and forth category recognizes that a university education was traditionally limited to the middle- to upper-class, and still continues to lead to higher status and higher income jobs, on average, whereas a community college or vocational education was more readily accessible to those who wanted to continue their schooling beyond high school but may not have had the resources to attend university. Furthermore, as previously illustrated, there is a segment of the YITS sample that aspires to attend college. Therefore, while

[20] College participation includes those who have participated in a college program, a university transfer program at a college or CEGEP, a trade/vocational college, or a registered apprenticeship program.

college participation will not be the primary focus in later parts of this study, comparisons between college and university participation will be made where appropriate.

It is important to emphasize that this analysis focuses on *initial* post-secondary participation rather than *final* educational attainment, since the YITS participants were only 19 years old by the third survey cycle and might not have finished their post-secondary education or even have even started it. Youth who have not yet begun to actualize their university aspirations might still do so. Similarly, some who had begun a post-secondary program by age 19 might still drop out. However, with each passing year, the likelihood of starting a post-secondary educational program, particularly university, decreases. For example, at the University of Alberta, for the 2004 fall semester which is the year the YITS participants were 19 years old, the average age of a full-time undergraduate student was 22 years[21]. Given that an undergraduate degree is generally a four-year program, this statistic suggests that, on average, most students start their university studies within a year or two of graduating from high school.

Highest Level of Educational Participation

While 72% of the YITS participants indicated at age 15 that they wanted to complete at least one university degree, at age 19, only 37.6% reported that they had actually attended university (Table 4.8). In contrast, 26.5% reported that the highest level of education they had participated in was high school, with an

[21] Table 2.8.1 Average Age of Full-Time and Part-time Students by Faculty and Sex Fall 2000-01 to 2004-05 final datahttp://www.ualberta.ca/~idosa/databook/04-05/Table2_8_1_avgage_5Yr2004f.pdf

additional 8.1% indicating that they had not yet completed high school. This is in sharp contrast to the highly ambitious aspirations these individuals held just four years earlier.

Table 4.8: Highest level of educational participation at age 19, Canada, 2004

Education levels	%	N
Less than high school	8.1	1356
High school	26.5	4427
College	27.8	4639
University	37.6	6291
Total	100%	16713

Similar to the previous analysis of educational aspirations, this analysis will begin with an examination of the potential social and familial determinants of initial educational participation by age 19. And, again, the results will be discussed with reference to Bourdieu's theoretical framework.

Family Socio-Economic Status

Consistent with previous research which has shown that the children of highly-educated parents are more likely to experience high levels of educational success themselves, Table 4.9 shows that, as parental education increases, so do the levels of educational participation of their children. Among those youth who come from families where both parents have a university degree, 70.6% indicate that the highest level of education they participated in was university, compared to only 29.7% of youth whose parents did not attend university. The children of non-university educated parents are found to be over-represented among those who had only completed high school by age 19 (30.6%).

Family income is a strong predictor of educational participation among the YITS respondents. Specifically, low income youth were more likely to indicate that the highest level of education they had participated in was high school (or less than high school) and those from high-income families were more likely to indicate that university was the highest level of education in which they had participated. Table 4.9 shows a linear increase in university attendance across the six levels of household income.

Following the same patterns observed for parental educational attainment and family income, parental occupation is also shown to shape educational participation. Among those youth who have at least one parent who is a manager or working in a high skill (Class A) occupation, 43.7% indicate that university is the highest level of education they have participated in by age 19, compared to 21.4% of youth who have two parents working Class D jobs.

Table 4.9: Highest level of educational participation at age 19 by selected variables, Canada, 2004

Predictor variables	< High school	High school	College	University	Total %	Total N
Parental Education						
No degrees	8.5%	30.6%	31.2%	29.7%	100%	8957
1 Degree	3.5%	16.4%	24.3%	55.7%	100%	2459
2 Degrees	1.7%	12.3%	15.4%	70.6%	100%	1725
Household Income						
<$30,000	13.1%	32.1%	27.4%	27.4%	100%	2048
$30K-$44,999	11.2%	32.5%	27.7%	28.7%	100%	2394
$45k-$59,999	10.0%	28.5%	29.9%	31.7%	100%	2837
$60K-$74,999	6.9%	26.8%	29.3%	37.0%	100%	2859
$75K-$89,999	6.2%	23.7%	27.1%	43.0%	100%	3040
$90K+	4.3%	19.8%	25.6%	50.4%	100%	3537
Parental NOC Classification						
At least one manager or A class	8.0%	23.0%	25.3%	43.7%	100%	9496
At least one B class	7.0%	31.1%	30.7%	31.1%	100%	5195
At least one C class	12.3%	31.3%	30.5%	25.9%	100%	1694
Both D class	7.3%	34.0%	37.4%	21.4%	100%	206

In general, as was found for educational aspirations, measures of family socio-economic status are all consistently related to the educational participation of youth at age 19. These findings clearly suggest that advantage is intergenerational; parents who are more educationally, financially, and occupationally successful pass that success along to their children. Bourdieu's theory of capital conversion and the intergenerational transmission of capital provide valuable insight into these findings. Youth who are exposed to higher levels of cultural capital, coupled with economic capital, are better equipped to translate these forms of capital into educational advantage. Their knowledge of the education system and an awareness of what is required to achieve success

helps guarantee their ability to "play the game" more successfully and optimize their chances of achieving. Coupled with financial resources and a disposition (habitus) towards wanting higher levels of achievement creates a situation where such youth can reap the benefits of their more privileged social position. In contrast, youth who have limited access to such resources struggle to achieve the same levels of success, if they are able to achieve it at all.

Socio-Demographic Variables

Again repeating the pattern observed for educational aspirations, Table 4.10 shows that females are more likely than males to have attended university by age 19 (43.8% compared to 31.1%). Alternatively, more males than females indicate that high school is the highest level of education in which they have participated (31.1% compared to 22.1%). These findings are consistent with previous research that shows attendance within Canadian universities is higher among females than males (Frenette & Zeman, 2007; Andres & Krahn, 1999; Andres, 2002). In fact, according to the 2001 Canadian Census, females represented 58% of all university graduates (Frenette & Zeman, 2007).

Also reflecting previous research findings (Thiessen, 2009), visible minority-immigrant youth participate in university at a higher rate than their non-visible minority immigrant peers (52.4% compared to 35.7%). Canadian-born White youth were more likely than visible minority immigrant youth to indicate that high school was the highest level of education in which they had participated (27.4% compared to 19.8%).

Family structure exerts some influence on educational participation. Specifically, youth living in two-parent households were the most likely to report that university was the highest level of education in which they had participated (41.0%), compared to youth living in single- parent households (31.5%). Those who were living in a step-parent family at age 15 or in an "other" family arrangement, which includes youth living in foster families, were more likely to indicate that high school was the highest level of education they had participated in by age 19 (32.2% and 31.3% respectively). These findings are consistent with other research on family type and investment in education. For example, Zvoch (1999), using the U.S. National Education Longitudinal Survey, found that children from stepparent families receive significantly less parental support for pursuit of higher education.

Interestingly, those who speak a language other than French or English had the highest rates of university participation with 50.6% indicating they had participated in a university program. These findings, while consistent with the fact already noted that immigrant youth outperform native-born youth, are inconsistent with research that argues that language can often be a barrier to educational and occupational success, particularly as Canadian universities are often instructed in one of the two official Canadian languages.

Table 4.10: Highest level of educational participation at age 19 by selected variables, Canada, 2004

Predictor variables	< High school	High school	College	University	Total %	Total N
Sex of Youth						
Females	6.3%	22.1%	27.7%	43.8%	100%	8586
Males	10.0%	31.1%	27.8%	31.1%	100%	8127
Visible-Minority Immigrant Status of youth						
Visible-minority immigrant	4.5%	19.8%	23.4%	52.4%	100%	2017
All else	8.6%	27.4%	28.3%	35.7%	100%	14402
Family Structure						
Two parent	7.1%	26.2%	27.8%	38.9%	100%	14063
Single parent / "Other"	13.5%	28.1%	27.1%	31.3%	100%	2616
First language of youth						
English	9.4%	29.5%	23.4%	37.7%	100%	11988
French	4.0%	16.9%	54.0%	25.0%	100%	2201
French Quebec	5.5%	24.0%	30.3%	40.1%	100%	491
Other	5.8%	19.4%	24.2%	50.6%	100%	2032

Geography and Educational Participation

Geography, as was found earlier with educational aspirations, is shown to shape educational participation patterns. Given the differences across regions of Canada, in terms of labour market opportunities, industry, and educational opportunities, it is not unexpected that differences should be observed with respect to educational participation among young people. Table 4.11 shows that youth from Atlantic Canada, followed by those living in British Columbia, are the most likely to report that university was the highest level of education that they had participated in by age 19. Not surprisingly, given Quebec's unique education system, youth living in Quebec are more likely to report that the highest level of education they had participated in was college.

Alberta had the highest percentage of youth indicating that they did not finish high school (11.1%) and the highest percentage of those who indicate they only had a high school diploma (38.4%). In 2002 and 2003, Alberta was beginning to experience an economic boom motivated by high production in the provinces oil industry. The spike in oil production meant that as the oil and gas industry grew, so did the number of blue collar jobs. By 2006, many of Alberta's blue-collar occupational groups had unemployment rates of less than three percent, indicating a severe skill shortage in many labour market sectors. According to Alberta Employment, Immigration, and Industry (2006), between December 2005 and December 2006, employment grew by 5.6%, or 100,900 people, compared to 2.1% for all of Canada. The labour market opportunities within Alberta's industry-based economy provided an alternative to post-secondary education, thereby encouraging a direct transition from high school to the labour market, or transitions via community college or technical schools.

In addition to differences across Canada's various regions, living in either a rural or urban area was also found to be associated with diversity in educational participation. Specifically, Table 4.11 shows that 40.4% of urban youth have participated in a university program by age 19, compared to only 29.1% of rural youth.

Table 4.11: Highest level of educational participation at age 19 by selected geographical variables, Canada, 2004

Predictor variables	< High school	High school	College	University	Total %	Total N
Canadian Regions						
Atlantic Canada	5.8%	25.1%	19.3%	49.7%	100%	1352
Quebec	4.2%	15.5%	54.4%	25.9%	100%	2626
Ontario	9.7%	23.3%	28.1%	38.8%	100%	7158
Manitoba/ Saskatchewan	8.2%	36.6%	14.2%	41.0%	100%	1326
Alberta	11.1%	38.4%	17.4%	33.1%	100%	1784
British Columbia	6.6%	34.0%	17.8%	41.6%	100%	2467
Rural/Urban						
Urban	8.2%	25.4%	26.1%	40.4%	100%	12482
Rural	7.9%	30.7%	32.4%	29.1%	100%	16413

Parental Aspirations

The educational atmosphere of the household can play an important part in determining a young person's educational success. Specifically, the level of importance that parents place on education may ultimately have an impact on the importance youth place on education. For example, Knighton and Mirza (2002) found that, while family income is a statistically significant predictor of university attendance among Canadian youth, parental education is a more powerful predictor. We would expect that parents who have themselves participated in university would be more in favour of their children going to university, that is, their aspirations for their children would be higher. In fact, Christofides, Hoy, Li, and Stengos (2008) show that parental expectations regarding their children's PSE attainment have a consistent and expected effect on their children's aspiration formation, which, in turn, affects their decision to attend PSE in subsequent years. As can be seen in Table 4.12, among those youth whose parents held high

educational aspirations for them, almost 50% indicated that the highest level of education they had participated in by age 19 was university. On the other hand, among those whose parents had lower educational aspirations for their child, approximately 45% indicated the highest level of education they had participated in was high school, with an additional 34.3% indicating they had not completed their high school education.

Table 4.12: Highest level of educational participation at age 19 by parental educational aspirations, Canada, 2004

Parents' Aspirations	< High school	High school	College	University	Total %	Total N
High school or less	34.3%	44.4%	16.0%	5.2%	100%	324
College	14.6%	39.9%	33.7%	11.7%	100%	4064
University	5.0%	20.7%	25.0%	49.3%	100%	11072

Summing up, while at age 15 the majority of youth (71.9%) wanted to attend university, only 35.4% had participated in university by age 19. Some of this is due, of course, to the relatively short time period covered by Cycles One to Three of the YITS. But some of the difference might also be because initially high aspirations in some groups might be starting to decline. We have seen that, in general, the predictors of educational aspirations at age 15 are also influential predictors of educational participation by age 19. But we have been looking only at bivariate relationships, and need to see what effect aspirations have on educational outcomes, controlling on family background and other important predictor variables.

Research Question 3: Do educational aspirations at age 15 inform educational participation at age 19?

As was shown earlier in this chapter, while the majority of YITS participants aspire to attend university, only about half as many have participated in university by age 19. We have also seen that the same factors that shape university aspirations at age 15, particularly family background, also have an impact on university attendance by age 19. However, a key question remains – do educational aspirations affect educational outcomes, controlling on these other factors?

Beginning with a look at the bivariate relationship between aspirations at age 15 and educational participation by age 19, Table 4.13 shows that approximately 50% of youth who indicated at age 15 that they wanted at least one university degree had, in fact, attended university by age 19. In sharp contrast, less than 10% of those who had not aspired beyond high school had attended university. So, at the bivariate level, aspirations do have a strong impact on educational outcome. Even so, it is also clear that not all of the youth with high aspirations had managed to get to university. Similarly, a small proportion of those who had aimed low had, in fact, gone beyond their aspirations.

Table 4.13: Highest level of educational participation at age 19 by educational aspirations at age 15, Canada, 2000 and 2004

Educational Aspirations	< High school	High school	College	Univer-sity	Total %	Total N
High school diploma or less	26.2%	48.6%	17.0%	8.2%	100%	854
College	12.4%	37.1%	41.3%	9.1%	100%	3356
1+ university degrees	4.6%	19.5%	24.6%	51.3%	100%	10779

These findings suggest that young people's positive attitudes towards education achievement, in the form of educational aspirations, do encourage higher levels of educational participation. This is consistent with Bourdieu's notion of the habitus as a set of attitudes and beliefs that influence a young person's view on what are possible accomplishments given their view on the world and their place in it. For those youth who decide early in their adolescence that post-secondary education is not an option, their actions may correspondingly lead them to be educationally disengaged. On the other hand, for those who set their aspirations high, post-secondary education appears to be a feasible option. However, while there is a strong relationship between aspirations and outcomes, not all those who aspire for university make that specific transition, at least by age 19. While their habitus may allow them to aspire to this transition, Bourdieu might argue that limitations in their familial background, in the form of relatively less access to the various forms of capital, make this transition less likely.

