

UNIVERSITY OF OTTAWA

# The Impact of Visible Minorities on Majority Giving.

---

Major Paper presented to the Department of Economics of the University of Ottawa in partial fulfillment of the requirements of the M.A. Degree.  
(ECO 6999)

**Supervisor: Prof. Rose Anne Devlin**  
**Student: Benic Amankwaa (6321535)**  
**12/7/2012**

## Abstract

This Paper examines how the interactions between minority and majority groups affect the willingness of the latter to give to international charity, using Canadian data. By minority group I mean all individuals living in Canada who have non-white ethnic background (Chinese, Africans etc.) and the reverse is true for the majority group. I find that on averages a 10% increase in the population of minorities reduces the predicted probability by 14-17%. Statistically, the estimate is mostly significant but the economic impact is very minimal.

**Key Words:** international charity; majority group; minority group; immigration.

## 1. Introduction

Immigration has often been a sensitive and hotly debated issue around the globe and this is understandably so. It is just commonsensical to fully examine the costs and benefits of opening your door to a stranger, whether at the family, state or national level. The impact of immigration on the host country has been examined in the arena of politics, economics and other aspects of human life (e.g. Tu, 2007; Winters et.al 2003; Anderson and Winters 2008; van der Mensbrugge and Roland-Holst 2009, Ortega and Peri 2009; Hunt and Gauthier-Loiselle 2010). What is obvious from all these arguments, both for and against, is that immigration is among the few realities of life that you can aptly describe as a “bitter pill”. There are equally very strong arguments from both sides.

Of prime interest in this paper is the potential relationship between the presence of visible minorities, brought about basically through immigration, and the decision to give to international charities by the majority. Why should the presence of visible minorities affect the behavior of the majority group? Two possible explanations come to mind. Some researchers have found that immigration driven diversity is inimical to collective mindedness, civic trust and participation. Most prominently, Putnam (2007) posits that heterogeneity undermines the willingness and ability of people to engage in collective actions. In other words, diversity brings an individual closer to himself or herself and farther from others resulting in anomie or social isolation. Even more disturbing is his finding that diversity reduces not only trust between groups but within groups as well, hence his famous phrase “bowling alone”.

Previous studies by Alesina and La Ferrara(2000 and 2002) in the US, and Soroka et al. in Canada (2006) all found evidence for Putnam's observation that at least between the short and the medium term "immigration and ethnic diversity challenge social solidarity and inhibit social capital" (Putnam 2007: p.138). Costa and Kahn (2003) also find an inverse relationship between racial fractionalization and volunteering. Just recently, Andreoni et al. (2011) also report, using a 10-year neighborhood-level panels derived from personal tax records in Canada, that ethnic diversity has a negative effect on charitable donations. Specifically a 10% increase in ethnic diversity reduces donations by 14%.

The logical deduction one can make from these findings is that if immigration and its associated diversity negatively affect charitable giving and participation in civic issues in the host country, then this relationship should be much worse when it comes to international charity. In other words, if people tend to "hunker down "(Putnam 2007) and become less involved in issues that require collective efforts in their own country because of diversity, then we should expect them to be even more apathetic when it comes to problems outside the bounds of their nation.

Another explanation of the link between visible minorities and international giving by the majority is found in another hypothesis known as the Contact hypothesis which presents human interaction in a much more positive light. Developed by Gordon Allport in 1954, this hypothesis is predicated on the observation that given the presence of four basic criteria (equal status, common goals, acquaintance potentials and support of authorities or law or custom), "increasing physical intergroup contact inevitably will lead to changes in the mutual attitude of the interacting members and improve their

intergroup relations” (Hewstone and Brown, 1986, p.172). In other words, contact with persons from different backgrounds should under normal circumstance make us realize the beauty of our differences while at the same time embracing the truth about our common humanity.

Empirically, this hypothesis has received overwhelming support across different target groups such as gays, Muslims, and blacks. In fact, in a meta-analysis of 517 contact studies, Pettigrew and Tropp (2006) observe that 93% of these studies have found a negative relationship between contact and prejudice, with the correlation coefficient increasing the more rigorous and sophisticated study. More of these studies will be reviewed in the next section.

What I seek to do in this paper therefore is to examine whether the concentration of visible minorities in a given area affects the probability of a majority group member donating internationally, using Canadian data. By majority group I mean both native-born Canadians as well as foreign born individuals with white ethnic background living in Canada. In other words, someone born in Britain who now lives in Canada will be included in the majority (sometimes referred to as the Canadian group), while someone born in Canada but of, say, Chinese origin, will be counted as part of the minority group. The immediate reason for this fusion of European immigrants with the native-born group is because the assimilation process is quicker, smoother and easier for these foreign-born individuals due to racial, linguistic, economic, social and even sometimes cultural similarities. Moreover, it is not apparent upon viewing a “white” immigrant that they are indeed an immigrant and hence their presence in a community is not likely to affect giving to their place of origin which is probably a developed country and therefore

not in need of charity. Thus merging them with their fellow white Canadian born comes at a low cost. Nothing is lost by redefining a native Canadian in this way because I am still able to maintain the visible difference between immigrants and non-immigrants which is the thread on which this paper hangs. Note, when mention is made of Canadians in this paper, I am basically referring to majority members.

Regarding visible minority group, I classify anyone born either outside or inside Canada as a member as long as their ethnicity is non-white where non-white refers to such ethnic backgrounds like Chinese, African, Filipino, Haitian, Indian, and so on. In effect a white American living in Canada but born outside, though an immigrant, will still not qualify as a minority person in this study but a Chinese born here in Canada who probably cannot speak the Chinese language will still pass as one because of their ethnicity. The reason for this is so as to create visible difference between minority and majority group members. Moreover this definition also allows me to focus attention on immigrants from those countries on the receiving end of international donations.

Until now, no one has tried to examine empirically the impact that visible minorities may have on the voluntary behavior of Canadians (or, more specifically White Canadians). By analyzing the impact of immigration driven diversity on the philanthropic landscape of Canada I make a useful contribution to the increasingly hot immigration debate. Another reason why this study is necessary is aptly described by (Osili and Du, 2005, p89): “By studying immigrant assimilation and charitable giving it is possible to go beyond learning about immigrants, cultural values and norms and understand how they interact with the host country.” This paper also provides further

insight into the contact hypothesis developed by Gordon Allport (1954). More about this hypothesis will be discussed in the literature review section.

The expected sign of the estimated coefficient on the measure of visible minority density is ambiguous: it is negative if Putnam's "hunkering down" phenomenon is at work and positive if Allport's "contact hypothesis" dominates. In general, whenever a statistically significant result is obtained, it is negative. However, the economic significance of the effect is very small: A 10% increase in the proportion of visible minorities in a given area on average decreases the predicted probability of a visible majority member giving internationally by as little an average of 15% indicating that people might not really be "bowling alone" that much.

The rest of the paper is structured as follow: In section 2, I provide a review of some relevant literatures .The data used and the econometric model are described in section 3 and 4 respectively. Section 5 discusses the estimation results and I conclude the paper in section 6.

## 2. Literature Review

Strictly speaking there is no literature, at least to the best of my knowledge that has directly dealt with this particular subject. However when the relationship between immigration and international giving is considered in a broader context, then several other literatures can be invited into the discussion.

Basically, the transmission mechanism of the power of immigration is intergroup contact and this readily allows for the examination of the contact hypothesis developed by Gordon W. Allport (1954). As discussed in the introduction, the contact hypothesis predicts a positive outcome from interactions with “out group” members, given the presence of four cardinal criteria, namely, equal status, common goals, acquaintance potentials and support of authorities or law or custom.

Allport (1954) deduced this hypothesis from earlier studies about intergroup contact. Most of these researches dealt with the experiences of American soldiers during the Second World War. The shortage of troops during the war as well the usual tumultuous conditions of every combat resulted in the need to integrate black soldiers into the combat troops even though US army policy frowned on that. Concerned with the general morale of the army, several studies were carried out to ascertain what this “unfortunate” condition would mean for the chances of America winning the war. One key finding was that White soldiers who had previously served in combat with Blacks were relatively more comfortable with this new arrangement than those with no prior experience (Singer, 1948; Stouffer, 1949).

Another study by Deutsch and Collins (1951) in connection with two similar but racially different housing projects in New York City and Newark found a similar positive outcome from intergroup contact. Specifically, 75% of housewives in New York City where there existed a fairly high degree of racial integration were fine with interracial housing compared to only 25% in Newark where race was a big thing. They also observed that people in New York because of regular contact with blacks were much less stereotypical than those in Newark.

Since Allport gave prominence to the contact hypothesis in 1954 several other researchers have also extensively dealt with it in a much brighter empirical light. Using different research methods –survey, laboratory, field- most of these studies have consistently been supportive of the contact hypothesis even under circumstances where the four key variables outlined by Allport are not simultaneously existent. Researchers have found a negative relationship between prejudice and contact with homosexuals (Herek and Glunt 1993; Eskilson 1995), Muslims (Savelkoul et al. 2011; Novotny and Polonsky 2011), the elderly (Hale 1998), physically disabled (Krahe and Altwasser 2006), (Anderson and Antonak 1992), computer programmers (McGinnis 1990), refugees (Cameron L. et al 2006) and several other target groups.

Some papers have even tightened the screws a little bit more to capture the impact of all the various forms of contact. Wright, Aron, McLaughlin-Volpe, and Ropp (1997) find that all ingroup members do not necessarily have to experience a direct contact with out group members; instead the mere knowledge of inter-friendship among some of the members of the different groups is enough to generate the overall positive effect predicted by the Allport (1954). They conducted four studies with the degree of friction between the groups increasing with each study. In all four instances they observe that participants who know an “in-group” member with an ‘out-group” friend were less prejudiced.

Schiappa, Gregg, and Hewes (2005) further observe that when it comes to contact the line between what is real and what is “make believe” is quite thin. The illusion of a face to face interaction created by the mass media (“parasocial contact”), according to them, “facilitates positive parasocial responses and changes in beliefs about the attributes of

minority group categories” (page 92). Three studies were carried out to measure the correlation between the level of prejudice of majorities and parasocial contact with gay men and a male transvestite known as Eddie Izzard. In all three, they find that parasocial contact results in a decline in prejudice but the impact is much lower compared to real contact. This finding quickly drives home the contact hypothesis as it applies to this paper, namely that immigration produces a deeper and more powerful relationship than any TV commercial can do, hence it should be able to ignite the type of giving that transcends national borders.

The review so far clearly reveals the support that the contact hypothesis in all its forms has found in the literature. But before we “open up the champagne bottle”, Pettigrew (1971) cautions “contact can lead either to greater prejudice and rejection or to greater respect and acceptance, depending upon the situation in which it occurs” (p.275), and just as forewarned some researchers have indeed found a neutral and sometimes positive correlation between contact and prejudice. Using a sample of 1411 soldiers in the Israeli army, Amir, Bizman and Rivner (1973) sought to examine the extent to which interethnic contact can generate acceptance and oneness. Sadly, after six weeks of intergroup contact, no major change was found overall; same friends as before. Forbes (1997) makes a similar observation. He concludes that intergroup contact works favorably at the individual level but fails to translate to the group level. Hence contact can reduce petty individual squabbles and not group conflict.

This notwithstanding, the vast majority of papers seem to strongly support the fact that contact can bridge gaps. So can contact really reduce prejudice? The resounding answer is yes.

The subject of social capital and immigration has also been extensively dealt with in the literature. Using a cross-national, cross-sectional time-series dataset of 19 countries spanning from 1981 to 2000, Kesler and Bloemraad (2010) find that, though the relationship between immigration and collective mindedness is negative, there is nothing scary about it. They observe that countries with policies promoting economic equality and a smooth assimilation for immigrants (i.e. conditions similar to the four basic criteria by Allport (1954)) experience less and even sometimes no decline in social capital.

Delhey and Newton (2005) also find a negative effect of ethnic fractionalization on social capital but they further observe that this effect dwindles with the inclusion of such controls as corruption, democracy and a rule of law index. This was a comparative study of 60 western countries and developing countries designed to ascertain the extent to which diversity affects social capital under very different circumstances.

It is also worth emphasizing that the empirical story is not all negative. Kazemipur (2006) for instance finds a positive correlation between ethnic diversity and civic trust in Canada. A similar finding was obtained by Hooghe, et al. (2009) in their study of European countries using 26 different indicators of diversity. In a nut shell, it is clear that the empirical research on social capital and diversity does not lead towards a single definitive conclusion. The results may vary depending on the country(s) under study and the type of social capital being measured.

### 3. Data and Variables

Canada is one of the ripest countries for any kind of immigration related study due to its relatively high proportion of immigrants and friendly immigration and assimilation policies compared to most countries in North America and Europe. According to Statistics Canada immigration is responsible for about two-thirds of Canada's population growth during the last 10 years, while the US has been growing as a result of its high fertility rate.<sup>1</sup> In contrast, recent population growth in the United States has been mainly the result of natural increase. As a popular joke, a Canadian is defined as “someone who drinks Brazilian coffee from an English teacup and munches a French pastry whilst sitting on their Danish furniture having just come from an Italian movie in their German car. He or she picks up their Japanese pen and writes to their member of parliament to complain about their American takeover of the Canadian publishing business” (*sorinflutur.ablog.ro/2009-04-16/on-canadian-identity.html*). Though funny and light, it reveals to some extent the immigration driven diversity in Canada.

Consequently, I focus my analysis on Canada using data from the 2000 National Survey of Giving, Volunteering and Participating (NSGVP) and the 2004-2010 Canadian Surveys of Giving, Volunteering and Participating (CSGVP). The NSGVP was renamed CSGVP in 2004 with the latter containing additional questions and a slightly different survey approach. However, both surveys are designed for the same purpose and that is to collect information about the giving behavior of Canadians aged 15 and above. By giving, I mean both donations in-kind or in cash and any other indirect form of

---

<sup>1</sup> <http://www.statcan.gc.ca/daily-quotidien/120208/dq120208a-eng.htm>

financial support. I use the confidential master files of all of these surveys because they contain more and better data, as explained later on.

Both the NSGVP and CSGVP offer some great advantages particularly in terms of sample size and number of missing observations. The 2000 survey contains information on 14,724 respondents. The sample sizes in 2004, 2007 and 2010 are 22,164, 21,827 and 15,482 respectively. Also the fact that these surveys ask the same or similar questions over time allows me to track the behavior of the estimates within and across time. Finally, having data where the unit of observation is the census area and not provincial is more appropriate for studies of this nature because diversity and human interaction are more felt at the local level than the national or even provincial level .

The use of the master file instead of the public file is prompted at least by two reasons: 1) the master file contains data at the census metropolitan area (CMA) level and this allows for more variations in my main independent variable, which is the proportion of visible minorities that exist at a given time in a particular area. 2) The information on immigrants contained in the master file is more detailed than it is in the public file; hence I am able to customize the definition of an immigrant to fit the purpose of this study.

To assess the impact of missing observations, I keep all observations on individuals even when they fail to respond to a question of interest to this study. Should that occur, I create a dummy variable indicating that the response is missing and then examine whether the group of missing responses behaves differently from the others. On average about 10% of persons interviewed did not respond to the question of religiosity, 5% were missing for health, 6% for satisfaction with life, 10% for education, 8% for labour force

status, 2% for CMA and just as little as 1% for marital status. The regression results presented in table 3 clearly show that the missing observations do matter especially in both 2007 and 2010 data. For instance, in 2007, the marginal impact of individuals who did respond to the question about their health status is estimated to be about 7.8% and this is statistically significant at the 1% level of significance. Every missing observation is significant at least in one survey year.

