The Effects of Social Capital on Individual Income in Canada[*]

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Introduction:

The study of social capital is an extensive field ranging from micro studies of individual income to more macro studies of civic engagement, culture and its effects upon countries' prosperity. Social capital in a micro context entails the relationships that one has with other people and the value inherent in those relationships. This study attempts to quantify the effects that relationships have upon individual income in Canada. More specifically, three characteristics of social capital are shown to affect the income of an individual. These three characteristics are quantity, quality and composition of social networks. Quantity entails the number of relationships that a person has within their network, including relatives, close friends, acquaintances and membership amongst groups. Quality is measured by the amount of time a person spends maintaining the relationships and group memberships that they have. Finally, composition examines how a person's network resembles their own characteristics based on six categories. All of these characteristics of social capital have an effect on income as they influence the level of resources available to a person.

Abundant research has been done on the effects of social capital on income. However, most empirical projects have focused on the effects of social capital at macro levels. A fair amount of game theoretic and speculative thought has been written regarding the effects that social capital has at the individual level. These effects tend to come in four varieties: by affecting the incentives in a "prisoner's dilemma" situation, by changing behaviour through the construction of cultural values, by allowing access to resources (specifically within the labour market) and by enhancing developments in human capital. Through these venues it can be speculated that the larger a person's network, the better off they should be. Indeed the literature in this field thoroughly supports this idea. Furthermore, relationships that are more highly maintained should be most important for income as they are the ones through which people are most likely capable of accessing resources such as money or jobs. Finally, though one could argue

that the diversity of networks would increase access to resources, literature supports the idea that more economic aid comes from networks that are less diverse. Despite the support in the literature for the positive effects of large networks, this study asserts that, within Canada, the most benefit to income comes from networks that are composed of relatively small groups of closely related people. In this instance, networks of close relatives that are very similar to oneself produce the largest positive effect on income.

Literature Review:

Social capital is a topic that has held wide interest in academic literature for some time. Though discussions of the economic implications of social organizations have been mentioned by "Aristotle to Tocqueville," literature in this area has blossomed immensely in the past decades (Goss and Putnam 2002: 1). Despite the expansive amount of research in this area, most studies have been conducted on a macro scale, with mixed results as to the implications of social capital on income. In John Helliwell's study on the effects of trust on economic growth, he found that variance in trust across Canadian provinces and American states could not account for the differences in growth rates in these regions (Helliwell 2003: 38). However, Knack and Keefer, have shown that increases in country level trust increases economic performance (Knack and Keefer 1997: 33). Indeed, the influential work by the political scientist Robert Putnam on government efficiency in Italy would indicate that more mobilized social capital affects the efficacy of local governments, thus influencing local prosperity (Fukuyama 1995: 104). Although discrepancies exist in the area of social capital most accept the general theory that social capital does have an effect on income. Indeed, a study of the effects of social capital on household income in rural Canada suggests that there is a strong relationship between income and the possession of any kind of social capital (Tiepoh and Reimer 2004: 446).

Before examining how social capital may affect individual income, social capital itself must be defined. Social capital has many definitions that can range from it being seen as an inherent individual asset to one held by a larger community of people. The actual definition of social capital is a much-debated topic within the literature as different scholars define social capital on different levels. Robert Putnam, defines social capital as "features of social organization, such as networks, norms and trust, that facilitate

coordination and cooperation for mutual benefit" (Dayton-Johnson 2003: 49). In this definition social capital is viewed as an asset of society, allowing markets and general transactions to be carried out more efficiently. Social capital has this capacity to function on a community level as it allows for reduced transaction costs as the sanctions and norms associated with the social capital replace the need for use of formal contracts or, in some cases, legal systems (Halpern 2005: 44). Thus, according to this definition social capital is mainly a community asset as it is a "collective, or ecological, dimension of society, to be distinguished from the concepts of social networks and social support, which are characteristically measured at the level of the individual" (Halpern 2005: 17). This is a more macro definition, but many scholars consider social capital to be a micro concept, affecting income the way physical or human capital would, as an asset that one invests in to gain benefits from in the future. Social capital as a characteristic of the individual can be described as the sacrifices, be that of time, money or effort, that someone makes in the hopes of gaining in the future through cooperation with others on productive endeavors (Osberg 2003: 50). This school of thought sees social capital as a thing possessed at an individual level, naming social cohesion as the force behind greater collective action in society (Halpern 2005: 17). Fukuyama sees social capital as something that results due to a high prevalence of trust in a society, this social capital can exist in small units such as families or rise to encompass large groups such as nations (Fukuyama 1995: 26). This definition is more inclusive and recognizes that the networks of people and interconnectedness of social capital can not easily fit into one small network at the level of a person or nation alone, but rather is a fluid thing that builds upon itself as one examines it harder.

Within this study, social capital is defined as an individual asset and viewed as a network possessed by the individual in which they invest time and can hope to receive benefits from in the future. That definition of individual social capital being stated, there still exists different kinds of social capital at the individual level. The language used to describe these types of social capital includes terms such as weak or strong and bridging or bonding relationships. Weak and strong bonds indicate the intensity of the relationship, weak bonds being a relationship between two people that is not particularly close and strong bonds being those between people who are very close to one another (Halpern

2005: 19-20). Strong bonds are not, however, necessarily superior to weak ties. Though the name "weak ties" implies something less forceful these are believed to often be the ties associated with allowing people greater access to information and opportunities, whereas, strong ties are more often associated with support in emotional health (Halpern 2005: 19).