Net Effects of Educational Aspirations on University Participation

The previous analysis reveals a strong connection between educational aspirations at age 15 and educational participation four years later. However, after controlling for many of the factors that were previously shown to shape educational aspirations, including parents' aspirations for their children, will aspirations continue to have a direct impact on subsequent educational participation? In Step One in the logistic regression analysis presented in Table 4.14, the role of educational aspirations at age 15 in predicting university attendance at age 19 is evaluated, without the addition of any statistical controls.

In Step Two, the same predictors of educational aspirations used earlier in Table 4.5 are now examined to see if they have a net effect on educational participation, controlling on educational aspirations themselves.

Without the introduction of any statistical controls, Table 4.14 shows that, compared to youth who aspired to a high school education or less, those who aspired to go to university were approximately 12 times more likely to attend university by age 19. This very strong impact is, of course, the same one described above in Table 4.13, but in the form of a cross-tabulation. While the odds-ratio drops considerably (from 11.85 to 3.37), the effect of educational aspirations on university participation still remain strong and statistically significant after controlling for the effects of individual socio-demographic variables, such as, family SES measures, geography, parental educational aspirations, and high school grades and courses (Step Two). Specifically, youth aspiring to attend university are still more than three times more likely than those aspiring to a high school diploma or less to actually attend university by age 19.

Within this model, the strongest predictors of university attendance, with the exception of youth's own educational aspirations, was taking university preparatory classes in mathematics (2.374) and English (1.739) and having an overall grade average of 80% or higher. Parental education was also found to have a very strong net effect on educational participation by age 19, with youth whose parents are university educated being 2.4 times more likely to attend university than their peers whose parents who are not. Parental aspirations for their child and household income are also found to shape educational

participation, as do the geographical measures included in the analysis. However, overall, youth's educational aspirations are found to exert the strongest effect on educational participation, even after controlling for this long list of social, demographic, and geographical variables.

Table 4.14: Logistic regression predicting university attendance at age 19, Canada, 2000 and 2004

	Predictor Variables	Step 1		Step 2	
Educational Aspirations	College	1.127		1.115	
	1+ University Degrees	11.845	***	3.374	***
	High School Less				
Sex:	Female			1.371	***
	Male				
Visible Minority-Immigrant Status:	Visible Minority Immigrant			1.373	***
	All Else				
Family Structure:	Step-parent			.739	***
	Single parent			1.121	
	Other			.830	
	Two parent				
First Language of Youth	French - Quebec			1.126	
	French			1.176	
	Other			1.036	
	English				
University Preparatory Classes (gr.12)	English - Yes			1.739	***
	No				
University Preparatory Classes (gr. 12)	Math - Yes			2.374	***
	No				
Overall Grades	69% or lower			.094	***
	70% to 79%			.295	***
	80% or higher				
Parental Education:	1 Degree			1.636	***
	2 Degrees			2.374	***
	No Degrees				
Parental Occupation	Skilled			.889	*
	Semi-skilled			.730	***
	Un-skilled			.722	
	Managerial/professional				

Household Income:	$30K - $44,999		1.106	
	$45K - $59,999		1.084	
	$60k - $74,999		1.268	**
	$75K - $89,999		1.417	***
	$90K +		1.470	***
	<$30,000			
Parental PSE Aspirations for Youth				
	College		.947	
	1+ University Degrees		1.910	***
	High School Diploma or Less			
Canadian Regions	Atlantic Canada		1.494	***
	Quebec		.536	***
	Manitoba/Saskatchewan		1.176	
	Alberta		.843	*
	British Columbia		.868	*
	Ontario			
Rural/Urban	Rural		.813	***
	Urban			
Nagelkerke R Square		.218	.487	
N		14910	14148	

Discussion

In this chapter, patterns of educational aspirations and participation of Canadian youth between the ages of 15 and 19 were explored. It was found that despite the high aspirations that were initially observed among the YITS participants, large and systematic variations were found across groups. Specifically, parental educational attainment and the educational aspirations parents have for their children were found to be the most influential factors affecting educational aspirations when a variety of social, demographic, and geographic variables are evaluated. Utilizing the same type of analytic model that was used to explore educational aspirations, but with the addition of aspirations themselves, the strongest predictor of university attendance at age 19 was found to be educational

aspirations, followed by grades in high school and high school courses. Parental educational attainment and parents' aspirations for their children were also found to be the strongest of a number of factors that had significant influences in shaping educational participation patterns.

Based on these findings, one might conclude that aspirations at age 15 and high school engagement/achievement matter the most for subsequent post-secondary participation when all other factors are controlled. However, this conclusion may be premature since there is an element of causal ordering that is implicit in the model of educational participation discussed in this chapter. For example, a youth is born and socialized into a certain family of a certain socio-economic status, which was shown in the first half of this chapter to be the primary predictor of educational aspirations at age 15, in turn, affecting their high school achievement, and ultimately, their post-secondary participation. In other words, in statistical language, family background may have indirect effects on post-secondary educational participation via aspirations, as well as direct effects.

In Chapter 2 the concept of "circles of causality" was presented as a critique of the status attainment model. While the original model proposed a set sequencing of particular events, Haller and Portes (1973) argue that the sequence hypothesized in the original model may not be the in the correct order or links between particular variables may be reciprocally related. One of the unique strengths of the Youth in Transition Survey is that data were collected at three time points, with an additional time point generated from retrospective information provided by the parents of the YITS participants. These four time

points each provide key variables found in the status attainment model but, by virtue of when they were asked and the time period to which they refer, they are set in an explicit order, simplifying issues of "circles of causality" found in the original status attainment model.

Following Bourdieu's theory of practice, the family is the primary site of socialization. Parental educational attainment brings a certain level of cultural capital into the home which can be converted into social and economic capital. These various forms of capital, particularly in high levels, are associated with particular advantages, such as access to educational resources and opportunities, specific knowledge about the particulars involved in making a successful educational transition and the links between educational training and employment. Youth from families where the parents have higher levels of educational attainment have a type of inside knowledge which would help them to be more aware of the types of high school classes to take, the grades required to attend university, how to achieve these grades, and the mechanisms for being successful once they have enrolled in university. For these youth, educational aspirations may be more meaningful at a younger age, particularly in the early years of high school so they can begin to take the necessary steps to make these aspirations a reality.

In this way, the ascribed variables that were examined in this chapter (e.g., family socio-economic status) would be more influential on the achieved variables (e.g. high school grades) during the early stages of a model of educational participation. So, for example, parental education may have a

stronger direct role in shaping a young person's educational aspirations than on their eventual level of educational participation. These aspirations, if meaningfully connected to a concrete, well-informed plan, would then play a role in shaping high school achievement and subsequent post-secondary involvement. Relating this back to Bourdieu's theory of practice, habitus, as an embodiment of socio-familial background of the youth, may be directly connected with what I term the familial field. As youth make the transition from junior high to high school, their exposure to capital beyond the family expands. Educational aspirations may more closely align with the goals of their expanding peer group, even if youth are themselves unaware of the particulars required to achieve those goals. If this is true, high school grades might be more closely associated with university attendance than the initial educational aspirations observed among youth people at age 15. In this way, Bourdieu's theory of practice, in conjunction with the analytic model of status attainment theory, can help us account for the problems of causal ordering and may provide insight into why educational aspirations, while a powerful motivator for young people, do not necessarily directly translate into subsequent educational participation. The next chapter will take his theoretical framework and apply it to a model of causation to evaluate its applicability within the contemporary Canadian context.

Chapter 5: Connecting the Dots: Evaluating the Direct and Indirect Effects of Educational Aspirations on Educational Participation

Introduction

Canadian teenagers have high educational aspirations. When asked about the highest level of education they would like to attain, approximately 72% of Canadian 15 year-olds indicated that they would like to have one or more university degrees. However, by age 19, only 34.9% indicated that university was the highest level of education in which they had participated. Recognizing that some might still enter the university system at a later age, it is still clear that there is a large discrepancy between the educational aspirations and the realities of subsequent educational participation among YITS participants. So what happens to these young people? Why are half of those who aspired to university able to achieve their educational aspirations by age 19 while the others are not? And what about their educational aspirations; are young people who have acquired more post-secondary education by age 19 more likely to maintain high aspirations, and vice versa?

Educational participation has been shown, both within this dissertation and in other studies, to be restricted by a variety of social barriers. For example, Frenette (2007) has shown that limited financial resources are a major barrier to access to higher education in Canada, both in terms of not being able to afford tuition and fees or the expenses associated with living away from home, such as rent or residence fees. However, other factors can also be linked with creating barriers to higher education, such as the educational atmosphere within the

familial household, a young person's attitudes towards educational participation, and inadequate preparation for post-secondary studies. These last barriers are not always as directly correlated with educational participation since they are often influenced by various background variables such as parental education and socio-economic status. For example, youth from university-educated families may be better prepared for the challenges of post-secondary education. They may have higher educational aspirations then their peers, and they may have higher marks in grade 12 as a result of their family background, their higher educational aspirations, or both. Because many of these variables are interconnected, or informed by a variety of social and familial background factors, disaggregating the effects and calculating the relative impact of their direct and indirect effects is essential for understanding the individual and social processes that influence educational participation.

In the previous chapter, marks in grade 12 were shown to have among the strongest effects on educational participation by age 19, almost as strong as educational aspirations held at age 15. In the status attainment model, these variables are defined as achieved factors, characteristics which a young person can personally influence or alter. In contrast, family socio-economic status and other individual demographic variables are defined as ascribed factors, those which a youth is born into and has little to no influence over. Such ascribed factors were also shown in the previous chapter to have substantial significant effects on educational participation by age 19. However, since grade 12 marks and educational aspirations at age 15 had the largest net impacts on initial post-

secondary participation, it could be argued that, despite ascribed characteristics which had somewhat weaker effects, to a significant extent young people can shape their educational future and overcome traditional socio-structural barriers, such as family socio-economic status, if they work hard enough and aim high. But is this really the case?

Bourdieu's theory of practice tells us that individual actions and motivations are shaped by exposure to various forms of capital, which often come via the family and the experiences within the field. The field can best be conceived of as the social space that contains both the family and extends into the larger community. Within that social space, a young person sees the social world in a particular way, informed by their habitus. Following Bourdieu's theoretical framework which has a strong temporal element, the findings presented in the previous chapter are incomplete or possibly tell a misleading story. Educational aspirations and high school grades, following Bourdieu's logic, should be informed by the field in which the youth was raised. This field, at age 15, is largely informed by the family, shaped primarily through familial capital in all its forms. The influence of both the field and the family comes to shape a young person's habitus which not only informs what a young person sees as an educational possibility or not, measured via educational aspirations, but also how well they are performing in the education system, measured via high school grades. From Bourdieu's perspective, rather than being exogenous predictors, the social psychological and performance aspects of educational success are

intervening variables, shaped by background variables including the socio-economic status of the family and other ascribed characteristics.

In 1983, Looker and Pineo examined the social psychological variables associated with the status transmission process using data from 400 teenagers and their parents. Building on the original Wisconsin status attainment model, Looker and Pineo, much like what will be done in this chapter, attempted to evaluate the role of intervening social psychological variables in the educational attainment process. Recognizing the link between family socio-economic status and educational attainment, Looker and Pineo examined value orientations in an attempt to clarify the importance of educational and occupational aspirations and achievements in young people's transition from school to work. As was done with the Youth in Transition Survey, Looker and Pineo collected data from both parents and youth, allowing them to examine the extent to which parental values are transmitted to the children and the extent to which these values influence the educational and occupational aspirations of the youths. Their work, while not explicitly citing the work of Bourdieu, began a trend towards linking family-level ascribed variables with individual-level achieved variables. By recognizing the link between these variables, aspirations came to be defined as not only an outcome variable but also a crucial intervening variable in the status attainment process.

By connecting the ascribed components of Bourdieu's theoretical framework with the achieved factors which were demonstrated by Looker and Pineo to be influenced by ascribed factors, we put more emphasis on an explicit

temporal ordering of the life course. In turn, we can then try to assess the relative weight of the direct and indirect effects associated with the processes of educational participation. Specifically, a longitudinal analysis of youth's educational participation places educational aspirations at age 15 as an intervening variable between exogenous ascribed factors and educational participation at age 19.

In Figure 5.1, "A Conceptual Model of Educational Attainment and Aspirations", educational participation at age 19 is positioned as a function of grade 12 marks, educational aspirations at age 15, and parental educational aspirations. In turn, all of these intervening variables are modeled as a function of exogenous individual and family-level variables, including parental education, gender, visible minority immigrant status, and living in a rural or urban area, across the various Canadian regions. The choice of specific exogenous variables is based on the findings of the previous chapter. That is, only those variables with substantial significant net effects in the multivariate logistic regression analysis are included in the path analyses in this chapter. In Chapter 4, the list of independent variables encompassed a much wider array of familial and individual-level variables.[22]

In Figure 5.1, the intervening variables are presented in appropriate temporal order: parental aspirations for their children precede their children's

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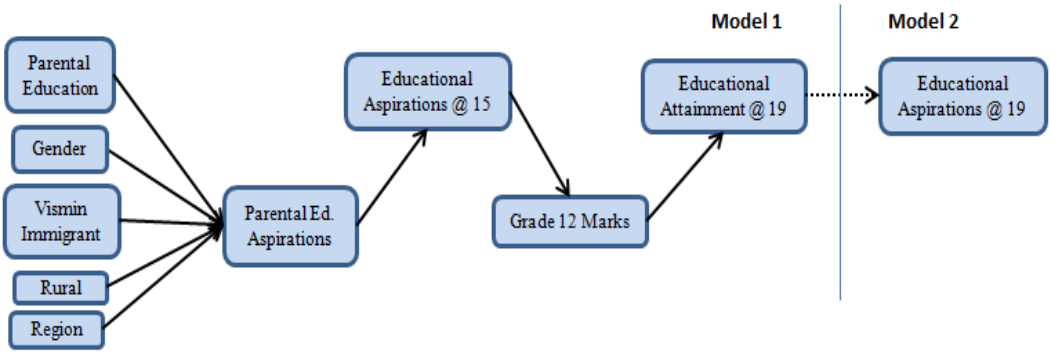
[22] In Chapter 4, independent variables included were: sex, visible-minority immigrant, first language of youth, family structure, parental education, parental occupation, and household income, Canadian region, rural/urban, parental educational aspirations for the youth, educational aspirations at age 15 years, grade 12 marks, level of English and math taken in grade 12.

educational aspirations at age 15 which, in turn, precedes academic participation in grade 12, and subsequent educational participation at age 19. Parental education, gender, visible-minority immigrant status, as well as the geographical variables, are presented as exogenous to the rest of the educational participation model, but no attempt is made to identify a causal ordering among them (e.g., it could be argued that parental education and visible-minority immigrant status would differ across regions and in urban and rural areas). While Figure 5.1 displays only direct effects, it is not unreasonable to expect, for example, that educational aspirations at age 15 may also have an indirect effect on educational participation at age 19 through, for example, marks in grade 12. The statistical analyses presented in this chapter will examine both direct and indirect effects.