Also, I drop all respondents from the Territories so as to narrow the analysis to provinces where immigration issues do really matter. This restriction does not affect the 2000 NSGVP but shrinks the 2004, 2007 and 2010 CSGVP from an original size of 22,164 to 20,832, 21,827 to 20,510 and 15,482 to 14,059 respectively.

The dependent variable is a dummy variable equal to one if the individual is a native-born Canadian or foreign born with white ethnic background who gives to an international charity. The main independent variable is the proportion of visible minorities in the various Census Metropolitan areas (CMAs), obtained by dividing the number of visible minority individuals in a given CMA by the total sample population of that area. Other regressors include such socioeconomic characteristics as age, income, labour force status, religiosity, health status, satisfaction with life, household size, marital status and education which have all been empirically established by existing literatures to influence giving. The definition of all variables used in the estimations is given in table 1.

Table 2 presents summary statistics of these variables by survey year, using first the total sample and finally two subsamples consisting of visible majorities who give internationally and visible minorities. One obvious fact from table 2 is that the number

of Canadians who give internationally, though small, has been increasing over time. In 2000, only 6% of Canadians gave internationally in this sample. However, in 2010, this proportion more than doubles to 14%. Of these, there were on average about 6% more females than males across all survey years. Another noteworthy characteristic of Canadian international givers is that on average there are more most of them are more religious persons than their visible minority counterparts. In 2004 for instance, 42% of international donors against 36% minorities responded religious. It is also clear that education matters when it comes to international donation. Consistently across all survey years, there are more educated (college and university) international givers specifically, about 56%. Also majorities are about 10% more likely to be married than minorities and on average 5 years older. The province with consistently the most majority international donors is Quebec with as high as 32% in 2004.

With regards to visible minorities, it can be observed that a fairly large proportion of the sample (an average of 30% across all survey years) is represented by them. The proportion of minorities has over the years been on the increase from a low of 21% in 2000 to a high of 39% in 2004 and then fell to 29% in 2010. It can further be observed that within province the percentage of minority individuals has remained fairly stable over the years. The only province with quite significant variations in minority population (between 43% and 47%) is Ontario. However, across province the proportion of minorities exhibits quite substantial variations from as low as 0% in Prince Edward Island (PEI) to as high as 47% in Ontario. It can also be inferred from table 2 that over time, the proportion of visible minorities with a university education has increased. In 2000, 19% of them were university degree holders and by 2010 the number had shot to

about 29%. This trend is consistent with recent immigration policies designed to attract more educated immigrants into Canada. It also reflects the fact that the stock of visible minorities is increasing over time.

#### 4. Methodology

The econometric approach is fairly straightforward. I use a probit model where the probability of a majority individual donating towards an international cause is obtained by regressing whether or not an individual is an international giver on the proportion of visible minorities in the various CMAs plus a series of other variables. The probit model is appropriate because of the discrete nature of the dependent variable. Generally, the decision to give to international charity or not is modeled as an unobserved variable  $y^*$  such that

$$y^* = \mathbf{X}'\boldsymbol{\beta} + \varepsilon \quad (1)$$

Note that  $y^*$  which is the decision making process is unobserved; we only observe the outcome of the process, that is whether the individual gave to international charity or not. Thus, our observation is given as

$$y=1 \quad \text{if } y^* > 0$$

$$y=0 \quad \text{if } y^* \leq 0$$

From equation (1)  $\mathbf{X}$  and  $\boldsymbol{\beta}$  are obviously the independent variable and estimated parameter matrices respectively, and  $\varepsilon$  is a vector matrix of normally distributed error terms which is assumed to be uncorrelated with  $\mathbf{X}$ . Specifically,  $\mathbf{X}$  consists of the main variable of interest (M/N) which is the proportion of visible minorities in the various CMAs obtained by dividing the number of minority individuals in a given CMA by the total inhabitants in the same area. In addition, the  $\mathbf{X}$  matrix contains all relevant donor characteristics (age, income, education religion, health, marital status and gender etc.) as well as province and time dummies that vary by specification. The first specification is a very parsimonious equation where all elements in vector  $\mathbf{X}$  except the primary independent variable (M/N) are assumed to be equal to zero. . The second specification includes all the socioeconomic characteristics in the  $\mathbf{X}$  matrix. The final specification adds province dummies only in case of a single year data or both province and time dummies in case of pooled data.

Furthermore, I divide the data into subsamples using key characteristics like income, age, religiosity, gender and education in order to exploit any differences in direction and magnitude of the estimates across these groups.

## 5. Results

Table 3 presents the marginal effects, from the probit model of the willingness of a majority individual to give internationally according to year of study and specification. The marginal effects are calculated using the delta method and the evaluation is done at the sample mean of the data. Robust standard errors are estimated to take account of

the possibility of heterogeneity. All of the data are weighted using the weights provided by Statistics Canada for each survey. The weighting method for the NSGVP and CSGVP is very comprehensive. It combines four factors; the probability weight, cluster sub-weight, a balancing factor for non-response and the province-age-sex and CMA ratio adjustment factor.

The predicted probability of the reference individual is given in each results table. The reference individual is captured by the omitted category in each dummy variable as defined in table 1, and the average value for the continuous variables. Specifically, she is a high school graduate, aged 44 years, living in Ontario, married, nonreligious, in poor health, dissatisfied with life, unemployed, and living in a household of three and with average household income of 67,675.9 dollars. The predicted probability of such an individual ranges between 0.03 and 0.06 across survey year. Differently put, there is at least 3% and at most 6% chance of finding the reference individual in the category of Canadian international givers. In effect, there is roughly a 95% probability that she (reference person) will not give to international charity. The predicted probability serves as the yardstick for measuring the strength of the marginal effects of the independent variables. That is, we can tell how much of an impact a variable has by computing how much it changes the predicted probability.

With regards to the individual –level controls, the results are basically no different from existing papers (e.g., Rajan, Pink and Dow, 2009; Apinumahakul and Devlin, 2008). I find that women are more likely to give to international charity than men. If the reference individual becomes a male, the predicted probability falls by 31.9% in 2000, 25.8% in 2004, 23.3% in 2007 and 30.5% in 2010, making an average effect of 27.8%

across all survey years (recall, however, that the predicted probabilities are very small, so a tiny marginal effect results in a large percentage increase). The effect is also statistically significant mostly at 1%. Household income against all expectations has a very minimal, almost zero, effect on the decision to give internationally. However, regardless of its little effect it is always statistically significant across all specifications and year. On average if income goes up by \$1000, the predicted probability increases by just 0.45%. Also except under very few specifications, the effect of household size on international giving is mostly statistically insignificant. Furthermore, being married, older, a worker or satisfied with life does not really affect one's willingness to give to an international organization.

The main drivers of international giving from table 3 are one's level of education, religion and health. Across all specifications and survey years, I observe that on average, having a university degree increases the predicted probability by 62%. This value decreases as we move lower on the educational ladder, suggesting that education has a positive effect on international giving. This is really not surprising because when it comes to international giving one big difference maker is a person's level of awareness and this is one of the many things that higher education bestows on an individual (Cheung and Chan, 2000; Sargeant, 1999). Religiosity is also positively related to the probability of a majority member giving internationally. The more religious are on average more willing to donate to international charity than the nonreligious and if the reference person becomes religious the predicted probability increases by about 60%. This estimate is both economically and statistically significant at the 1% level. The same strong positive effect is observed for the health condition of a person. The healthier you

are the more willing you are to give internationally. Health, they say is wealth, so it is not surprising it affects giving in a positive way.

With regards to my primary question of interest, I find that the concentration of visible minorities in a given area at a given time generally imparts on the probability of a majority member giving to international charity in a negative way. However, the depth of this impact is extremely shallow. Specifically, a 10% increase in the percentage of minorities in a given area decreases the predicted probability by 14.3% in 2000. In other words, a 1% increase is associated with just 1.4% decrease in the probability of a majority donating to international charity. To put things in perspective that is a reduction of only 0.0004. This estimate is statistically significant at 5% in the second specification where all control variables are included but insignificant in the first specification (no controls) and third specification (controls and province fixed effect). In 2004, I find that a 10% increase in the population of visible minorities decreases the predicted probability by an average of 14% across all three specifications. Here too, the marginal effect is significant only in the second specification. In the third specification, which is the most elaborate, the effect is approximately zero. When I pool both 2000 and 2004 data, the marginal impact falls in magnitude to as low as 0.30% but still maintains its statistical significance at 1%. In 2007 the average marginal effect is about 17% for a 10% increase in minority population and statistically significant across all specific specifications. In 2010 however, none of the marginal effects is statistically significant.

In terms of percentages it might appear the marginal effect of an increase in minority population is quite substantial. But the question worth asking is, “of what is it a

percentage?” As mentioned earlier the predicted probability serves as the baseline estimate hence the strength of the marginal effects is directly tied to its absolute value. If the predicted probability is high the marginal effects lose their strength and vice versa. In my model the highest predicted probability is 0.054 and with this small value even the smallest of changes will appear big in percentages. Hence a 17% marginal effect of minorities reported in table 3, when converted to absolute value is only just a tip of the iceberg. Clearly, this result shows that there is not enough reason to believe that, at least when it comes to international giving, people “hunker down” in the face of increased diversity. There is even, in one specification in 2010 where the estimation produces a positive marginal effect, but it is very far from statistical significance. Most of the negative estimates are on the other hand very statistically significant but as mentioned earlier all of them are economically insignificant.

Overall, the model exhibits a fairly good fit at least as depicted by the high Chi-Square values across all survey years. The model consistently passes the overall test of significance at the 1% level. The McFadden's Pseudo R-Squared however appear to tell a different story given that highest value across all specifications is only 0.06 indicating that model has a very low likelihood. However, before making any hasty conclusions, it is vital to point out the Pseudo R-Square is fraught with several limitations that make it far from being a true measure of goodness of fit. Even the writers of the program STATA, which I use for this paper, discourage its users from attaching great significance to the Pseudo R-Square; “This formula for pseudo- $R^2$  is nothing more than a reworking of the model chi-squared, which is  $2(\mathbf{L1} - \mathbf{L0})$ . Thus even for discrete distributions

where  $0 \leq \text{pseudo } R^2 \leq 1$ , it is still better to report the model chi-squared and its  $p$ -value—not the pseudo- $R^2$ .” (<http://www.stata.com/support/faqs/stat/pseudor2.html>).

It is important to point out that table 3 only shows the average effect across all groups of people; to explore the possibility that the minority group effect may vary systematically across different groups of people, I divide the sample into subsamples using gender, income, education, religiosity and age and then re-estimate equation (2). The findings are reported in tables 4-13. In some specifications, I am also able to pool together the 2000 and 2004 samples and the 2007 and 2010 samples as they ask identical questions. The main difference between the two pooled data is that names of CMAs are not the same and since this is the focal point of the minority-majority interaction, I am not able to pool all years (2000-2010). Aside this all other relevant questions are basically the same.

Generally, I find that there are no sharp differences in the way different groups of people respond to changes in minority population when it comes to the decision to give to international charity. Between males and females, I observe that during the year 2000 and 2004 the effect of minority population on the probability that a female majority member gives internationally is sometimes negative and sometimes positive but always statistically insignificant. For men however the reverse is the case; the marginal effects are all negative and all statistically significant. It thus appears in this period that females respond more positively to increases in the minority population than men. However the story does not tilt in favor of females in 2007. For both males and females, a 1% increase in minority population decreases the probability of giving to international charity on average by 2.5% but this estimate is statistically significant for females only. A year fixed

effect indicates that the year 2007 did matter for females. In 2010, both males and females were on the same scale: negative and statically insignificant.

A fairly similar result is found within income and age groups, education and religiosity. Across different educational groups, the marginal effect seems to be heading in a positive direction as we move from dropout to high school and to college but plummets back to significant negative values when we move further to university level. I was expecting the impact of minorities to be positive in favor of the more educated because of their open mindedness. However it is also possible higher education is associated with less social interaction and that might explain the negative response to increased minority population by the very educated (university degree).

With regards to religiosity, I find that the changes in the number of minorities did not matter to the nonreligious in their decision to give to international charity. On average, a 1% increase in the proportion of minorities reduces the predicted probability by 0.65% and this estimate is statistically insignificant across all years. Surprisingly, the religious are relatively less likely to give internationally in the face of a burgeoning minority population. Except in 2000, all the estimates of the minority group effect are statistically significant at mostly the 1% level and negative. In terms of percentage, a 1% increase in the proportion of minorities reduces the predicted probability by an average of 1.8%.

Across different age groups, I observe that the effect is leaning a little farther from negative for individuals below age thirty (young) than those above thirty (old). In 2007, the minority estimate is both negative and statistically significant for both age groups. However, in the other years the estimate is statistically insignificant when negative and

sometimes positive for young Canadians. For older people, the negative effect is mostly significant statistically.

Finally, I divide the sample into three subgroups; those who make less than \$20,000 a year (bottom income), those making from \$20,000 up to \$50,000 a year (middle income), and finally those making more than \$50,000 a year (top income). Across these groups the effect does not go in one direction. It is sometimes negative for certain income group in certain years and sometimes positive. A similar trend can be observed about its statistical significance as well. What is common about all the three income groups is that whenever the estimation produces a positive effect, it is always not statistically significant.

## 6. Conclusion

In this paper I seek to investigate how changes in visible minority population affect the probability of a majority member giving to an international organization. In other words, does contact with say an African make any difference when it comes to giving to charity in Africa? On one hand, some researchers suggest that such contact can be used to bridge gaps and to make people less prejudiced. On the other hand, several papers have found that people generally step back into the “self-first zone” in the face of increased diversity.

The question posed in this paper is which of these two competing effect dominates the decision to donate internationally. Generally I find that an increase in minority population negatively affects majority giving to international charities. The impact is

however very little and even sometimes negligible in some specifications and years. I observe further that the minority group effect is almost the same between the rich and poor, male and female, highly and less educated, religious and nonreligious and the young and old. The direction is mostly negative across these groups with very slight differences in magnitude. Note that the results vary across survey years for different groups of people but on average they lean towards the negative side.

With the exception of age and household income, I did not find any other major surprises when it comes to the traditional determinants of giving. The healthy, more educated and religious give more internationally and this finding ties in neatly with previous papers. Household size and satisfaction with life mostly do not matter in international charity.

In some respects, the finding that the hunkering down hypothesis dominates – namely that as the proportion of the population that is minority increases, the likelihood that the majority population gives to international causes falls,-- is disappointing. However, this paper is but the first attempt to try to get to the bottom of how minorities affect majority giving, and it is not without weaknesses.

One problem with this paper concerns data. Ideally, one would like to have a time dimension to the data set that could help better link changes in the proportion of minority population to that of majority giving. In this paper, I have had to rely on cross-sectional variations across 75 CMAs in Canada in a given year. However, if there are other systematic differences across these CMAs not captured by the other independent variables included in the regression, then these will confound the interpretation of the

effect of minorities on majority giving. Of course I have tried to include all obvious factors like age, education and income.