Bridging and bonding capital explains how relationships relate to existing groups of people. Bridging capital describes relationships that cross groups (Halpern 2005: 21). These groups can be age groups, ethnic groups or family groups but they are relationships that bring together people who are dissimilar from one another (Goss and Putnam 2002: 11). Bonding relationships, on the other hand, are those that are made within groups of people sharing similar attributes. Thus, family ties or religious groups tend to be relationships that are bonding in nature (Goss and Putnam 2002: 11). Bridging and bonding relationships are interesting as they behave differently from one another. Bridging relationships tend to have a higher depreciation rate than bonding relationships (Halpern 2005: 21). This does not, however, imply that bridging relationships are less valuable. They are often important economically as they connect people with those they would not normally encounter and thus can open them up to unknown opportunities (Halpern 2005: 11). A study of bankers showed that 9 out of 10 of their bridging contacts were no longer within their networks after a year. However, the act of creating these bridging networks was associated with higher pay and better reputations amongst their coworkers (Halpern 2005: 22). Furthermore, a study of community level ethnic diversity in Canada suggested that increasing diversity increased the levels of social capital (Aizlewood and Pendakur 2007: 192). These positive effects of bridging ties are contested, however, by studies such as Robert Putnam's article on community diversity which suggests that having increased bridging relationships is detrimental to social cohesion (Jonas 2007). There are also downsides to increasing bonding relationships as they can have negative externalities to a greater extent than bridging ties do (Goss and Putnam 2002: 11). Indeed, the downside to social capital can be that it is valuable for those in the right groups, but can result in exclusion that harms others (Friesen 2003: 207-208). Although it may be valuable to belong to a group, if you are excluded from a dominant group and forced to remain only within a marginalized network, your chances

of being more successful are diminished despite the fact that one may still be very well connected within their own network (Friesen 2003: 207-208).

So it is evident that individual levels of social capital can affect communities due to the attributes that comprise it, namely networks, norms and sanctions (Halpern 2005: 10). This means that social capital is made up of networks or groups of people tied by some associational contact with one another, that it is comprised of norms of behaviour within the networks that govern how to interact with one another and there exist sanctions that are in place to punish those that do not abide by the norms that the groups have set about to ensure a system governing their transactions with one another (Halpern 2005: 10). Though these three components imply that social capital is an asset held by groups of people, these components help to describe the benefits that social capital may give to the individual as well. These three components make the idea of social capital fit within a microeconomic framework as it relates to the game theory concept of the "prisoner's dilemma". In the "prisoner's dilemma", the incentives to choices in an interaction with another person are such that two players will not cooperate with one another but will attempt to "cheat" the other person to gain a larger reward for themselves. As a result, both people end up with lower pay-offs than the ones they would have received had the two cooperated together (Dayton-Johnson 2003: 44). The idea of social capital is that it can change the incentive structure for such interactions so that people will cooperate with one another and thus get higher returns to their interaction (Dayton-Johnson 2003: 65). If people know one another and are likely to meet again, then there exists incentives to be honest with one another and not to defect from an agreement, thus given larger pay-offs to both parties (Mclean, Schultz and Steger 2002: 9-10). An example of this is present in the diamond industry in New York where a small and close knit group of merchants will lend large numbers of diamonds to one another for inspection without counting them nor issuing any legal contract (Halpern 2005: 2-3). In this instance transactions can move quickly as the sanctions in place are high enough to deter people from cheating one another. The norms and sanctions within a network can also help an individual by reducing moral hazard and adverse selection problems when services are being provided (Dasgupta 2002: 12). In all the use of such social capital can often replace or supplement

weaker or non-existent contracts, legal systems or formal sanctions by the use of their norms and sanctions thus allowing for more profitable transactions (Halpern 2005: 44).

The norms and sanctions associated with social capital can govern individual behaviour not only in prisoner's dilemmas but also in the use of social capital for economic ends. In his book *Trust*, Fukuyama states that it is often "the absence of a proclivity for community that inhibits people from exploiting economic opportunities that are available to them" (Fukuyama 1995: 10). This sense of community within a society can affect individual income as these social community characteristics can be prerequisites for the formation of individual behaviours such as work ethic (Fukuyama 1995: 48). This sentiment is repeated in the controversial work by Weber, entitled *The Protestant Work Ethic*. In this work Weber states that the spread of Protestantism is responsible for the success of most leading nations. He asserts that the Protestant beliefs foster behaviours such as "the capacity for hard work, frugality, rationality, innovativeness, and openness to risk" (Fukuyama 1995: 46). With this belief also came the idea that Protestantism fosters social virtues allowing for social cohesion that permitted these societies to cooperate, thus reaping the benefits of a highly trusting and cohesive society (Fukuyama 1995: 46). Indeed many interesting studies on the income effects of religious group membership support the idea that certain beliefs can promote social capital and its economic effects. In a study by Marcus, religious affiliation was correlated with country-wide economic performance (Marcus 2003: 26). In another country-wide study it appeared that when controlling for religious beliefs, increased attendance at meetings decreased economic growth, and that when controlling for religious service attendance, increasing some religious beliefs, increased economic growth (Barro and McCleary 2003: 38). Thus, it is possible that these country-wide effects are similar to those that would be affecting individuals in their club affiliations. Dense networks tend to foster feelings of reciprocity and trust and thus shared religious beliefs could help people to act in a trustworthy way towards one another even if their church attendance is not that high (Goss and Putnam 2002: 7). If that is the case then mere entrance into a club, even if attendance at meetings is low, is enough to allow one to reap the benefits of association with a club. Overall, the changing of incentive structure in a "prisoner's dilemma" and the construction of social norms effected by religions can

affect individual income, but they do so through affecting the norms and sanctions component of social capital.

Social capital can affect income by setting out cultural rules encouraging trust that lowers transaction costs, but the size and quality of one's network also has implications for individual income by allowing a person access to resources. Networks that are open and well connected can allow people to swiftly access information and gain opportunities or experience needed to improve their income (Halpern 2005: 44). The use of networks for gaining information is most prominently seen when examining social capital's effects on the labour market. Work by Granovetter showed that the majority of job positions are found and filled through informal channels (Granovetter 1973: 205-206). The interesting aspect here is that Granovetter found that a person's "weak" ties were most effective in helping to seek employment (Granovetter 1973: 228). The "weak" ties are more likely to help one get a job as a weakly associated friend likely knows a lot more people unassociated with one's own network allowing for a wider range of available resources (Goss and Putnam 2002: 10). Stephen Knack's research supports this claim by stating that trust and social capital affect national income but only if this trust is measured by "high radius trust" or the trust of those outside of one's close group (Knack 2000: 32-33). Thus the size of one's social network is very often correlated with labour market participation (Halpern 2005: 45). To further that point, once in a job it appears that those who are promoted the fastest and end up going the furthest are those with extensive networks (Halpern 2005: 45-46). This has been shown to be an important factor for people in all ranges of careers because once in a job a network will still connect one to customers, allow one access to funding and enable trade of resources or information between co-workers (Halpern 2005: 45-46).