Figure 5.1: A conceptual model of educational participation and aspirations



The first statistical model explored in this chapter will evaluate the predictors of educational participation at age 19. The second model will expand on the first and evaluate the predictors of educational aspirations at age 19. In doing so, this chapter takes the status attainment model a step further to explore how initial educational participation at age 19 may affect subsequent educational aspirations. It is important not only to explore initial post-secondary participation

patterns among those who either attend or do not participate in higher education immediately following high school but also to focus on their goals for future educational attainment as reflected in their aspirations at age 19. In fact, post-secondary educational aspirations among youth at age 19 are perhaps even more important than the educational aspirations held at a younger age as the aspirations held by 19 year olds may be more reflective of the realities of post-secondary education and what is required to successfully compete in the labour market. As the previous chapter showed, the educational aspirations of the YITS participants are quite high. However, could these aspirations be unrealistically high? Do the realities of educational participation become more obvious as youth begin their transition into young adulthood, from high school into the post-secondary education system or into full time labour market participation?

Following Bourdieu's theoretical framework, educational aspirations, particularly at a younger age, are a reflection of habitus. However, life experiences that extend beyond those of the family into the community, for example, the influence of peer groups, may have an effect on early educational aspirations. To check for this possibility, it to useful to examine educational aspirations at age 19, once a young person has begun to experience the realities of the social world for him or herself. It is, at this point, after initial plans for post-secondary education either do or do not transpire, that educational aspirations may by adjusted to more closely align with traditional patterns of social reproduction.

Analytic Design

Drawing on the conceptual model presented in Figure 5.1, this chapter will begin to explore temporal ordering in a model of post-secondary educational participation, positioning educational aspirations as both a key dependent variable and as an intervening variable. This chapter, further developing the findings presented in the previous chapter, addresses questions about the role of grade 12 marks on post-secondary educational participation while simultaneously examining the effects of various socio-economic, demographic, and attitudinal variables. Specifically, this chapter will address the following research questions:

1. Do family socio-economic, individual demographic, and geographic factors, along with parents' aspirations for their children, have direct or indirect (via aspirations at age 15) effects on educational participation at age 19?

2. Do the educational aspirations young people have at age 15 have a direct effect on educational participation at age 19, over and above the indirect effects they have via grade 12 grades which were shown in Chapter 4 to affect post-secondary educational participation?

3. Are young people who have acquired more post-secondary education by age 19 more likely to have maintained their educational aspirations by age 19?

Path analysis is used to answer these questions and to determine the empirical validity of the theoretical model presented in Figure 5.1. Path analysis consists of a series of temporally-ordered multiple regression analyses.[23] Each successive

[23] Path analysis was chosen as the statistical technique for this part of my analysis because it would be understood by a broader audience. An alternative would have been to use structural equation modeling (SEM). The main advantage of SEM lies in its use of multiple indicators for each construct in the model, rather than the single indicators utilized in path analysis. However, with the exception of familial socio-economic status, each core construct in the model could be captured with only one indicator in the YITS database. In the case of familial socio-economic status, which can be measured using household income, occupation, and parental education, each

regression equation changes the status of a previous independent (predictor) variable to that of a dependent variable. Given that educational participation is hypothesized to be the effect of a series of life course events which are chronologically ordered, the nature of one event is argued to have consequences on subsequent events leading to the final outcome of educational participation.

Model 1: Predicting Post-secondary Participation at Age 19

The first step in assessing Model 1 involves regressing educational participation at age 19, measured with an ordinal scale ranging from less than high school to university, on grade 12 marks, educational aspirations at age 15, and parental educational aspirations, along with a series of exogenous variables, including, Canadian region (Atlantic, Quebec, Prairies, Alberta, British Columbia), urban-rural residency (rural = 1), visible-minority immigrant status (visible minority immigrant = 1), gender (male = 1), and parental education (0 = no university degrees, 1 = 1 degree, 2 = 2 or more degrees). The second regression equation uses grade 12 marks as the dependent variable with educational aspirations at age 15 and parental educational aspirations, along with the exogenous control variables as predictors. Third, educational aspirations at age 15 are used as the dependent variable with parental educational aspirations and the other exogenous variables as predictors. The forth model positions parental educational aspirations as the dependent variable. Table 5.1 provides a complete break-down of the regression coefficients (β) for Model 1, as well as the variance explained (R^2) for

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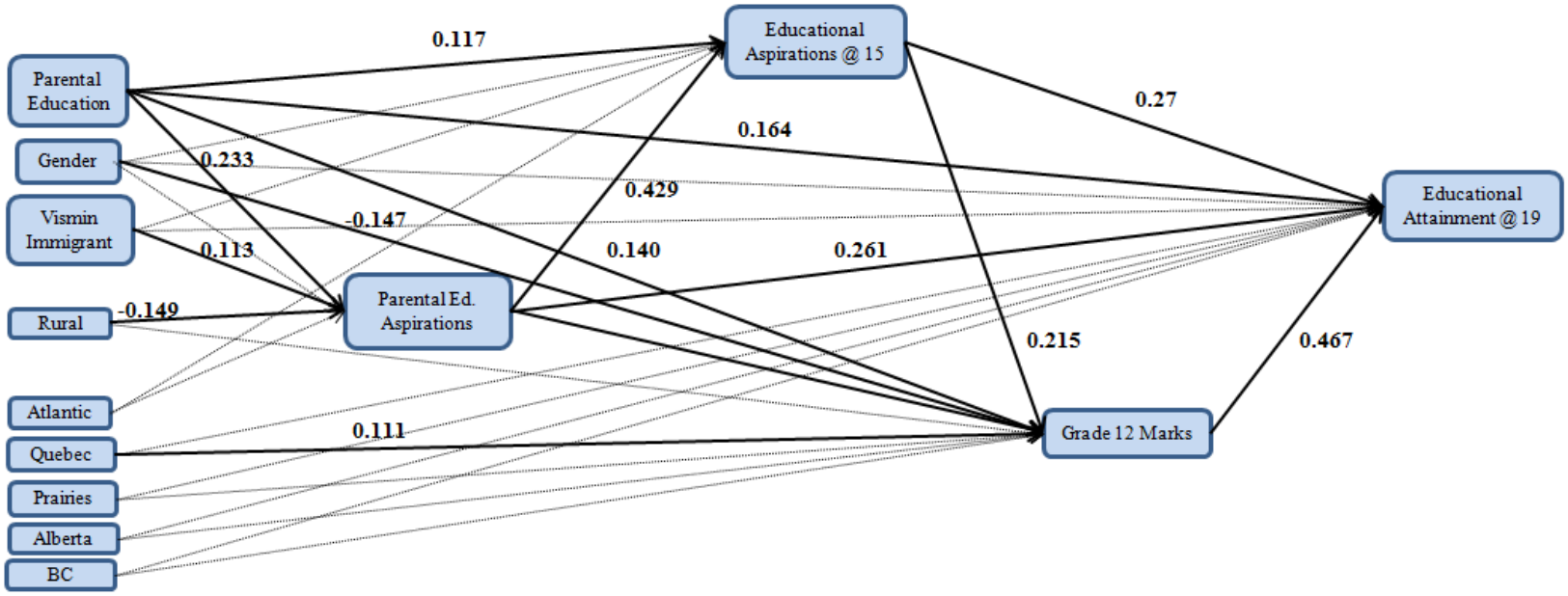
measure was tested during preliminary analyses to determine which provided the strongest effect on the dependent variable.

each respective equation. As can be seen, all of the regression equations have quite a few statistically significant results, as we would expect given the large sample size. Consequently, to reduce the visual complexity, only results with a standardized path coefficient (β) greater than 0.100 are highlighted (with bold lines) in Figure 5.2. The lighter lines in Figure 5.2 represent those effects which are statistically significant, but not as substantively important (i.e., the path coefficients are less than 0.100). The complete list of calculated coefficients(β) can be found in Table 5.1.

Focusing on the temporal sequencing of causality (as hypothesized in Figure 5.1), this analysis evaluates the nature of influences throughout the life course which may or may not shape educational participation by age 19. To begin, educational participation at age 19 is shown to be strongly and positively influenced by grade 12 marks (β = 0.467). Parental education (β = 0.164), parental educational aspirations (β = 0.261), and educational aspirations held by the youths themselves at age 15 (β = 0.270) are also found to exert significant positive direct effects on patterns of educational participation, but they are not as strong as the effects of school performance (grade 12 marks). Interestingly, gender, visible-minority immigrant status, and region did not exert substantial significant effects, as would have been expected based on the findings presented in Chapter 4. The combination of predictor variables accounts for 34 percent of the variation in educational participation at age 19.

Figure 5.2: Significant effects (standardized slopes) of selected variables on educational participation among 19-year old youth, Canada, 2000, 2002, and 2004



The second equation displayed in Table 5.1 examines the factors that influence grade 12 marks. As Figure 5.2 reveals, grade 12 marks are directly affected by educational aspirations at age 15 (β = 0.215), gender (β = -0.147)[24], parental educational aspirations (β = 0.144) and parental education attainment (β = 0.140). The third equation in Table 5.1 shows that educational aspirations among 15 year old youth are positively affected by parental educational aspirations (β = 0.429) and education participation (β = 0.117), but particularly the former. Finally, we also see that parents' educational aspirations for their children are positively affected by their own education participation (β = 0.233). Furthermore, being a visible-minority immigrant (β=.113) and living in an urban community (β=-149) are both associated with higher levels of educational aspirations. It is important to note that, while parental education is shown to shape parental educational aspirations, the current model does not incorporate other variables which are typically associated with parental attitudes towards educational achievement, such as occupation and income (Finnie and Mueller, 2008). The decision to only include parental education as a predictor in the model was based on findings from the previous chapter which found that parental education, compared to occupation and income, was the strongest predictor of educational aspirations and initial educational participation among the YITS respondents.

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[24] The negative coefficient on gender indicates that being male, compared to female, is associated with lower grade 12 marks.

Table 5.1. Standardized slopes and R^2 for the direct effects of predictor variables, Canada, 2000, 2002, 2004

	β Values for Predicted (dependent) Variables			
Predictor Variables	**Parental Educational Aspirations**	**Educational Aspirations @ age 15**	**Grade 12 Marks**	**Educational Participation age 19**
Parental Education	0.233 *	0.117 *	0.140 *	0.164 *
Gender	-0.096 *	-0.079 *	-0.147 *	-0.092 *
Visible-Minority Immigrant	0.113 *	0.045 *	-0.008	0.079 *
Atlantic	0.066 *	0.025 *	0.023	0.116 *
Quebec	0.012	-0.014	0.111 *	-0.070 *
Prairies	0.004	0.011	0.035 *	-0.061 *
Alberta	-0.011	0.003	-0.082 *	-0.117 *
British Columbia	0.000	0.005	0.037 *	-0.045
Rural	-0.149 *	-0.019	0.039 *	0.005
Parental Educational Aspirations		0.429 *	0.144 *	0.261 *
Educational Aspirations @ age 15			0.215 *	0.270 *
Grade 12 Marks				0.467 *
N	**11900**	**10707**	**10498**	**10432**
R^2	**12.1%**	**25.2%**	**19.2%**	**34.3%**

*Path coefficient is statistically significant ($p \leq .05$)

Overall, these findings show that both achieved characteristics (high school performance) and ascribed characteristics (family SES and individual demographic characteristics), along with aspirations (both parents and children), affect post-secondary educational participation. However, by using path analysis techniques that incorporate a temporal model of causality, we are reminded not to stop after observing that grade 12 marks have the strongest direct effect on educational participation at age 19. We can also see that academic performance in grade 12 is influenced by a large number of prior variables, including family SES and individual demographic characteristics, as well as youth's and parent's post-

secondary aspirations. Thus, it is possible that the combination of direct and indirect effects of these background variables on educational participation at age 19 are, in fact, larger, than the direct effects of grade 12 marks.

In order to more fully understand how a particular exogenous or intervening variable in Model 1 affects educational participation at age 19, we must separate out its direct and indirect effects. For example, along with the direct effect parental education has on educational participation at age 19 (β = 0.164), it is important to determine how much of an additional indirect effect is transmitted via parental educational aspirations, youth's educational aspirations at age 15, grade 12 marks.

Indirect effects (i.e., the effects transmitted via an intervening variable) are calculated by multiplying the direct effect of the prior variable on the intervening variable by the direct effect of the intervening variable on the ultimate dependent variable (Lait & Wallace, 2002, p.415). For example, if you multiply the effect of parental education on parental aspirations (the intervening variable) by the direct effect of parental aspirations on educational participation at age 19, you have calculated one portion of the indirect effect of parental education on educational participation at age 19 (other indirect effects could occur through youth's aspirations and also through grade 12 marks). The total effects of a particular predictor variable in Model 1 represent the sum of its indirect and direct effects on the dependent variable, educational participation at age 19. By taking into account both indirect and direct effects, we gain a more complete understanding of the cumulative effects of specific exogenous variables. More specifically, we

can determine whether grade 12 marks really are the strongest predictor of educational participation at age 19.

With respect to the predictors of educational participation by age 19, Table 5.2 shows that parental educational aspirations and the educational aspirations of young people themselves have indirect effects that substantially exceed their direct effects. Specifically, of the total effect of parental educational aspirations (β=.444) on educational participation, 59% is transmitted directly (β=.261) and 41% is transmitted indirectly via its effect on youth's educational aspirations and grade 12 marks. Furthermore, of the total effect of youth's educational aspirations at age 15 on educational participation at age 19 (β=.444), 73% is transmitted directly and the remainder is transmitted indirectly through grade 12 marks. While their effects are not as substantial as those found for parents' and youth's educational aspirations and grade 12 marks, the effect of parental education, gender, visible-minority immigrant status, and living in a rural community on educational participation increased when the total effects (both direct and indirect) were considered.

Table 5.2: Direct, indirect, and total effects (standardized slopes) of variables on educational participation at age 19, Canada, 2000, 2002, and 2004

Predictor variables	Direct	Indirect	Total Effects
Parental Education	0.164	0.058	.222
Gender	-0.092	0.145	-.237
Visible-Minority Immigrant	0.079	0.068	.0147
Rural	0.005	0.051	-.056
Parental Ed. Aspirations	0.261	0.183	.444
Educational Aspirations	0.270	0.100	.370
Grade 12 Marks	0.467	0.000	.467

In one sense, these findings support the previous conclusion that grade 12 marks matter the most for educational participation at age 19, since even when direct and indirect effects are added together, the total effect of grade 12 marks in Table 5.2 is still larger than the total effect of any other single variable. However, when we consider the sum of the total (direct and indirect) effects of all the statistically significant ascribed characteristics (i.e., parents' SES measured by their education, gender, visible-minority immigrant status), we see that it is slightly larger than the total effect of achieved characteristics (grade 12 marks). If we were to add the total effect of parents' aspirations to the sum of the total effects of the ascribed characteristics, the difference would be even larger.