Overall, this paper represents a first step in trying to understand better the link between overseas giving and the presence of visible minorities. More and better data would help further this understanding.

## References

Alesina, A., and Ferrara E. (2000). "Participation in Heterogeneous Communities." *The Quarterly Journal of Economics*, 115 (3): 847–904.

Alesina, A., and Ferrara E. (2002). "Who Trusts Others?" *Journal of Public Economics*, 85 (2): 207–34.

Allport, G. W. (1954). "The nature of prejudice". Reading, MA: Addison-Wesley.

Amir, Y., Bizman, A., and Rivner, M. (1973). "Effects of interethnic contact on friendship choices in the military." *Journal of Cross-Cultural Psychology*, 4, 361-372.

Anderson, K. and Winters, L.A. (2008). "The challenge of reducing international trade and migration barriers." *Policy Research Working Paper. Series 4598, The World Bank*

Anderson, R. J., and Antonak, R. F. (1992). "The influence of attitudes and contact on reactions to persons with physical and speech disabilities". *Rehabilitation Counseling Bulletin*, 35, 240-247.

Andreoni, J., Payne, A., Smith, J.D., and Karp, D. (2011). "Diversity and Donations: The Effect of Religious and Ethnic Diversity on Charitable Giving." *NBER Working Paper Series. No: 17618*.

Apinunmahakul, A., Devlin, R.A. (2008). "Social networks and private philanthropy." *Journal of Public Economics, 92: 309-328*.

Cameron, L., Rutland, A., Brown, R., and Douch, R. (2006). "Changing children's intergroup attitudes toward refugees: Testing different models of extended contact". *Child Development, 77, 1208-1219*.

Cheung, C. K., and Chan, C. M. (2000). "Social-cognitive factors of donating money to charity, with special attention to an international relief organization." *Evaluation and Program Planning, 23(2), 241-253*.

Costa, D.L., and Kahn, M.E. (2003). "Civic Engagement and Community Heterogeneity: An Economist's Perspective." *Perspectives on Politics, 1 (1): 103-11*.

Delhey, J. and Newton, K. (2005). "Predicting Cross-National Levels of Social Trust: Global Pattern or Nordic Exceptionalism?" *European Sociological Review, 21(4):311-27*.

Deutsch, M., and Collins, M. E. (1951). "Interracial housing: A psychological evaluation of a social experiment". *Minneapolis, MN: University of Minnesota Press*.

Eskilson, A. (1995). "Trends in homophobia and gender attitudes: 1987-1993". *Presented at 90<sup>th</sup> Annual Meeting American Sociology Association, Washington, DC*.

Forbes, D. (1997). "Ethnic conflict: Commerce, culture, and the contact hypothesis." *New Haven, CT: Yale University.*

Hale, M.N. (1998). "Effects of age and interpersonal contact on stereotyping of the elderly". *Current Psychology, 17(1): 28-38.*

Herek, G. M., and Glunt, E. K. (1993), "Interpersonal contact and heterosexuals' attitudes toward gay men: Results from a national survey". *Journal of Sex Research, 30: 239-244.*

Hewstone, M., and Brown, R. J. (1986). "Contact is not enough: An intergroup perspective on the Contact Hypothesis". In M. Hewstone and R. Brown (Eds.), *Contact and conflict in intergroup encounters (pp. 1-44).* Oxford: Basil Blackwell.

Hooghe, M., Reeskens, T., Stolle, D. and Trappers, A. (2009). "Ethnic Diversity and Generalized Trust in Europe: A Cross-National Multilevel Study." *Comparative Political Studies, 42(2): 198-223.*

Hunt, J., and Gauthier-Loiselle, M. (2010). "How much does immigration boost innovation?" *American Economic Journal: Macroeconomics, 2(2): 31-56.*

Kazemipur, A. (2006). "A Canadian Exceptionalism? Trust and Diversity in Canadian Cities." *Journal of International Migration and Integration, 7(2): 219-40.*

Krahe, B., and Altwasser, C. (2006), "Changing negative attitudes towards persons with physical disabilities: an experimental intervention". *Journal of Community and Applied Social Psychology, 16(1): 59-69.*

Kesler, C. and Bloemraad, I. (2010). "Does Immigration Erode Social Capital? The Conditional Effects of Immigration-Generated Diversity on Trust, Membership, and Participation across 19 Countries, 1981-2000." *Canadian Journal of Political Science*, 43(2): 319-347

McGinnis, S.P. (1990). "Descriptive and evaluative components of stereotypes of computer programmers and their determinants". *PhD thesis*. New York: City University. NY.

Novotny, J., Polonsky, F. (2011). "The Level of Knowledge about Islam and Perception of Islam among Czech and Slovak University Students: Does Ignorance Determine Subjective Attitudes?" *Sociologia*, 43(6): 674-696.

Ortega, F., and Peri G. (2009). "The Causes and Effects of International Labor Mobility: Evidence from OECD Countries 1980-2005." *NBER Working Paper Series*, 14833.

Osili, U.O., and Du, D. (2005). "Immigrant Assimilation and Charitable Giving." *New Directions for Philanthropic Fundraising*. 48: 89-104.

Pettigrew, T.F. (1971), "Racially Separate or Together?" *New York: McGraw-Hill*.

Pettigrew, T.F. and Tropp, L.R. (2006). "A meta analytic test and reformulation of intergroup contact theory". *Journal of Personality and Social Psychology*, 90(5): 751-783

Putnam, R.D. (2007). "*E Pluribus Unum*: Diversity and Community in the Twenty first Century." The 2006 Johan Skytte Prize Lecture. *Scandinavian Political Studies* 30 (2): 137-74.

Rajan, S.S., Pink, G.H. and Dow, W.H. (2009). "Sociodemographic and personality characteristics of Canadian donor contributing to international charity". *Nonprofit and Voluntary Sector Quarterly*, 38(3): 413-440.

Sargeant, A. (1999). "Charitable giving: Towards a model of donor behavior." *Journal of Marketing Management*, 15(4), 215-238.

Savelkoul, M., Scheepers, P., Tolsma, J., Hagendoorn, L. (2011). "Anti-Muslim Attitudes in The Netherlands: Tests of Contradictory Hypotheses Derived from Ethnic Competition Theory and Intergroup Contact Theory" *European Sociological Review*, 27 (6): 741-758.

Schiappa, E., Gregg, P., and Hewes, D. (2005). "The Parasocial Contact Hypothesis Communication". *Monographs*, 72, 92-115.

Singer, H. A. (1948). "The veteran and race relations". *Journal of Educational Sociology*, 21, 397-408.

Soroka, S., Richard J., and Keith, B. (2006). "Ethnicity, Trust and the Welfare State." *In Social Capital, Diversity and the Welfare State*, ed. F. Kay and R. Johnston. Vancouver: University of British Columbia Press.

Stouffer, S. A. (1949). "The American soldier". Princeton, NJ: Princeton University Press.

Tu, J. (2007). "The Impact of Immigration on the Labour Market Outcomes of Native-born Canadians". *Social and Economic Dimensions of an Aging Population (SEDAP) Research Paper No. 216*.

Van der Mensbrugge D. and Roland-Holst D. (2009). "Global Economic Prospects for Increasing Developing Country Migration into Developed Countries." *Human Development Research Paper No.50, New York: Human Development Report Office (HDRO), United Nations Development Programme (UNDP).*

Winters, L.A., Walmsley, T.L., Wang, Z.K. and Grynberg, R. (2003). "Liberalising Labour Mobility under the GATS", *Economic Paper, No. 53, Commonwealth Secretariat. London.*

Wright, S. C., Aron, A., McLaughlin-Volpe, T., and Ropp, S. A. (1997). "The extended contact effect: Knowledge of cross-group friendships and prejudice". *Journal of Personality and Social Psychology*, 73, 73–90.

[sorinflutur.ablog.ro/2009-04-16/on-canadian-identity.html](http://sorinflutur.ablog.ro/2009-04-16/on-canadian-identity.html)

[www.statcan.gc.ca/daily-quotidien/120208/dq120208a-eng.htm](http://www.statcan.gc.ca/daily-quotidien/120208/dq120208a-eng.htm)

<http://www.stata.com/support/faqs/stat/pseudor2.html>

**Table 1: Variable Definitions**

<b>Dependent Variable</b>	
<b>Majority Int. donor</b>	1=donated to international org. and has White ethnic background, 0=otherwise
<b>Independent Variable</b>	
<b>Minority Donor</b>	1= born in Canada or outside Canada and has non-white ethnic background, 0=otherwise
Excellent	1=excellent or very good in health, 0= otherwise
Good	1= good in health, 0=otherwise
Poor	1= Poor or fair in health, 0=otherwise <b>reference group</b>
Very satisfied	1= very satisfied in life, 0=otherwise
Somewhat satisfied	1=somewhat satisfied in life, 0=otherwise
Dissatisfied	1=somewhat dissatisfied or very dissatisfied in life,0=otherwise, <b>reference group</b>
Religious	1=attend religious service or meeting: at least once a week or at least once a month, 0=otherwise
Not religious	1= if never attend religious service or meeting or attend religious service or meeting: at least 3 or 4 times a year or only once or twice a year, 0=otherwise, <b>reference group</b>
Female	1=female, 0=otherwise
Male	1=male, 0=otherwise <b>reference group</b>
Married	1=married or common law, 0=otherwise <b>reference group</b>
Single	1=single or widow or separated, 0=otherwise
Dropout	1=less than high school, 0=otherwise
High school	1=high school as highest completed education, 0= otherwise, <b>reference group</b>
College	1=some post high school education or post-secondary diploma , 0= otherwise
University	1=university degree, 0= otherwise
M health	=1 if information on health is missing, 0= otherwise

M religious	=1 if information on religion is missing, 0= otherwise
M minorities	=1 if information on immigration is missing, 0=otherwise
M satisfied	=1 if information about life satisfaction is missing, 0= otherwise
MCMA	=1 if information about CMA is missing, 0=otherwise
MLFS	=1 if information about labour force status is missing, 0= otherwise
M education	=1 if information on education is missing, 0=otherwise.
ON	1=Ontario, 0=otherwise <b>reference group</b>
NFLD	1=Newfoundland , 0= otherwise
PEI	1=PEI, 0= otherwise
NS	1=Nova Scotia, 0= otherwise
NB	1= New Brunswick, 0= otherwise
QC	1=Quebec, 0= otherwise
MB	1=Manitoba, 0= otherwise
SK	1=Saskatchewan, 0= otherwise
AB	1=Alberta, 0= otherwise
BC	1=British Columbia, 0= otherwise
Year 2000	1=year 2000, 0=otherwise
Year 2004	1=year 2004, 0=otherwise <b>reference group for pooled 2000 and 2004</b>
Year 2007	1=year 2007, 0=otherwise <b>reference group for pooled 2007 and 2010</b>
Year 2010	1=year 2010,0=otherwise

**Table 2: Summary Statistics (2000-2010)**

	2000			2004			2007			2010		
	Overall Mean	Minority Donors	Maj.Int Donors	Overall Mean	Minority Donors	Maj.Int Donors	Overall Mean	Minority Donors	Maj.Int Donors	Overall Mean	Minority Donors	Maj.Int Donors
Age	43.51	41.11	47.12	43.99	42.16	47.68	44.39	41.58	46.94	45.07	41.3	49.65
Household size	3.02	3.32	3.06	2.88	2.99	2.85	2.98	3.13	2.87	3.02	3.22	2.82
Income(\$)	54769	57416	66172	63489	66954	73870	71382	75478	83130	81044	83101.29	98087
<b>Gender</b>												
Male	0.49	0.52	0.42	0.49	0.49	0.44	0.49	0.5	0.44	0.49	0.48	0.43
Female	0.51	0.48	0.58	0.51	0.51	0.56	0.51	0.5	0.56	0.51	0.52	0.57
<b>Marital status</b>												
Single	0.38	0.4	0.31	0.39	0.41	0.3	0.39	0.41	0.34	0.36	0.41	0.27
married	0.62	0.6	0.69	0.6	0.58	0.69	0.61	0.59	0.66	0.64	0.59	0.73
M marital status				0.01	0.01	0.01	0	0	0	0	0	0
<b>LFS</b>												
Employed	0.63	0.66	0.63	0.58	0.64	0.57	0.57	0.65	0.55	0.57	0.63	0.57
Unemployed	0.37	0.34	0.37	0.35	0.35	0.33	0.29	0.31	0.23	0.35	0.36	0.29
MLFS				0.07	0	0.11	0.08	0	0.15	0.08	0.01	0.14
<b>Religiosity</b>												
Religious	0.29	0.36	0.42	0.29	0.34	0.39	0.26	0.32	0.34	0.24	0.33	0.33
Not religious	0.64	0.64	0.51	0.62	0.65	0.49	0.64	0.68	0.49	0.66	0.67	0.51
M religious	0.07	0.01	0.08	0.11	0.02	0.13	0.12	0.01	0.19	0.11	0.01	0.16
<b>Health Status</b>												
Excellent health	0.22	0.22	0.28	0.25	0.26	0.29	0.25	0.27	0.3	0.25	0.27	0.27
Good health	0.55	0.59	0.52	0.57	0.59	0.55	0.57	0.6	0.54	0.56	0.58	0.54
Poor health	0.17	0.19	0.13	0.14	0.14	0.1	0.14	0.13	0.09	0.15	0.15	0.1
M health	0.06	0	0.07	0.04	0	0.06	0.04	0	0.08	0.05	0	0.1
<b>Satisfaction with Life</b>												
Very satisfied	0.42	0.44	0.52	0.49	0.49	0.56	0.48	0.5	0.55	0.5	0.52	0.59
Somewhat satisfied	0.45	0.46	0.38	0.42	0.44	0.33	0.43	0.44	0.34	0.4	0.41	0.29
Dissatisfied	0.07	0.1	0.03	0.05	0.05	0.04	0.04	0.05	0.03	0.04	0.05	0.02
M satisfied	0.06	0	0.07	0.05	0.01	0.07	0.05	0.01	0.07	0.06	0.01	0.1
<b>Education</b>												

	Overall Mean	Minority Donors	Maj.Int Donors	Overall Mean	Minority Donors	Maj.Int Donors	Overall Mean	Minority Donors	Maj.Int Donors	Overall Mean	Minority Donors	Maj.Int Donors
dropout	0.27	0.22	0.12	0.17	0.16	0.1	0.17	0.15	0.09	0.15	0.15	0.06
High school	0.29	0.32	0.25	0.24	0.25	0.22	0.23	0.25	0.17	0.22	0.23	0.16
college	0.28	0.27	0.35	0.31	0.33	0.27	0.31	0.33	0.27	0.31	0.32	0.29
university	0.17	0.19	0.28	0.2	0.25	0.29	0.19	0.26	0.3	0.22	0.29	0.34
M education				0.09	0	0.12	0.1	0	0.17	0.1	0.01	0.15
<b>Province</b>												
Newfoundland	0.02	0.01	0.02	0.02	0.01	0.02	0.02	0.01	0.01	0.02	0.01	0.02
PEI	0	0	0	0	0	0	0	0	0	0	0	0
Nova scotia	0.03	0.02	0.05	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.03
New Brunswick	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.01	0.02
Quebec	0.24	0.08	0.25	0.24	0.17	0.32	0.24	0.14	0.22	0.23	0.11	0.22
Ontario	0.38	0.47	0.3	0.39	0.43	0.4	0.39	0.44	0.4	0.39	0.45	0.39
Manitoba	0.04	0.05	0.05	0.04	0.04	0.03	0.04	0.03	0.04	0.04	0.04	0.03
Saskatchewan	0.03	0.04	0.04	0.03	0.03	0.02	0.03	0.03	0.02	0.03	0.04	0.03
Alberta	0.1	0.14	0.11	0.1	0.11	0.05	0.1	0.13	0.1	0.11	0.14	0.11
BC	0.13	0.17	0.17	0.13	0.17	0.12	0.14	0.17	0.15	0.14	0.17	0.15
Missing CMA	0	0	0	0	0	0	0.09	0.06	0.12	0.02	0.01	0.02
Prop. of minorities	0.21	-	-	0.39	-	-	0.38	-	-	0.29	-	-
Prop. of majorities	0.71	-	-	0.49	-	-	0.49	-	-	0.59	-	-
Prop. of majority int. donors	-	-	0.06	-	-	0.08	-	-	0.11	-	-	0.14
Observations	14,724	3,217	677	20,832	8,292	851	20,510	7,881	1,125	14,059	4,154	1,133