Some theory would suggest that social capital can help improve people's labour force participation but that it has no effect on the amount that people earn, as they will still need the skills necessary to succeed at their job in order to earn more money (Halpern 2005: 49). However, social capital can affect income at the individual level by affecting levels of health and education (Dasgupta 2002: 6-7). Social capital can affect income by influencing the level of educational attainment that people receive and the likelihood that they will not drop out of school (Halpern 2005: 44). Even when education

levels are controlled for, it appears that less supportive forms of social capital, such as single parent homes, can lead to increased occurrence of unemployment in adult life (Halpern 2005: 44). There is, however, a problem here of reverse causation as one of the biggest drivers of social capital formation is education level (Glaeser 2001: 19). The acquisition of literacy skills "must certainly affect the nature of the social networks in which people are included and engaged and the extent to which people can transform social capital into economic capital" (Willms 2000: 4). Social capital can also affect productivity through influencing people' s health. Lavis and Stoddart looked at the effects of social capital on health and found that those people who belonged to dense networks were often healthier and received more informal care (Lavis and Stoddart 2003: 138). As a result, social capital on the individual level can affect income by influencing levels of education and health that can increase productivity.

Model:

This model attempts to predict expected income for an individual based on various control characteristics and social capital variables that fall under three categories: quantity, quality and composition. The basic regression model resembles this equation:

$$y = \mathbf{X}\beta + u$$

Where y represents income and $\mathbf{X}$ represents the variables that make up the three components of social capital (i.e. quantity, quality and composition) and the control variables. The control variables are: the number of weeks worked in a year, the number of hours usually worked at all jobs in a week, age group, sex, marital status, province of residency, rural/urban indicator, main activity of the respondent in the last year, the North American Industrial Classification of the respondent, Standard Occupational Classification of the respondent, the highest level of education obtained by the respondent and the main source of the respondent's income over the last year. The assumption here is that the errors are normally distributed.

The problem with the linear regression model is that the data source recorded income in brackets and not as a continuous variable of individual income. As a result

interval regression is run on a new model to help determine the effect of social capital on income in Canada (Greene 2003: 736-740). The interval regression model resembles this equation:

$$y^* = \mathbf{X}\beta + u$$

The difference between this equation and the linear model being that the y* variable is the log of income measured in brackets instead of continuously. The assumption of normally distributed errors is still held. The income data contained 12 income bracket categories running from no income to over $100 000 a year for annual personal income. Three main regression models are tested using interval regression analysis to examine the effects of the three characteristics of social capital upon income. The three main models consist of a base regression where all control variables and all social capital variables were included, a reduced regression where all of the social capital variables that did not achieve significance in F-tests were dropped and finally a regression where all social capital variables are included but the control variables for number of hours worked a week and number of weeks worked a year are dropped.

Indexes:

Due to the large number of variables included in the three characteristics of social capital, the overall effects of each of these three characteristics, namely quantity, quality and composition, are difficult to determine. Two indexes are created for each characteristic, a Base Index containing all variables in the category and a Reduced Index containing only those variables, from the category, that are run in the reduced regression of the previous section. All three Base Indexes and all three Reduced Indexes are run in a regression containing all of the control variables and in a regression where the number of weeks worked in a year and the number of hours worked in a week are dropped from the regression. The regression model is the same as the interval model, except that $\mathbf{X}$ contains all controls and the Indexes instead of the dispersed variables. Refer to the Appendix for a full explanation of the process of Index construction.

DATA SOURCE:

The data used for analysis is the Canadian General Social Survey, Cycle 17 from 2003. The Survey is mainly focused on collecting information about social capital in Canada to examine how citizens engage in social and civic life. The survey consists of the answers to an interview that was administered to 25 000 Canadians over the age of 15 (Schellenberg 2004: 16). Only those Canadians living in the provinces were surveyed. Questions that were asked regarded social capital related to the contact that people have with friends and family, their engagement in groups (political, religious, sport etc.), their level of given and received informal care and their levels of societal trust. The variables used in this analysis focus on the characteristics of Canadians' social networks. Within the General Social Survey many questions were asked regarding the quantity, quality ad composition of Canadians' networks. Quantity variables include the number of relatives that the respondent feels close to and can call on for help, the number of close relatives that the respondent feels close to and can all on for help, the number of friends/ or acquaintances that the respondent has that are not close, the number of groups or clubs that the respondent is a member of and the number of new people that the respondent met, outside of work, within a month that they intended to keep in contact with in the future. The quality variables are comprised of how frequently the respondent communicates in person, over the telephone or over the internet with their friends and family and how often the respondent attends group meetings or activities. Finally the composition variables describe all of the friends in a person's network, that the person communicated with in the last month, that share the same characteristics as the respondent. These characteristics include the mother tongue spoken by the respondent, the ethnic background of the respondent, the sex of the respondent, the age group of the respondent, the education level of the respondent and the family income level of the respondent.

Results and Discussion:

Please refer to the Appendix for specific regression results.

