Trial, error and a time of one's own.

Enrolling anew in postsecondary education as an element of the transition to adulthood in Canada

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Abstract

In many societies, the transition to adulthood has become protracted. Postsecondary education is typically seen as a cause of this protraction. However, current research on the transition to adulthood shows that attending postsecondary education is not a 'mechanical' cause of the protraction, but an element in the process by which young people build, drive or correct their own transition to adulthood. One way they do this is enrolling anew in postsecondary education after having interrupted their studies.

We focus on Canada, and look into the process by which young graduates, who stop studying after having completed some postsecondary programme, and young non-graduates, who stop studying by quitting a postsecondary programme, enrol back.

We use data from a panel survey that enables us to follow a sample of young Canadians from the moment they interrupt postsecondary education until the moment they enrol back or up to the age of 27. We use hazard models to test hypothesis about the process that leads them to enrol back or not.

Our results show that, in Canada, enrolling anew is massive and that its timing and circumstances are compatible with the view that postsecondary education is not merely a 'mechanical' cause of the protraction.

Keywords

Higher education; Transition to adulthood; Young adult; Life course; Canada

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Introduction

In most developed societies, adult education is institutionalized. The level of institutionalization and the institutions vary across countries. In some countries, adult education has its own set of institutions. For instance, northern European countries rely on 'people's superior schools' (Folkhögskola, Højskole) and "study clubs" (Studieförbund). In other countries, adult education and regular education are not set apart as strictly. In English speaking countries, adult education is provided as workplace training and evening classes typically provided by regular postsecondary institutions. In Canada, for instance, 34% of people aged 18 to 64 have taken part in a some structured adult education activity during the one year period ending in June 2008; half of these people, or 17% of the whole adult population, has taken part in a form of postsecondary education (Knighton et al. 2009).

Research on adult education usually assumes that adulthood and adult population are straightforward notions whose operationalization is equally straightforward. However, current research on the youth and on the transition to adulthood shows that these assumptions are unlikely. In many societies, the transition to adulthood has become protracted. Postsecondary education relates in several ways to this protraction. The most obvious is that attending postsecondary education delays the moment an individual can live from his work and face the responsibilities of family formation. However, current research on the transition to adulthood shows that in many societies, attending postsecondary education is not simply a 'mechanical' cause of the protraction, but an element in the process by which young people build or drive their own transition to adulthood. One way they do this is enrolling anew in a postsecondary education programme after having interrupted their studies. By doing this, these young people become amalgamated with the adult population of adult education without behaving like adults going back to school and with motivations quite different from those of such adults. In other words, in countries where adult education is provided by the very institutions which provide regular education, the protraction of the transition to adulthood is likely to alter the border between the population of regular and adult education and to 'heterogenize' the population of adult education. This may have practical consequences for the postsecondary institutions themselves. In Quebec, for instance, 48% of university students are aged 25 year or more, and are thus 'adult students' according to the usual operationalization of the notion. The motivations, needs and rhythm of a substantial fraction of this adult student population may have little in common with those of commonly associated with adult education if the protraction of the transition to adulthood delays the completion of postsecondary education.

In this article, we focus on Canada, and look into the process by which young graduates who stop studying after having completed some postsecondary programme and young nongraduates who stop studying by quitting a postsecondary programme enrol back in postsecondary education. We use a biographical perspective and we assess to which extent enrolling back in postsecondary education is common among the Canadian youth, and whether the process by which young Canadians enrol anew can be interpreted using the views developed by current research on youth and on the transition to adulthood.

We use data from a panel survey that enables us to follow a probabilistic sample of young Canadians from the moment they interrupt postsecondary education until the moment they enrol back or up to the age of 27. We use hazard models to test hypothesis about the process that leads them to enrol back or not.

The transition to adulthood and postsecondary education

Over the last decades, the transition to adulthood has attracted attention from sociologists and demographers because of the growing interest in the life course perspective and because this portion of the human life has become less simple that it once had been or, at the very least, is perceived to have changed in such a way. Two widely cited reviews provide an overview of the research done on the topic since the beginning of the 1960s: Hogan and Astone (1986) and Shanahan (2000). Although centred on the US experience, Berlin, Furstenberg and Waterstook (2010: 3-6) provide a brief, but excellent overview of the basic aspects of the current vision of the schedule of the transition to adulthood.

Becoming an adult was a protracted process in the traditional agriculture-based economy, but occurred early and quickly after World War II: secondary education had become a mass phenomenon, but postsecondary education was still uncommon; the economic boom made well-paid and unionized jobs easily available to young men just finishing high school. This pattern of early and quick transition to adulthood truly held no more than two decades. By the mid-1960s, a variety of factors had set in motion a process by which the transition to adulthood was to become 'delayed' relative to the short-lived pattern that had emerged after 1945. Liefbroer (1999) provides a list of such factors, grouped in two categories: changes in the economic and social structure (the expansion of the educational system, the increase in the labour force participation of women, economic development, the creation and revision of the welfare state, and changes in the economic structure) and cultural factors (the decrease in the normative controls of behaviour, increasing individualisation, and the re-emergence of feminism). On one point, Berlin, Furstenberg and Waterstook (2010) are more precise: it is not the expansion of the educational system as a whole that played a role in the delaying of the transition to adulthood, but really the expansion of higher education.

Postponement, delay, or protraction is only one of the two main changes that affected the transition to adulthood over the last decades. The second one, following Beck (1992: 127-150) and in the context of life course research, is thought of as de-standardization or individualization and sometimes, more descriptively, as mere diversification. Much of the research on the transition to adulthood is done with reference to a set of moves, or 'markers', that are routinely used to define the transition to adulthood itself: leaving school, starting a full-time job, leaving the home of origin, getting married, and becoming a parent for the first time (e.g. Shanahan 2000: 667, Galland 1996). According to the quick and early pattern of the post-war period, these moves were occurring not only early and over a short period, but pretty much in the very order they are canonically listed. Nowadays, they do not occur necessarily in that order and some moves that were deemed to be irreversible aren't so anymore. Many young people live as a couple before having completed their studies, couples are not made for life, some students become parents before completing their studies, mixing work and study is general, going back to one's parents' home is not uncommon, etc. This is not to say that the subjective experience of the transition to adulthood has changed drastically. Goodwin and O'connor (2007) stress that the experience of the transition from full-time education to 'whatever follows next' was characterized by complexity, uncertainty and risk even when the economic conditions were more favourable to the youth. However, the number of steps and decisions as well as the period over which complexity, uncertainty, and risk are to be tackled with have increased.

Researchers recognize that the transition to adulthood is now a process that may span up to almost two decades. Stokes and Wyn (2007) even argue that during this period, the boundaries of youth, adult, student, and worker are so blurred than the term 'transition' doesn't fit the period nor the process. Over this 'long youth', the individualized biography evolves as the product of a set of processes governing a set of trajectories: an educational trajectory, an oc-

cupational trajectory, a conjugal trajectory, and so on. These processes and trajectories are related. Each trajectory may be a sequence of apparently forward and backward moves. Leaving school is likely followed by starting a new job, but having a job does not preclude going back to school. Gaudet (2007: 11) has a word for the new pattern in which the academic and occupational trajectories of youths are intertwined: 'yo-yo' transitions.

Comparative research (e.g. Blossfeld et al. 2009, Corijn and Klijzing 2001) has shown that the prolongation and the individualization of the transition to adulthood is a common feature of advanced societies. It has also shown that how it develops and the pace of its development vary greatly across societies. When looking for an explanation of this diversity within the common trend, research tends to focus on the role institutional factors, especially welfarestate regimes.