**Table 3 Probit Model: Marginal Effects (2000-2010)**

	2000			2004			2007			2010		
	0.0353	0.0293	0.0285	0.0641	0.0538	0.0537	0.0351	0.0343	0.0331	0.0471	0.0421	0.0415
	dy/dx			dy/dx			dy/dx			dy/dx		
	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
Pred. Probabilities: Reference Individual												
Age	-	-0.0001 (0.0006)	0 (0.0006)	-	0.0004 (0.001)	0.0004 (0.001)	-	0.0002 (0.0006)	0 (0)	-	0.0002 (0.0007)	0.0002 (0.0007)
Age Square	-	0 (0)	0 (0)	-	0 (0)	0 (0)	-	0 (0)	0 (0.0049)	-	0 (0)	0 (0)
Dropout	-	0.0194*** (0.0051)	-0.018*** (0.0049)	-	-0.0243** (0.0078)	-0.0245*** (0.0077)	-	0.0124** (0.0051)	-0.013*** (0.0049)	-	-0.0114* (0.0067)	-0.0107 (0.0066)
College	-	0.0108* (0.0064)	0.0108* (0.0063)	-	0.0079 (0.0079)	0.0078 (0.0079)	-	-0.0053 (0.0051)	-0.006 (0.0063)	-	0.0033 (0.0064)	0.0038 (0.0062)
University	-	0.0186** (0.0078)	0.0195*** (0.0079)	-	0.036*** (0.0095)	0.0359*** (0.0095)	-	0.0128* (0.0066)	0.0106* (0.002)	-	0.0315*** (0.0081)	0.0327*** (0.0081)
Household Size	-	0.0018 (0.0018)	0.002 (0.0018)	-	-0.016*** (0.0021)	-0.0059*** (0.0021)	-	0 (0.0021)	-0.0001 (0)	-	-0.0021 (0.0019)	-0.0022 (0.0019)
Income	-	0** (0)	0*** (0)	-	0*** (0)	0*** (0)	-	0*** (0)	0*** (0.0037)	-	0*** (0)	0*** (0)
Male	-	-0.0089** (0.0042)	-0.0091** (0.0041)	-	-0.0164*** (0.0052)	-0.0164*** (0.0052)	-	0.0087** (0.0038)	-0.0086** (0.0039)	-	-0.0097** (0.0041)	-0.0097** (0.004)
Single	-	0 (0.0054)	0.0006 (0.0054)	-	-0.0071 (0.0061)	-0.0071 (0.0061)	-	-0.0046 (0.004)	-0.0052 (0.0047)	-	0.0013 (0.0051)	0.0014 (0.005)
Worker	-	-0.0029 (0.0052)	-0.0029 (0.0051)	-	0.0109 (0.0066)	0.0109 (0.0066)	-	0.0017 (0.0048)	0.0021 (0.0044)	-	0.0031 (0.0052)	0.0029 (0.0051)
Religious	-	0.0156*** (0.0051)	0.0163*** (0.0052)	-	0.0344*** (0.0068)	0.0348 (0.0068)	-	0.0182** (0.0045)	0.02*** (0.0083)	-	0.0254*** (0.005)	0.0251*** (0.005)
Excellent health	-	0.0124 (0.0097)	0.0122 (0.0096)	-	0.0153 (0.0101)	0.0146 (0.0101)	-	0.0197** (0.0087)	0.0175** (0.0055)	-	0.0242*** (0.0094)	0.0244*** (0.0093)
Good health	-	0.0037 (0.0067)	0.0035 (0.0065)	-	0.0128 (0.0079)	0.0124 (0.0079)	-	0.0129** (0.0057)	0.0122** (0.0101)	-	0.0163*** (0.0063)	0.0162*** (0.0062)
very satisfied	-	0.0228** (0.0093)	0.0233** (0.0092)	-	0.0201 (0.0146)	0.0203 (0.0145)	-	0.0063 (0.0103)	0.0079 (0.0098)	-	0.0121 (0.0139)	0.0124 (0.0136)

somewhat satisfied	-	0.0173** (0.0088)	0.0179** (0.0086)	-	0.0029 (0.0147)	0.0029 (0.0147)	-	0 (0.0101)	-0.0002 (0.0003)	-	0.0049 (0.014)	0.0057 (0.0137)
% of minorities	-0.0003 (0.0003)	-0.0004* (0.0002)	-0.0004 (0.0003)	0.0002 (0.0002)	-0.0001 (0.0002)	-0.0001 (0.0003)	-0.0005 (0.0002)	-	0 (0.0078)	-0.0004** (0.0002)	-0.0006*** (0.0002)	-0.0011*** (0.0003)
Missing religion	-	-0.0112 (0.0104)	-0.0108 (0.0101)	-	-0.0168 (0.0134)	-0.0168 (0.0132)	-	-0.0113 (0.0075)	-0.009 (0.0086)	-	0.0192 (0.0151)	0.0164 (0.0143)
Missing Minorities	0.0109 (0.0111)	0.0317 (0.0245)	0.028 (0.0223)	0.0238** (0.0114)	0.0011 (0.0121)	0.0011 (0.0121)	0.0095 (0.0087)	0.0095 (0.0087)	0.0086 (0.0334)	0.0287*** (0.0086)	0.0175 (0.0125)	0.0167 (0.0122)
Missing Health	-	0.0023 (0.0196)	0.0025 (0.0198)	-	0.0679 (0.0493)	0.0672 (0.0489)	-	0.024 (0.0343)	0.0238 (0.0277)	-	0.0777*** (0.0309)	0.08*** (0.0305)
Missing Satisfaction	-	0.0281 (0.0291)	0.0321 (0.031)	-	0.0071 (0.0311)	0.0071 (0.0309)	-	0.0136 (0.0289)	0.0129 (0.023)	-	-0.0198* (0.0119)	-0.0198* (0.0114)
Missing Marital status	-	-	-	-	-0.0429*** (0.0123)	-0.043*** (0.0121)	-	0.0111 (0.0246)	0.0091 (0.0197)	-	-	-
Missing LFS	-	-	-	-	0.0725** (0.0351)	0.0723 (0.0351)	-	0.0406** (0.0198)	0.0391** (0.0099)	-	0.0307 (0.024)	0.0301 (0.0235)
Missing CMA	-	-	-	0.0106 (0.0271)	0.0085 (0.0234)	0.0046 (0.0232)	-	-	-	-0.0096 0.0094	-0.0104** (0.0142)	-0.0286*** (0.0075)
Missing Education	-	-	-	-	0.0021 (0.0224)	0.0087 (0.0233)	-	-0.0105 (0.0105)	-0.0123 (0.0081)	-	-0.0168 (0.0079)	-0.008 (0.0145)
Newfoundland	-	-	0.0012 (0.0088)	-	-	0.0158 (0.0116)	-	-	-0.0016 (0.0094)	-	-	-0.0136* (0.0076)
PEI	-	-	-0.002 (0.0089)	-	-	0.0035 (0.011)	-	-	-0.001 (0.006)	-	-	-0.0084 (0.0074)
Nova scotia	-	-	0.0266 ** (0.0129)	-	-	0.0018 (0.0089)	-	-	-0.002 (0.0055)	-	-	-0.0067 (0.0069)
New Brunswick	-	-	0.0151 (0.0105)	-	-	-0.014 (0.0087)	-	-	-0.0095* (0.0073)	-	-	-0.0252*** (0.005)
Quebec	-	-	0.009 (0.0084)	-	-	0.0035 (0.0086)	-	-	0.0158* (0.0056)	-	-	-0.014** (0.0068)
Manitoba	-	-	0.0259*** (0.0097)	-	-	0.0042 (0.0092)	-	-	-0.0006 (0.0047)	-	-	0.0108 (0.0085)
Saskatchewan	-	-	0.019* (0.011)	-	-	0.001 (0.01)	-	-	-0.0138*** (0.0042)	-	-	-0.0138** (0.0057)
Alberta	-	-	0.0172* (0.0093)	-	-	0.0021 (0.0093)	-	-	-0.018*** (0.0048)	-	-	0.0016 (0.0064)
BC	-	-	0.0217** (0.0096)	-	-	0.0025 (0.0076)	-	-	-0.0019 (0)	-	-	0.0097 (0.0065)
Year 2004	-	-	-	-	-	-	-	-	-	-	-	-
Year 2007	-	-	-	-	-	-	-	-	-	-	-	-
Pseudo R <sup>2</sup>	0.0012	0.0514	0.0582	0.0015	0.0331	0.0412	0.0064	0.0407	0.0450	0.0023	0.0601	0.0606
Wald Chi(2)	2.37	120.15	145.07	3.12	119.28	189.25	21.12	158.51	204.56	5.66	194.20	213.72

Notes: Weighted standard errors are in parentheses. \* Significant at 10%; \*\* significant at 5%; \*\*\*significant at 1%

**Table 3 cont. (Pooled 2000 and 2004, and Pooled 2007 and 2010)**

	2000 and 2004			2007 and 2010		
Pred. Probabilities: Reference Individual	.0369	0.0343	0.0331	0.0558	0.0484	0.048
	dy/dx			dy/dx		
	(1)	(2)	(3)	(1)	(2)	(3)
Age	-	0 (0.0004)	0 (0.0004)	-	0.0002 (0.0006)	0.0002 (0.0006)
Age Square	-	0 (0)	0 (0)	-	0 (0)	0 (0)
Dropout	-	-0.017*** (0.0036)	-0.0169*** (0.0035)	-	-0.0175*** (0.0052)	-0.0167*** (0.0052)
College	-	0.0032 (0.0042)	0.0029 (0.0041)	-	0.0053 (0.0051)	0.0058 (0.0051)
University	-	0.0167*** (0.0052)	0.0161*** (0.0052)	-	0.0348*** (0.0064)	0.0348*** (0.0063)
Household Size	-	0.0008 (0.0014)	0.0011 (0.0014)	-	-0.0039*** (0.0014)	-0.0041*** (0.0014)
Income	-	0*** (0)	0*** (0)	-	0*** (0)	0*** (0)
Male	-	-0.0086*** (0.0029)	-0.0087*** (0.0029)	-	-0.0132*** (0.0034)	-0.0131*** (0.0033)
Single	-	-0.0024 (0.0034)	-0.0025 (0.0034)	-	-0.0029 (0.004)	-0.0026 (0.004)
Worker	-	-0.0008 (0.0036)	-0.0003 (0.0036)	-	0.0074* (0.0042)	0.0072* (0.0042)
Religious	-	0.0174*** (0.0034)	0.0184*** (0.0035)	-	0.0298*** (0.0042)	0.0298*** (0.0042)
Excellent health	-	0.0162*** (0.0068)	0.0152*** (0.0067)	-	0.0187*** (0.007)	0.0192*** (0.007)
Good health	-	0.0083* (0.0046)	0.0078* (0.0045)	-	0.0144*** (0.0052)	0.0145*** (0.0052)
very satisfied	-	0.0156** (0.0071)	0.0159** (0.0071)	-	0.0161 (0.0104)	0.0166 (0.0103)
somewhat satisfied	-	0.0096 (0.0069)	0.0091 (0.0069)	-	0.0033 (0.0104)	0.0046 (0.0104)
% of minorities	-0.0001 (0.001)	-0.0001*** (0.0001)	-0.0001 (0.0002)	-0.0027 (0.0012)	-0.0005*** (0.0001)	-0.0006*** (0.0002)
Missing religion	-	-0.0131** (0.0062)	-0.0119* (0.0064)	-	0.0014 (0.0104)	0.0009 (0.0102)
Missing Minorities	0.0108 (0.007)	0.0169* (0.0098)	0.0165* (0.0097)	0.215*** (0.0514)	0.0082 (0.0089)	0.0082 (0.0088)
Missing Health	-	0.0142 (0.0222)	0.0145 (0.0223)	-	0.0694** (0.0319)	0.0697** (0.0314)
Missing Satisfaction	-	0.0251 (0.0259)	0.0248 (0.0257)	-	-0.0079 (0.0161)	-0.0083 (0.0158)
Missing Marital status	-	0.0135 (0.0247)	0.0085 (0.0222)	-	-0.0409*** (0.0083)	-0.0413*** (0.0075)
Missing LFS	-	0.0417*** (0.0208)	0.0401** (0.0204)	-	0.0532** (0.0218)	0.0507** (0.0213)
Missing CMA	-	-	-	-0.0971 (0.0863)	-0.015** (0.0072)	-0.014 (0.009)
Missing Education	-	-0.0088 (0.0082)	-0.0105 (0.0077)	-	-0.0026 (0.0137)	-0.0011 (0.0136)

Newfoundland	-	-	0.0001 (0.0061)	-	-	-0.002 (0.0068)
PEI	-	-	-0.0011 (0.0067)	-	-	-0.0055 (0.0063)
Nova scotia	-	-	0.0124* (0.0069)	-	-	-0.0047 (0.0055)
New Brunswick	-	-	0.0024 (0.0058)	-	-	-0.0213*** (0.0048)
Quebec	-	-	0.0138** (0.0057)	-	-	-0.0065 (0.0055)
Manitoba	-	-	0.0108** (0.0052)	-	-	0.0084 (0.0064)
Saskatchewan	-	-	0.0008 (0.0057)	-	-	-0.0064 (0.0058)
Alberta	-	-	-0.0029 (0.0047)	-	-	0.0021 (0.0057)
BC	-	-	0.009* (0.0052)	-	-	0.0053 (0.005)
Year 2004	-	-	0.0001 (0.0048)	-	-	-
Year 2007	-	-	-	-	-	-0.0086** (0.004)
Pseudo R <sup>2</sup>	0.0009	0.0385	0.0416	0.0039	0.0498	0.0522
Wald Chi(2)	3.43	201.44	238.39	25.52	328.56	359.73

Notes: Weighted standard errors are in parentheses. \* Significant at 10%; \*\* significant at 5%; \*\*\*significant at 1%