The analysis of the quantity variables supports the thesis that small, close networks are the most beneficial form of social capital for income. Through all of the regression models run the number of close relatives is always a very statistically significant variable. All of the regressions are consistent with one another in that the optimal number of family members to have is 6-10. It appears that all other categories have effects on income that are below the effect of this category. The most negative effect on income comes, consistently from the highest number of relatives, more than 20. Having more than 20 relatives gives a person, on average, an income that is about 10.9% lower than a person who has only 6-10 close relatives. Indeed this indicates that a moderate level and neither too few nor too many relatives are optimal for income. It is possible to conclude from these results that the effects of relatives is important as it does allow one to have help when in trouble and thus access resources such as jobs or money when in need. Close relatives may also look after one another when ill or help support each other when attempting to complete an education, thus helping to improve a respondent's productivity. Having too few relatives is detrimental to a person since they will not have such a safety net when needed. This effect is well documented in the theory, as the more people one can rely on the more resources at their disposal. However, the negative effects, from large numbers of relatives, do not fit within the literature. Perhaps, the reciprocal relationship expected from such interactions is large enough to outweigh the benefits after a certain point. Thus, with a large number of relatives, one may begin to give more than they receive. Furthermore, one could lose incentive to work for their own income if constantly being supported by lots of family members. It is also possible that large numbers of relatives do not give the "weak" bonds effect set out by Granovetter, where the most resources can be accessed through those that you associate with less. As a result, after the point of 6-10 relatives, more does not add to your resource base as they will all likely be giving you access to the same network of people. Smaller families may also be more likely to branch out and expand into less connected networks than large families.

It would be logical to assume that the effects of close family members on income are likely to be the same as that of close friends, since their place within a person's network is close enough to serve the same economic purpose as a family member.

However, the number of close friends is consistently insignificant throughout all regressions. Even when the number of close relatives is not controlled for the number of close friends remains insignificant. Overall, this seems a bit interesting since one would believe that in the absence of relatives that are close and willing to help, the effects of having friends that are close would become very significant. Perhaps, for many the bond of friendship does not hold as strongly as the bonds of blood relationships. It is possible to assume that the amount of help that one receives from relatives is more extensive and likely to affect income more than the help one receives from close friends. However, the insignificance of close friendships does fit within the theory of "weak" ties, as close friendships could be less likely to extend the networks through which one could receive help and thus the strong friendship ties may be more useful for emotional rather than financial support. This being said, if "weak" friendships are more likely to affect income due to their connection to more external networks, then the number of non-close friends or acquaintances should prove to have a significant effect on income. However, in most regressions the number of acquaintances is not a significant variable. The number of acquaintances that one has is only significant in the regression where the number of hours worked per week and the number of weeks worked per year are not controlled for. In this regression any number of acquaintances below the level of 11 to 20 has an effect on income that is less than those people who have 11 to 20 friends. The next seven categories, however, have effects that are more positive than having 11 to 20 friends. However, having more than 61 to 70 friends produces an effect that is negative compared to having 11 to 20 acquaintances. Therefore, as with relatives there may be a threshold at which having too many acquaintances is detrimental. There is a relationship between the amount a person works and the number of acquaintances that they have in that those people that work more hours and weeks tend to have more friends. Thus, it is possible that those people who work more meet more people, or that people with more friends are in some way motivated to work more. The direct effect of acquaintances on income can not be determined except to say that there is a tendency for people who work a lot to have many friends.

The issues of the amount of work affecting friendships or friendships affecting the amount of work is also a problem when examining the variable that indicates the number

of new people a person meets outside of work or school that they intend to keep in contact with in the future. In almost all regressions this factor is significant. For the base and the regression in which work hours and work weeks are excluded, only the category with no new friends being made and 11 to 20 new people being met are positive. In the base regression meeting no new people has the most positive effect by making income 1.4% higher, whereas in the regression with weeks worked and hours worked excluded meeting 11 to 20 new people increases income by 2.0%. In the reduced regression only meeting no new people has a positive effect. These results are quite shocking as one would expect that meeting new people outside of work would be beneficial for expanding a network and diversifying contacts. Indeed, in the study done on bankers, these loose contacts were associated with higher pay and esteem. However, the effect that meeting no one is most beneficial may be due to reverse causation. Those people who work more often may be less able to meet people outside of work, though they are earning more money due to their many work hours.

The last variable that measures the number of connections a person has is the number of groups to which a person belongs. This variable is significant in all regressions. Overall the effect of increasing membership in a club by one group increases income by 1.49%. This variable fits well within the theory as attending a group will expand one's contacts and allow for greater access to new networks. These group memberships may also bring a certain extra quality to a network that random acquaintances may not by allowing for special privileges given to "club" members, such as increased access to funds for borrowing or patronization of one's business. The positive effects of group associations fits within the thesis that small, close groups are most economically beneficial. Being a group member enables association with a network of people that share an interest or belief, thus making a close and similar group through the sharing of an interest.

The Base Quantity Index and the Reduced Quantity Index are significant in all regressions. Within the base regression the effect of both indexes are always positive in their effects on income. Within the regression with work weeks and work hours excluded the Base Quantity Index produces the largest effect on income with an increase of 36% in income resulting from an increase in the index. This fits within the theory as it shows that

increasing the number of people within one's network base does have a significant and positive effect on income. The most benefit comes from the index including all variables with the effect of the reduced index on income being about 30%. This indicates that increasing the number of friends one has does increase income a bit but that the majority of the effects on income come from the effects of meeting new people, joining groups and having close relatives. Therefore, since the effect of friends is minimal the index supports the idea that small, close groups have the largest effect on income.

Overall, it appears that the most positive quantity effect on income comes from the close relatives that people have. It seems strange, but evident that friendships do not have a profound effect on income and this contradicts the theory of "weak" ties by not supporting the idea that extending networks is always going to benefit one financially. So relatives who have a blood association are beneficial in moderate quantities, and joining groups that connect you to other people through a common interest or association is also beneficial. Since the effects of the number of acquaintances and the number of new people met a month can not be separated out from the effects of the number of hours or weeks worked, it is difficult to say how the creation of weak ties affects income in Canada. However, keeping a small group of relationships with people who are somehow associated with you is going to have positive effects on income.

As with the Quantity variables, the Quality variables' analysis rejects the idea that weak ties are more beneficial than strong ties. The frequency variable describing when a person sees their relatives, outside of the people that they live with, is significant only in the reduced regression and then it is only the difference between the most frequent and least frequent contact that is of any interest. The difference of the effect on income between contacting relatives less than once a month and everyday fluctuates between 4.5% and 6.8%. Therefore, there is a significant effect on income between frequently seeing relatives and seeing them infrequently, even if the differences between seeing them a few times a month and not seeing them a lot or seeing them a lot is not significant. When the frequency with which people talk to their relatives on the phone is dropped from the regression, the amount of time that people spend with their relatives becomes significant. This makes sense since it indicates that contact is significant and if one form is not present then the other becomes very important. People who have relatives that they

do not live with but see everyday likely live within a very tight knit family which may lend lots of support to one another when in need. It is, therefore, evident that seeing relatives very frequently is beneficial for income.