Obviously influenced by Esping-Andersen (1990, 1999) and Ferrera (1996) although he does not cite them, Vogel (2002) relates the differences in the rhythm and diversification of the transition to adulthood across European countries to differences between their welfarestate regimes. Using data from household surveys, he shows that the enrolment rate in the labour market among the youth is related to social protection expenditures and what he labels a 'traditional family index'. He groups countries in three categories based on their rank in these linear relationships: Nordic (Denmark, Finland, and Sweden, with Netherlands as a close neighbour), Central (Belgium, France, Germany, Norway, and UK) and Southern (Greece, Italy, Portugal, and Spain). Entry into the labour market, partnering, birth of the first child occur at a younger age in the Nordic countries, which have the highest social protection expenditures and the lowest score of the 'traditional family index' than in the Central countries, which spend less in social protection expenditures and have higher values of the 'traditional family index'. Unfortunately, Vogel does not examine postsecondary education.

Van de Velde (2008: 42-61) does so in her comparative study of the transition to adulthood in Denmark, France, Spain and the UK. She finds a striking difference between Denmark and the other countries. In France, Spain and the UK, the proportion of youth going back to school decreases from 1% or 2% at 18 to less than 0.5% around 21, then slowly decreases until the end of the twenties. In Denmark, this proportion peaks over 3% from 18 to 22, then decreases to 1.5% at 25 and remains around that value till the end of the twenties. Going back to school is actually one side of what appears to be a distinctively Danish pattern in Europe. First, young Danes typically take a 'gap' year between secondary and tertiary (postsecondary) studies. Second, between the age of 18 and 30, young Danes actually move massively back and forth between three states: studying, working and studying, and working, apparently in no particular order. The pattern crosses social classes and is part of a notion of youth that allows and values experimentation, and is made possible, among other things, by the availability of jobs for the youth. The Dane 'yo-yo' pattern is not a curse, not even for the underprivileged. In the Danish case, apparently, low youth unemployment does not necessarily foster a fast transition to adulthood.

Comparative research on education and the transition to adulthood that includes Canada is not common. One rare example is Fussell, Gauthier, and Evans (2007), which focus on the differences between Australia, Canada and the USA, three mainly English-speaking countries having rather liberal welfare regimes. The authors find that postsecondary education has become increasingly important in all three countries—labour markets require more and more skilled workers—and strongly structures late adolescence and early adulthood, but that differences emerge in its concentration in traditional postsecondary ages and the absolute level of participation. A larger proportion of the Canadian youth attain postsecondary education and do so at non-traditional ages, whereas these figures are lower and concentrated at traditional ages in Australia and the United States. Overall, and despite its being prolonged in all countries, United States youth experience a more uniform and shorter transition to adulthood than their peers in Australia or Canada, largely due to the concentration of education in traditional school ages. Although they do not discuss this point, their findings suggest that Canadian youth may be attending postsecondary education after some experience in the labour market.

There has been a flurry of large-scale survey based research on postsecondary education in Canada since the mid 2000's because of the availability of a panel survey on the transition to adulthood (more below) and of research funding from the Canada Millennium Scholarship Foundation. Diallo, Trottier and Doray (2009: 36-38) provide a review of some of this research. Much of it has been done by government agencies and a large fraction of the research done by academics is still only available as research reports. Most focus on access and persistence. Most has been mainly descriptive (e.g. Shaienks, Eisl-Culkin, and Bussière 2006, Finnie and Qiu 2008, Shaienks, Gluszynski and Bayard 2008), or focused either on the influence of aspiration, grades and behaviour, or on the economic conditions surrounding postsecondary attendance, with a special interest for loans.

One exception is Martinello (2008), which investigates what leads students to quit their first programme or to switch from their first postsecondary programme to a second one. Outcomes and students decisions vary according to how the students finance their education: students who receive government sponsored loans or non-repayable help from the family are more likely to complete their studies, but less likely to try again if they did not complete their first programme. Parents' educational background has no effect on the probability of completing the first programme, but increases the probability of attempting a second programme if the first is not completed. His interpretation is worth citing: 'Surprisingly, parents with more education did not appear to help students make better initial decisions about their PSE. [...] Thus students whose parents have more education appear more able to adjust to adversity or surprises within their PSE, and any overall relation between parents' education and PSE completion occurs via this mechanism' (Martinello 2008: 235).

Qualitative research provides some insight on the transition to adulthood and learning trajectories. Charbonneau (2006) uses interviews with 33 young adults from Montreal to investigate how the possibility of moving between school and work in their transition to adulthood became institutionalised, and how this possibility fosters altering one's trajectory. Charbonneau's view of the moves between school and work by the Quebec youth is quite similar to Van de Velde's view of the same moves by the Dane youth. The tone is certainly different: Charbonneau does not relate what she finds in Quebec to the combination of job availability and Nordic style welfare regime-of which some elements can be found in Quebec, especially affordable postsecondary education-as Van de Velde does, but rather to a specific setting created by economic uncertainty and a series of unrelated government decisions. Van de Velde's view suggests interpreting the Dane pattern as an element of a society which favours self-expression over survival; Charbonneau's allows the same interpretation-after all, Quebec youth is giving itself a 'time of one's own'-, but she stresses the contradiction between the cultural norms of the society she looks at rather than celebrates its postmodernity. Her view suggests a line of interpretation for the findings by Fussell, Gauthier, and Evans on Canada; unfortunately, we know of no study similar to that of Charbonneau on the other Canadian provinces.

Background information on postsecondary education in Canada

The Canadian Constitution makes education a provincial responsibility. Consequently, there are notable differences between the postsecondary education systems across provinces.

In English-speaking provinces, high school ends after 12 years of schooling; in Ontario, the most populated Canadian province, until 2002, high school could end after 13 years of schooling. After high school, students may enrol in postsecondary education either in a university or in a college. Universities and university programmes are quite comparable across Canada, but the word 'college' encompasses a wide variety. Typically, colleges offer postsecondary programmes shorter than typical university programmes and leading to vocational or technological occupations rather than to professional or scientific ones. In some provinces, e.g. British Columbia and Alberta, students may take up to two years of university level courses in a college, and move afterwards to a university to complete a university programme (Andres 2001). This allows students whose family does not live close to a university to stay home longer. In Ontario, the college system had been designed as parallel to universities., but things are changing Ontario's Colleges of Arts and technology offer a wide variety of vocational and technical programmes and even four-year programmes leading to a bachelor degree granted by the provincial government; some colleges developed partnerships with universities and offer degrees as well as diplomas. In Quebec, the French-speaking province, high school ends after 11 years of schooling. After high school, students proceed to 'college' (actually a 'collège d'enseignement général et professionnel' or 'cégep') where they may enrol in a twoyear pre-university programme ('enseignement général') or in a three-year technical programme leading to the labour market ('enseignement professionel'). They enrol in a university programme after having completed the pre-university programme. However, a nonnegligible number of students enter university after having completed a three-year technical programme. In English-speaking provinces, undergraduate university programmes typically last four years; in Quebec, they typically last three. In all Canadian provinces, the bachelor's degree is typically granted after 17 years of schooling.

Enrolling anew as an element of the transition to adulthood

Fussell, Gauthier, and Evans (2007) finding that a larger proportion of youth attains postsecondary education in Canada than in the USA and Australia, and does so older than in these two countries suggests that, in Canada, the choice of education and career is done in a way that postpones the decision and, at the very least, gives time for the choice being made through experimentation and 'trial and error'. The findings by Charbonneau (2006) are even more precise: in Quebec, the combination of economic conditions and decisions by the provincial government favoured the development and acceptance of experimentation and 'trial and error' as the common way to make decisions about education and career.