**Table 4: Marginal Effects base on Gender**

	Female						Male					
	2000	2004	2007	2010	2000&2004	2007 & 2010	2000	2004	2007	2010	2000&2004	2007&2010
Predicted Probability	.0312	.0369	.0443	.0613	.0353	.0536	.0238	.0277	.0352	.0447	0.0273	.0412
	dy/dx						dy/dx					
Age	-0.0002 (0.0008)	0.0008 (0.0008)	0.0011 (0.001)	0.0003 (0.0015)	0.0003 (0.0006)	0.0004 (0.0009)	0 (0.0009)	-0.0007 (0.0009)	-0.0009 (0.0009)	0.0004 (0.0012)	-0.0003 (0.0006)	-0.0002 (0.0008)
Age square	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Dropout	-0.021*** (0.007)	-0.0083 (0.0072)	-0.0325*** (0.0065)	-0.0312** (0.0102)	-0.0164*** (0.0051)	-0.0319*** (0.0061)	-0.0146** (0.0063)	-0.0157*** (0.006)	0.0148 (0.0124)	-0.0208** (0.0104)	-0.0171*** (0.0046)	-0.0016 (0.0085)
College	0.0064 (0.0083)	-0.0039 (0.0065)	0.0013 (0.0079)	0.018 (0.0119)	0.0021 (0.0056)	0.0097 (0.0072)	0.0149* (0.0089)	-0.0072 (0.0067)	0.0071 (0.0097)	-0.0035 (0.01)	0.0033 (0.0057)	0.0018 (0.0072)
University	0.0138 (0.0098)	0.0179** (0.0088)	0.025** (0.0105)	0.035*** (0.0139)	0.0173*** (0.007)	0.0303*** (0.0089)	0.0274** (0.0126)	0.0051 (0.0082)	0.0394*** (0.0123)	0.0333*** (0.0124)	0.015** (0.0074)	0.0376*** (0.009)
Household size	0.0016 (0.0022)	-0.0017 (0.0024)	0.002 (0.0024)	-0.0033 (0.0032)	-0.0001 (0.0016)	-0.0004 (0.0021)	0.0021 (0.0025)	0.0012 (0.003)	-0.0069*** (0.0026)	-0.0081*** (0.0026)	0.0018 (0.0021)	-0.0076*** (0.0019)
Income	0*** (0)	0*** (0)	0*** (0)	0*** (0)	0*** (0)	0*** (0)	0 (0)	0* (0)	0** (0)	0*** (0)	0 (0)	0*** (0)
Single	-0.0054 (0.0063)	-0.0068 (0.0053)	0.0131** (0.0064)	-0.0084 (0.0082)	-0.0067 (0.0042)	0.0017 (0.0053)	0.0074 (0.0091)	-0.004 (0.0057)	-0.0091 (0.0074)	-0.0066 (0.009)	0.0019 (0.0055)	-0.0068 (0.006)
Worker	-0.0015 (0.0073)	-0.0007 (0.0058)	-0.002 (0.0071)	0.0126 (0.0088)	-0.0008 (0.0048)	0.0055 (0.0058)	-0.0042 (0.0065)	0.0048 (0.0075)	0.0088 (0.0063)	0.0078 (0.0099)	0 (0.0053)	0.0088 (0.006)
Religious	0.016** (0.0068)	0.0162*** (0.0054)	0.03*** (0.0071)	0.0317*** (0.0089)	0.0167*** (0.0045)	0.0312*** (0.0058)	0.0181** (0.0074)	0.0236 (0.0068)	0.018*** (0.0065)	0.0386*** (0.0102)	0.0207*** (0.0053)	0.028*** (0.0061)
Excellent health	0.0235 (0.0146)	0.0182* (0.0104)	0.0283** (0.0131)	0.0213 (0.0145)	0.0221 (0.0094)	0.0248** (0.0102)	0.0016 (0.0111)	0.0157 (0.0126)	0.0166 (0.012)	0.0126 (0.014)	0.0069 (0.0087)	0.014 (0.0094)
Good health	0.0078 (0.0097)	0.0111 (0.0071)	0.0181** (0.0084)	0.006 (0.011)	0.0098 (0.0063)	0.0125* (0.0072)	-0.0003 (0.0077)	0.0129 (0.0084)	0.0128 (0.0085)	0.0211* (0.011)	0.0051 (0.0062)	0.0169** (0.0072)

Very satisfied	0.036*** (0.0118)	0.0106 (0.0124)	-0.0052 (0.0175)	0.0361* (0.0194)	0.0231*** (0.0089)	0.0133 (0.0146)	0.0119 (0.0118)	0.003 (0.0145)	0.039** (0.019)	0.0058 (0.0196)	0.008 (0.0099)	0.0199 (0.0142)
Somewhat satisfied	0.0269** (0.0115)	0.0075 (0.0128)	-0.0135 (0.0168)	0.0206 (0.0201)	0.0173* (0.0092)	0.001 (0.0146)	0.0112 (0.011)	-0.008 (0.0137)	0.0354* (0.019)	-0.0127 (0.0191)	0.0015 (0.0094)	0.0083 (0.0143)
% of minorities	-0.0002 (0.0004)	0.0001 (0.0005)	-0.0012*** (0.0004)	-0.0003 (0.0004)	0 (0.0003)	-0.0007** (0.0003)	-0.0007 (0.0004)	-0.0002 (0.0004)	-0.0009** (0.0004)	0.0001 (0.0004)	-0.0003 (0.0003)	-0.0004 (0.0003)
M religious	-0.0014 (0.0196)	-0.0048 (0.009)	0.0056 (0.0186)	-0.0234 (0.0231)	-0.0062 (0.0112)	-0.0099 (0.0152)	-0.0186*** (0.005)	-0.0112 (0.0111)	0.0205 (0.0184)	-0.011 (0.0123)	-0.0166 (0.0062)	0.0072 (0.0125)
M minorities	0.0349 (0.0346)	0.0035 (0.0099)	0.0223 (0.0179)	0.0166 (0.0229)	0.0146 (0.0143)	0.0192 (0.0147)	0.0226 (0.0226)	0.0158 (0.0147)	0.0115 (0.015)	-0.0094 (0.0111)	0.0196*** (0.012)	0.0004 (0.0098)
M health	-0.0177 (0.0165)	0.0089 (0.0415)	0.0696 (0.0532)	0.0967* (0.0773)	-0.0008 (0.0262)	0.0685 (0.0501)	0.0506 (0.0401)	0.0439 (0.051)	0.1371*** (0.0502)	0.0345 (0.0489)	0.0385 (0.0346)	0.0749** (0.0361)
M satisfied	0.0886 (0.0769)	0.0289 (0.0535)	-0.0372*** (0.0106)	0.0372 (0.0574)	0.0585 (0.0543)	-0.0136 (0.0253)	-0.0014 (0.0159)	-0.0022 (0.0215)	0.0096 (0.0225)	-0.0088 (0.0272)	-0.0007 (0.0174)	-0.0047 (0.0165)
M marital status	-	0.0273 (0.0373)	-	-0.0411 (0.0223)	0.0265 (0.0364)	-0.0414*** (0.0132)	(-)	-0.0258** (0.0035)	-	-	-0.0254*** (0.003)	-
MLFS	-	0.053** (0.0269)	0.0387 (0.0283)	0.0999* (0.0535)	0.0582** (0.0291)	0.0801*** (0.0313)	(-)	0.0196 (0.0268)	0.0272 (0.0357)	0.042 (0.0409)	0.019 (0.0274)	0.0253 (0.0258)
M CMA	-	-	-0.0298*** (0.0109)	-0.0173 (0.0237)		-0.0097 (0.019)	(-)	-	-0.0142*** (0.0178)	0.0377 (0.0308)	-	0.0112 (0.0199)
M education	-	-0.0076 (0.0105)	-0.0011 (0.0203)	-0.019 (0.0307)	-0.0116 (0.0091)	-0.0199 (0.0122)	(-)	-0.0168 (0.0135)	-0.026 (0.0091)	0.0273 (0.0396)	-0.01 (0.0133)	-0.0088 (0.0128)
Newfoundland	-0.0015 (0.0099)	-0.0127 (0.0084)	-0.0143 (0.0101)	0.0102 (0.0149)	-0.0071 (0.0065)	-0.0049 (0.0089)	0.0038 (0.0141)	0.0123 (0.0143)	-0.0094 (0.0112)	0.0214 (0.0183)	0.0089 (0.0106)	0.0019 (0.0104)
PEI	-0.0124 (0.0084)	-0.0125 (0.0095)	-0.0149* (0.0087)	0.001 (0.0149)	-0.0126* (0.0066)	-0.0102 (0.0082)	0.0095 (0.0158)	0.0117 (0.0163)	0.0002 (0.0121)	0.0049 (0.0159)	0.0125 (0.0121)	-0.0013 (0.0093)
Nova scotia	0.0209 (0.0147)	-0.0047 (0.0081)	0.0007 (0.0105)	-0.0103 (0.0115)	0.0076 (0.0082)	-0.0074 (0.0076)	0.0319 (0.0211)	0.0014 (0.0085)	-0.0097 (0.0092)	0.0141 (0.0137)	0.0187 (0.0116)	-0.0014 (0.008)
New Brunswick	0.0183 (0.0151)	-0.009 (0.0075)	-0.0258*** (0.0077)	-0.0096 (0.0132)	0.0043 (0.0083)	-0.02*** (0.0073)	0.0102 (0.0132)	-0.0098 (0.0076)	-0.0212*** (0.0066)	-0.0192* (0.0108)	0.0008 (0.0078)	-0.022*** (0.0061)
Quebec	0.0136 (0.0122)	0.0073 (0.0086)	-0.0111 (0.01)	-0.0069 (0.0117)	0.0107 (0.0074)	-0.0102 (0.0079)	0.0043 (0.0101)	0.0238** (0.0108)	-0.0135 (0.0089)	0.0133 (0.0125)	0.0175** (0.0083)	-0.0022 (0.0076)
Manitoba	0.0272** (0.0134)	-0.0003 (0.0071)	0.0142 (0.0116)	-0.0079 (0.0119)	0.0115 (0.007)	0.0027 (0.0083)	0.0244* (0.0137)	-0.0003 (0.0084)	0.0086 (0.0121)	0.015 (0.0138)	0.011 (0.0079)	0.0134 (0.0096)
Saskatchewan	0.0103 (0.0113)	-0.0143** (0.0069)	-0.0078 (0.0091)	0.0063 (0.0154)	-0.0041 (0.0064)	-0.0009 (0.009)	0.0283 (0.018)	-0.0128** (0.0059)	-0.0183*** (0.0068)	-0.0035 (0.0123)	0.0065 (0.0095)	-0.0113 (0.0071)
Alberta	0.0158 (0.0131)	-0.0217*** (0.0051)	0.0011 (0.12)	-0.002 (0.0119)	-0.0057 (0.0061)	-0.0009 (0.0075)	0.0214 (0.0134)	-0.0132** (0.0065)	0.0015 (0.0086)	0.0056 (0.0136)	0.0014 (0.007)	0.0044 (0.0083)

BC	0.0103 (0.0106)	-0.004 (0.0066)	0.0056 (0.0086)	-0.0078 (0.0103)	0.0033 (0.0063)	-0.0012 (0.0068)	0.0319** (0.0156)	0 (0.0067)	0.0138 (0.0091)	0.0141 (0.0112)	0.0152* (0.0081)	0.0125* (0.0073)
Year 2004	-	-	-	-	-0.0058 (0.007)	-	-	-	-	-	0.0069 (0.0061)	-
Year 2007	-	-	-	-	-	-0.01* (0.0057)	(-)	-	-	-	-	-0.0072 (0.0054)

Notes: Weighted standard errors are in parentheses. \* Significant at 10%; \*\* significant at 5%; \*\*\*significant at 1%.

**Table 5: Marginal Effects Based on Religiosity**

Religious	Religious						Non-Religious					
	2000	2004	2007	2010	2000&2004	2007&2010	2000	2004	2007	2010	2000 & 2004	2007 & 2010
Predicted Probability	0.0402	0.0452	0.0928	0.1126	0.045	0.1045	0.0237	0.0268	0.0521	0.038	0.0263	0.0353
	dy/dx						dy/dx					
Age	0.0011 (0.0012)	0.0001 (0.0012)	0.0013 (0.0014)	0.0014 (0.0019)	0.0005 (0.0009)	0.0013 (0.0012)	-0.0003 (0.0007)	0.0001 (0.0006)	0.0003 (0.001)	-0.0006 (0.0008)	-0.0001 (0.0005)	-0.0002 (0.0005)
Male	-0.0124 (0.008)	-0.0005 (0.0074)	-0.0173** (0.0077)	-0.0159 (0.0108)	-0.0061 (0.0058)	-0.0162** (0.0068)	-0.0079* (0.0044)	-0.0108** (0.004)	-0.014*** (0.0056)	-0.0118*** (0.0047)	-0.0093*** (0.0031)	-0.0108*** (0.0031)
AGESQUARE	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
dropout	-0.029*** (0.0103)	-0.0171** (0.0087)	-0.0115 (0.0118)	-0.0089 (0.0186)	-0.0259*** (0.0071)	-0.0085 (0.0113)	-0.0135*** (0.0053)	-0.0096* (0.0058)	-0.0139 (0.0091)	-0.0169** (0.0074)	-0.0125*** (0.0041)	-0.0128*** (0.0048)
college	0.0037 (0.0121)	-0.0055 (0.0089)	-0.0017 (0.0104)	0.0257 (0.0178)	-0.0009 (0.0081)	0.0123 (0.0101)	0.014** (0.0071)	-0.0059 (0.0056)	0.0083 (0.0082)	0.0072 (0.0069)	0.0043 (0.0047)	0.0067 (0.0045)
university	0.0283* (0.0166)	0.0078 (0.0106)	0.0419*** (0.0151)	0.0615*** (0.0206)	0.0178* (0.01)	0.0528*** (0.013)	0.0164* (0.0087)	0.0121 (0.0076)	0.0366*** (0.0097)	0.0341*** (0.0092)	0.0152*** (0.0059)	0.0316*** (0.0061)
Household size	0.0022 (0.0031)	-0.0075*** (0.0025)	-0.0017 (0.0041)	0.0002 (0.0048)	-0.0021 (0.0022)	-0.0012 (0.0032)	0.0015 (0.0022)	0.0026 (0.0023)	-0.0012 (0.0025)	-0.0021 (0.0022)	0.0022 (0.0016)	-0.0013 (0.0014)
Income	0** (0)	0** (0)	0*** (0)	0** (0)	0*** (0)	0*** (0)	0 (0)	0** (0)	0*** (0)	0*** (0)	0*** (0)	0*** (0)
Single	0.0052 (0.0103)	-0.0176*** (0.0069)	0.0124 (0.0101)	0.0023 (0.0139)	-0.0074 (0.0063)	0.0065 (0.0089)	-0.0009 (0.0059)	0.0005 (0.0043)	0.0085 (0.0066)	-0.0006 (0.0057)	0 (0.0038)	0.0029 (0.0037)
worker	0.0025 (0.0107)	-0.0037 (0.0098)	0.0007 (0.0097)	0.0269 (0.012)	-0.001 (0.0079)	0.0144* (0.0078)	-0.0054 (0.0055)	0.0048 (0.0048)	0.0072 (0.0073)	0.0094 (0.006)	0 (0.0037)	0.0074* (0.004)
Excellent health	-0.0017 (0.0174)	0.0106 (0.0136)	0.0395** (0.0171)	0.0216 (0.0229)	0.0022 (0.0123)	0.0287** (0.0145)	0.0185* (0.0104)	0.0211** (0.0105)	0.0133 (0.0113)	-0.001 (0.0113)	0.0209*** (0.0078)	0.0031 (0.0058)
Good health	0.0021 (0.0141)	0.0153 (0.0093)	0.019* (0.0107)	0.0207 (0.0164)	0.0081 (0.0097)	0.019** (0.0099)	0.0049 (0.0062)	0.0116* (0.0067)	0.0109 (0.0088)	0.0009 (0.0074)	0.0084* (0.0048)	0.0037 (0.0049)
Very satisfied	0.0302 (0.0217)	-0.0118 (0.0228)	0.032 (0.0212)	0.0916*** (0.0289)	0.0087 (0.0167)	0.0603*** (0.0181)	0.0202** (0.0091)	0.0144 (0.0107)	0.0422*** (0.0135)	-0.0005 (0.0117)	0.0179*** (0.0071)	0.0106 (0.0082)
Somewhat satisfied	0.0261 (0.0231)	-0.0251 (0.0202)	0.032 (0.0254)	0.0574 (0.0366)	-0.0022 (0.0166)	0.0419** (0.0221)	0.0146* (0.0082)	0.0089 (0.0103)	0.0323*** (0.0132)	-0.0104 (0.0111)	0.0125* (0.0067)	0.0021 (0.008)