Thus, to conclude that grade 12 marks, in conjunction with educational aspirations at age 15, are the primary determinants of educational participation at age 19 is simply not correct. It is clear that background factors play a very important part in shaping grade 12 marks and youth's educational aspirations. Bourdieu's theory of practice maintains that youth reflect the social positioning of their parents and will often come to engage with the school system in ways that will mirror the educational and occupational status, and values, of their parents. This understanding of the social reproduction of educational inequality is clearly supported by the very large combined effect of ascribed characteristics, particularly parental education, and parental aspirations played on the educational aspirations young people hold at age 15 and on their grade 12 marks and subsequently, educational participation by age 19.

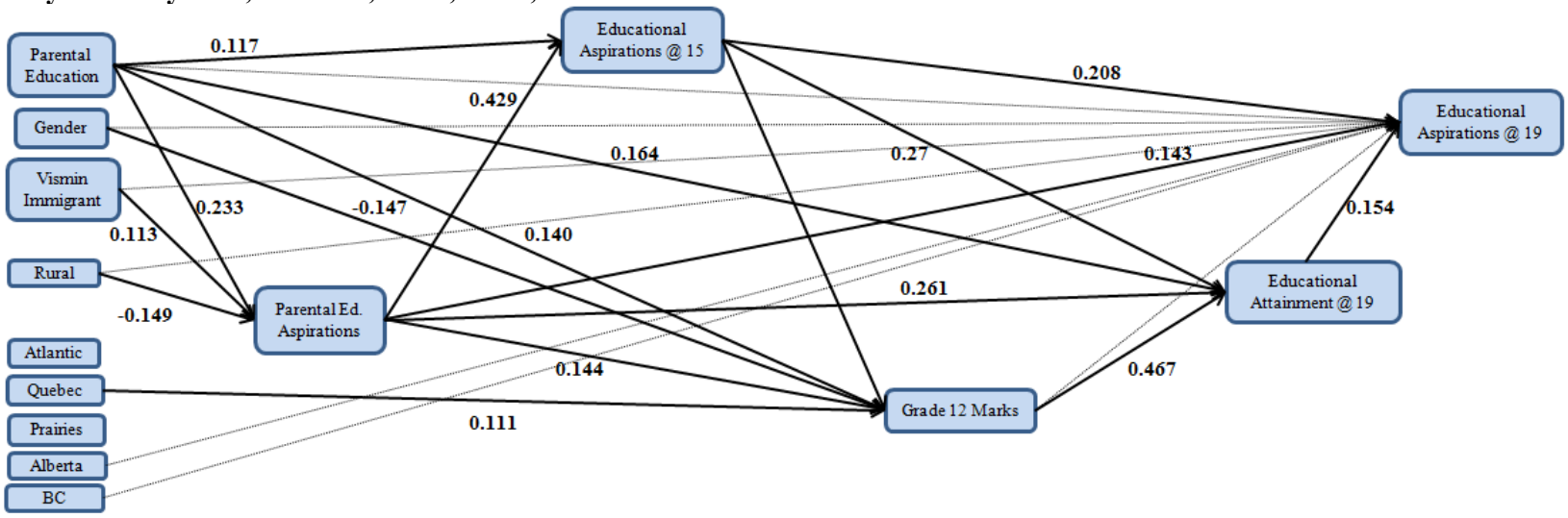
Model 2: Are young people who have acquired more post-secondary education by age 19 more likely to have maintained they educational aspirations by age 19, and vice versa?

At the beginning of this chapter, I hypothesized that educational aspirations at age 19 would be affected by educational participation at age 19, reasoning that as a young person begins to pursue post-secondary education or begin full-time labour force participation, certain social and economic realities may become more apparent. For example, the unexpected costs associated with university attendance may lead some youth to lower their educational aspirations. However, if there is no association between educational participation and educational aspirations at age 19, perhaps aspirations are more a reflection of society-wide norms, rather than meaningful goal-setting on the part of individuals. In other words, as public rhetoric encourages participation in post-secondary education, particularly university participation, young people may feel pressured to indicate that they want to attend university without understanding the realities of such a decision. Therefore, education aspirations, while important at the high school level with respect to shaping grade 12 marks, may be less meaningfully with respect to actual educational participation at age 19.

The following path analysis is an extension of the Model 1 analysis. Specifically, Model 2 replicates the previous analysis with the addition of educational aspirations at age 19 as the ultimate dependent variable. Since the relationships among the exogenous and intervening variables were already discussed, the focus of the following discussion will be on the effects of the exogenous and intervening variables on educational aspirations at age 19.

Figure 5.3 shows that educational participation at age 19 ($\beta = 0.154$), followed by educational aspirations at age 15 ($\beta = 0.208$), are the strongest predictors of educational aspirations at age 19. The first of these two findings support my initial hypothesis that educational aspirations at age 19 would be significantly affected by initial educational attainment experiences. Specifically they show that higher levels of educational participation and higher levels of educational aspirations at age 15 are associated with higher educational aspirations at age 19, controlling on all the other variables in Model 2.

Figure 5.3: Significant effects (standardized slopes) of selected variables on educational aspirations among 19-year old youth, Canada, 2000, 2002, and 2004



The significant positive relationship between aspirations measured four years apart indicates that aspirations are relatively stable, but the only moderate size of the path coefficient also suggests that they do vary over time. Some of this change may be random, or a function of factors not included in the model, but some is also a function of the exogenous variables in Model 2. More importantly, the fairly strong effect of educational participation at age 19 suggests that young people are beginning to experience the social and economic realities of post-secondary educational participation. Recognizing the financial costs associated with attending a post-secondary institution or the skills and credentials required for successful labour market participation, lead to adjusting of one's educational aspirations. However, when the total effects (indirect and direct effects combined) of all the variables in Model 2 are calculated (Table 5.3), that is, considering the background factors which cumulatively come together to shape a young person's life, a somewhat different story emerges as to the strongest influences shaping educational aspirations at age 19.

Table 5.3: Direct, indirect, and total effects (standardized slopes) of variables on educational aspirations among 19-year old youth, Canada, 2000, 2002, and 2004

Predictor variables	Direct	Indirect	Total Effects
Parental Education	0.021	0.152	0.173
Gender	-0.055	0.087	-0.142
Visible-Minority Immigrant	0.080	0.060	0.140
Rural	-0.102	0.047	-0.149
Parental Ed. Aspirations	0.143	0.180	0.323
Educational Aspirations	0.208	0.071	0.279
Grade 12 Marks	0.066	0.126	0.192
Educational Participation	0.154	0.000	0.154

With a total effect of 0.323, parental educational aspirations for their child emerges as the strongest single predictor of educational aspirations at age 19. As was demonstrated earlier, parental educational aspirations are strongly correlated with parental educational attainment and are arguably reflective of the familial habitus. In fact, 56% of the influence parental aspirations have on educational aspirations at age 19 is due to their strong indirect effects via their children's aspirations, their performance in grade 12, and their educational participation by age 19. Thus, long after influencing their children's early teenage aspirations, parental educational aspirations continue to play a significant role in their children's lives. Using the language of Bourdieu's theory of practice, family has a profound effect on habitus formation.

The total effect of youth's educational aspirations at age 15 (0.279) are almost as strong as the impact of parents' aspirations. However, unlike parental educational aspirations, the direct effect of youth's aspirations accounts for 74.5% of the total effects. This is likely because there are only two variables in Model 2 that intervene between aspirations at age 15 and at age 19. The third strongest total effect on educational aspirations at age 19 is grade 12 marks which is moderately and positively associated with aspirations at the same age (0.192).

Visible minority immigrant status, gender, rural residence, and parental educational attainment all became more influential in shaping educational aspirations at age 19 when total effects are calculated. Summing up these findings briefly, we see that, controlling on all the other variables in Model 2, children from university educated families, young women, visible minority immigrants,

and urban youth are more likely to have high educational aspirations at age 19. The influence of visible minority immigrant status almost doubles (from 0.080 to 0.140) when the indirect effects are added to the direct effects. Similarly, the influence gender has in shaping educational aspirations at age 19 almost triples when indirect effects are considered (-0.055 to -0.142). The effect of living in a certain type of community (i.e., residing in a rural or urban community) also increases, but not by as much, when the indirect effects are considered.

Finally, the total effect of parental educational attainment is 0.173, compared to a very small direct effect of 0.021. This last total effect is particularly important. It speaks to the influential but largely invisible role of parental education in shaping educational outcomes for their children or, more generally, to the ongoing reproduction of educational inequalities in contemporary Canadian society. Specifically, of the total effect of parental educational attainment (0.173), only12% is transmitted directly. In addition, 14% is an indirect effect via early educational aspirations (.024), 19% is indirect via parental educational aspirations (.033), and 14% is indirect via educational participation at age 19 (.025). Thus, this path analysis shows that parental educational attainment, operationalizing the various forms of capital found within the household, has a strong and lasting effect on the various social psychological (i.e., aspirations at two time points) and performance measures that are modelled in Figure 5.3.

Discussion

Using path analysis techniques that incorporate a temporal model of causality, the analyses in this chapter were able to link background factors (ascribed characteristics), parents' aspirations and youth's aspirations at age 15, and academic performance in grade 12, to educational participation at age 19. In the previous chapter it was found that grade 12 marks were the strongest predictor of subsequent educational participation. However, further analysis in this chapter revealed that, while performance in grade 12 did have a strong direct effect, other background factors which appeared to have weaker effects actually had equally strong total effects, once their indirect effects through variables like grade 12 grades were taken into account. Thus, the path models presented in this chapter demonstrated that the combination of parental education, gender, visible minority immigrant status, and geographic location, statuses which a young person is either born into or spends a significant proportion of their life experiencing, set into motion a series of processes involving both parents' and youth's aspirations, along with high school performance, which have significant effects, both direct and indirect, on post-secondary participation by age 19. While grade 12 marks still play a significant direct role in shaping educational participation by age 19, they are themselves largely a function of educational aspirations at age 15, as well as parental aspirations and education, and gender. Educational aspirations at age 15 were also shown to be a function of parental educational aspirations which, in turn, were primarily a function of parental educational attainment.

Given the sequential ordering of effects, the calculation of the total effects of each of the exogenous and intervening variables on educational participation at age 19 was the most telling analysis. The total effects take into account the role each variable plays, directly and indirectly, in shaping the subsequent variables in the model. These calculations revealed that grade 12 marks have the strongest effect of any single variable on educational participation at age 19. However, when we consider the sum of the total (direct and indirect) effects of all the statistically significant ascribed characteristics (i.e., parents' SES measured by their education, gender, visible-minority immigrant status), we find that it is slightly larger than the total effect of achieved characteristics (grade 12 marks). If we add the total effect of parents' aspirations to the sum of the total effects of the ascribed characteristics, the difference is even larger.

The second part of this chapter extended the first model to include educational aspirations at age 19 as the final dependent variable. When only direct effects were considered, with the exception of educational aspirations at age 15, educational participation at age 19 was found to be the strongest predictor of educational aspirations at age 19. Yet, when total effects were considered, parental educational aspirations and the educational aspirations of the youth themselves at age 15 were found to play the strongest role in shaping educational aspirations at age 19, followed by educational participation by age 19. Thus, there is some stability in educational aspirations over this critical period in the life course. But aspirations are also affected by experiences, presumably in school and/or at work, between age 15 and 19.

However, like the pattern of influence observed for educational participation at age 19, the combined total effect of ascribed characteristics such as parental education, gender, visible-minority immigrant status, and type of community have a substantial effect on educational aspirations at age 19. With the addition of parental educational aspirations, this effect becomes even more pronounced.

Summing up, familial habitus is powerful. It affects not only university enrolment at age 19, but also educational aspirations at both age 15 and age 19, and grade 12 marks. While grade 12 marks initially emerged as the strongest direct predictor of post-secondary participation at age 19, when the indirect and total effects of other ascribed characteristics were considered, a different story emerged. Specifically, familial background remains the strongest predictor of post-secondary educational participation at age 19. Thus, this study supports Bourdieu's theory of practice which maintains that the family is the primary site of socialization where understandings of the social world are shaped. A young person's experiences within the education system are deeply connected with familial capital, as demonstrated through the net effects of the ascribed predictor variables as compared to the achieved variables.

As this chapter has shown, the relationship between educational aspirations and participation is complicated. Parental education and aspirations, as well as gender and visible minority immigrant status, play a significant role in shaping the educational aspirations of youth, and also have prominent indirect effects via aspirations on high school performance and subsequent post-secondary

participation. In turn, educational aspirations have a stronger effect on shaping high school grades then they do in shaping post-secondary participation. These findings, as they relate to the core research question in this dissertation, suggest that high educational aspirations in and of themselves are not enough to ensure higher levels of educational participation. However, they do play an essential role within a larger constellation of ascribed and achieved predictor variables. The next chapter adds one more layer to this analysis by asking about the role, if any, that schools play in this complicated set of relationships.

Chapter 6: The Secondary Education System: A Level Playing Field or an Exacerbation of Social Inequalities?

Introduction

Studies connecting school quality with student outcomes have a long history within the social sciences. Researchers have worked with an assortment of school-level variables such as length of the school year, per-student expenditures, and student-teacher ratios to explain a variety of student outcomes, such as future earnings and occupation, as well as educational achievement and attainment (Card and Krueger, 1996; Coleman, et al. 1966; Entwisel and Hayduk, 1988; Maxwell and Maxwell, 1995; Merrigan and Verstraete, 2008; Webbink, 2005). Nevertheless, these studies are varied in their conclusions regarding the relationship between school quality and student outcomes.

Interest in this area expanded in the mid-1960s with the release of the Coleman Report (Coleman et al., 1966). *Equality of Educational Opportunity* offered a unique perspective on educational inequality. Beginning with the widely held notion that a high quality school with high quality resources should help minimize the educational gap that exists between advantaged and disadvantage students, Coleman stated that "just as a loaf of bread means more to a starving man than to a sated one, so one very fine textbook or, better, one very able teacher, may mean far more to a deprived child than to one who already has several of both" (p. 8). But Coleman's research disputed this position, arguing that: "whatever may be the combination of nonschool factors – poverty, community attitudes, low educational level of parents – which put minority

children at a disadvantage in verbal and nonverbal skills when they enter the first grade, the fact is the schools have not overcome it" (p. 21). In other words, Coleman argued that educational policies and school-based initiatives were not enough to help disadvantaged students catch up to their advantaged peers.

In recent decades, researchers have sought to challenge Coleman's findings, but with mixed results. Much of this research comes out of the United States where there is a high level of stratification among schools, within cities and across states. While the extent of between-school stratification is not as obvious within Canada, studies of the effects of school quality are still relevant since an evaluation of measures of school quality in and of themselves may provide insight into the types of possible educational interventions that may help disadvantaged youth.