We use a biographical perspective (Alheit 1994) and look at the process that leads young graduates and non-graduates to enrol anew in postsecondary education as s step in their leaning careers (Bloomer and Hodkinson 2000a, 2000b) or in their lifetime learning trajectories (Gorard et al. 1998). We oppose the traditional pattern and the 'protracted' pattern-for lack of a better term. In the traditional pattern, postsecondary education is chosen in a careful way, as it is for instance in France according to Charbonneau, and concentrated in the 'traditional' ages-i.e. it comes immediately after high school and does not last much after age 20-, as it is for instance in the USA and Australia according to Fussell, Gauthier, and Evans. Postsecondary education is assumed an investment in human capital made by the individuals, their family, and the State whose purpose is getting the most from the labour market. It should be completed in as little time as possible and use resources it the most effective way. Ideally, it should be completed before other steps in the transition to adulthood. Once the training completed, postsecondary education ends. It may be followed by some new training later, but in a continuous education perspective, with the purpose of further human capital investment. In the protracted pattern, postsecondary education is an instrument of self-development as much or more than an investment in human capital. The self-development through and during postsecondary education is as important as the knowledge and know-how it provides. Enrolment in postsecondary education may be extended, interrupted by periods of full time work or coexist with part-time work. Other events of the transition to adulthood, especially those related with family formation, may occur during enrolment.

We allow the traditional pattern a modest amount of experimentation and 'trial and error' that occurs through reorientation and programme changing without interrupting studies. We do not look at reorientation or programme changing, and exclude short interruptions that could be mixed up with these; on the contrary, we look only at longer interruptions (more details in Model below).

The traditional and protracted patterns should lead to different in schedules of enrolment i.e. the enrolment rate as a function of the number of time elapsed since leaving postsecondary education— and to different patterns of relation between enrolment rate and age.

If the traditional pattern prevails, enrolling anew in postsecondary education should be a rare event until reaching the point at which career development requires a new investment in human capital. The rate of enrolment should be low, and decrease as the number of semesters elapsed since leaving school increases. It should increase with age, or at least be low at the traditional ages of postsecondary education—we are looking at enrolling anew, not at first enrolment—and higher at ages compatible with the need for further human capital investment driven by career development.

If the protracted pattern prevails, enrolling anew in postsecondary education should be common. The rate of enrolment should be relatively high and remain so as the number of semesters elapsed since leaving school increases, even though some decrease could be expected. It should vary little with age, at least until the end of the twenties.

The two patterns should also lead to different patterns of relation between enrolment and other states related to the transition to adulthood. If the transition to adulthood still follows a traditional pattern, living with a spouse or a partner should come after school completion. Being married or cohabiting should reduce the hazard of going back to school whatever the type of programme and whether or not the previous programme has been completed. If the transition to adulthood follows the protracted pattern, there should be no association between being married or cohabiting and enrolling anew. If being married or cohabiting increases the hazard of going back to school, it could be either that a new pattern is emerging, in which some form of postsecondary studies still part of primary training rather than part of continuous education is done after the first steps of family formation, or that the continuous education process has begun by the mid-twenties. Being a parent or not should be interpreted in the same way.

Part-time work is typical of 'youthood' and combining part-time work and attending school is typical of the protracted pattern. Holding a full-time job, especially one with high income, high qualification, or responsibilities is typical of a completed transition to adulthood. Given that we observe people aged up to 27 years, we do not expect enrolling anew in postsecondary education to being motivated by a need for further human capital investment driven by career development. Thus, if the traditional pattern prevails, holding a position that provides high income, requires high qualification, or involves responsibility should reduce enrolment. If the protracted pattern prevails, holding a part-time job should increase enrolment.

The two patterns should also lead to different relations between enrolment and social origin as well as the previous step in postsecondary education.

In theory, non-university postsecondary programmes lead to the labour market and do not lead to nor prepare for further studies. In the traditional pattern, people who have completed a non-university programme should enrol anew after some work experience and in order to move ahead in their career, typically being older than the age up to which we observe people in this study. If the traditional pattern prevails, having completed a non-university programme should reduce enrolment strongly. If the protracted pattern of experimentation and 'trial and error' prevails, having completed a non-university programme should not reduce enrolment to the point of making it rare.

Undergraduate programmes may lead directly to the labour market and prepare as well for further studies. In the traditional pattern, students who have completed their undergraduate programme should move directly to graduate studies; we do not look at such cases. The former university students we include in our study have interrupted their postsecondary education after graduation or after having left their programme without graduating. If the traditional pattern prevails, the enrolment rate should be low in both cases. If the protracted pattern of experimentation and 'trial and error' prevails, enrolment should be a real possibility in both cases.

In the traditional pattern, the relation between social origin and enrolling anew should be similar to what Martinello was expecting. Highly educated parents should have assisted their children in choosing their postsecondary programme thus increasing their chances of success. Graduate students wishing to pursue education further should enter graduate studies right after graduation. Students somehow in need of reorientation should move between programmes without interrupting their education. Leaving school before having completed whatever should be completed is assumed a consequence of poor resources, whether economical—lack of money—or intellectual—lack of guidance. If the traditional pattern prevails, enrolling anew should be more common among young people whose parents are less educated. If the protracted pattern prevails, things should look more as what Van de Velde found. Moving between school and work should be quite common. If Canada is more like Denmark, enrolling anew should vary little according to social origin. If Canada is more like countries of Southern Europe, enrolling anew should be more common for young people from highly educated parents.

Charbonneau's analysis leads to expect that enrolling anew should be common in Quebec. Fussell, Gauthier, and Evans found that Canadian youth enrols in postsecondary education more and at a letter age than youth from USA and Australia. The null hypothesis is obviously that things are similar within the whole country and thus vary little across provinces.

Method

We faced modelling problems from the onset, the first one being the very notion of programme. The main distinction within postsecondary education is between university education and non-university postsecondary education. The distinction is grounded in that the former typically lasts longer, has higher tuition, leads to professional or scientific occupations and, at least in principle, to high income and, eventually, to managerial positions whereas the second typically should not last very long, should not cost as much, leads to technological occupations and middle level income, and does not really prepare for management. Once secondary education is completed or after having left a postsecondary education programme as in the case in our study, students may enrol either in a university programme or in a nonuniversity programme. Enrolling in a university programme or in a non-university programme are competing risks (see Model below) and thus define different equations. In other words, the distinction between the two is part of the definition of our dependent variable.

The second issue was the circumstances in which students leave postsecondary education. Individuals become at risk of enrolling anew in postsecondary education when they leave the first postsecondary programme they had enrolled. They may leave this programme either by graduating or by quitting before graduating. Whether they become at risk as graduates or as non-graduates, they may go back to postsecondary education by enrolling in a university programme or by enrolling in a non-university programme. Given our hypotheses about experimentation and the 'trial and error' process, we need to estimate these effects separately for graduates and for non-graduates. Being a graduate or a non-graduate thus defines separate groups for which we estimate our equations separately.

A third issue was the schedule of the process. The probability of going back to school if not having done it already varies as a function of the time elapsed since leaving school. In other words, over and above the effects of the factors that are believed to explain whether individuals go back to school, in what type of programme and when they do it, the probability of going back to school is likely to vary from one semester to the next. Furthermore, there is no reason to assume that the effects of the factors that may increase or decrease this probability remain constant from one semester to the next.

Age had also to be dealt with. The probability of going back to school if not having done it already varies as a function of age as well as a function of the time elapsed since leaving school.

Differences between men and women could have been thought important enough to warrant separate estimation. However, a study on the participation of women in adult education by Bélanger, Doray, and Levesque (2004) confirms results from previous research: the participation rates in adult education, and especially the decision to return to studies, varies little according to gender. We have no reason to expect gender to play a different role in the process we are interested in, but we include it as a control variable in our equations.