% of minorities	-0.0007 (0.0005)	-0.001** (0.0005)	-0.0014*** (0.0004)	-0.0016*** (0.0006)	-0.001*** (0.0004)	-0.0015*** (0.0004)	-0.0004 (0.0003)	0.0004 (0.0003)	-0.0001 (0.0004)	0.0004 (0.0003)	0.0002 (0.0003)	0 (0.0002)
M religious	-0.0044 (0.0249)	-0.0264*** (0.011)	-0.0038 (0.0309)	-0.0697*** (0.0068)	-0.0188 (0.0121)	-0.0371 (0.0163)	-0.0122 (0.0104)	-0.0011 (0.0092)	0.0023 (0.0159)	-0.0268*** (0.0072)	-0.0094 (0.007)	-0.011 (0.0069)
M minorities	-0.0197 (0.0149)	0.0035 (0.0159)	0.0115 (0.0273)	-0.0357 (0.0219)	0.0018 (0.014)	-0.0113 (0.0185)	0.0369 (0.0259)	0.0115 (0.0096)	-0.0101 (0.0129)	-0.0241*** (0.0079)	0.0198* (0.0108)	-0.016*** (0.006)
M health	-	0.056 (0.0637)	-	0.2559 (0.2227)	0.0085 (0.0387)	0.1236 (0.1258)	0.0273 (0.0211)	0.0764** (0.033)	0.0048 (0.0508)	-0.0375 (0.0071)	0.0596*** (0.022)	-0.017 (0.0172)
M satisfied	0.0714 (0.1075)	0.051 (0.0742)	-	0.2192 (0.1597)	0.0798 (0.0766)	0.0563 (0.0762)	0.002 (0.0127)	-0.0102 (0.0091)	-0.003 (0.0286)	-0.0105 (0.0194)	-0.0064 (0.0073)	-0.0103 (0.013)
M marital status	-	0.0291 (0.0646)	-	-0.0436 (0.0344)	0.0422 (0.0791)	-0.0525*** (0.0133)	-	0.0029 (0.0194)	-	-0.018 (0.0233)	0 (0.0172)	-0.0208 (0.0168)
MLFS	-	0.1213 (0.1214)	-	-	0.143 (0.1343)	-	-	0.0322** (0.0167)	-	-0.0017 (0.0303)	0.0394** (0.0178)	-0.0275*** (0.0109)
MCMA	-		-0.052*** (0.0067)	0.0049 (0.0544)	-	-0.0473*** (0.011)	-	-	-0.0136 (0.0169)	-0.0156 (0.0194)	-	-0.012 (0.0075)
M education	-	0.0041 (0.0371)	-0.0095 (0.0421)	0.1051 (0.0901)	0.0148 (0.0434)	0.056 (0.054)	-	-0.015** (0.0073)	-0.0526*** (0.0045)	-0.0407*** (0.0098)	-0.0125* (0.0057)	-0.0413*** (0.0064)
Newfoundland	.0078 (.0167)	-.0216 (.0094)	-.0302 (.0197)	-.0041 (.0259)	-0.0128 (0.0087)	-.0194 (.0161)	-0.0008 (0.01)	.0134 (.0135)	-0.0119 (0.0132)	0.0162 (0.0123)	0.0072 (0.0087)	-0.001 (.)
PEI	-0.0004 (0.015)	-0.0245*** (0.0081)	0.0131 (0.0166)	-0.0268** (0.0135)	-0.018** (0.0077)	-0.0096 (0.0105)	-0.0025 (0.0113)	0.024 (0.0192)	-0.0207* (0.0108)	0.0169 (0.0136)	0.0128* (0.012)	-0.0028 (0.0067)
Nova scotia	0.0306* (0.0175)	-0.0084 (0.0105)	0.0061 (0.0153)	-0.0085 (0.0164)	0.0052 (0.0098)	-0.0014 (0.0114)	0.0266 (0.0169)	0.0024 (0.0071)	-0.0023 (0.0105)	0.005 (0.0093)	0.0167 (0.0098)	-0.001 (0.0055)
New Brunswick	0.0305 (0.0211)	-0.016* (0.0094)	-0.03*** (0.0093)	-0.012 (0.017)	0.0008 (0.0109)	-0.0197*** (0.0098)	0.0078 (0.0102)	-0.0105* (0.0055)	-0.0202*** (0.0083)	-0.0187* (0.0077)	0.001 (0.0066)	-0.0178 (0.0044)
Quebec	0.0135 (0.0158)	-0.0166* (0.0095)	-0.0093 (0.0131)	-0.0434*** (0.0124)	-0.0064 (0.0091)	-0.0261 (0.0093)	0.0061 (0.0086)	0.0276*** (0.0088)	-0.0142 (0.0099)	0.0104 (0.0092)	0.0209*** (0.007)	-0.0034*** (0.005)
Manitoba	0.0377** (0.0191)	-0.0018 (0.0098)	0.0384** (0.0174)	0.019 (0.0197)	0.0118 (0.0095)	0.0321** (0.0139)	0.022* (0.011)	-0.0006 (0.0066)	-0.0023 (0.0107)	-0.0067 (0.0072)	0.0101 (0.0064)	-0.004 (0.0052)
Saskatchewan	0.0179 (0.0132)	-0.0157** (0.0082)	0.0023 (0.0137)	0.0005 (0.0179)	-0.0046 (0.0074)	0.0022 (0.0115)	0.02 (0.0144)	-0.0129** (0.0058)	-0.0152* (0.0084)	0.0013 (0.0087)	0.0038 (0.0081)	-0.0048 (0.0051)
Alberta	0.0374** (0.0193)	-0.0228** (0.008)	0.0321** (0.0153)	0.0128 (0.0206)	0 (0.0093)	0.0235 (0.0135)	0.0092 (0.0097)	- 0.0145*** (0.0049)	0.0018 (0.0093)	-0.0009 (0.0081)	-0.0036 (0.0053)	0.0005 (0.0052)
BC	0.0879*** (0.0358)	0.011 (0.011)	0.0309** (0.0147)	0.023 (0.018)	0.0383*** (0.0155)	0.0261** (0.0117)	0.0067 (0.0076)	-0.0042 (0.0051)	0.0066 (0.0081)	0.013 (0.0079)	0.002 (0.0048)	0.0081* (0.0048)
Year 2004	-	-	-	-	0.0116 (0.0094)	-	-	-	-	-	-0.005 (0.0054)	-

Year 2007	-	-	-	-	-	-0.0071 (0.0075)	-	-	-	-	-	-
-----------	---	---	---	---	---	---------------------	---	---	---	---	---	---

Notes: Weighted standard errors are in parentheses. \* Significant at 10%; \*\* significant at 5%; \*\*\*significant at 1%.

**Table 6: Marginal Effects for Individuals below 30 years**

	2000		2004		2007		2010		2000and2004		2007and2010	
Predicted prob.	0.0187		0.0256		0.0282		0.0227		0.0233		0.0289	
	Marginal Effect	Standard Error	Marginal Effect	Standard Error	Marginal Effect	Standard Error	Marginal Effect	Standard Error	Marginal Effect	Standard Error	Marginal Effect	Standard Error
Dropout	-0.007	0.007	0.001	0.009	-0.015*	0.008	-0.007	0.01	-0.005	0.006	-0.013*	0.007
College	0.019	0.012	0	0.008	-0.008	0.009	-0.003	0.01	0.009	0.008	-0.007	0.007
University	0.011	0.013	-0.002	0.009	0.007	0.012	-0.001	0.01	0.006	0.009	0.003	0.008
Household size	0	0.002	-0.001	0.002	0	0.003	-0.008***	0.002	-0.002	0.002	-0.004*	0.002
Income	0.000*	0	0	0	0	0	0	0	0.000**	0	0	0
Male	-0.002	0.006	-0.004	0.006	-0.002	0.008	-0.009	0.007	-0.002	0.005	-0.006	0.006
Single	-0.001	0.007	-0.01	0.007	-0.001	0.009	0.004	0.008	-0.003	0.006	0.002	0.007
Worker	0.002	0.006	0.002	0.006	0.016**	0.007	0.004	0.01	0.001	0.005	0.011	0.007
Religious	0.009	0.009	0.011	0.008	0.020*	0.011	0.024**	0.012	0.013*	0.007	0.023***	0.008
Excellent health	-0.011	0.011	0.009	0.014	0.019	0.026	0.068***	0.026	-0.005	0.01	0.035	0.022
Good health	-0.012	0.012	0.008	0.011	0.004	0.021	0.040***	0.015	-0.008	0.01	0.017	0.015
Very satisfied	0.028	0.02	-0.001	0.016	-0.025	0.02	0.033	0.024	0.014	0.013	-0.009	0.017
Somewhat satisfied	0.007	0.014	-0.008	0.016	-0.028	0.019	0.028	0.027	-0.002	0.011	-0.012	0.016
% of minorities	0	0	0	0.001	-0.002***	0.001	0	0	0	0	-0.001**	0
M religious	-0.019*	0.004	0.01	0.022	-0.021***	0.008	-0.024***	0.006	-0.011	0.011	-0.020***	0.006
M minorities	0.002	0.016	0.01	0.014	0.025	0.021	0.005	0.014	0.005	0.01	0.018	0.014
M health	0.019	0.038	0.053	0.055	0.015	0.039	0.364	0.243	0.036	0.036	0.219	0.175
M satisfied	0.014	0.035	-0.022***	0.006	-0.013	0.018	0.003	0.049	-0.014*	0.008	-0.024*	0.013
M marital status	-	-	-	-	-	-	-	-	-	-	-	-
MLFS	-	-	0.057	0.057	0.065	0.052	0.195*	0.104	0.053	0.057	0.115**	0.055
M education	-	-	-0.018	0.011	0.002	0.017	-0.001	0.015	-0.013	0.013	-0.007	0.011
MCMA	-	-	-	-	-0.027***	0.009	-0.020***	0.006	-	-	-0.022***	0.009
Newfoundland	-0.007	0.008	0.015	0.019	-0.019**	0.009	0.042	0.032	0.001	0.01	-0.004	0.012
PEI	-0.005	0.016	0.037	0.029	-0.018**	0.008	0.067*	0.04	0.015	0.017	0.005	0.014

Nova scotia	0.02	0.029	0.005	0.012	-0.008	0.01	0.03	0.021	0.013	0.016	0.003	0.01
New Brunswick	0.016	0.017	-0.013*	0.007	-0.018**	0.008	0.017	0.023	0	0.009	-0.01	0.009
Quebec	0.008	0.012	0.004	0.01	-0.016	0.011	0.019	0.016	0.008	0.009	-0.005	0.01
Manitoba	0.015	0.015	-0.011	0.007	-0.015**	0.008	-0.012	0.009	0.002	0.008	-0.015**	0.007
Saskatchewan	0.072**	0.033	-0.013	0.008	-0.021***	0.006	0.019	0.018	0.024	0.016	-0.003	0.01
Alberta	0.013	0.016	-0.009	0.008	-0.008	0.009	0.01	0.017	0.003	0.009	0.001	0.01
BC	0.011	0.013	-0.01	0.007	-0.016*	0.009	-0.016**	0.008	-0.001	0.007	-0.017**	0.007
Year 2004	-	-	-	-	-	-	-	-	0	0.008	-	-
Year 2007	-	-	-	-	-	-	-	-	-	-	0.009	0.007

\* Significant at 10%; \*\* significant at 5%; \*\*\*significant at 1%.

**Table 7: Marginal Effects for Individuals above 30 Years**

	2000		2004		2007		2010		2000and2004		2007and2010	
Predicted prob.	0.0317		0.0358		0.0442		0.0649		0.0349		0.0546	
	Marginal Effect	Standard Error	Marginal Effect	Standard Error	Marginal Effect	Standard Error	Marginal Effect	Standard Error	Marginal Effect	Standard Error	Marginal Effect	Standard Error
Dropout	-0.020***	0.006	-0.017***	0.006	-0.004	0.008	-0.029***	0.009	-0.019***	0.004	-0.016***	0.006
College	0.008	0.007	-0.009	0.006	0.01	0.007	0.011	0.01	0.001	0.005	0.011*	0.006
University	0.023**	0.01	0.013*	0.008	0.044**	0.009	0.046***	0.012	0.018***	0.006	0.045***	0.008
Household size	0.001	0.002	-0.002	0.003	-0.004*	0.002	-0.010***	0.003	0	0.002	-0.007***	0.002
Income	0.000**	0	0.000***	0	0.000**	0	0.000***	0	0.000***	0	0.000***	0
Male	-0.011**	0.005	-0.010**	0.005	-0.012***	0.004	-0.019***	0.006	-0.011***	0.003	-0.015***	0.004
Single	0	0.007	-0.006	0.005	0	0.006	-0.013*	0.008	-0.004	0.004	-0.007	0.005
Worker	-0.014**	0.006	-0.004	0.005	-0.006	0.005	0.001	0.007	-0.009**	0.004	-0.002	0.004
Religious	0.022***	0.006	0.025***	0.005	0.029***	0.006	0.042***	0.008	0.023***	0.004	0.035***	0.005
Excellent health	0.019	0.012	0.016*	0.01	0.022**	0.01	0.004	0.012	0.016**	0.008	0.011	0.008
Good health	0.006	0.008	0.011*	0.006	0.018***	0.007	0.009	0.01	0.009*	0.005	0.013**	0.006
Very satisfied	0.024**	0.01	0.013	0.012	0.033***	0.013	0.025	0.018	0.019**	0.008	0.028***	0.012
Somewhat satisfied	0.026**	0.011	0.004	0.012	0.026*	0.014	0.001	0.018	0.015*	0.008	0.013	0.012
% of minorities	-0.001	0	0	0	-0.001***	0	0	0	0	0	0.000**	0
M religious	-0.008	0.015	-0.014**	0.007	0.033*	0.019	-0.01	0.017	-0.012	0.008	0.012	0.013
M minorities	0.042	0.033	0.007	0.01	0.009	0.013	-0.003	0.015	0.02	0.013	0.001	0.01
M health	-0.007	0.019	0.022	0.037	0.090***	0.035	0.028	0.04	0.007	0.023	0.050*	0.029
M satisfied	0.052	0.045	0.034	0.043	-0.012	0.015	0.022	0.038	0.047	0.039	0.002	0.02
M marital status	-	-	0.026	0.033	-	-	-0.047**	0.019	0.011	0.026	-0.045***	0.01
MLFS	-	-	0.022	0.017	0.015	0.021	0.029	0.03	0.02	0.018	0.019	0.018

M education	-	-	-0.006	0.013	-0.002	0.018	0.029	0.033	-0.005	0.01	0.015	0.019
MCMA	-	-	-	-	-0.023***	0.008	0.023	0.034	-	-	-0.009	0.011
Newfoundland	0.002	0.011	-0.007	0.008	-0.008	0.009	0.006	0.012	-0.002	0.007	-0.002	0.008
PEI	-0.001	0.01	-0.016**	0.006	-0.002	0.01	-0.017*	0.01	-0.008	0.006	-0.01	0.007
Nova scotia	0.027**	0.013	-0.004	0.007	-0.005	0.008	-0.007	0.01	0.011	0.007	-0.007	0.006
New Brunswick	0.012	0.012	-0.009	0.007	-0.026***	0.006	-0.023**	0.01	0.002	0.007	-0.025***	0.005
Quebec	0.006	0.01	0.020**	0.009	-0.011	0.007	-0.001	.	0.015**	0.007	-0.006	0.006
Manitoba	0.030***	0.012	0.004	0.007	0.023**	0.011	0.01	0.012	0.014**	0.006	0.018**	0.008
Saskatchewan	0.001	0.009	-0.014***	0.005	-0.008	0.007	-0.003	0.012	-0.008	0.005	-0.006	0.007
Alberta	0.020*	0.011	-0.022***	0.005	0.005	0.008	-0.002	0.011	-0.005	0.005	0.002	0.007
BC	0.026**	0.012	0.001	0.006	0.020**	0.008	0.011	0.01	0.012**	0.006	0.014**	0.006
Year 2004	-	-	-	-	-	-	-	-	0.001	0.006	-	-
Year 2007	-	-	-	-	-	-	-	-	-	-	-0.016	0.004

\* Significant at 10%; \*\* significant at 5%; \*\*\*significant at 1%.