Within the United States, discussions of school quality are often linked to the debates surrounding school choice, that is, whether parents should be able to choose among schools with a wide range of different policies and programs and/or between public, alternative, charter, and private institutions. Powers and Cookson Jr. (1999) argue that the "choice" debate can be broken into two distinct schools of thought. On the one hand are business groups, market theorists, policy advocates, religious groups, and entrepreneurs who believe the public school system is too rigid, monolithic, unaccountable, and thus failing youth (p. 105). These groups maintain that by changing the structure of schooling, that is by giving parents choice over where to send their children, public institutions will become more accountable and effective. On the other hand are those who believe

that public schooling is the "cornerstone of democracy" (p. 105) and that there is no clear evidence that a lack of school choice leads to lower achievement levels. An underlying premise of school choice, according to the market approach, is that as parents are given more choices in terms of their children's education, schools will need to become more effective, as measured by levels of student success. Therefore, all schools, regardless of type (i.e., private, charter, or public), will need to increase their quality to remain competitive in a consumer-based "educational" market. While the point of this chapter is not to debate the merits of school choice, discussing this educational philosophy reminds us to take into account differences across schools as school choice has the potential to exacerbate inequalities amongst students by creating homogeneity within schools (i.e. the notion of 'school mix' as argued by Thrupp, 1999), when conducting a study of educational outcomes such as this one.

Decisions regarding school choice often come down to the characteristics of the school itself. Schools which have smaller class sizes, more resources (e.g., libraries, computers, labs), and which provide more instructional hours during the school year are often attractive to parents seeking a more positive educational experience for their children. However, the actual benefits which arise from these characteristics are highly contested. For example, in her study of Milwaukee schools, Rouse (1998) found only indirect evidence that smaller class sizes in primary to grade 5 schools can contribute to higher math achievement levels. Focusing on class size, Dearden, Ferri, and Meghir (2002) found that pupil-teacher ratio had very little effect on educational attainment and wages, both ten

and twenty years later. Following Brown and Saks (1975) and Eide and Showalter (1998), Bedard (2003) used Canadian Census data to show that the direction and size of the impact exerted by class size, school size, and teacher salaries is not consistent across income levels. Specifically, Bedard found that reducing class size and raising teachers' salaries is beneficial only for those youth from the high end of the income distribution; it is either detrimental or has no effect on those from the lower end of the income distribution.

In a review of studies of school effectiveness, Hanushek (1997) found that results were generally unclear as to the effect on student attainment of educational inputs such as student-teacher ratio, educational attainment of teachers, and annual expenditures per student. While some studies, such as of Lefebvre, Merrigan, and Verstraete (2008), found that the quality of a school does have a positive impact on math performance, others (e.g., Todd and Wolpin, 2007) argue that school inputs have no impact on math and reading achievement scores. Thus, since they are inconsistent in their findings, recent studies reinforce the original findings of the Coleman Report which ultimately argued that differences between schools were not enough to eliminate the effects of family background on student achievement. As stated by Janushek (1986, p. 1162) "it would be easy to conclude that the findings of the [available] studies are inconsistent. But there is a consistency to the results: There appears to be no strong or systematic relationship between school expenditures and student performance."

Despite the fact that research results in this area are inconsistent, local governments continue to push educational agendas which focus on spending a

significant proportion of their budgets on increasing educational resources and investing in programs to help disadvantaged students. For example, Alberta Education has recently formulated an action plan which includes the goal of developing an inclusive education system where each student is provided with a personalized education that focuses on their individual strengths and weaknesses (Alberta Education, 2010). This initiative seeks to improve the learning experiences of Alberta's youth, particularly those considered to be "at-risk". A recent report released by Alberta Education (2010, p. 1) states:

> Evidence is mounting that many problems experienced by students in middle and secondary schools – such as disengagement, dissatisfaction with their schooling experience, and dropping out – are significantly linked to the learning environment and disengagement is disproportionately experienced by students living in poverty, ethnic minorities, and other students with diverse learning needs.

Given that local governments continue to focus on increasing school quality as a means of helping disadvantaged students, more research in this area is warranted to determine whether such educational interventions do matter and, if so, which aspects of school quality can have the most positive effect on educational performance among disadvantaged students?

This dissertation has focused on the impact of educational aspirations on educational attainment, specifically post-secondary participation. In the previous chapter, using a longitudinal approach to examine both the direct and indirect effects of educational aspirations in conjunction with other variables, it was found that youth who aspire to higher levels of educational attainment at age 15 achieve higher marks in grade 12 and are more likely to participate in higher levels of

post-secondary education by age 19. Youth whose parents are university-educated have higher educational aspirations themselves, and are more likely to participate in higher levels of PSE by age 19. In contrast, youth who do not have university-educated parents are more likely to have lower educational aspirations at age 15, are more likely to have lower grades in high school, and are more likely to discontinue their education after high school or to drop out prior to graduating. Given that youth whose parents have lower levels of education often experience difficulties making the transition from high school into post-secondary education, particularly university, this chapter adds an additional component to the ongoing debate regarding the importance of school quality by asking whether, in addition to all the other background variables considered in the previous chapter, school quality is associated with both educational aspirations and post-secondary participation?

Bourdieu on the Role of School Quality

Throughout much of his career, Bourdieu grappled with the role of the education system in shaping and reinforcing cultural and social reproduction of inequality. Following his theoretical arguments, some recent empirical studies have asked whether the education system could help expose youth to various forms of capital which are lacking within the familial home, thus giving them advantages that may otherwise not be available to them (Bedard, 2003, Webbink, 2005) . However, Bourdieu was quite clear on his position with regards to the role of the education system as a means for overcoming social disadvantages and breaking the cycle of social reproduction. He argued with respect to the

educational attainment/ achievement process that "it becomes necessary to study the laws that determine the tendency of structures to reproduce themselves by producing agents endowed with the system of predispositions which is capable of engendering practices adapted to the structures and thereby contributing to the reproduction of the structures" (Bourdieu, 2006, p.258). In other words, youth endowed with various forms of capital and possessing the proper educational dispositions (habitus) are able to use such resources as a means for manoeuvring between and through educational institutions and do so successfully. Moreover, students who possess attitudes or dispositions (i.e., habitus) similar to that of their teachers are better able to relate to both the teacher and the curriculum established by individuals of a like-minded habitus. This results, overall, in a more positive and meaningful educational career for more advantaged youth. In this way, much like Coleman et al. (1966) argued, Bourdieu's basic position is that disadvantaged youth will continue to be disadvantaged throughout their educational careers.

Bourdieu maintained that the observed link between family SES and educational attainment is often the result of strategic choices and plans made by elite parents to create education systems which favour the privileged (Maxwell and Maxwell, 1995). As children of the elite are endowed with various forms of capital and possess a habitus which aligns with the motivations of the education system, these youth can better maximize the benefits associated with a high quality school whereas working class youth, despite access to the same educational resources, may not have the know-how (habitus) to engage them. The

1985 summary by Robinson and Garnier, as quoted by Maxwell and Maxwell (1995) remains highly relevant:

> Through the choice of curriculum, pedagogical methods, the relationship between teacher and students, and the methods of selection – all of which gave the children of the economically privileged and well educated an advantage over the children of the less privileged and less educated – the education system did not break down class and cultural inequalities but reinforced them (Robinson and Garier, 1985, p. 251).

Based on this line of reasoning, one might argue that educational interventions will not succeed in narrowing the gap between educationally-advantaged and educationally-disadvantaged youth.

However, the success of educational interventions is often measured via achievement testing and subsequent wage levels and occupational prestige (Bedard, 2003, Card & Kruegar, 1992, Dearden, Ferri, & Meghir, 2002). As this dissertation has shown, educational aspirations at age 15 have both a direct and indirect effect on subsequent post-secondary educational participation. If schools, through various educational interventions such as decreasing classroom size, increasing access to quality educational resources, and increasing the amount of time students spend in the classroom, could both elevate student aspirations and also help prepare students to achieve these goals, then perhaps educational interventions may be more effective in creating positive student gains. This chapter will evaluate this assertion by asking whether, controlling on other relevant factors, aspirations are higher in schools with more resources and whether, as a result, students are also more likely to participate in higher levels of the post-secondary educational system by age 19.

Analytic Design

Drawing on the conceptual model developed in Chapter 2, this chapter adds the effects of school quality to the temporal model of post-secondary educational participation presented in Chapter 5. School quality will be measured using the following variables: (1) level of educational resources found within the attended school; (2) average student-teacher ratio within the attended school; and (3) total number of instructional hours per academic year within the attended school. In addition, the following analyses will compare the type of high school attended, either a private or public school.[25] Private schools are marketed largely on the presumed better achievements of their graduates, both in high school and in the post-secondary system (Maxwell & Maxwell, 1995; Davies & Quirke, 2006; Davies, Quirke, & Aurini, 2006). A more complete description of these variables can be found in Chapter 3.

Specifically, this chapter will address the following research questions:

1. What effect, if any, does high school quality have on the educational attainment process? In other words, controlling on the socio-economic, attitudinal, and demographic variables already examined in Chapters 4 and 5, are schools with different characteristics and different levels of resources a site where the reproduction of social inequality across generations can be partially ameliorated?

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[25] A number of other possible school-level variables were available in the YITS database. The decision not to include student peer groups was based on the assumption that this variable could not be incorporated into educational policy in a tangible way. The decision not to use variables such as teacher experience / education and learning incentives for students, was based on the recognition that other variables (i.e., those I did choose) have recently been targeted areas of interest. For example, school choice has become a "hot topic" with many parents searching for more specialized educational options for their children. Within the realm of school choice, parents are typically considering such factors as student-teacher ratio, school-based resources, and the option of enrolling their children in either a public or private school.

2. Does school quality affect the relationships between socio-economic, attitudinal, and demographic variables and educational aspirations at age 15 as well as educational participation at age 19?

A logistic regression analysis predicting educational participation at age 19 is first employed to evaluate the main effects of the four measures of school quality mentioned above. After examining these relationships, the four school quality measures are added to a logistic regression equation with the same dependent variable but also the full list of individual, family, demographic, and geographic variables examined in Chapter 4, to see if the school quality variables have net main effects. The analysis then shifts to an examination of interaction effects. In other words, whether or not school level variables have independent main effects on post-secondary participation, do they also possibly affect the relationships between other predictor variables and youth's educational aspirations at age 15 and post-secondary participation by age 19. This analysis is conducted by comparing two sets of paired logistic regression analyses that contain the same variables examined in the single full-sample logistic regression analyses presented in Chapter 5.[26] In the first set of comparisons, the sample is divided into students attending schools with high levels of educational resources (the top 33% of the

[26] This approach to examining both individual/family and school-level effects was chosen over hierarchical linear modeling (HLM) because of its relative simplicity. Again, as with the choice of path analysis over structural equation modeling in the previous chapter, my goal was to make my research available to a wider reading audience. The principal advantage to utilizing HLM lies in its ability to separate variance into components explaining the effects of different levels of analysis, such as the effect of students, families, classrooms, and schools. While my simpler approach to looking at possible multi-level interaction effects cannot do this, it can clearly show the extent to which individual- or family-level variables have different effects under different school conditions (e.g., private schools compared to public schools).

educational resource distribution) and those with low levels of educational resources (bottom 33% of the educational resource distribution). In the second set of comparisons, the sample is divided into those youth attending private schools and those attending public schools to establish any educational advantages that may be offered by attending one type of school over the other. [27]

To determine whether the effect of a particular variable in one sub-sample is significantly different from its effect in the other sub-sample (i.e., when comparing private versus public schools, and high resourced versus low resourced schools), a simple t-test will be employed. In this case, the t-test assesses whether the slopes for a particular variable in a multiple regression equation used in the path analysis are statistically different from one another. A T-ratio that exceeds a value of 1.96 is considered to be statistically significant at the 0.05 level. The formula for this computation is as follows:

$$t = \frac{b_1 - b_2}{\sqrt{SE_1^{\,2} + SE_2^{\,2}}}$$

Where: b1= slope (unstandardized coefficient) for the specific variable in the first equation
b2= slope (unstandardized coefficient) for the specific variable in the second equation
SE1 = standard error of the coeffficient (b1) in the first equation
SE2 = standard error of the coefficeint (b2) in the second equation

[27] The decision to focus on these two measures of school quality is based, in part, on the results from the multivariate logistic regression analysis presented below in Tables 6.1 and 6.2.

Main Effects of School Resources and School Type on Educational Participation at Age 19

The following analysis begins by questioning whether one or more measures of school quality / type have a significant net impact on university participation of YITS participants by age 19. The only substantial finding in the logistic regression equation displayed in Table 6.1 involves differences between public and private schools. Specifically, compared to those youth who attend private schools, youth who attend public schools are 41% less likely to go to university. Educational resources and total instructional hours have virtually no net effect on university attendance at age 19. The, student-teacher ratio has a significant positive effect on university attendance, which is not what one might expect. Specifically, an increase in the number of students per teacher yields increased odds of university attendance among students. However, the effect is very small, and only statistically significant because of the very large sample. Moreover, it is important to note that only a small percentage of the overall variance (0.7%) in university attendance among 19 year-olds is accounted for with this model. And since the many other variables which we already know to be influential with respect to university attendance are still not in this model, any conclusions drawn at this point are premature.

Table 6.1: Odds of attending university for selected measures of school quality/type, Canada, 2000 and 2004

		Odds Ratio	
Educational Resources		1.002	
Student/Teacher Ratio		1.023	***
Total Instructional Hours		1.000	
Public/Private School	Public	0.589	***
	Private		
N		13549	
Nagelkerke R Square		0.007	

* p<.05; **p<.01; ***p<.001

The next step in this analysis provides a more thorough examination of the effects of school quality by expanding the current model to include a more complete list of predictor variables. In Table 6.2, university participation at age 19 is the dependent variable in a logistic regression equation including both school quality/type variables as well as the many family background, individual demographic, attitudinal (i.e., aspirations of youth and parents), and geographic variables found to be of interest in previous chapters.

Similar to what we observed in Table 6.1, the effects of school quality/type in Table 6.2 remain relatively unchanged. Again, the only school-level measure found to be substantially and statistically significant is the type of high school attended. Specifically, youth who attend public schools are approximately 44% less likely to go to university than those who attend private schools, controlling on all the other variables in the equation. It would appear, then, that even after controlling for SES (parents' education), private schools still offer educational advantages in terms of higher rates of university attendance.