Data

We use data from the Youth in Transition Survey (YITS), a panel survey conducted by Statistics Canada and Human Resources and Skills Development Canada (HRSDC). The YITS questionnaires gather data on significant aspects of the lives of young people, including most education and employment spells. These allow studying a number of important transitions that typically occur at this time of life, such as finishing high school, embarking on postsecondary studies, obtaining a first job, leaving home, and so on. The questionnaires also collect data on the factors liable to affect these transitions, some of which are 'objective'—including family background and previous educational experience—and others 'subjective'—aspirations, expectations, and so on (Statistics Canada 2007: 83).

YITS was launched in 1999. The first wave—'cycle 1'—gathered information about a single year, 1999. Subsequent waves covered two-year periods: 'cycle 2' collected information on 2000 and 2001, 'cycle 3' on 2002 and 2003, and 'cycle 4 on 2004 and 2005'. YITS has gathered data up to the end of 2009. At the time we realized our study, the available data allowed us to follow respondents' lives over seven years.

The YITS sample design excludes people living in the three territories (i.e. parts of Canada that are not provinces), on First Nations reserves, on Canadian Forces Bases, and in remote areas. YITS follows two cohorts of young people. The cohort we use comprises young people born between 1979 and 1981 inclusively and aged 18–20 on December 31, 1999. Our analyses are based on respondents living in the ten Canadian provinces who responded to all first four cycles of the survey. They focus on going back to school after having completed a postsecondary programme or dropped out of a postsecondary programme. The observation period covers the years 1999 to 2005. The sample we use includes 5613 individuals of which 3314 left school having completed a postsecondary programme and 2299 by quitting their pro-

gramme. Laplante, Street, Kamanzi, Doray, and Moulin (2010) provides complete information on the variables and the statistical model.

Results

Schedule. Figure 1 shows the cumulative proportions of graduates and non-graduates who enrolled anew in a postsecondary programme according to the number of semesters elapsed since leaving, and to the type of programme they enrolled in.

Going back to school is more common among those who quit than among graduates. Nearly 20% of graduates and 30% of those who quit went back during the first two semesters they were considered at risk. In the fifth semester (i.e. seven semesters after leaving), the proportions were at around 30% and 50% respectively. The two groups continue to show a difference until the end of the observation range: eleven semesters, or six years, after leaving school, 45% of graduates and 66% of those who quit were back to school.

Graduates were more likely to enrol in a university programme, particularly when going back earlier rather than later, while 'quitters' showed a stronger tendency to enrol in a non-university programme.

Age. For each semester, we estimated what amounts to age-specific rates according to the type of the previous programme and statistically adjusted for gender and province of residence. This leads to 22 sets of 8 coefficients. Figures 2 to 4 show these sets of rates for a selection of semesters. In the first semester, among non-graduates, the rate of enrolment in a university programme is very high up to age 20, reasonably high from ages 20 to 23, and fairly low among older respondents; among graduates, the rate increases from ages 19 to 22 then falls. The rate of enrolment in a non-university programme is relatively high up to age 20 among non-graduates, it falls from ages 20 to 22 and is quite a bit lower among older respondents; it is fairly low for graduates of all ages, but slightly higher up to age 20.

In the third semester, the rate of enrolment in a university programme among nongraduates is relatively high at age 19, somewhat lower between ages 20 and 22, and low thereafter; it is low among graduates and does not appear to vary according to age. Among non-graduates, the rate of enrolment in a non-university programme is high at age 19, lower but still significant between ages 20 and 22, and low thereafter; it is low for graduates of all ages, but, interestingly, seems a bit higher than the rate of enrolment in a non-university programme up to age 22.

In the sixth semester, the rate of enrolment in a university programme is low among nongraduates and does not appear to vary according to age; the same is true for graduates. The rate of enrolment in a non-university programme is low at all ages among non-graduates.; it is high among graduates at age 19 but low at every other age.

In short, in most cases, the rate of enrolment decreases with age. Its relation with age, where it exists, appears to diminish with the amount of time elapsed since leaving. There is one notable exception: the rate of enrolment in university programme increases between ages 19 and 22 during the first semester where individuals are at risk of going back to school after graduating.

Gender. There are no statistically significant difference between men and women, even at the 0.01 threshold, when controlling for schedule, age, province of residence and type of the previous programme. It is possible that some differences between men and women be mediated through one or several control variables. It is also possible that the effects of some of these variables, or of some the variables we are interested in, vary according to sex. The sample size does not allow for estimating conditional relations or separate equations for men and women.

Conjugal status and parenthood. Living with a spouse or partner reduces the hazard of enrolling, among graduates as among non-graduates. Being a parent does not appear to have a significant effect on the hazard of going back to school.

Employment and income. By itself, employment reduces the hazard of going back to school whether in a university or a non-university programme. Going back is least likely when individuals spend most of their time at work, e.g. 25 hours per week or more; this result holds both for graduates and non-graduates, and does not vary as time elapses. The hazard of enrolling in a university programme is higher when individuals work 9 to 16 hours per week; again, this is true for both graduates and non-graduates, and holds steady over time. Graduate employees, whether holding a permanent or a temporary job, were less likely to enrol in a university programme during their first semesters after leaving. Among non-graduates, only holding a permanent job decreases the risk of going back to school.

Holding a professional, paraprofessional or intermediate occupation reduces the hazard of enrolling in a university programme. Holding a paraprofessional or intermediate position with a middle level income reduces the hazard of enrolling in a non-university programme. Having a permanent job with middle or high level income reduces the hazard of enrolling in a university programme.

Previous programme. Up to the fifth semester after leaving school, graduates from nonuniversity programmes are less likely to enrol in a university programme than university graduates are; the lack of significance of the difference between the two categories in the third semester could be an artefact. Up to the fourth semester, graduates from pre-university programmes are as likely as graduates from university programmes to enrol in a university programme are; in the fifth semester, they are significantly less likely to do so. People who quit a university programme are more likely to enrol in a university programme than people who quit a non-university programme during the first three semesters after quitting; the difference between the two groups vanishes afterwards. The nature of the previous programme does not seem to be related to enrolling in a non-university programme.

Parents' education. Parents' education has a significant effect on the hazard of going back to school. Graduates and non-graduates whose parents have attended university have a higher hazard of enrolling anew in a university programme; their hazard of doing so is two to three times that of students whose parents have not attended university. Having parents with non-university postsecondary education increases the hazard of enrolling in a non-university programme after dropping out. Overall, going back to school is both more likely and faster among youth whose parents have attended university.

Province of residence. There are little differences across provinces and they are concentrated in the three first semesters. In the Prairie Provinces, graduates are more likely to enrol in a non-university programme in the first semester, and less likely in the third than in Ontario, the reference category. Non-graduates are also less likely to enrol in a non-university programme in the first semester at risk. In Quebec, graduates are more likely to enrol in a university programme, especially in the second semester at risk.

Discussion and conclusion

At the end of the eleven semesters over which our data allow following them, 45% of the young people who had stopped postsecondary education after graduating and 66% of those who had left without graduating had enrolled anew in a postsecondary programme. Enrolling anew is massive. The high figure among non-graduates supports the notion that in Canada, quitting postsecondary education is not an irreversible failure. The still high figure among graduates supports the notion that taking a pause between the steps or stages of postsecondary

education is common and institutionalized. Enrolment is higher in the semesters that follow leaving and decreases as time goes by; this result is more compatible with a pattern in which young people extend their education over their extended youth rather than with a pattern in which enrolling anew would be driven by career development. Where the young people end up is definitely related to the circumstances in which they left. Graduates are more likely to enrol in a university programme, particularly when going back earlier rather than later, whereas 'quitters' show a stronger tendency to enrol in non-university programmes.