**Table 8: Marginal Effects Sample of High School Graduates and Dropouts**

	2000		2004		2007		2010		2000and2004		2007and2010	
Predicted prob.	0.0196		0.0245		0.0652		0.0324		0.0232		0.0307	
	Marginal Effect	Standard Error	Marginal Effect	Standard Error	Marginal Effect	Standard Error	Marginal Effect	Standard Error	Marginal Effect	Standard Error	Marginal Effect	Standard Error
Age	0	0.001	0	0.001	0.001	0.001	0	0.001	0	0	0	0.001
AGESQUARE	0	0	0	0	0	0	0	0	0	0	0	0
Household size	0.003	0.002	-0.004**	0.002	0	0.003	-0.003	0.003	0	0.002	-0.001	0.002
Income	0	0	0.000***	0	0.000*	0	0.000***	0	0.000***	0	0.000***	0
Single	-0.002	0.005	-0.002	0.006	0.007	0.008	-0.006	0.007	-0.002	0.004	0.001	0.006
Male	-0.009*	0.005	-0.005	0.005	-0.003	0.006	-0.01	0.007	-0.007**	0.004	-0.006	0.004
worker	0.002	0.006	0.006	0.005	0.005	0.006	0.016	0.008	0.004	0.004	0.011**	0.005
religious	0.012*	0.007	0.021***	0.006	0.018***	0.006	0.020**	0.008	0.015***	0.005	0.019***	0.005
Excellent health	0.004	0.009	0.018	0.011	0.007	0.011	0.007***	0.011	0.011	0.008	0.007	0.008
Good health	0.001	0.007	0.005	0.007	0.006	0.007	0.01	0.008	0.002	0.005	0.008	0.005
Very satisfied	0.022**	0.01	0.020*	0.011	0.026*	0.015	0.01	0.015	0.021***	0.008	0.018	0.011
Somewhat satisfied	0.018**	0.008	0.014	0.01	0.018	0.013	0.002	0.016	0.017**	0.007	0.01	0.011
% of minorities	-0.001*	0	0	0	-0.001*	0	0	0	0	0	0	0
M religious	-0.007	0.008	-0.013***	0.005	0.024	0.022	0.009	0.028	-0.008	0.006	0.022	0.019
M minorities	0.015	0.017	-0.013***	0.005	0.02	0.015	0.015	0.015	-0.002	0.007	0.019*	0.011
M health	0.017	0.021	0.056	0.06	-	-	-0.02	0.014	0.021	0.03	-0.023***	0.009
M satisfied	0.018	0.02	0.074	0.077	-	-	-0.030***	0.006	0.05	0.047	-0.029***	0.004
M marital status	-	-	0.019	0.043	-	-	-	-	0.019	0.043	-	-
MLFS	-	-	0.103	0.076	-	-	-	-	0.073	0.075	-	-

MCMA	-	-	-	-	-0.021**	0.009	0.045	0.043	-	-	-0.003	0.015
Newfoundland	0.01	0.013	0.01	0.013	-0.009	0.009	0.008	0.015	0.012	0.01	-0.003	0.009
PEI	-0.008	0.008	0.005	0.014	-0.008	0.009	0.035*	0.02	-0.003	0.008	0.008	0.01
Nova scotia	0.032*	0.019	0.013	0.011	-0.002	0.01	-0.01	0.01	0.025**	0.012	-0.007	0.007
New Brunswick	0.022	0.014	-0.004	0.008	-0.020***	0.005	-0.002	0.012	0.014	0.01	-0.014**	0.006
Quebec	0.007	0.01	0.037***	0.012	-0.018**	0.009	0.01	0.011	0.022***	0.009	-0.006	0.007
Manitoba	0.01	0.01	0.004	0.008	0.005	0.011	-0.005	0.01	0.006	0.006	0.001	0.008
Saskatchewan	0.034**	0.017	-0.005	0.008	-0.019***	0.005	-0.002	0.01	0.016	0.01	-0.012**	0.006
Alberta	0.016	0.01	-0.010*	0.006	-0.002	0.008	0.01	0.013	0.002	0.006	0.003	0.008
BC	0.024*	0.014	0	0.007	-0.001	0.008	0.001	0.009	0.013	0.008	-0.001	0.006
Year 2004	-	-	-	-	-	-	-	-	0.006	0.005	-	-
Year 2007	-	-	-	-	-	-	-	-	-	-	-0.003	0.006

\* Significant at 10%; \*\* significant at 5%; \*\*\*significant at 1%.

**Table: 9 Marginal Effects for College Graduates**

	2000		2004		2007		2010		2000and2004		2007and2010	
Predicted prob.	0.0364		0.0292		0.0386		0.0501		0.0338		0.0448	
	Marginal Effect	Standard Error	Marginal Effect	Standard Error	Marginal Effect	Standard Error	Marginal Effect	Standard Error	Marginal Effect	Standard Error	Marginal Effect	Standard Error
Age	0.003	0.002	0	0.001	-0.001	0.001	0.003*	0.002	-0.001	0.001	0.001	0.001
AGESQUARE	0.000**	0	0	0	0	0	0	0	0	0	0	0
Household size	0	0.004	-0.004	0.003	-0.002	0.003	-0.003	0.004	-0.002	0.002	-0.002	0.002
Income	0.000**	0	0.000**	0	0	0	0.000*	0	0.000**	0	0.000***	0
Single	-0.006	0.013	-0.011**	0.006	-0.006	0.007	0	0.012	-0.009	0.007	-0.003	0.007
Male	-0.007	0.008	-0.004	0.006	-0.014**	0.006	-0.028***	0.009	-0.005	0.005	-0.022***	0.006
worker	-0.004	0.01	-0.01	0.01	0.005	0.008	0.005	0.012	-0.007	0.008	0.006	0.007
religious	0.014	0.009	0.024***	0.007	0.015**	0.008	0.031***	0.011	0.020***	0.006	0.024***	0.007
Excellent health	0.064**	0.027	0.018	0.013	0.026*	0.014	0.055**	0.023	0.039***	0.015	0.040***	0.014
Good health	0.031***	0.011	0.019**	0.008	0.022	0.009	0.033**	0.014	0.025***	0.007	0.027***	0.009
Very satisfied	0.011	0.016	-0.001	0.014	0.019***	0.014	0.004	0.024	0.005	0.011	0.011	0.016
Somewhat satisfied	-0.001	0.017	-0.005	0.013	0.017	0.015	-0.003	0.024	-0.003	0.011	0.006	0.016
% of minorities	0	0.001	0	0	-0.001**	0	0	0	0	0	0	0
M religious	-0.029***	0.007	0.009	0.019	0.011	0.023	-0.027*	0.014	-0.009	0.011	-0.01	0.013
M minorities	-0.003	0.014	0.031	0.022	-0.01	0.013	-0.017	0.018	0.022	0.016	-0.014	0.011
M health	0.264**	0.134	-	-	-	-	0.413*	0.226	0.082**	0.042	0.125	0.112
M satisfied	-0.021	0.016	-	-	-	-	-0.019	0.029	-0.023***	0.007	-0.025	0.017

M marital status	-	-	0.068	0.089	-	-	-	-	0.058	0.082	-	-
MLFS	-	-	-	-	-	-	-	-	-	-	-	-
MCMA	-	-	-	-	-0.025***	0.01	-0.03	0.018	-	-	-0.020*	0.011
Newfoundland	-0.013	0.011	-0.016**	0.007	-0.01	0.013	0.019	0.019	-0.016***	0.006	0.004	0.011
PEI	0.005	0.017	0.007	0.021	-0.006	0.011	-0.017	0.013	0.003	0.014	-0.013	0.008
Nova scotia	0.038	0.024	0.004	0.011	-0.006	0.01	0.012	0.016	0.015	0.012	0.002	0.01
New Brunswick	0.014	0.021	0	0.011	-0.022***	0.008	-0.021*	0.012	0.004	0.01	-0.022***	0.007
Quebec	0.030*	0.018	0.007	0.01	-0.002	0.011	-0.003	0.014	0.015*	0.009	-0.003	0.009
Manitoba	0.055**	0.026	0.002	0.009	0.008	0.013	-0.013	0.013	0.023*	0.012	-0.002	0.009
Saskatchewan	-0.009	0.011	-0.01	0.008	0.002	0.013	-0.001	0.018	-0.011	0.006	0.001	0.012
Alberta	0.022	0.02	-0.018***	0.007	0.007	0.012	-0.001	0.015	-0.003	0.009	0.004	0.01
BC	0.036*	0.02	-0.004	0.007	0.017	0.012	0.0016118	0.01222	0.01	0.009	0.0097	0.0087
Year 2004	-	-	-	-	-	-	-	-	-0.015*	0.0095	-	-
Year 2007	-	-	-	-	-	-	-	-	-	-	-0.0126**	0.0063

\* Significant at 10%; \*\* significant at 5%; \*\*\*significant at 1%.

**Table 10: Marginal Effects for University Graduates**

	2000		2004		2007		2010		2000 & 2004		2007 & 2010	
Predicted prob.	0.0454		0.0451		0.0652		0.0846		0.0487		0.0769	
	Marginal Effect	Standard Error	Marginal Effect	Standard Error	Marginal Effect	Standard Error	Marginal Effect	Standard Error	Marginal Effect	Standard Error	Marginal Effect	Standard Error
Age	0.005*	0.002	0.002	0.002	0.002	0.002	0.006**	0.003	0.003*	0.001	0.004**	0.002
AGESQUARE	0	0	0	0	0	0	0.000*	0	0	0	0	0
Household size	0.002	0.004	-0.007**	0.003	-0.003	0.004	-0.018***	0.005	-0.003	0.003	-0.011***	0.003
Income	0.000**	0	0	0	0.000***	0	0.000**	0	0.000**	0	0.000***	0
Single	0.016	0.018	-0.017**	0.008	0.004	0.012	-0.032***	0.013	-0.002	0.009	-0.014	0.009
Male	-0.019	0.013	-0.021***	0.008	-0.013	0.01	-0.011	0.012	-0.021***	0.008	-0.011	0.008
worker	-0.012	0.015	0.023***	0.008	0.002	0.014	0.015	0.014	0.009	0.008	0.01	0.01
religious	0.037**	0.015	0.012	0.009	0.047***	0.013	0.049***	0.015	0.023**	0.009	0.048***	0.01
Excellent health	-0.019	0.021	0.006	0.021	0.033	0.022	-0.035	0.024	-0.009	0.016	-0.007	0.017
Good health	-0.031	0.021	0.002	0.019	0.016	0.019	-0.036	0.025	-0.016	0.015	-0.013	0.017
Very satisfied	0.074***	0.027	-0.007	0.035	0.039	0.03	0.069**	0.032	0.024	0.028	0.057***	0.023
Somewhat satisfied	0.086**	0.036	-0.03	0.03	0.027	0.036	0.03	0.039	0.008	0.03	0.031	0.027
% of minorities	-0.001	0.001	0	0.001	-0.002***	0.001	-0.001	0.001	0	0.001	-0.001**	0.001
M religious	0.013	0.065	-0.027**	0.012	-0.01	0.03	-0.053***	0.018	-0.02	0.019	-0.027	0.018
M minorities	0.115	0.112	0.032	0.035	0.036	0.041	-0.021	0.036	0.07	0.049	-0.004	0.025
M health	-0.057***	0.009	0.024	0.073	0.765***	0.195	-	-	-0.015	0.033	0.11	0.197
M satisfied	0.468**	0.236	-0.038***	0.013	-	-	0.026	0.108	0.01	0.051	-0.014	0.06
M marital status	-	-	-0.021	0.019	-	-	-0.008	0.074	-0.018	0.023	-0.002	0.072
MLFS	-	-	0.005	0.051	-0.007	0.078	0.211	0.266	-	-	0.05	0.107
MCMA	-	-	-	-	-0.064***	0.009	-0.083***	0.007	-0.026	0.026	-0.064***	0.01
Newfoundland	-0.015	0.018	-0.003	0.021	0	0.035	0.045	0.037	-0.005	0.016	0.02	0.025
PEI	0.025	0.04	-0.014	0.015	0.001	0.026	-0.024	0.02	0.002	0.019	-0.018	0.015
Nova scotia	-0.003	0.017	-0.017	0.01	-0.014	0.016	0.021	0.026	-0.008	0.01	0	0.015
New Brunswick	-0.007	0.018	-0.028***	0.009	-0.022	0.016	0.01	0.033	-0.019	0.010*	-0.008	0.018

Quebec	-0.02	0.017	0.007	0.013	0.011	0.019	0.021	0.024	-0.001	0.012	0.014	0.015
Manitoba	0.028	0.023	-0.020**	0.009	0.007	0.019	0.069**	0.032	-0.002	0.011	0.042**	0.02
Saskatchewan	0.02	0.024	-0.030***	0.007	0.016	0.023	0.032	0.032	-0.01	0.011	0.023	0.021
Alberta	0.034	0.034	-0.019*	0.01	0.035*	0.019	0.005	0.022	-0.002	0.014	0.016	0.015
BC	0.004	0.018	0.003	0.011	0.056***	0.018	0.033*	0.02	0.003	0.011	0.040**	0.014
Year 2004	-	-	-	-	-	-	-	-	0.001	0.013	-	-
Year 2007	-	-	-	-	-	-	-	-	-	-	-0.009	0.009

\* Significant at 10%; \*\* significant at 5%; \*\*\*significant at 1%.