The next relationship maintenance variable is how often one speaks to their relatives on the phone. This variable is significant in all regressions and followed a very clear pattern of increasing the benefit to income as the frequency of telephone contact increased. Speaking to relatives less than once a month always produces the most negative effect on income, whereas speaking to relatives everyday gives the highest increase to income. Overall, the results for this variable fit within the theory very well, as frequent maintenance of family relationships gives the highest boost to income.

The final variable measuring how frequently a person contacts their relatives looks at how frequently a person communicates with their relatives using the computer. This is interesting as it has the opposite effect from the other relative communication variables in that the less contact with relatives in this manner the more benefit to income. Indeed, everyday contact has the least benefit to income whereas contact with relatives less than once a month has the most. This does not entirely fit within the theory as more communication with relatives should improve familial relationships. Perhaps, because this variable does not measure the quality of communication the type of contact people have over the internet may not improve relationships much. Conceivably, internet communication is seen as a replacement for meeting or calling someone, which may be a better way to maintain a relationship, and thus the relationships are maintained but not to the intensity necessary to enable a person to reap economic benefits. It is also possible, however, that internet communication is used most often with relatives that live farther away and thus are not as able to give help when needed. Those relatives that are seen and spoken to frequently may be nearby and thus can lend aid whenever possible.

Just as the number of friends does not matter much for income, the regressions show that the frequency of contact with friends is not significant either. Two of these variables, how often a person sees and speaks to their friends, are not at all significant. Overall, it is interesting that the frequency with which people see or speak to their friends is not important, as it could be assumed that more contact with friends would better relationships and thus allow for more economic benefit. Again, however, it is possible

that friends do not give the economic support that family members do and thus have no real effect on income. Despite the insignificance of face to face and telephone contact with friends, internet contact is very significant. Though it is significant, this variable does not show much of a pattern in terms of its effect on income. In all of the regressions, contact over the internet everyday and less than once a month has negative effects on income, whereas more moderate amounts of contact has positive effects. It is possible that there is really no pattern here, especially since neither the number of friends, acquaintances, nor frequency of contact with these individuals is significant. It would make sense that too little communication with one's friends is detrimental to income as a lack of friendship maintenance would not allow for access to resources in times of need. However, the negative effects of frequent contact does not fit within the literature. Again this evidence would contradict the theory that weak ties are more economically beneficial than strong ties.

The last variable in the maintenance category is the amount of time that a person spends in group meetings or attending group activities. This variable is always very significant. In all of the regressions the least amount of time spent in group meetings is the most beneficial for income. It appears that attending group activities once or twice, or less than once a year has the most positive effects on income. More frequent attendance, such as a few times a month or at least once a week has negative economic effects. Therefore, it is evident that the optimal amount of time to spend at group activities is once or twice a year and that past this point there is a penalty to more time spent at group activities. This fits within the literature on religious service attendance, where studies show that more time spent in group meetings takes away from more productive activities, thus lowering one's income. Therefore, it may be better to attend group activities once or twice a year to meet new contacts and remain connected to the club but that too much time spent at these activities is a detriment as it takes away from more productive endeavours, such as maintaining ties with close relatives.

The Quality Indexes are significant for two regressions, as the Base Quality Index is always insignificant. The effects of the reduced indexes are about the same with an increase in income of about 7.5% for an increase in the indexes. These effects fit with the idea that more maintenance of relationships positively affects income by making

relationships stronger so that help can be accessed when in need. However, this effect is likely to be from the increased contact with relatives and groups, as face to face and telephone contact with friends is not included in the reduced indexes.

Overall, maintaining relationships with friends does not have a significant effect upon income. Only internet communication is significant, however, too much of that is detrimental, so it is possible that like the number of friendships, quality of friendships does not really have an effect on income. This could be because friends are less likely to lend financial help or find jobs for one another. However, the quality variables do support the idea that having close relationships with relatives is an important factor for income. Indeed frequent, as in everyday contact, is the most beneficial and if the negative effects of internet communication are taken to mean that relatives who are close are more capable of helping, then physical proximity is also important for income. In contrast to this, group membership maintenance supports the idea that weak ties are important, as infrequent contact with groups is most beneficial. This could again be expressing the idea that belonging to a club brings benefits of its own, even if relationships with those within the club are not well maintained. Therefore, the manner in which quality affects income is a bit difficult to state, as weak ties and strong ties are important. However, the idea that maintaining relationships with people who have some association to you, either through a club or through being related, is supported by these variables.

Network composition is an interesting aspect of social capital to examine as it relates to the effects of bridging and bonding capital. When mother tongue composition of the network is examined, the number of friends that speak the same mother tongue as the respondent is never significant in shaping income. The only time that this variable becomes significant is when the ethnic composition of a network is not controlled for. In this regression the most benefit to income is given by the category where all of a person's friends speak the same mother tongue as they do. It is possible that this variable becomes important when ethnic composition is dropped since it can act as a replacement for indicating the ethnic origins of a person's network. Therefore, having friends who speak the same mother tongue as you is more beneficial than having a few that do not. This does fit within the thesis of bonding social capital in that more homogeneous groups are likely to last longer and give more aid to one another. This can also relate to club

dynamics in that revealing the possession of a specific trait, such as speaking the same language, will allow for special treatment amongst certain groups. However, this data does not support the idea that friends who are less like oneself can connect you to networks that you do not have access to and thus increase your income due to the availability of new resources.