Overall, the enrolment rate decreases with age, and the relation between rate and age vanishes as time elapsed since leaving school increases and the rate itself decreases. Again, this result does not fit with a pattern in which going back to postsecondary education would be driven by career development: in such a case, the rate would increase with time elapsed since leaving and with age. However, it fits very well with the protracted pattern of extended youth pattern.

The timing process of enrolling into a university programme among graduates is especially revealing. Enrolment is higher in the first semester at risk, which means roughly one academic year after having graduated. The relation between enrolment rate and age is strong: it is centred on age 22 and quite evenly spread around it. Graduates are the 'successful', and among them, those who enrol anew in a university programme are likely to be those who have the highest control over their destiny of all the young people we are looking at. What we see here is likely to be an institutionalized pattern among them, mainly driven by their own decisions rather than by uncontrolled circumstances, something similar to the Dutch gap year, but between undergraduate and graduate studies and not as generalized. This definitely looks like youth extension wished for and relished, a real piece of 'time of one's own'. By contrast, the other enrolment patterns could be more adjustment to events, reactions to circumstances rather than a planned leisurely cruise. Graduates sail where they want to go at their own pace, others seem to be adjusting themselves, maybe changing course, using their time and the flexibility of the education system to repair something that may need to be fixed.

Living in a stable relationship reduces enrolment, as holding a job that has any of the characteristics of a serious adult-type job. Enrolment is lower when working part-time that when not working at all, but still higher than when working almost full-time. Having a stable relationship and holding a 'real' job means that two important steps of the transition to adulthood have been achieved. Apparently, having achieved them means that the 'time of one's own' period or the 'trial and error' period are over, and enrolling anew in postsecondary education is not relevant anymore; it could become relevant as part of the career development process, but at a later age.

Graduates from a university or a pre-university program are more likely to enrol in a university programme than others are, but this is true during the four of five fist semesters at risk. The lack of differences between the various groups after the fifth semester could simply be due to low frequencies, but it consistent with a meaningful pattern: these programs lead to university programmes, but enrolment has to be done not too long after graduation. After a year or two, the interruption is not a pause anymore, but a real stop. This is very similar to what see for graduates in general. The difference between pre-university and university programmes is interesting: it becomes significant after the fourth semester; apparently, the pause turns into a stop a bit faster for graduates from pre-university programmes than for graduates from university programmes. Furthermore, going back remains a real possibility among graduates from university programmes it seems to become almost impossible among graduates from pre-university programmes.

We find no difference between Quebec and the other provinces that would suggest the difference between Canada, on one side, and USA and Australia on the other, found by Fussell, Gauthier, and Evans could be due to a difference between Quebec and the rest of Canada. The difference between Quebec and Ontario is likely to be related to the importance of preuniversity programmes in the former. The special attraction of non-university programmes in the Prairie Provinces is likely a consequence of the importance of their oil industry, which offers a large number of well-paid technical jobs. Therefore, our results are likely valid for all of Canada.

Parents' education plays as social reproduction. Young people whose parents have attended university are more likely to enrol anew, whether they have graduated or not. The result we get is similar to Martinello's, but, of course, we look at it in a slightly different way: In the Canadian context, 'trial and error' has emerged as a 'rational' approach to education and career choice, and 'having a time of one's own' is truly institutionalized. Highly educated parents support their children in this process, through guidance or with material resources, as they probably know more about the process from their own experience or relations, and as they more likely to have the means to support their offspring for a long time. From this perspective, the 'time of one's own' may be viewed as an element of the prolonged education of the well-off, akin to the Grand Tour, but less exclusive. It is leisurely, but it is part of a process of social reproduction. Unlike the Grand Tour, it does not occur after the completion of formal studies, but sometimes before. The children who haven't done yet must go back to school to get the education level their parents had.

Young people who dropped out from postsecondary education are more likely to enrol anew in a non-university programme if their parents have non-university postsecondary education: these parents are likely to have a limited knowledge of postsecondary education and limited material resources as well.

Overall, in Canada, enrolling anew in postsecondary education is a process that follows a protracted pattern of transition of adulthood and, more specifically, of relation to education and career choice, similar to what Van de Velde found in the Netherlands, although with more social inequality, but probably not as much as in Southern Europe. The successful young people, i. e. the graduate students who take what amount to a gap year between undergraduate and graduates studies, clearly are in control of their destiny, making the most of the 'time of one's own'. Others seem to use the flexibility of the education system to 'repair' a trajectory that somehow went off course, enrolling anew being the 'second chance' in a 'trial and error' process. Stable relationships seem incompatible with both types of education related youth extension.

Given this pattern, it is no wonder that the university student population be old. Preuniversity graduates may take a one or two-year pause before entering university, university graduates may take a one or two-year pause before entering graduate studies. These pauses increase the mean age and the proportion of students aged 25 or more. Two-thirds of nongraduates enrol anew after some time: the time elapsed translates into a higher mean age and a higher proportion of students aged 25 or more. This pattern is not the only factor that contributes to the age structure of the Canadian postsecondary education population: career development driven enrolment and part-time studies certainly contribute as well. However, given the high proportions of graduates and non-graduates who enrol anew, the phenomenon is an important factor. For education as a system, a significant proportion of 'adulescents' is not an insignificant matter: such students, whether they are successful graduates wishing to make the most of their youth or less successful non-graduates who try to adjust their trajectory, are neither the regular young undergraduates who get their diploma in due time, nor the regular adults who attend night classes. They have a pace of their own and may have requirements or live under constraints that do not fit well neither with what is expected from the regular young undergraduates or the regular adult student.

Fussell, Gauthier, and Evans do not discuss the factors that may explain why young Canadians attain postsecondary education in a greater proportion than their counterpart in the USA or Australia does. Charbonneau, in her analysis of the factors that played a role in the emergence or experimentation and the 'trial and error' approach as a rational way of dealing with the education and career choice problem are proportionally omits what could be a key factor: affordable postsecondary education. Although things are changing right now, university education and other forms of postsecondary education were comparatively very affordable during the years covered by the YITS panels. If the current trend towards higher tuitions continues, one of the factors that likely made possible the emergence of the 'trial and error' approach and, therefore, made possible a certain portion of youth extension could disappear and put Canada youth in conditions similar to their USA counterpart.

We think proper to conclude with a few words of caution about the strong relation between the life cycle and enrolling anew among young adults. At first sight, this relation looks nothing more than just a matter of the life cycle. At some point, one may consider having enough schooling and choose to spend otherwise their time and money. However, having made such a choice, one may find itself under constraints that require spending time and money otherwise although getting more schooling would be the best strategy. In such a case, adulthood would be a barrier to enrolling anew.

References

Alheit P, (1994), The 'Biographical question' as a challenge to adult education, *International Review of Education*, 40, 3-5, 283-298.

Beck, U., (1992), Risk society. Towards a new modernity, London, Sage.

Bélanger, P., Doray, P., and Levesque, M., (2004), *La participation des femmes à la formation des adultes : une situation en changement ?* Quebec and Montreal, Ministère de l'Emploi, de la Solidarité sociale et de la Famille and Centre interuniversitaire de recherche sur la science et la technologie.

Berlin, G., Furstenberg, F.F. and Waterstook, M.C., (2010), Introducing the issue. *Future of Children*, 20, 1, 109-132.

Bloomer, M., and Hodkinson, P., (2000a), Learning careers: continuity and change in young people's dispositions to learning. *British Educational Research Journal*, 26, 5, 583-597.

Bloomer, M. and Hodkinson, P., (2000b). The complexity and unpredictability of young people's learning careers. *Education and Training*, 42, 2, 68-74.