However, once again the issue of direct and indirect effects must be considered. If we were to construct a path model where SES and other ascribed characteristics, along with parents' educational aspirations for their children were positioned as exogenous variables affecting private/public school choice, we would probably find that the total (indirect and direct) effects of these endogenous variables would be substantial, in addition to any direct effects of private school attendance. Recall that, in Chapter 4 (Table 4.14), youth who aspired to attend university at age 15 were 3.7 times more likely to indicate that university was the highest level of education they had participated in by age 19. Within the current analysis, after controlling for school quality/type, the net effect of educational aspirations is virtually unchanged. As for the other individual, family, and geographic-level variables originally examined in Table 4.14, in most cases their effects are reduced a bit when school-level variables are included as predictors (comparing odds ratios in Tables 4.14 and Table 6.2), but the conclusions drawn earlier about their net effects would only change little. In short, at least in terms of main effects, the impact of educational aspirations, parental education, high school grades, and other key explanatory variables on university attendance at age 19 is not substantially altered by the inclusion of school-level variables in the analysis.

Table 6.2: Logistic regression, incorporating school-level variables, predicting university attendance at age 19, Canada, 2000, 2002, and 2004

		Odds Ratio	
Educational Resources		1.003	
Student/Teacher Ratio		1.019	*
Total Instructional Hours		1.000	
Public/Private School	Public	0.553	***
	Private		
Educational Aspirations	College	0.942	
	1+ University Degrees	4.005	***
	High School Diploma or Less		
Sex:	Male	0.755	***
	female		
Visible Minority-Immigrant Status:	Visible Minority Immigrant	1.260	***
	All Else		
Overall Grades	69% or lower	0.072	***
	70-79%	0.253	***
	80% or higher		
Parental Education:	1 Degree	1.763	***
	2 Degrees	2.603	***
	No Degrees		
Parental PSE Aspirations for Youth	College	0.867	
	1+ University Degrees	2.067	***
	High School Diploma or Less		
Canadian Regions	Atlantic Canada	1.639	***
	Quebec	0.291	***
	Manitoba/Saskatchewan	1.083	
	Alberta	1.050	
	British Columbia	0.916	
	Ontario		
Rural/Urban	Rural	0.810	***
	Urban		
N		11521	
Nagelkerke R Square		46.2%	

* p<.05; **p<.01; ***p<.001

These findings, while preliminary since they focus only on main effects and do not take into account interaction effects, are nevertheless relevant. As Bourdieu suggests, and as Coleman et al. (1966) observed, measures of school quality do not necessarily allow disadvantaged students to overcome the educational barriers associated with their disadvantaged social position. Hence, these preliminary findings point towards an affirmation of Bourdieu's theoretical argument since, even after controlling for the effects of school quality which essentially puts all youth on a level playing field within equally resourced schools, SES continues to play a significant role in shaping patterns of university participation. If the effect of SES had diminished substantially, one might argue that schools can ameliorate any educational disadvantages associated with family background. But capital, habitus, and field all work together to create student outcomes. In this situation, the social space, or field, associated with the school does not, at first glance, appear to be able to help students overcome the disadvantages associated with family background.

School Resources and School Type: Interaction Effects on Aspirations at Age 15 and Educational Participation at Age 19

As already noted, to this point we have only examined the main effects of school-level variables. While they may not have significant main effects on educational participation at age 19 (with the exception of school type – public versus private), it remains possible that they might have interaction effects. In fact, they might also have interaction effects with other predictor variables on young people's aspirations at age 15. For example, we might hypothesize that

family SES would have a much smaller effect on educational outcomes at age 19 in better resourced schools as compared to poorly resourced schools. Or we might predict something similar when comparing private and public schools. In other words, if a low-income youth manages to get into a private school, or a well-resourced school, perhaps family background no longer matters all that much.

In short, despite the highly influential role of the family, schools may still become a site where disadvantages associated with family SES can be negated. For example, schools with positive educational environments may encourage students to raise their educational aspirations, which may subsequently affect how well they perform academically in grade 12, thereby leading to higher levels of educational participation by age 19. If the role of the family, measured through household income and parental educational aspirations, can be mediated through various school quality indicators, then policies which encourage increasing school quality will be increasingly warranted.[28]

The following analysis examines the merits of such an argument in two different ways. I first examine the effect of schools with either high levels of education resources or low levels of educational resources on the patterns of post-secondary participation already explored in Chapter 5. I then repeat the analysis, this time examining the effect of type of school attended – public high schools

[28] The decision to use household income instead of parental education (as in Chapter 5) as a measure of family SES in these tests for interaction effects is based largely on the argument that educational resources that may be lacking in schools can be purchased by wealthier families more so than by low-income families. Furthermore, high income families also have the option of enrolling their children in private schools, more so than low-income families.

compared to private high schools – on the same patterns of post-secondary participation.

Unlike the previous chapter which focused on the overall change in standardized regression coefficients (beta values) that resulted from including additional variables into successive regression equation, this chapter focuses on the differences between the slopes (unstandardized coefficients) of the regression lines when the sample is divided by school type and by levels of school resources. This is necessary since, when the total sample is split into sub-samples, the means and standard deviations of variables in the analysis would not necessarily be the same in the sub-samples. As a result, it might be misleading to compare standardized coefficients (beta values).

High versus Low Resourced Schools: Do School Resources Matter?

Table 6.3 displays the slopes for all predictor variables for the regression equations for educational aspirations at age 15 and for educational participation at age 19, within low and high resourced schools. Focusing first on the predictors of aspirations at age 15 (the left panel in Table 6.3), we observe that only some of the pairs of slopes are significantly different[29]. While the effects of household income, gender, visible minority immigrant status and urban-rural residence are not significantly different in high and low resourced schools, we can see some significant differences across regions indicating that the educational aspirations of young people are differentially affected by whether or not the youth attends a

[29] See Appendix Table 1 for details of the significance tests.

highly-resourced school or poorly-resourced school. For example, compared to Ontario, high resourced schools have a significantly more positive impact on the educational aspirations of 15 year-olds in Atlantic Canada, Quebec, and Alberta. In other words, it appears that the level of school resources matters less, with respect to increasing young students' aspirations, in Ontario than it does in most other provinces. One might speculate that youth in Quebec who attend poorly-resourced schools may be more actively socialized into the CEGEP system which is more vocational in nature than the university system. Similarly, youth in Alberta who attend poorly-resourced schools may be encouraged to pursue careers in that province's blue-collar economy, which requires lower levels of educational attainment.

Table 6.3: Slopes for the direct effects of predicted variables within high and low resourced schools, Canada, 2000, 2002, and 2004

Predictor Variables	Educational Aspirations @ age 15		Educational Attainment @ age 19	
	Low Resources	High Resources	Low Resources	High Resources
Household Income	.073	.165	.483	.461
Gender	-.050	-.085	-.072	-.054
Visible-Minority Immigrant	.042	.035	.182*	.378
Atlantic #	.001*	.142	.251	.209
Quebec	-.141*	.098	.036	-.058
Prairies	-.030	.067	-.028	.001
Alberta	-.119*	.064	-.047	-.059
British Columbia	-.015	.081	.075	-.065
Rural	-.025	-.087	-.026	.007
Parental Educational Aspirations	.502	.551	.233	.217
Educational Aspirations @ age 15			.284	.347
Grade 12 Marks			.537	.525

* Difference between slopes is statistically significant ($p < 0.05$)
# The reference category for the regional comparisons is Ontario

The second panel in Table 6.3 examines the possible differences that attending a high- compared to a low-resourced school may have on the relationships between predictor variables and educational participation at age 19. The only statistically significant difference emerges for visible minority immigrant youth, who are shown to fare better in high resourced schools. Given visible minority immigrant youth may come into the education system with English as a second language and be lacking the types of cultural capital that are valued within the Canadian education system, attending a high resourced school may provide them with additional advantages that they are able to translate into long-term educational advantage through increased odds of attending university.

Private versus Public Schools: Does type of high school matter?

It has been argued that there are specific educational advantages associated with attending private schools over public schools. The benefits of private schools are argued to include such things as smaller class sizes, specialized curriculums, and greater parental control over the educational process. Moreover, given the presumed higher academic standards set in private schools (Quirke, 2009), the type of youth who attend them may be relatively homogeneous with respect to their attitudes towards education. Peer groups, as identified in the original Wisconsin status attainment model, can play a significant role in shaping both aspirations and attainment patterns; therefore, private schools may also offer certain peer group advantages. This analysis, paralleling the previous analysis of low and high resourced schools, examines what effect, if any, school type has on the relationships between the predictor variables examined in previous chapters

and educational aspirations at age 15 as well as educational participation at age 19.

Table 6.4 displays the slopes for all predictor variables for the logistic regression equations for educational aspirations at age 15 and for educational participation at age 19, within public and private schools. Focusing first on the predictors of aspirations at age 15 (the left panel in Table 6.4), we observe that only two pairs of the slopes are significantly different. While the effects of household income, gender, visible-minority immigrant status and region are not significantly different in public and private schools, the effect of living in a rural as compared to an urban community does differ depending on whether or not the youth attends a public school or a private school. Specifically, compared to public schools, private schools have a significantly more positive impact on the educational aspirations of urban youth (slopes of -.027 versus -.141, respectively). While an interpretation of this difference is speculative, at best, it may mean that the types of private schools typically attended by rural youth may be less academically focused (e.g., religious private schools).

Still focusing on educational aspirations, it is interesting to note that the role of parental educational aspirations in shaping youth educational aspirations is also affected by whether or not the youth attends a public school or a private school. Specifically, parents' educational aspirations are more influential in public schools. Given that the culture of a private school is aimed towards academic excellence, there may be an expectation that all youth in the school will pursue university after graduating from high school. Within public schools, this

culture may not be as omnipresent. In other words, habitus formation within the familial home, with respect to a university-oriented habitus, appears to be more important within public schools than private schools.

Table 6.4: Slopes for the direct effects of predicted variables within public and private schools, Canada, 2000, 2002, and 2004

Predictor Variables	Educational Aspirations @ age 15		Educational Attainment @ age 19	
	Public	Private	Public	Private
Household Income	.171	.096	.375*	.133
Gender	-.090	-.105	-.112	-.049
Visible-Minority Immigrant	.117	.077	.222*	-.062
Atlantic#	.077	.137	.168	-.324
Quebec	-.014	-.031	-.060*	-.379
Prairies	.033	-.001	-.047*	-.320
Alberta	.017	-.166	-.108*	-.692
British Columbia	.006	-.026	-.034*	-.393
Rural	-.027*	-.141	-.006*	-.177
Parental Educational Aspirations	.504*	.387	.249	.125
Educational Aspirations @ age 15			.302	.366
Grade 12 Marks			.502*	.259

* Difference between slopes is statistically significant ($p < 0.05$)
# The reference category for the regional comparisons is Ontario

The second panel of Table 6.5 examines the possible effects that attending a public compared to a private school may have on the relationship between predictor variables and educational participation at age 19. First, we see that the effects of gender, parental educational aspirations, and youth educational aspirations are not significantly different between public and private schools. Table 6.5 does show a significant effect for household income. This effect is positive (youth from more affluent households are more likely to attend university), but it is stronger in public schools. Family SES seems to matter less in private schools. But since other research shows that, on average, youth from more

advantaged families are more likely to attend private schools (Davies and Guppy, 2006, p.231), this apparent equalizing effect of private schools may have little impact on the inter-generational reproduction of inequality. You have to first get into a private school before you can benefit from the school culture that promotes university participation.

We do find significant differences for the effects of visible-minority immigrant status. Specifically, visible-minority immigrant youth, while more or less comparable to their White native-born peers when they attend private schools, are more likely to attend university when they attend public schools.

There is also some evidence that regional differences in university attendance by age 19 are accented when comparing youth attending public and private schools. Compared to in Ontario, youth who attended private high schools in Quebec, the Prairies, Alberta, and British Columbia are significantly less likely to be attending university at age 19. While it is not possible to further explain this finding with YITS data, it may be that more private schools in Ontario are of the elite upper-class variety compared to religious and other types of private schools. Ontario is home to many highly-acclaimed private institutions (e.g., Upper Canada College), which may help account for the observed regional differences, However, further research is required to determine if this is true.

Still focusing on university attendance at age 19, grade 12 marks are shown to matter more for youth attending public schools than those attending private schools. Within private schools, students are expected to make the transition into university whereas, within public schools, students may be guided

into university only if their grades suggest they are "university-material". In other words, the social fields in which they youth attend schools (defined as either a public school or private school) plays a large role in determining post-secondary educational success.

Discussion

This chapter began by evaluating the main effects of school quality and school type on educational participation by age 19, controlling on the many other individual, family, and other factors found to be important in previous chapters. However, the impacts of educational resources, student/teacher ratio, total instructional hours, and whether the youth attended a public or private high school were minimal. The only substantial finding involved the differences between public and private schools, with students attending the latter being significantly more likely to be attending university at age 19. Furthermore, in terms of main effects, the impact of youth's and parents' educational aspirations, parental education, high school grades, and other key explanatory variables on university attendance at age 19 were not substantially altered by the inclusion of school-level variables.

These preliminary findings suggest that, with the exception of attendance in a private school, an opportunity not available to the majority of Canadian youth, school-level variables do not ameliorate the disadvantages associated with familial background. However, it remains possible that school resources and school type might have interactive effects on university attendance at age 19, and perhaps also on aspirations at the earlier age of 15. In other words, do school

quality and type affect the relationships between predictor variables and educational aspirations at age 15, as well as educational participation at age 19. To test for this possibility, the sample was separated into distinct groups, first to compare those attending well-resourced school with those attending poorly resourced schools, and then to compare youth attending private schools with those attending public schools. A more interesting story about school-level effects emerged from these tests for interaction effects.

Some of the significant interaction effects involved regional differences across Canada. Compared to their counterparts in Ontario, students attending private schools in Quebec, the Prairies, Alberta, and BC were less likely to be attending university by age 19. During the 1990s, Ontario saw a 40% increase in both the number of private schools and number of enrolments, compared to just 20% for the rest of the country (Aurini & Davies, 2005, p.461). While the increased number of private schools and private school enrolments would not account for the presence of this "Ontario advantage", it might however, be part of the explanation if the expansion of Ontario's private school system involved greater growth in the number of elite university-focused private schools. Again, as previously mentioned, additional research comparing Ontario's private schools to those across other provinces would be necessary to confirm this hypothesis.

Other significant interaction effects involved visible-minority immigrant youth. Compared to their non-visible-minority immigrant peers, these youth appear to better maximize the advantages offered within high resourced schools. As stated earlier, visible-minority immigrant youth may come into the education

system with English as a second language and be lacking the types of cultural capital that are valued within the Canadian education system. Attending a high resourced school may provides them with some additional advantages that they are able to translate into long-term educational advantages through increased odds of attending university.