This same pattern of decreased diversity within a network being more beneficial is shown in the examination of ethnic composition of networks. The difference between this variable and mother tongue composition is that there is no negative effect to diversity. The lowest effect on income comes from having a network that is neither very diverse nor very similar. Having all friends from an ethnic background that is visibly different from the respondent's is not detrimental, but is just a little less beneficial than the effect of having the whole network from the same ethnic background as the respondent. Again, however, the most beneficial effect on income comes from the networks with no diversity. The effects of similar friends can have bonding effects and thus may be more likely to work the way close family relationships do. However, the positive effects of diversity are also supported here as the effects of bridging are shown to be positive on income earnings.

The variable describing network sex composition is insignificant in all three regressions. There is no evidence in the literature to suggest that sex composition of networks should affect income except possibly through bridging capital. However, being friends with those of the opposite sex is not likely to count as bridging capital in Canada, as most "homogenous" groups, such as family or ethnic groups, are likely to contain people of both sexes. Therefore, bridging across a group to befriend those dissimilar from oneself is likely to involve meeting people of both sexes that have characteristics other than sex that make them different from oneself. Therefore, the sex composition of networks has no effect on income.

The next variable is the educational composition of the respondents' networks. This variable is insignificant in all regressions except for the one in which the number of hours and number of weeks worked are excluded. In this regression the most diverse networks have the most negative effect on income. Since the number of work weeks and work hours are not being controlled for, it is possible that people who work more tend to

have networks that are more similar to themselves. Indeed, if a person is working more it is less likely that they will be able to meet and socialize with those outside of their workplace and it is likely that in a job most coworkers are from similar educational backgrounds. Thus, it is possible that people who work more have less diverse friends because of their work schedule, not because diversity makes one work less or because diversity is detrimental to income.

The variable indicating the income composition of networks is never significant. Therefore, it appears that the level of income held by those in a network is not important for an individual's income. This seems counterintuitive because one would think that the resources held within a network would be very valuable. However, since this variable only measures whether income is like or dislike the respondent's there is no way of knowing if the network is saturated with friends that are very wealthy or very poor. Certainly wealthy networks could be very beneficial to income, but since that can not be distinguished here that may be the reason for the insignificance. The insignificance could also be due to the fact that this variable is measuring the income of friends within a network. If, as is suggested above, friends do not have a significant impact on income, then the insignificance of this variable would make sense.

The final variable in these regressions is that of age composition of the respondent's network. This variable is significant in the base and the reduced regression but with different results for each. In the base regression the most benefit to income is from the completely age diverse networks, and the least benefit is from the networks with most people being of a different age. In the reduced regression however, having only a few people of a different age is the most beneficial, and the least benefit is from the networks with most people being of a different age. Here again, bridging ties appear to be important as the wealth of resources one could draw upon in an age diverse network would be vast. If one had friends both older and younger one can have different perspectives on financial problems, gain help from older friends and possibly get fresh and new ideas from younger ones. Why having only a few differently aged friends is the most beneficial in the reduced regression is, however, not clear.

Finally the composition indexes are significant for all regressions. The effects of all of the indexes are about the same, decreasing income by about 16% when the indexes

are increased. It thus appears that, overall, increasing the diversity of one's network is not beneficial. This does not fit within the theory that bridging ties increase access to valuable resources. However, it does support the idea that the most financially beneficial relationships are very close ones with a small group of people that are similar to oneself.

Overall, diversity within a network does not have the most positive effects upon income. Although diversity does not necessarily have negative effects upon income, the regressions indicate that the most positive influences on income come from more homogeneous groups. This may be due to the idea that groups of people sharing characteristics are more likely to be generous to one another. This fits within the theory that relatives are the people who are most likely to have positive effects upon income. Relatives themselves are more likely to share characteristics such as education, mother tongue, ethnicity and income with you. However, since these variables measure the sharing of characteristics with friends and not relatives it is possible that this tendency to receive more financial aid from those most similar to you has extended beyond just blood relationships and affects friendships as well. Therefore, if friendships matter at all for income, the most beneficial friendships are those with people who generally resemble oneself.

Conclusion:

Many of the theories that have been laid out in the literature do not support the findings in this examination of social capital in Canada. Most theory suggests that friendships do matter and that the more one has of them the more likely one is to be better off financially. However, it does not appear that that is so. Indeed, the most financially supportive networks appear to be those that are small, very highly maintained family groups, with some association outside of that into groups or activities that are sparsely attended. This poses some interesting issues as those people who do not have a close family group on which to rely for help are at a loss in terms of benefiting from social capital. If weak friendships proved to be the most beneficial form of social capital then anyone could cultivate financially supportive networks. However, blood relationships can not be created, unless marrying into a family, and therefore many people may be at a loss for long-term help if they do not have any or many relatives. This effect would be most

pronounced in the development of human capital. Those people with supportive family networks are most likely to earn more through this manner as they will have support when taking risks such as pursuing education or will have support when in poor health. In this manner, social capital is most effective by influencing the level at which people can perform by ensuring that their human capital is as developed as possible. This is a possible reason why weak bonds did not appear to be as effective in increasing income as predicted in the literature.

Perhaps, weak bonds affect income only on the margin, and thus to reach a level at which success is possible one must have strong human capital facilitated by strong bonds. This could be demonstrated through the example of the bankers given in Halpern's book, even though weak ties were cited as having an effect on income for these people, the study was not examining the fact that the bankers already had relatively successful jobs (Halpern 2005: 22). It is possible that the strong social capital bonds possessed by these bankers enabled them to gain the education and other social capabilities that allowed them to reach this successful job. Once there, the effects of weak social capital could increase the income of bankers a little, but their stronger social ties had already accomplished the larger effect of pushing them into a successful career. This idea is further supported by the fact that no evidence appeared in the data to support the idea of occupational sorting due to weak ties. If those people with larger networks were more likely to enter certain careers that made them more financially successful, then there should have appeared a correlation between network size and occupation type, but this relationship does not exist. Therefore, it appears that the largest effect on income by social capital is not made by weak ties facilitating job acquisition but rather through strong ties with relatives that enable a person to develop human capital that, in turn affects their productivity.