Blossfeld. H.-P., Klijzing, E., Mills, M., and Kurz, K. (eds.), (2009), *Globalization, uncertainty and youth in society: The losers in a globalizing world*, London and New York, Routledge.

Charbonneau, J., (2006), Réversibilités et parcours scolaires au Québec, *Cahiers internationaux de Sociologie*, 120, pp. 111–131.

Corijn, M. and Klijzing, E., (2001), *Transitions to adulthood in Europe*, Kluwer Academic Press.

Diallo, B., Trottier, C., and Doray, P., (2009), *What Do We Know About the Pathways and Transitions of Canadian Students in Post-Secondary Education?*, Montreal, The Canada Millennium Scholarship Foundation.

Esping-Andersen, G., (1990), *The three worlds of welfare capitalism*, Princeton, Princeton University Press.

Esping-Andersen, G., (1999), *Social foundations of postindustrial economies*, Oxford, Oxford University Press.

Ferrera, M., (1996), The 'southern model' of welfare in social Europe, *Journal of European Social Policy*, 6, 1, pp.: 17-37.

Finnie, R., Qiu, H.T., (2008), Is the glass (or classroom) half-empty or nearly full? New evidence on persistence in post-secondary education in Canada. In R. Finnie, R.E. Mueller, A. Sweetman, and A. Usher (eds.) *Who goes? Who stays? What matters? Accessing and persisting in post-secondary education in Canada* (Montreal and Kingston: Mc-Gill-Queen's University Press), pp. 179-207.

Fussell, E, Gauthier, AH, and Evans, A., (2007), Heterogeneity in the transition to adulthood: the cases of Australia, Canada, and the United States. *European Journal of Population*, 23, 3-4, pp. 389-414.

Galland, O., (1996), L'entrée dans la vie adulte en France. Bilan et perspectives sociologiques. *Sociologie et sociétés*, 28, 1, pp. 37-46.

Gaudet, S., (2007), *Emerging adulthood: A new stage in the life course*, Ottawa, Policy Research Initiative.

Goodwin, J. and O'connor, H., (2007), Continuity and change in the experiences of transition from school to work, *International Journal of Lifelong Education*, 26, 5, pp. 555-572.

Gorard, S., Rees, G., Fevre, R., and Furlong, J. (1998), Learning trajectories: travelling towards a learning society? , *International Journal of Lifelong Education*, 17, 6, 400-410

Hogan, D.P. and Astone, N.M., (1986), The transition to adulthood. *Annual Review of Sociology*, 12, 109-130.

Knighton T., Hujaleh F., Iacampo, J., and Werkneh G., (2009), *Lifelong learning among Canadians aged 18 to 64 Years: First results from the 2008 Access and support to education and training survey*, Ottawa, Statistics Canada and Human Resources and Skills Development Canada (Catalogue no. 81-595-M — No. 079).

Laplante, B., Street, M.C., Kamanzi, P.C., Doray P., and Moulin, S., (2010). *When Young Canadian Adults Return to School: A Decision Anchored in the Individual's Social and Academic Past*, Montréal, Centre interuniversitaire de recherche sur la science et la technologie, (Projet Transitions, Note 12).

Liebfroer, A., (1999), From youth to adulthood. Understanding changing patterns of family formation from a life course perspective. In L.J.G. van Wissen and P.A. Dykstra (eds.), Population issues. An interdisciplinary focus (Dordrecht: Kluwer Academic/Plenum Publishers), pp. 53-86.

Martinello, F., (2008), Transitions and adjustments in students' post-secondary education. In R. Finnie, R.E. Mueller, A. Sweetman, and A. Usher (eds.) *Who goes? Who stays? What matters? Accessing and persisting in post-secondary education in Canada* (Montreal and Kingston: Mc-Gill-Queen's University Press), pp. 209-238.

Shaienks, D., Eisl-Culkin, J., and Bussière, P., (2006), Follow-up on education and labour market pathways of young Canadians aged 18 to 20—Results from YITS Cycle 3, Ottawa, Statistics Canada.

Shaienks, D., Gluszynski, T., and Bayard, J., (2008), *Postsecondary education participation and dropping out - Differences across university, college and other types of postsecondary institutions*, Ottawa, Statistics Canada.

Shanahan, M.J., (2000), Pathways to adulthood in changing societies: Variability and mechanisms in life course perspective. *Annual Review of Sociology*, 26, 667-692

Statistics Canada, (2007) *Youth in Transition Survey (YITS) Cohort B - 24 to 26 year-olds Cycle 4 User Guide*, Ottawa, Statistics Canada.

Stokes, H. and Wyn, J., (2007), Constructing identities and making careers: young people's perspectives on work and learning, *International Journal of Lifelong Education*, 26, 5, pp. 495-511

Van de Velde, C., (2008), *Devenir adulte. Sociologie comparée de la jeunesse en Europe*, Paris, Presses universitaires de France.

Vogel, J., (2002), European welfare regimes and the transition to adulthood: A comparative and longitudinal perspective. *Social Indicators Research*, 59, pp. 275-299

Enrolment by semester



Source: Youth in Transition Survey, Statistics Canada Figure 1



Enrolment rate during the first semester at risk

Source: Youth in Transition Survey, Statistics Canada

Figure 2



Enrolment rate during the third semester at risk

Source: Youth in Transition Survey, Statistics Canada Figure 3 $% \left({{\left[{{G_{1}} \right]}_{G_{2}}}} \right)$