A somewhat different picture emerged from the interaction tests involving comparisons between young Canadians who had attended public and private schools. Parents' aspirations for their children had a stronger positive effect on their children's university aspirations in public schools compared to private schools. Grade 12 grades had a significantly stronger effect on university participation at age 19 in public than in private schools. In addition, the positive effect of visible minority immigrant status on university attendance was stronger in public schools. The explanation of all of these interaction effects may be the same. In most private schools, planning for university is part of the culture. It is expected that you will go on to university. This would appear to be an ideal "equalizing" environment for young Canadians. The problem, of course, is that most young people from disadvantaged backgrounds do not have the privilege of attending private high schools.

Finally, it is noteworthy that the tests for interaction effects did not show that the impact of youths' educational aspirations on subsequent post-secondary educational participation was affected by neither school resources nor school type. Following Bourdieu's theoretical approach, this would suggest that the mechanisms which shape educational aspirations within the home, such as

familial capital and the resulting habitus, are not really affected by school quality and type. In other words, when it comes to both aspiration formation and the effect of aspirations, schools do not significantly alter the highly influential role of the family. Furthermore, as observed earlier, well-resourced schools can sometimes amplify the effects of family SES on post-secondary participation. As for private schools, while several acknowledged predictors of post-secondary participation – household income, visible minority immigrant status, and grade 12 marks – are less influential in them, the real issue has to do with gaining entry into private schools.

Chapter 7: Conclusions

In this chapter, I will begin with an overview of the study. Next, I will summarize and discuss the main findings by systematically addressing the research questions posed in Chapter 2. These findings will be interpreted in relation to both Bourdieu's theory of practice and status attainment theory. I will then discuss the educational policy implications of the study, before commenting on a few study limitations and future areas of research.

Overview of the Study

Are the educational aspirations of 15 year old youth too ambitious, unrealistic, or precarious and therefore not reflective of the social realities that inform educational participation? Or do educational aspirations have the potential to allow young people to overcome traditional class-based and other sources of inequality and achieve educational parity with their non-disadvantaged peers?

On the one hand, at age 15, educational aspirations may result from unrealistic self-appraisals of scholastic ability, inaccurate information about post-secondary education, and other factors that may be unrelated to motivation, such as the economic costs associated with PSE. Or, given the increase in the variety of post-secondary educational options available to young Canadians (Krahn and Hudson, 2006), aspirations may be reflective of these expanded options. On the other hand, research has also shown that elevated educational aspirations, which are often shaped by social class, lead to increased levels of educational attainment (Edgerton, Peter, & Roberts, 2009), and subsequently, higher status occupations and incomes (Anisef et al. 2000). Given the inherent contradiction between these

two positions, one where aspirations are seen to lead to post-secondary participation, the other where aspirations are considered ephemeral and fleeting attitudes, there is value in directly examining the role educational aspirations play in a model of educational attainment.

As outlined in Chapter 1, this dissertation contributes to the growing body of educational research in a variety of ways. First, this research is a replication of existing research, some of which was conducted decades ago. Given the many educational, labour market, immigration, and technological trends which have significantly affected the Canadian cultural and social landscape, it is important to reassess the extent to which traditional dimensions of social inequality continue to manifest themselves in the educational attainment process. The replication of existing research is further advanced through my use of the Youth in Transition Survey, a contemporary, national, longitudinal and multi-level dataset that offers unique analysis opportunities. While this research has contributed to the literature by updating our knowledge of the sources of educational inequality in Canada, by focusing explicitly on educational aspirations, it also has the potential to enhance the Canadian policy agenda with a direct focus on the role of educational aspirations.

While debate continues about the mechanisms that reproduce educational inequality, this dissertation helps fill a theoretical gap in the educational inequality and status attainment literature. Prominent among theories explaining educational inequality is Pierre Bourdieu's theory of practice. Bourdieu relies on his concepts of habitus, field, and capital to explain why educational inequality

results from an institutionalized system established to maintain a privileged status quo. For Bourdieu, transfer of capital occurs within the family and has lasting effects on the educational trajectories of youth as the education system reinforces the cultural tastes and dispositions of a privileged middle and upper-class.

Bourdieu's theory of practice has not been the prevailing approach to studying educational inequality among North American quantitative researchers. Instead, researchers have often relied primarily on status attainment theory which, while also viewing social origins as important, in conjunction with academic ability and peer groups, does not provide as theoretically nuanced an explanation of the reproduction of social and educational inequality. It does, however, offer a more testable causal model of the factors that help determine positions in a social hierarchy.

Educational aspirations, as was argued initially in Chapter 2 and then demonstrated throughout this dissertation, are an essential link that can bring together the strengths of Bourdieu's theory of practice and status attainment theory. Educational aspirations are a key variable in the status attainment literature; however, they can also be seen as a reasonable operationalization of Bourdieu's concept of habitus. Together, these theoretical approaches provide a more complete explanation of the reproduction of educational inequality.

This study used data from the Youth in Transition Survey (YITS) to assess the role that young people's educational aspirations play in linking background characteristics and post-secondary educational participation. The YITS is a Statistics Canada longitudinal dataset containing a total of 5 waves of data,

collected in conjunction with the Programme for International Student Assessment (PISA), a project of the Organization for Economic Cooperation and Development (OECD), starting in 2000 and continuing every 2 years. This study used data from the first three waves, when YITS participants were 15, 17, and 19 years old. The unique structure of the YITS (i.e., information was gathered from youth, their parents, and their schools during the first data collection period), made it an ideal choice for a study of the individual, family, and school-level factors shaping both educational aspirations and post-secondary participation. The final sample for this analysis contained 16,842 of the original 34,275 participants.

This analysis of YITS data was conducted in three phases, described within each of the analytic chapters (Chapters 4 through 6). The first phase examined the patterns of educational aspirations and post-secondary participation among Canadian youth and began to describe the relationship between the two. The second phase examined these issues in further detail by placing both educational aspirations and educational participation into a temporal model using a path analysis modeling technique. The third phase added school level variables to the previous multivariate analyses, and then went on to check for interaction effects, to determine if school quality and school type have significant impacts on relationships between other variables in the educational attainment process.

Main Findings and Conclusions

Phase 1: Patterns of Educational Aspirations and Participation

The first goal of this study was to describe and analyze patterns of educational aspirations among young Canadians. Specifically, Chapter 4 addressed the following questions:

1. Are educational aspirations meaningful? That is to say, are they simply ephemeral and fleeting attitudes, or are they consistent across time within individuals and do they vary in consistent ways within and between groups of youth in a manner that can help us understand patterns of social inequality?

2. Does post-secondary educational participation systemically vary among youth, particularly with respect to university participation?

3. Do educational aspirations at age 15 translate into educational participation at age 19?

Results from the descriptive and exploratory analysis in this first analytic chapter indicated that, at the onset of their high school years, the YITS participants had very high educational aspirations with 72% aspiring to attain at least one university degree. Additionally, educational aspirations vary systemically across groups of youth. Generally speaking, youth from low-income families and males are less likely to aspire to higher levels of post-secondary education. Furthermore, those youth who do aim high at age 15 – females, visible-minority immigrants, urban youth, and those from more advantaged families – generally maintain their aspirations across time. Therefore, while there is some adjustment in educational aspirations between ages 15 and 19, these adjustments are interpretable, rather than random.

While the majority of 15 year-old youth (72%) wanted to attend university, only 37.6% had participated in university by age 19. Much like educational aspirations, educational participation systematically differed between subgroups of youth. Low-income youth, males, and those from rural communities all reported lower rates of university attendance than their peers. Furthermore, visible-minority immigrant youth and those whose have university-educated parents were also significantly more likely to attend university themselves. Thus, educational participation by age 19 is systematically predictable.

At the bivariate level, approximately 50% of youth who indicated at age 15 that they wanted at least one university degree had, in fact, attended university by age 19. This is in sharp contrast to the 8.2% who did not aspire to educational participation beyond high school but who had attended university by age 19. So, at the bivariate level, aspirations do have a strong impact on educational outcomes. When educational aspirations were modelled using logistic regression, controlling for a variety of individual socio-demographic variables, their effect remained strong and statistically significant. Specifically, youth aspiring to attend university were almost four times more likely than those aspiring to a high school diploma or less to actually attend university by age 19, controlling on a range of other predictor variables. In addition, a number of these other predictor variables – gender, household income, visible-minority immigrant status, parental education – continued to have significant net effects on university attendance by age 19.

For Bourdieu, the intra-group differences in educational aspirations could be explained through differences in access to cultural capital, thereby creating differences in habitus. For some of these youth, differences in familial socialization, in goals and values favoured within the household, have resulted in different post-secondary aspirations. However, strict reading of Bourdieu's theory of practice would suggest that differences arise from an unequal distribution of capital within the familial home, yielding differences in habitus which predispose youth to view university as impossibility. Yet, high levels of university aspirations were observed among youth from less advantaged families, albeit at a lesser rate than what was observed among more advantaged families. In this way, Bourdieu's original notion of the field which was conceived of as isolated social sites where youth were socialized has been expanded to encompass a much wider array of socializing factors, such as attending schools that may expose a young person to forms of capital that may not be present in the home. The inter-play of an expansive field and familial capital may come together to explain why less advantaged youth are also aspiring to high levels of post-secondary education, yet not to the same degree as their more advantaged peers.

Similarly, youth from families with higher levels of parental education have higher levels of educational participation by age 19. Bourdieu would argue that it is at this stage that the evidence of participation gaps between advantaged and disadvantaged youth created by differences in familial capital becomes more obvious. Higher levels of familial capital are associated with particular advantages, such as access to educational resources and opportunities, and

knowledge about the particulars involved in making successful educational transitions. For these youth, educational aspirations may be more meaningful at a younger age. Therefore they can begin sooner to take the necessary steps to make their aspirations a reality.

Phase 2: Evaluating the Direct and Indirect Effects of Educational Aspirations on Educational Participation

The second goal of this study was to evaluate the direct and indirect effects of educational aspirations on educational participation. Specifically, Chapter 5 addressed the following questions:

1. Do family socio-economic, individual demographic, and geographic factors, along with parents' aspirations for their children, have direct or indirect (via aspirations at age 15) effects on educational participation at age 19?

2. Do the educational aspirations young people have at age 15 have a direct effect on educational participation at age 19, over and above the indirect effects they have via grade 12 marks which were shown in Chapter 4 to affect post-secondary educational participation?

3. Are young people who have acquired more post-secondary education by age 19 more likely to have maintained their educational aspirations by age 19?

Results from the path analysis showed that socio-economic, demographic, and geographic factors, along with parents' aspirations for their children, have significant direct and indirect (via aspirations at age 15) effects on educational participation at age 19. When the total effects (including indirect effects via educational aspirations and grade 12 marks) of these exogenous variables on educational participation were calculated, they were found to be considerably larger than their direct effects. These results indicate that a variety of background (or ascribed) characteristics come together to influence both educational

aspirations and grade 12 marks (variables defined in this research as achieved characteristics), and, through, them, post-secondary participation.

After calculating the direct and total effects of each variable in the model on educational participation by age 19, grade 12 marks were found to matter most. However, the sum of the total effects of the ascribed characteristics (i.e., parents' education, gender, visible-minority immigrant status) was slightly larger than the sum of the total effects of the achieved characteristics (grade 12 marks). Thus, while basic logistic regression analyses suggest that achieved characteristics matter the most for post-secondary participation, a longitudinal path analysis demonstrates that social background and ascribed characteristics actually matter more since they operate both directly and indirectly (via academic achievement in high school, for example).

Results from the second path analysis presented in Chapter 5 showed that when only the direct effects were considered, educational aspirations at age 15 was found to be the strongest predictor of educational aspirations at age 19. Yet, when the total effects were considered, parental educational aspirations were found to be the strongest predictor of educational aspirations at age 19, followed by the youth's own educational aspirations at age 15. The third strongest effect on educational aspirations at age 19 was grade 12 marks. Thus, there is some stability in educational aspirations over this critical period in the life course, but aspirations are also affected by experiences, both during early childhood and between ages 15 and 19. Much like the pattern of influence observed for post-

secondary educational participation, the total effect of the ascribed factors on educational aspirations at age 19 is substantial.

Bourdieu's theory of practice, in conjunction with the analytic model of status attainment theory, helped account for the problems of causal ordering and why educational aspirations, while a powerful motivator for youth, did not directly translate into educational participation. Familial habitus remained as a strong predictor of post-secondary participation, as it was found to not only affect educational participation patterns but also educational aspirations and Grade 12 marks. This is consistent with Bourdieu's theory of practice which maintains that the family is the primary site of socialization where understandings of the social world are informed.

These findings demonstrate the continued usefulness of the status attainment model. The original status attainment model, as conceived by Sewell, Haller, and Portes (1969), placed students' educational aspirations at the center of the educational status attainment process. Despite the substantial social and economic changes which have occurred across North America during the past four decades, family background is still found to inform educational aspirations, which combine to shape educational performance in the form of grade 12 marks and eventual post-secondary educational participation.

Phase 3: Evaluating the Effect of School Quality and Type on Educational Aspirations and Educational Participation

The third major goal of this study was to analyze both the main and possibly the interaction effects of school type and quality on educational aspirations at age

15 and on educational participation by age 19. Chapter 6 addressed the following research questions:

1. What effect, if any, does high school quality have on the educational attainment process? In other words, controlling on the socio-economic, attitudinal, and demographic variables already examined in Chapters 4 and 5, are schools with different characteristics and different levels of resources a site where the reproduction of social inequality across generations can be partially ameliorated?

2. Does school quality affect the relationships between socio-economic, attitudinal, and demographic variables and educational aspirations at age 15 as well as educational participation at age 19?

Preliminary results from this chapter showed that the main impacts on educational participation by age 19 of educational resources, student/teacher ratio, total instructional hours, and whether the youth attended a public or private high school were minimal, even after controlling on the many other individual, family, and other factors found to be important in previous chapters. In fact, the only substantial finding involved the differences between public and private schools, with students attending the latter being significantly more likely to be attending university at age 19.

When possible interactive effects of school resources and school type on the relationships between predictor variables and university participation at age 19 were examined, a more interesting story about school-level effects emerged. For example, some of the more significant interaction effects involved regional differences across Canada. Specifically, school resources matter relatively less, with respect to increasing students' post-secondary aspirations, in Ontario than in other provinces. Similarly, compared to their counterparts in Ontario, students

attending private schools across the various Canadian regions were less likely to be attending university by age 19. While this study could not explain this finding, it may mean that more of the private schools in Ontario are of the elite Upper Canada College variety, particularly if the expansion of private schools within Ontario in the 1990s, which was twice that of the rest of the country during this time period (Aurini & Davies, 2005, p. 461), involved more university-focused private schools. These findings may be better explained using qualitative research where insights could be gathered from school administrators, parents, and students.

Other significant interaction effects involved, visible-minority immigrant youth who demonstrated a stronger effect on university attendance for those attending well-resourced schools compared to those attending poorly-resourced schools.