**Table 11: Marginal Effects for Top Income Earners (Income>50,000)**

	2000		2004		2007		2010		2000and2004		2007and2010	
Predicted prob.	0.0341		0.0365		0.0428		0.065		0.0374		0.0544	
	Marginal Effect	Standard Error	Marginal Effect	Standard Error	Marginal Effect	Standard Error	Marginal Effect	Standard Error	Marginal Effect	Standard Error	Marginal Effect	Standard Error
Age	0.001	0.002	-0.001	0.001	0.001	0.001	0.001	0.002	-0.001	0.001	0.001	0.001
AGESQUARE	0	0	0.000**	0	0	0	0	0	0.000*	0	0	0
dropout	-0.01	0.011	-0.01	0.009	-0.004	0.011	-0.030**	0.014	-0.012*	0.007	-0.017*	0.009
college	0.026**	0.013	-0.016**	0.007	0.01	0.009	0.005	0.012	0.002	0.007	0.007	0.007
university	0.031**	0.012	0.005	0.009	0.041***	0.01	0.035***	0.013	0.017**	0.008	0.038***	0.008
Household size	0.001	0.003	-0.003*	0.002	-0.003	0.002	-0.008***	0.003	-0.001	0.002	-0.006***	0.002
Male	-0.021***	0.007	-0.012**	0.005	-0.015***	0.005	-0.019**	0.007	-0.016***	0.005	-0.017***	0.005
Single	0.016	0.015	-0.006	0.006	-0.001	0.007	-0.002	0.01	0.003	0.007	-0.001	0.006
worker	-0.003	0.009	0.014**	0.007	0.004	0.008	0.011	0.01	0.007	0.006	0.008	0.006
religious	0.018**	0.008	0.017***	0.006	0.029***	0.007	0.049***	0.011	0.018***	0.005	0.039***	0.007
Excellent health	0.013	0.016	0.022	0.014	0.035**	0.014	0.003	0.015	0.019*	0.011	0.015	0.01
Good health	0.01	0.012	0.008	0.01	0.022**	0.009	-0.008	0.014	0.01	0.008	0.004	0.009
Very satisfied	0.049***	0.018	0.041**	0.018	0.012	0.018	0.013	0.026	0.047***	0.013	0.012	0.016
Somewhat satisfied	0.038*	0.022	0.041*	0.024	0.003	0.019	-0.009	0.026	0.043**	0.017	-0.004	0.017
% of minorities	0	0	0	0	-0.001**	0	0	0	0	0	0.000*	0
M religious	-0.009	0.024	-0.019**	0.009	0.029	0.022	-0.024	0.015	-0.012	0.011	0.001	0.013
M minorities	0.085	0.059	0.01	0.016	0.02	0.022	-0.007	0.017	0.037*	0.022	0.003	0.013
M health	0.041	0.042	0.130*	0.07	0.136*	0.075	0.072	0.079	0.115**	0.049	0.091	0.058
M satisfied	-0.002	0.028	-0.025**	0.012	-0.033***	0.011	-0.027	0.036	-0.013	0.014	-0.031*	0.018
M marital status	-	-	-0.025***	0.009	-	-	-	-	-0.024**	0.011	-	-
MLFS	-	-	0.098*	0.051	0.017	0.037	0.081	0.058	0.039	0.031	0.048	0.035
M education	-	-	-0.022**	0.01	-0.006	0.027	0.042	0.043	-0.023**	0.008	0.016	0.026
MCMA	-	-	-	-	-0.032***	0.008	-0.002	0.035	-	-	-0.026**	0.01
Newfoundland	-0.003	0.013	0.012	0.016	-0.014	0.013	0.016	0.017	0.007	0.012	0.001	0.011

PEI	-0.016	0.011	0.002	0.013	-0.008	0.012	-0.009	0.014	-0.004	0.009	-0.009	0.009
Nova scotia	0.055*	0.03	0.011	0.011	-0.01	0.009	-0.012	0.011	0.032**	0.015	-0.011	0.007
New Brunswick	0.027	0.021	0	0.011	-0.027***	0.007	-0.025**	0.012	0.013	0.011	-0.025***	0.007
Quebec	0.027	0.019	0.028**	0.011	-0.008	0.008	-0.016	0.011	0.030***	0.01	-0.012*	0.007
Manitoba	0.026*	0.015	-0.008	0.009	0.015	0.011	0	0.013	0.008	0.008	0.007	0.009
Saskatchewan	0.013	0.015	-0.019***	0.006	-0.011	0.008	-0.019	0.012	-0.006	0.008	-0.015**	0.007
Alberta	0.018	0.014	-0.019***	0.006	0.008	0.009	0.011	0.014	-0.003	0.007	0.009	0.008
BC	0.005	0.012	0.006	0.008	0.008	0.008	-0.004	0.01	0.006	0.007	0.001	0.007
Year 2004	-	-	-	-	-	-	-	-	-0.009	0.008	-	-
Year 2007	-	-	-	-	-	-	-	-	-	-	-0.018***	0.005

\* Significant at 10%; \*\* significant at 5%; \*\*\*significant at 1%.

**Table 12: Marginal Effects for Middle Income (20,000<=Income<=50,000)**

	2000		2004		2007		2010		2000and2004		2007and2010	
Predicted prob.	0.0236		0.03		0.0438		0.038		0.0286		0.044	
	Marginal Effect	Standard Error	Marginal Effect	Standard Error	Marginal Effect	Standard Error	Marginal Effect	Standard Error	Marginal Effect	Standard Error	Marginal Effect	Standard Error
Age	-0.001	0.001	0.001	0.001	0	0.001	0	0.001	0	0.001	-0.001	0.001
AGESQUARE	0	0	0	0	0	0	0	0	0	0	0	0
dropout	-0.022***	0.006	-0.007	0.008	-0.015	0.01	-0.018**	0.009	-0.018***	0.005	-0.014*	0.008
college	0.005	0.008	0.001	0.007	-0.001	0.011	0.019	0.011	0.004	0.006	0.01	0.008
university	0.023*	0.013	0.012	0.01	0.023	0.014	0.045***	0.017	0.019**	0.009	0.037***	0.012
Household size	0.003	0.003	0.004	0.003	-0.001	0.004	-0.003	0.004	0.003	0.002	-0.002	0.003
Male	-0.006	0.005	-0.004	0.006	-0.005	0.007	-0.019***	0.007	-0.006	0.004	-0.013**	0.006
Single	-0.006	0.005	0.003	0.006	0.016*	0.009	-0.005	0.008	-0.002	0.004	0.007	0.007
worker	-0.004	0.007	-0.011	0.007	-0.01	0.008	0	0.01	-0.006	0.005	-0.005	0.007
religious	0.022***	0.008	0.028***	0.007	0.026***	0.008	0.023***	0.008	0.025***	0.006	0.025***	0.006
Excellent health	0.008	0.013	0.009	0.012	0.008	0.015	0.004	0.012	0.007	0.01	0.01	0.011
Good health	-0.003	0.009	0.017**	0.008	0.01	0.01	0.018**	0.009	0.005	0.007	0.018**	0.007
Very satisfied	0.023*	0.014	-0.008	0.013	-0.003	0.021	0.015	0.019	0.006	0.01	0.005	0.016
Somewhat satisfied	0.026**	0.013	-0.012	0.013	-0.002	0.021	0.007	0.018	0.007	0.01	0.001	0.015
% of minorities	-0.001*	0	0	0.001	-0.002***	0.001	0	0	-0.001*	0	-0.001***	0
M religious	-0.013	0.01	-0.012	0.009	0.009	0.025	-0.007	0.027	-0.013	0.008	0.005	0.021
M minorities	-0.007	0.008	0	0.01	0.024	0.02	-0.006	0.018	0	0.008	0.01	0.015
M health	0.011	0.029	-0.004	0.027	0.06	0.037	0.015	0.044	-0.003	0.02	0.032	0.039
M satisfied	0.095	0.071	0.038	0.052	-0.016	0.018	0.09	0.08	0.062	0.051	0.021	0.036
M marital status	-	-	0.036	0.054	-	-	0	0.042	0.018	0.04	-0.002	0.04
MLFS	-	-	0.026	0.024	0.015	0.032	0.076	0.057	0.037	0.029	0.047	0.034
M education	-	-	0.013	0.022	-0.006	0.026	-0.014	0.03	0.009	0.017	-0.012	0.021
MCMA	-	-	-	-	-0.033***	0.012	0.017	0.038	-	-	-0.011	0.015
Newfoundland	-0.005	0.011	-0.01	0.01	-0.024***	0.009	0.036	0.022	-0.009	0.007	-0.009	0.01

PEI	0.002	0.013	-0.007	0.011	-0.013	0.011	0.022	0.02	-0.003	0.009	-0.006	0.01
Nova scotia	0.013	0.014	-0.007	0.008	-0.013	0.011	0.034*	0.019	0.003	0.009	-0.001	0.01
New Brunswick	0.01	0.015	-0.014**	0.007	-0.028***	0.008	0.0047091	0.01637	-0.003	0.008	-0.0209***	0.0076
Quebec	0.001	0.01	0.0080357	0.01134	-0.0286**	0.01122	0.0366**	0.01733	0.0054099	0.0081	-0.0064225	0.00983
Manitoba	0.032*	0.017	0.006246	0.00923	0.0059479	0.01523	0.0207947	0.01668	0.0177*	0.0092	0.0128898	0.01192
Saskatchewan	0.003	0.009	-0.0096568	0.00787	-0.0217**	0.00899	0.055**	0.02626	-0.0047418	0.00621	0.0071976	0.0123
Alberta	0.0120788	0.01254	-0.0215***	0.0063	-0.0059836	0.01123	-0.0126136	0.01113	-0.0061562	0.007	-0.0098385	0.00846
BC	0.0373**	0.01758	-0.0104266	0.00635	0.0073015	0.01213	0.0268*	0.01522	0.0141619	0.00933	0.0143886	0.0097
Year 2004	-	-	-	-	-	-	-	-	0.0076053	0.00776	-	-
Year 2007	-	-	-	-	-	-	-	-	-	-	0.0086652	0.00702

\* Significant at 10%; \*\* significant at 5%; \*\*\*significant at 1%.

**Table 13: Marginal Effects for Bottom Income (Income <20,000)**

	2000		2004		2007		2010		2000and2004		2007and2010	
Predicted prob.	0.0174		0.0152		0.0144		0.038		0.0286		0.044	
	Marginal Effect	Standard Error	Marginal Effect	Standard Error	Marginal Effect	Standard Error	Marginal Effect	Standard Error	Marginal Effect	Standard Error	Marginal Effect	Standard Error
Age	0.001	0.001	0	0.001	-0.001	0.001	0	0.001	0	0.001	-0.001	0.001
AGESQUARE	0	0	0	0	0	0	0	0	0	0	0	0
dropout	-0.015**	0.006	-0.002	0.006	-0.007	0.007	-0.018**	0.009	-0.018***	0.005	-0.014*	0.008
college	-0.004	0.006	0.008	0.008	-0.004	0.005	0.019	0.011	0.004	0.006	0.01	0.008
university	-0.010*	0.006	0.003	0.009	-0.001	0.008	0.045***	0.017	0.019**	0.009	0.037***	0.012
Household size	0.001	0.003	-0.004	0.003	-0.004**	0.002	-0.003	0.004	0.003	0.002	-0.002	0.003
Male	0.007	0.006	-0.011***	0.004	0.003	0.005	-0.019***	0.007	-0.006	0.004	-0.013**	0.006
Single	0.001	0.006	0.003	0.006	-0.001	0.006	-0.005	0.008	-0.002	0.004	0.007	0.007
worker	-0.003	0.007	-0.004	0.005	0.015	0.009	0	0.01	-0.006	0.005	-0.005	0.007
religious	0.003	0.006	0.014**	0.007	0.019***	0.006	0.023***	0.008	0.025***	0.006	0.025***	0.006
Excellent health	0.051**	0.021	0.005	0.009	0.012	0.012	0.004	0.012	0.007	0.01	0.01	0.011
Good health	0.01	0.006	0.003	0.006	0.002	0.006	0.018**	0.009	0.005	0.007	0.018**	0.007
Very satisfied	0.001	0.009	0.009	0.01	0.034*	0.017	0.015	0.019	0.006	0.01	0.005	0.016
Somewhat satisfied	-0.002	0.008	-0.007	0.008	0.017	0.011	0.007	0.018	0.007	0.01	0.001	0.015
% of minorities	-0.001	0	0	0	0	0	0	0	-0.001*	0	-0.001***	0
M religious	-0.009	0.006	0.036*	0.021	-0.004	0.008	-0.007	0.027	-0.013	0.008	0.005	0.021
M minorities	0.002	0.011	0.017	0.011	0.005	0.011	-0.006	0.018	0	0.008	0.01	0.015
M health	0.038	0.031	0.021	0.019	0.031	0.022	0.015	0.044	-0.003	0.02	0.032	0.039
M satisfied	-0.001	0.012	0.002	0.011	0.014	0.019	0.09	0.08	0.062	0.051	0.021	0.036
M marital status	-	-	0.021	0.031	-	-	0	0.042	0.018	0.04	-0.002	0.04
MLFS	-	-	0.006	0.013	0.035	0.031	0.076	0.057	0.037	0.029	0.047	0.034
M education	-	-	-0.018***	0.006	-0.006	0.007	-0.014	0.03	0.009	0.017	-0.012	0.021
MCMA	-	-	-	-	0.006	0.017	0.017	0.038	-	-	-0.011	0.015

Newfoundland	0.012	0.017	0.003	0.011	0.050*	0.026	0.036	0.022	-0.009	0.007	-0.009	0.01
PEI	0.005	0.014	0.007	0.025	0.018	0.016	0.022	0.02	-0.003	0.009	-0.006	0.01
Nova scotia	0.009	0.012	-0.010**	0.005	0.040*	0.022	0.034*	0.019	0.003	0.009	-0.001	0.01
New Brunswick	0.004	0.011	-0.005	0.006	-0.003	0.01	0.0047091	0.01637	-0.003	0.008	-0.0209***	0.0076
Quebec	-0.004	0.009	0.007	0.008	0.022*	0.012	0.0366**	0.01733	0.0054	0.0081	-0.0064	0.0098
Manitoba	0.005	0.014	0.009	0.009	0.025	0.015	0.0207	0.01668	0.0177*	0.0092	0.0128	0.0119
Saskatchewan	0.057**	0.03	0.006	0.011	0.01	0.014	0.055**	0.02626	-0.0047	0.00621	0.0071	0.0123
Alberta	0.013	0.016	0.005	0.009	0.003	0.011	-0.0126	0.01113	-0.0061	0.007	-0.0098	0.0084
BC	0.018	0.014	0.004	0.007	0.015	0.014	0.0268*	0.01522	0.01416	0.00933	0.01438	0.0097
Year 2004	-	-	-	-	-	-	-	-	0.00760	0.00776	-	-
Year 2007	-	-	-	-	-	-	-	-	-	-	0.0086	0.0070

\* Significant at 10%; \*\* significant at 5%; \*\*\*significant at 1%.