Despite the obvious benefit to worker productivity, there exists a tension between the individual benefits of close, homogeneous networks and the effects that they have on the prosperity of Canadian society. Strong bonding groups are much more at risk of creating segregated societal groups that can easily lead to inequality as groups excluded from well-endowed networks cannot bridge across to benefit from existing resources (Mclean, Schultz and Steger 2002: 31). Thus, though some people may be slightly better

off financially with more homogeneous groups, society may not be. The results from this analysis prove the thesis that small, well maintained and homogenous networks are the most beneficial forms of social capital for an individual to cultivate. In all, it is no slight on human nature to realize that being close with one's relatives is going to help in the future, but the effects of non-diversity should be considered seriously. A Statistics Canada study showed that over 50% of the increased income inequality in Canadian cities was due to the fact that people were segregating themselves into "like" neighbourhoods (Myles, Picot and Pyper 2000: 23). Furthermore, an article in the *Globe and Mail* stated that the ethnic groups of Canada are becoming increasingly segregated from one another by moving to ethnic enclaves (Jimenez, 2007). Therefore segregation may be due to cultural prejudices against certain groups or, as this research would suggest, because people are responding to a financial benefit inherent in banding together with those people that are similar to themselves. However, since the research by Aizlewood and Pendakur shows that, in Canada, social capital increases as community level diversity increases, segregation is obviously not a desirable social outcome (2007: 192). This is clear as increased community level social capital can lead to more effective government, reduced crime and economic growth (Goss and Putnam 2002: 6); (Knack and Keefer 1997: 33). Preventing the creation of income or cultural enclaves is not a simple task, as it must involve fighting both cultural biases and the financial incentives to segregation. However, since community level social capital is a beneficial and desirable asset for reducing inequality and increasing positive social outcomes, further studies in this area should focus on determining exactly why these segregations are occurring and how they can be prevented.

Appendix:

All variable significance was measured at the 10% significance level.

Construction of the Indexes:

a) The Quantity Index:

The Questions asked are:

1) How many close relatives do you have that you can speak to about your problems and call on for help: answers ranged from 1-6, with 1 indicating none and 6 indicating more than 20
2) How many close friends do you have that you can speak to about your problems and call on for help: answers ranged from 1-6, with 1 indicating none and 6 indicating more than 20
3) How many friends (not relatives or close friends) do you have: answers ranged from 1-12, with 1 indicating none and 12 indicating 81 to 90
4) How many new people do you meet outside of school or work each month that you intend to keep in contact with in the future: answers ranged from 1-6, with 1 indicating none and 6 indicating more than 20
5) How many clubs or groups do you belong to: answers ranged from 1 to 25

Therefore, the higher the number for any one of these questions, the more expansive the respondent's network is.

To construct the Base Index, first a variable named QUANTITY is created which is a sum of all of the values of the respondent's answers to the above five questions.

For example, if these were the respondent's answers to the five questions:

1) How many close relatives do you have that you can speak to about your problems and call on for help: 4
2) How many close friends do you have that you can speak to about your problems and call on for help: 2
3) How many friends (not relatives or close friends) do you have: 10
4) How many new people do you meet outside of school or work each month that you intend to keep in contact with in the future: 5
5) How many clubs or groups do you belong to: 13

Then their value for the QUANTITY variable would be the sum of these numbers 4+2+10+5+13=34.

Once QUANTITY is created for all respondents the following index is constructed, the Index is called QUANTITY_INDEX:

QUANTITY_INDEX= (QUANTITY-5)/(55-5)

Where 5 is the lowest value that a respondent can have for the QUANTITY variable and 55 is the highest value possible for the QUANTITY variable.

Therefore, if a value of 0 is obtained in the QUANTITY_INDEX, the respondent's network is very small, if the respondent gets a value of 1 on the QUANTITY_INDEX then the respondent's network is very large.

To construct the Reduced Index the same process is undertaken, however, the number of close friends and the number of friends (not close) are excluded from the calculation of the QUANTITY_reduced variable. The formula for the QUANTITY_reduced_INDEX is

QUANTITY__reduced_INDEX= (QUANTITY_reduced-3)/(37-3)

b) The Quality Index:

The Questions asked are:

1) How frequently do you see your relatives: answers ranged from 1-5, with 1 indicating not in the last month and 5 indicating everyday
2) How frequently do you speak to your relatives on the telephone: answers ranged from 1-5, with 1 indicating not in the last month and 5 indicating everyday
3) How frequently do you communicate with your relatives on the computer: answers ranged from 1-5, with 1 indicating not in the last month and 5 indicating everyday
4) How frequently do you see your friends: answers ranged from 1-5, with 1 indicating not in the last month and 5 indicating everyday
5) How frequently do you speak to your friends on the telephone: answers ranged from 1-5, with 1 indicating not in the last month and 5 indicating everyday
6) How frequently do you communicate with your friends on the computer: answers ranged from 1-5, with 1 indicating not in the last month and 5 indicating everyday
7) How frequently do attend groups meetings or participate in group activities: answers ranged from 1-5, with 1 indicating not in the past year and 5 at least once a week

Therefore, the higher the number for any one of these questions, the more highly maintained and thus the closer the respondent is to their network.

To construct the Base Index, first a variable named QUALITY is created which is a sum of all of the values of the respondent's answers to the above five questions.

For example, if these were the respondent's answers to the five questions:

1) How frequently do you see your relatives: 3

2) How frequently do you speak to your relatives on the telephone: 2
3) How frequently do you communicate with your relatives on the computer: 5
4) How frequently do you see your friends: 2
5) How frequently do you speak to your friends on the telephone: 5
6) How frequently do you communicate with your friends on the computer: 5
7) How frequently do attend groups meetings or participate in group activities: 3

Then their value for the QUALITY variable would be the sum of these numbers 3+2+5+2+5+5+3=25.

Once QUALITY is created for all respondents the following index is constructed, the Index is called QUALITY _INDEX:

QUALITY _INDEX= (QUALITY -7)/(35-7)

Where 7 is the lowest value that a respondent can have for the QUALITY variable and 35 is the highest value possible for the QUALITY variable.