As school quality and type were shown to have mixed effects on the educational attainment process, it can be argued that schools, even those which are highly resourced, are not necessarily a site where the reproduction of social inequality across generations can be ameliorated. In fact, this research showed that, with the exception of regional differences, youth from a variety of socio-economic and demographic backgrounds did not show statistically significant differences between attending high resourced and low resourced schools. Therefore, when socially-advantaged youth are either attending well-resourced schools or private institutions, they do not appear to be able to further their educational advantage through higher levels of post-secondary participation.

These results are in contrast to Bourdieu's position that advantage is accumulated throughout a young person's educational life course.

Moreover, it was found that the impact of youths' educational aspirations on subsequent post-secondary educational participation was not differentially affected by either school resources or school type. Following Bourdieu's theoretical approach, this would suggest that the mechanisms which shape educational aspirations within the home, such as familial capital and the resulting habitus, are not really affected by school quality and type. In other words, when it comes to both aspiration formation and the effect of aspirations, schools do not significantly alter the highly influential role of the family. However, given that well-resourced schools were shown to amplify the effects of family SES on post-secondary participation, the role of educational aspirations within the larger constellation of ascribed and achieved predictor variables is still important. However, these affects do not vary between school quality and type.

While familial habitus remains an important component in shaping educational outcomes, its role is not as dominant within private schools. If a young person from a disadvantaged background can gain access to a private school, she or he is somewhat more likely to overcome those familial and community disadvantages than if they are attending a public school. However, as other research has documented, disadvantaged youth are less likely to be enrolled in private schools where they might benefit from a more pervasive "plan to attend university" culture.

Summary of Major Findings

In summary, the major findings of this study are:

- Educational aspirations at age 15, while generally high, systematically vary within and between groups of youth. Visible-minority immigrant youth, females, and those who have two university-educated parents were the most likely to have the highest aspirations.
- Post-secondary educational participation systematically varies between groups of youth, particularly with respect to university attendance. Again, visible-minority immigrant youth, females, and those who have two university-educated parents were the most likely to have gone to university. In addition, youth from Atlantic Canada (compared to the rest of Canada) and urban youth were more likely to have attended university by age 19.
- At both the bivariate and multivariate level, educational aspirations have a strong impact on educational participation at age 19. Furthermore, educational aspirations at age 15 and age 19 are also correlated and there is a higher correlation within specific groups. Specifically, visible-minority youth and those with two university-educated parents were the most consistent in maintaining their university-focused educational aspirations.
- Socio-economic, individual demographic, and geographic factors, along with parents' aspirations exert both direct and indirect effects, via educational aspirations and grade 12 marks on educational participation.

The sum of these effects exceeds the independent effect exerted by both educational aspirations and grade 12 marks. Therefore, socio-demographic background, such as SES, urban-rural, and gender, continue to matter, despite higher levels of high school achievement than in the past.

- Recognizing that social background matters, educational aspirations nevertheless do have a direct effect on grade 12 marks. In turn, grade 12 marks have the strongest direct effect on educational participation.
- Educational participation at age 19 does have a direct effect on educational aspirations at the same age. However, the direct effects of both parents' educational aspirations and the youth's own educational aspirations, exceed the effect of educational participation. Moreover, the sum of the effects of socio-familial background variables significantly outweighs the effect of educational participation. In other words, by age 19, we still continue to see the effect of social background on young people's educational aspirations.
- Private high school attendance has a significant positive effect on educational participation by age 19, but various measures of school quality do not.
- A number of relationships between predictor variables and educational participation at age 19 are affected by school quality and type. For example, school type affected patterns of educational participation differentially for youth across regions, by household income, and by

parental aspirations. However, the role of educational aspirations is not affected by school quality and type.

Implications for Educational Policy

This study revealed that high educational aspirations do have a significant impact on post-secondary educational participation. These effects are both direct and indirect via grade 12 marks. In addition to the effect of grade 12 marks on educational aspirations, parental aspirations were also found to have a strong impact on aspiration formation and subsequent post-secondary educational participation at age 19.

However, in addition to the aforementioned findings, this study revealed that socio-economic and demographic factors were, overall, the most influential factor shaping both educational aspirations and post-secondary educational participation. Such findings present a certain amount of difficulty for policy makers as mandating changes at the family-level is problematic. However, to overcome the barriers associated with family-level characteristics and dynamics, or familial habitus in the words of Bourdieu, social programs could be developed that help parents understand what is required of their children to make the most of their high school years by motivating them to attain postsecondary education and helping them to achieve high levels of academic excellence. It is important to note that while this research focused on university attendance as the final outcome, community colleges and technical schools offer a wide array of post-secondary educational opportunities which may be more appropriate for many students. Developing meaningful goals, that is, goals which are not necessarily

reflective of the university status quo but rather are more reflective of individual skills, interests, and talents, must be part of the larger formula in helping youth make meaningful educational transitions. In particular, parents from low SES backgrounds may need assistance in helping their children set meaningful goals (whether these are university of college/technical), select appropriate courses, how to do well academically, how to access financial aid and how to apply to college or university. Understanding the processes involved in each of these decisions will help parents to be more involved in their child's educational career and will help keep them motivated to attain higher levels of educational achievement.

Generally speaking, the most important factor that should be stressed in educational programming would be to help students develop meaningful educational aspirations and help them to take the right steps towards achieving those aspirations. If policymakers, educators, and mentors could focus on helping students to access high school tutors and career counselors, and on how to provide students with meaningful information about post-secondary educational opportunities and possible sources of financial aid, Canadians might see further improvements in educational participation among traditionally disadvantaged groups.

Community-based research (CBR) has blossomed over the past 20 years in response to limited research resources, movements toward interdisciplinary/inter-sectoral collaborations, and social and economic demands that research be more responsive to their communities (Kellogg Commission, 1999). Using CBR,

community, government, and academic sectors are increasingly pooling their expertise and resources to tackle a variety of complex societal problems such as poverty, educational inequality, and health. While this dissertation proposes individual-level interventions which may help low-income students achieve higher levels of educational success, these suggestions are not meant to act in isolation to other social policy developments. Much like research on public health focuses on the social determinants of health (SDOH); research on educational outcomes must act in concert with other policy arenas, such as housing, employment, and health. CBR provides a platform where academic, community, and government representatives, with a variety of specializations and expertise, can work together to help students, from a variety of social and economic backgrounds achieve high levels of educational success.

Limitations and Future Research Directions

One of the methodological limitations of this study was that it only focused on initial educational participation by age 19. Studying patterns of initial post-secondary educational participation are an important first step in understanding the connection between family and community background, educational aspirations and post-secondary educational participation. But following these students into their mid- to late-twenties when they have had increased time to complete a university undergraduate degree, switch programs, or make transition into post-secondary education for those who traversed non-linear pathways, would allow a much more detailed analysis of how aspirations and educational outcomes are related. .

While the Youth in Transition Study is unparalleled in its scope and focus, by using secondary data a researcher loses control over the questions asked and the response categories. For example, while the YITS provides detail regarding immigration status and visible minority background, a measure of Aboriginal status was not provided. As Aboriginals represent a growing population within Canada, a population which is quantifiably different than the majority population, this information could have been useful in an analysis of Canadian social and educational inequality.

Introducing a qualitative component to this study, such as interviews with high school students, recent high school graduates, or parents and teachers, would have helped to overcome these potential shortcomings. In-depth interviews with high school students could have provided insight into the factors students define as either hampering or encouraging their participation in post-secondary education and what role they see educational aspirations playing in this process. For example, personal narratives from recent graduates regarding how key factors were utilized to facilitate a successful transition into post-secondary education are only accessible through qualitative research. Moreover, interviews with parents and teachers may provide insight into the challenges they face in either creating or accessing educational opportunities for their family and students. Parental interviews could also provide insight into the school-choice debate regarding the nuances of how such decisions are made. While quantitative methodologies excel in providing generalizations into observed social patterns, the detail and insight which can be generated when conversations are initiated are often missed within

this type of research. Therefore, future research employing mixed methods may be useful in exploring the nuances of educational inequality and the relationship between educational aspirations and participation.

The results of this study indicate several directions for future research in the area of educational aspirations and attainment. First, a follow-up study using the next two waves of the Youth in Transition Survey (up to age 23) would help further our understanding of the connection between educational aspirations and post-secondary educational participation. As previously stated, by following-up on these young people as they approach their mid-twenties, more detail regarding the relationship between background factors, educational aspirations, and levels of post-secondary educational participation could be obtained.

Given that this study revealed minimal and mixed effects of school influences on the educational attainment process, Thrupp's (1999) concept of 'school mix' may be useful for future research. It is suggestive of what may be occurring within schools to produce differential outcomes between various groups of young people. Specifically, controlling for the mean level of SES of students within particular schools in this study may have revealed a school-based advantage that would explain differential educational participation patterns among the sample at the school level.

While it was not the focus of this research, examining the role of occupational aspirations, in addition to educational aspirations, may help expose the aspirations of 15-year olds as either meaningful or ephemeral and fleeting attitudes. Specifically, by juxtaposing educational aspirations with occupational

aspirations with post-secondary educational participation, researchers could better understand whether 15-year old students understand the levels of education required to pursue specific careers. For example, if a young person indicates they want to be a truck driver but they also indicate they want to attain at least one university degree, there may be a disconnect between their understanding of the level of education required to be a truck driver. Research in this area would help clarify concerns regarding the meaningfulness of educational aspirations as a predictor of subsequent educational participation.

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Appendix A: Tests of Significance

Table 1: T-ratios for models comparing schools with low and high levels of educational resources

Predictor Variables	Educational Aspirations @ age 15	Educational Attainment @ age 19
Household Income	-1.507	0.218
Gender	1.154	-.343
Visible-Minority Immigrant	0.111	-2.098
Atlantic	-2.110	0.389
Quebec	-3.309	0.838
Prairies	-1.429	0.260
Alberta	-3.752	0.161
British Columbia	-1.898	1.708
Rural	1.589	-0.517
Parental Educational Aspirations	1.473	-0.268
Educational Aspirations @ age 15		-1.253
Grade 12 Marks		0.341

Table 2: T-ratios for models comparing public and private schools

Predictor Variables	Educational Aspirations @ age 15	Educational Attainment @ age 19
Household Income	1.121	2.404
Gender	0.428	-1.190
Visible-Minority Immigrant	0.745	3.513
Atlantic	-.217	1.214
Quebec	0.298	3.854
Prairies	0.407	2.184
Alberta	1.698	3.648
British Columbia	0.495	3.733
Rural	2.111	2.093
Parental Educational Aspirations	-2.397	-1.614
Educational Aspirations @ age 15		-1.086
Grade 12 Marks		5.806

Appendix B: Correlation Matrix for Table 4.14

	Educational Participation @ age 19	Educational Aspirations @ age 15	Gender	Visible-Minority Immigrant	Family Structure	First language of youth	University preparatory classes: Grade 12 English	University preparatory classes: Grade 12 Math	Grade 12 Marks	Parental Education	Parental Occupation	Household Income	Parental Educational Aspirations	Canadian Region	Rural
Educational Participation @ age 19	1	.364**	.131**	.113**	-.096**	.065**	.305**	.379**	.454**	.314**	-.144**	.168**	-.344**	.014	-.099**
Educational Aspirations @ age 15		1	.113**	.131**	-.053**	.072**	.297**	.377**	.323**	.241**	-.129**	.146**	-.464**	.005	-.108**
Gender			1	.021**	.030**	.014	.085**	.037**	.187**	-.006	.000	-.040**	-.098**	-.014	.022**
Visible-Minority Immigrant				1	-.036**	.502**	.106**	.078**	.039**	.118**	.025**	-.107**	-.164**	.136**	-.189**
Family Structure					1	-.078**	-.078**	-.101**	-.099**	-.088**	-.290**	-.363**	.046**	.000	-.033**
First language of youth						1	-.089**	.046**	.080**	.091**	.049**	-.124**	-.110**	-.044**	-.127**
University preparatory classes: Grade 12 English							1	.419**	.179**	.145**	-.081**	.117**	-.266**	.316**	-.046**
University preparatory classes: Grade 12 Math								1	.364**	.192**	-.095**	.105**	-.327**	.068**	-.041**
Grade 12 Marks									1	.225**	-.081**	.099**	-.304**	-.066**	-.025**
Parental Education										1	-.377**	.281**	-.267**	.029**	-.164**
Parental Occupation											1	-.109**	.141**	-.019*	.108**
Household Income												1	-.161**	.046**	-.110**
Parental Educational Aspirations													1	.026**	.178**
Canadian Region														1	-.076**
Rural															1

Appendix C: Descriptive Statistics for Table 5.1

Variable	Mean	Standard Deviation
Parental Education	1.480	.734
Gender	.490	.500
Visible-Minority Immigrant	.124	.329
Atlantic	.084	.278
Quebec	.161	.367
Prairies	.080	.271
Alberta	.115	.319
British Columbia	.136	.343
Rural	.236	.425
Parental Educational Aspirations	2.726	.484
Educational Aspirations @ age 15	2.687	.565
Grade 12 Marks	2.230	.742
Educational Participation @ age 19	3.075	.949
Total N		**10432**

Appendix D: Descriptive Statistics for Table 6.1

Variable	Mean	Standard Deviation	N
Instructional Resources	-.196	1.030	16568
Student/Teacher Ratio	17.030	2.920	14714
Total Instructional Hours	965.730	219.504	15479
Public/Private School	.945	.229	16578

Appendix E: Correlation Matrix for Table 6.2

	Educational Participation @ age 19	Educational Resources	Student/ Teacher Ratio	Total Instructional Hours	Public/Private School	Educational Aspirations @ age 15	Gender	Visible-Minority Immigrant	Grade 12 Marks	Parental Education	Parental Educational Aspirations	Canadian Region	Rural
Educational Participation @ age 19	1	-.003	.032**	-.006	-.058**	.364**	.131**	.113**	.454**	.314**	-.344**	.014	-.099**
Educational Resources		1	-.012	.039**	.142**	-.031**	-.002	-.041**	-.036**	-.051**	.030**	-.010	.097**
Student/Teacher Ratio			1	.062**	-.039**	.034**	.001	.011	-.011	.057**	-.039**	.154**	-.084**
Total Instructional Hours				1	.024**	-.023**	-.011	.043**	-.027**	-.023*	.006	.089**	.022**
Public/Private School					1	-.053**	.029**	-.007	-.084**	-.128**	.078**	.044**	.066**
Educational Aspirations @ age 15						1	.113**	.131**	.323**	.241**	-.464**	.005	-.108**
Gender							1	.021**	.187**	-.006	-.098**	-.014	.022**
Visible-Minority Immigrant								1	.039**	.118**	-.164**	.136**	-.189**
Grade 12 Marks									1	.225**	-.304**	-.066**	-.025**
Parental Education										1	-.267**	.029**	-.164**
Parental Educational Aspirations											1	.026**	.178**
Canadian Region												1	-.076**
Rural													1