Enrolment rate during the sixth semester at risk

Source: Youth in Transition Survey, Statistics Canada Figure 4

			Table	1		Hazard of enrolling anew in postsecondary education																
		Previo	ous prog	gramme			Par	ents' edu	cation			Co	njugal s	status		Parenthood						
	Graduate Non-graduate			Graduate Non-graduate						Grad			aduate		Graduate		Non-g	raduate				
		UP	NUP	UP	NUP		UP	NUP	UP	NUP		UP	NUP	UP	NUP		UP	NUP	UP	NUP		
S ₁	PU	1.851	2,567	0,692	0,707	UN	2.036 ²	0.963	2.383 ³	2.484 ³	LS	0.1804	1.177	0.308 ³	0.495 ¹	Y	0.060	2.020	0.122	0.807		
	NU	0.153 ⁴	1,435	0,145 ⁴	1,345	NU	1.384	1.380	1.205	2.146 ²	NS	0.464	0.000	1.025	0.310							
	UC	0.924	0,968	0,996	0,000	NS	1.488	2.115	0.667	2.493 ¹												
S ₂	PU	0.771	0.635	0.523	1.189	UN	3.942 ⁴	0.668	1.852	1.016	LS	0.525 ²	0.519	0.431	0.497 ¹	Y	0.603	0.297	0.091	1.398		
	NU	0.2344	0.657	0.237 ³	1.193	NU	1.878	0.949	1.179	0.888	NS	0.836	0.264	1.265	0.432							
	UC	0.181	0.000	0.000	1.564	NS	2.807 ¹	1.039	0.324	0.483												
S ₃	PU	4.209	2.374	0.286 ¹	0.688	UN	3.112 ²	1.226	3.075 ³	2.234	LS	0.374 ¹	0.467	0.229 ³	0.349 ²	Υ	0.322	0.204	0.539	0.189 ²		
	NU	0.479	1.464	0.205 ⁴	1.432	NU	0.641	1.068	1.833	2.636 ³	NS	0.000	0.000	0.455	1.396							
	UC	0.000	0.000	0.000	0.000	NS	1.836	0.626	1.300	1.415												
S 4	PU	0.304	3.375	1.442	0.182	UN	1.174	1.196	1.357	2.473	LS	0.600	0.650	1.428	0.381	Y	0.154	0.048	0.000	0.540		
	NU	0.2104	1.285	0.619	1.039	NU	0.731	0.982	1.594	3.057 ²	NS	1.594	1.258	1.860	0.175							
	UC	0.074	0.000	0.000	0.000	NS	0.762	1.088	0.436	2.152												
S 5	PU	0.0014	4.104	0.855	2.956	UN	0.754	0.449	3.818 ¹	1.005	LS	3.624	0.404	0.361	0.828	Υ	0.380	0.017	0.128	0.608		
	NU	0.194 ³	2.007	0.578	1.822	NU	3.754	1.771	1.443	0.989	NS	0.000	0.000	0.000	0.890							
	UC	0.000	2.329	0.000	0.000	NS	0.000	1.716	0.480	0.184												
S ₆	PU	0.565	0.049	2.271	0.163	UN	1.353	3.868 ²	0.560	1.411	LS	0.299 ²	0.819	0.543	0.425	Υ	0.464	1.095	1.944	0.059		
	NU	0.965	0.288	0.262	0.760	NU	1.074	1.076	0.901	1.811	NS	0.000	0.000	0.303	0.536							
	UC	0.000	0.000	2.319	1.602	NS	1.088	3.836	0.000	3.573												
S 7	PU	7.499	1.774	0.030	0.943	UN	0.719	0.262	1.108	0.853	LS	0.443	0.359	0.132	0.205	Υ	0.084	1.771	0.307	0.883		
	NU	2.634	0.794	0.214	1.235	NU	0.278	2.774	0.192	8.061	NS	0.000	0.000	22.65	0.803							
	UC	0.000	0.000	0.000	10.91	NS	0.000	7.497	8.170	5.991												
	Ref:	Ref: University Ref: High school or less									Ref:	Not living	g with sp	ouse or p	partner	Ref: Does not have a child yet						
	PU:	PU: Pre-university UN: University NU: Non-university NU: Non-university postsecondary									LS: I	_iving wit	h a spoi	ise or pa	Y: Has at least one child							
	NU:									NS:	Not state	d										
	UC:	Unable to	classify	/		NS: N	lot stated		,													
		< 0.100; ²			< 0.010 4	: p < 0	.000															
		from the						tistics Ca	nada.													
										5613 indi	vidual	s aged 1	8-20 on	Decembe	er 31 st , 19	999,	who hac	l underg	one son	ıe		
										the obser												
	prog	ramme a	nd 2299	had not.				•	-			•										
				one a coi	mpeting	risks s	etting an	d using n	nultinomi	al logistic	regre	ssion. Th	ne estima	ation was	s weighte	d usi	ng longi	tudinal				
		pling weig																				
	The	effects of	the inde	ependent	variable	es expr	essed as	s time-va	rying rela	tive risks	•											

			Provinc	e				Work				Employment status					Hours of work					
		Graduate Non-graduate			Graduate Non-graduate						Grad	duate	Non-gr	raduate		Grad	luate	Non-graduate				
		UP	NUP	UP	NUP		UP	NUP	UP	NUP		UP	NUP	UP	NUP		UP	NUP	UP	NUP		
S ₁	AT	0.582	0.890	0.626	1.024	WO	0.4024	0.423 ²	0.3524	0.195	PE	0.2604	0.503 ¹	0.3504	0.666	8	0.946	0.899	0.386	1.249		
	QC	1.547	0.251	1.359	0.871	NS	0.160	0.353	0.437 ¹	0.552	TE	0.509 ¹	0.448	0.609	0.519	16	3.095 ²	1.328	1.703	1.099		
	PR	0.956	2.308 ¹	0.578 ¹	0.317 ¹						SE	1.597	0.538	0.285	0.422	24	0.604	0.638	0.660	1.286		
	BC	1.003	0.634	1.129	0.513						NS	0.164	0.324	0.353	0.703	MO	0.1504	0.427 ²	0.2354	0.494 ²		
																NS	0.000	0.000	0.461	0.547		
S ₂	AT	1.333	1.041	1.444	0.761	WO	0.1364	0.372 ²	0.601	0.456 ²	PE	0.139 ⁴	0.482 ¹	0.642	0.513 ¹	8	1.903	1.828	3.222 ¹	1.174		
	QC	2.702 ²	0.407	1.802	0.611	NS	0.162	0.367	0.315	0.310	TE	0.144 ⁴	0.194	0.927	0.398	16	0.655	1.733	1.332	1.396		
	PR	0.851	1.150	1.322	0.651						SE	0.460	0.086	1.388	0.238	24	0.330 ³	0.718	3.248 ¹	1.485		
	BC	0.582	1.524	2.648	1.574						NS	0.244 ²	0.681	0.704	0.409	MO	0.0884	0.361 ²	0.413 ²	0.317 ³		
																NS	0.000	0.000	0.000	0.000		
S ₃	AT	1.435	0.312	1.091	1.065	WO	0.292 ²	0.297 ³	0.2864	0.384 ³	PE	0.233 ³	0.253 ³	0.258 ⁴	0.252 ³	8	2.410	0.000	1.697	0.701		
	QC	2.600	0.158	1.011	0.316	NS	0.605	0.504	0.375	0.456	TE	0.482	0.122	0.750	0.144	16	0.697	0.443	0.966	0.676		
	PR	1.200	0.329 ³	1.245	0.757						SE	0.176	0.000	0.054	0.320	24	0.508	0.545	0.339	0.304		
	BC	1.167	0.805	1.071	2.076						NS	0.377	0.417	0.382	0.389	MO	0.224 ³	0.205 ³	0.2144	0.204 ³		
																NS	0.000	0.000	0.388	0.354		
S 4	AT	0.849	0.949	1.510	0.382 ¹	WO	0.213 ⁴	0.189 ⁴	0.485	0.639	PE	0.2624	0.242 ³	0.617	0.490	8	0.967	0.855	2.245	3.952		
	QC	1.800	0.518	0.524	0.164	NS	0.334	0.328	0.050	1.768	TE	0.281 ²	0.344	0.817	1.002	16	2.971 ¹	1.833	2.093	2.156		
	PR	1.032	1.896	0.479	1.259						SE	0.315	0.226	0.148	1.252	24	1.285	0.177	0.736	0.613		
	BC	1.060	1.049	0.978	0.580						NS	0.370	0.242	0.053	1.138	MO	0.151 ⁴	0.194 ⁴	0.486	0.419		
																NS	0.000	0.000	0.567	1.600		
S ₅	AT	3.262	0.303	0.707	0.347	WO	0.671	1.715	0.331 ¹	0.221 ²	PE	0.321	1.994	0.295 ²	0.261 ¹	8	0.000	0.000	0.471	0.000		
	QC	4.882	0.165	0.550	0.140	NS	0.000	0.185	0.601	0.259	TE	0.846	1.684	0.119	0.444	16	2.110	6.325	0.725	0.000		
	PR	1.044	0.580	0.430	1.330						SE	0.000	0.000	0.125	0.000	24	0.687	4.478	0.704	0.445		
	BC	0.700	2.045	0.092	0.000						NS	0.000	0.107	0.298	0.295	MO	0.310	1.594	0.207 ³	0.279 ¹		
																NS	0.000	0.000	0.538	0.299		
S ₆	AT	0.952	0.614	1.018	0.440	WO	0.180 ²	0.0774	0.113	0.534	PE	0.222 ²	0.0794	0.161	0.873	8	0.677	0.294	2.248	0.000		
	QC	2.049	0.463	0.526	0.225	NS	0.623	0.279	0.293	0.826	TE	0.000	0.250	0.352	0.000	16	0.204	0.291	0.169	0.000		
	PR	1.531	0.654	1.301	0.798						SE	1.074	0.088	0.000	0.000	24	1.507	0.350	0.296	1.195		
	BC	7.429	0.070	0.218	0.461						NS	0.474	0.210	0.193	0.638	MO	0.162 ²	0.0674	0.118	0.748		
																NS	0.000	0.000	0.401	1.071		
S 7	AT	0.000	0.177	0.460	1.597	WO	0.407	0.046 ¹	0.314	1.297	PE	0.510	0.036	0.476	1.338	8	15.60	0.000	0.000	8.993		
	QC	0.000	0.289	14.77	0.258	NS	0.507	0.000	12.83	2.711	TE	1.554	0.478	0.000	4.559	16	0.000	0.000	0.000	8.278		
	PR	0.000	0.101	1.355	0.728						SE	0.000	0.000	0.000	0.000	24	0.000	0.000	0.000	0.655		
	BC	0.000	0.000	1.527	0.705						NS	0.565	0.000	12.40	2.231	MO	0.285	0.068	0.426	1.106		
																NS		0.000	15.50	2.933		
	Ref: C	Ontario	BC: Brit	ish Colum	nbia	Ref: Not working						Not emplo				Ref: Not working NS: Not stated						
	AT: At	lantic				WO: Working							t employn			8 : Up to 8 hours						
	QC: C	Quebec				NS: N	ot stated						employm	ent		16 : 9 to 16 hours						
		rairies										Self-emplo		24 : 17 to 24 hours								
	1: p <	0.100; 2	: p < 0.05	50; ³ : p <	0.010 4:	o < 0.0	00				NS: I	Not stated				MO: N	More than	24				

			Skill lev	el					Skill lev	el			Income and status						Income and status				
		Grad	luate	Non-gr	aduate		Graduate Non-graduate		aduate			Grad	uate	Non-graduate				Grac	luate	Non-g	raduate		
		UP	NUP	UP	NUP			UP	NUP	UP	NUP			UP	NUP	UP	NUP			UP	NUP	UP	NUP
S 1	MA	0.018	0.867	0.357	0.369	S ₅	MA	0.173	0.000	0.000	0.496	S 1	PH	0.077 ²	0.216	0.114 ³	0.355 ¹	S ₅	PH	0.288	1.595	0.463	0.445
	PR	0.384 ²	0.201	0.311	0.281		PR	0.726	0.764	0.109	0.448		PM	0.1984	0.538	0.209 ³	0.465		PM	0.190	1.301	0.102	0.111 ²
	TP	0.336 ³	0.439	0.295 ³	0.390 ²		TP	0.356	2.000	0.219	0.022		PL	0.905	1.203	0.744	1.276		PL	2.206	11.47	0.779	0.503
	IN	0.325 ³	0.485	0.389 ³	0.919		IN	0.073	2.022	0.512	0.277		TH	0.310	0.264	0.071	0.000		TH	0.858	0.062	0.000	0.312
	LE	0.711	0.999	0.529 ¹	0.617		LE	0.000	3.515	0.000	0.663		TM	0.504	0.579	0.354	0.669		ТМ	0.301	2.042	0.000	0.833
	NS	0.120	0.424	0.369 ²	0.460		NS	0.000	0.180	0.500	0.297		TL	0.986	0.166	1.432	0.564		TL	5.852	27.19	0.522	0.000
													SE	1.578	0.526	0.283	0.422		SE	0.000	0.000	0.130	0.000
													NS	0.167	0.319	0.361 ¹	0.706		NS	0.000	0.103	0.318	0.299
S ₂	MA	0.072	0.283	0.037	0.386	S ₆	MA	0.326	0.000	0.000	0.416	S ₂	PH	0.108 ⁴	0.232 ²	0.111	0.119	S ₆	PH	0.243	0.006	0.036	0.587
	PR	0.285 ³	0.327	0.716	0.256		PR	0.237	0.000	0.499	1.839		PM	0.076 ⁴	0.477	0.435 ¹	0.370 ²		PM	0.087	0.107	0.115	1.214
	TP	0.1074	0.430 ¹	0.719	0.187 ³		TP	0.197 ¹	0.044	0.072	0.591		PL	0.551 ²	1.421	1.802	1.156		PL	0.916	0.335	0.628	0.452
	IN	0.118 ⁴	0.435 ¹	1.008	0.590		IN	0.168	0.227 ³	0.142	0.643		TH	0.038	0.000	0.094	0.326		TH	0.000	0.076	0.100	0.000
	LE	0.309 ¹	0.931	0.635	0.762		LE	0.270	0.181	0.329	0.683		TM	0.125 ⁴	0.060	0.253	0.198		ТΜ	0.000	0.382	0.870	0.000
	NS	0.211	0.358	0.366	0.343		NS	0.694	0.263	0.566	0.989		TL	0.661	2.688	4.579	1.010		TL	0.000	2.905	0.000	0.000
													SE	0.474	0.092	1.380	0.233		SE	1.076	0.090	0.000	0.000
													NS	0.243	0.647	0.733	0.403		NS	0.477	0.187	0.191	0.622
S ₃	MA	0.971	0.927	0.368	0.142	S 7	MA	4.360	0.000	0.000	0.280	S₃	PH	0.208	0.257 ³	0.120	0.359	S 7	PH	0.000	0.045	0.402	1.559
	PR	0.205	0.043	1.216	0.100		PR	1.230	0.000	0.000	0.000		PM	0.134 ³	0.185 ²	0.2004	0.182 ³		PM	0.334	0.022	0.639	0.570
	TP	0.1414	0.1712	0.158 ⁴	0.287 ²		TP	0.295	0.057	0.353	1.952		PL	1.145	0.596	0.661	0.375 ¹		PL	3.223	0.046	0.000	4.399
	IN	0.342	0.370 ²	0.324 ³	0.177 ³		IN	0.568	0.056	0.327	1.008		TH	0.176	0.119	0.120	0.000		TH	1.520	0.000	0.000	10.69
	LE	0.344	0.000	0.301	0.383 ¹		LE	0.000	0.276	1.489	3.118		TM	0.950	0.000	0.970	0.211		ΤM	1.311	1.354	0.000	0.000
	NS	0.481	0.418	0.299	0.346		NS	0.643	0.000	15.26	3.612		TL	0.736	1.496	1.463	0.215		TL	0.000	0.000	0.000	0.000
													SE	0.168	0.000	0.051	0.323		SE	0.000	0.000	0.000	0.000
													NS	0.377	0.414	0.381	0.384		NS	0.520	0.000	12.38	1.997
S 4	MA	0.294	9.017	0.215	0.000							S 4	PH	0.157 ³	0.129 ³	0.143	0.432						
	PR	0.273 ²	0.232	0.095	1.111								PM	0.292 ²	0.290 ²	0.693	0.503						
	TP	0.307 ³	0.103 ³	0.256	0.627								PL	0.960	0.735	1.555	0.552						
	IN	0.245 ³	0.478	1.257	0.573								TH	0.183	0.484	0.000	0.086						
	LE	0.113	0.160	0.668	0.587								TM	0.319	0.182	2.090	1.973						
	NS	0.373	0.378	0.043	1.358								TL	2.053	0.000	1.092	2.059						
													SE	0.313	0.229	0.141	1.190						
													NS	0.361	0.231	0.055	1.088						
		lot emplo						termediat						Permanent	•					emporary		income	
		/lanageria						abouring a	and eleme	ental				Permanent						Self-emplo			
		rofession					NS: N	Not stated						ermanent					NS: N	Not stated			
	TP: T	echnical a	nd parapr	ofessional									TH: F	Permanent	and high	income							
													TM: F	Permanent	and midd	lle income							
	1: p <	0.100; ²	: p < 0.05	0; ³ : <i>p</i> <	0.010 ⁴ : µ	o < 0.	000																