Therefore, if a value of 0 is obtained in the QUALITY _INDEX, the respondent is not very close to their network, if the respondent gets a value of 1 on the QUALITY _INDEX then the respondent is very close to their network.

To construct the Reduced Index the same process is undertaken, however, the frequency of face to face contact with friends and the frequency of telephone contact with friends are excluded from the calculation of the QUALITY _reduced variable. The formula for the QUALITY _reduced_INDEX is

QUALITY __reduced_INDEX= (QUALITY _reduced-5)/(25-5)

c) The Composition Index:

The Questions asked were:

How many friends of yours:

1) Speak the same mother tongue as you: 1-5
2) Are from an ethnic background visibly different from your own: 1-5
3) Are from the same age group as you: 1-5
4) Have an education level similar to your own: 1-5
5) Have a family income similar to your own: 1-5
6) Are the same sex as you: 1-5

All of them run on this scale:
1: All   2: Most   3: About half   4: A few   5: None

Except for 2) Are from an ethnic background visibly different from your own where the scale is:

1: None   2: A few   3: About Half   4: Most   5: All

Therefore, the higher the number for any one of these questions, the more diverse the respondent's network is.

To construct the Base Index, first a variable named COMPOSITION is created which is a sum of all of the values of the respondent's answers to the above five questions.

For example, if these were the respondent's answers to the six questions:

How many friends of yours:

1) Speak the same mother tongue as you: 4
2) Are from and ethnic background visibly different from your own: 2
3) Are from the same age group as you: 2
4) Have an education level similar to your own: 3
5) Have a family income similar to your own: 5
6) Are the same sex as you: 3

 Then their value for the COMPOSITION variable was the sum of these numbers 4+2+2+3+5+3=19.

Once COMPOSITION was created for all respondents the following index was constructed, the Index was called COMPOSITION_INDEX:

COMPOSITION_INDEX= (COMPOSITION-6)/(30-6)

Where 6 was the lowest value that a respondent could have for the COMPOSITION variable and 30 was the highest value possible for the COMPOSITION variable.

Therefore, if a value of 0 was obtained in the COMPOSITION_INDEX, the respondent's friends were all similar to the respondent in the six characteristics, if the respondent got a value of 1 on the COMPOSITION_INDEX then the respondent's network was very different from the respondent.

To construct the Reduced Index the same process is undertaken, however, only the variables that indicate the number of friends that are from ethnic backgrounds that are different from the respondent's and the number of friends that are from the same age group as the respondent are included in the calculation of the COMPOSITION_reduced variable. The formula for the COMPOSITION_reduced_INDEX is

COMPOSITION__reduced_INDEX= (COMPOSITION_reduced-2)/(10-2)

Results:

Quantity Variables:

Table 1.1: Number of Close Relatives

Category	Basic Regression		Reduced Regression		No Work Variables	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
None	-.0219545	.034263	-.0062161	.031964	-.032408	.0372577
1 or 2	-.0403268	.0189679	-.0540607	.0177087	-.0355579	.0206412
3 to 5	-.0207486	.0152626	-.0224409	.0145871	-.0202111	.0166155
6 to 10	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted
11 to 20	-.0587282	.0219334	-.0505605	.0209741	-.0567453	.0238573
More than 20	-.109823	.0329535	-.0938479	.0311277	-.0995163	.0358378

Table 1.2: Number of Close Friends

Category	Basic Regression		Reduced Regression		No Work Variables	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
None	-.0115885	.0483503	Omitted	Omitted	.0026199	.0528411
1 or 2	-.0259671	.0200148	Omitted	Omitted	-.0260437	.0217921
3 to 5	-.0065957	.0149775	Omitted	Omitted	-.0030023	.016306
6 to 10	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted
11 to 20	-.0077713	.0248685	Omitted	Omitted	-.0068541	.0269503
More than 20	.0681396	.0458335	Omitted	Omitted	.0465259	.0497785

Table 1.3: Number of Friends (not close)

Category	Basic Regression		Reduced Regression		No Work Variables	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
None	Drop	Drop	Omitted	Omitted	Drop	Drop
1 or 2	-.0217639	.0443247	Omitted	Omitted	-.0179092	.0483916
3 to 5	-.0445863	.0233919	Omitted	Omitted	-.0769159	.0254335
6 to 10	-.0233214	.0164446	Omitted	Omitted	-.0361082	.0179031
11 to 20	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted
21 to 30	.011391	.0182544	Omitted	Omitted	.0205242	.0198612
31 to 40	-.0077093	.0304804	Omitted	Omitted	.0054365	.0331702
41 to 50	.0117134	.0254129	Omitted	Omitted	.0176826	.0276219
51 to 60	.068308	.0599086	Omitted	Omitted	.1324404	.0655802
61 to 70	.1938805	.1040216	Omitted	Omitted	.2647593	.1137978
71 to 80	-.0627749	.0855432	Omitted	Omitted	-.0655107	.093107
81 to 90	-.0121962	.0284985	Omitted	Omitted	.0026231	.0309098

Table 1.4: Number of New People That You Meet in a Month

Category	Basic Regression		Reduced Regression		No Work Variables	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
None	.0132163	.0146552	.0073252	.0140969	.0085979	.0159465
1 or 2	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted
3 to 5	-.0424157	.0194306	-.042337	.0187383	-.0486731	.021118
6 to 10	-.0301587	.0279012	-.0240918	.0264996	-.035735	.0302881

11 to 20	.0047133	.0437962	-.0190378	.041292	.0171432	.0475278
More than 20	-.0050585	.0672783	-.02926	.0625308	-.0259131	.0729345

Table 1.5: Number of Clubs or Groups that Respondent Belongs to

Category	Basic Regression		Reduced Regression		No Work Variables	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
1 to 25	.0149733	.0035579	.0164842	.00343	.0211727	.0038709

Quality Variables:

Table 2.1: Frequency of Face-to-Face Contact with Relatives

Category	Basic Regression		Reduced Regression		No Work Variables	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
Not in The Last Month	-.0342059	.0199151	-.0523772	.0189062	-.0501749	.0216506
Once A Month	-.0033278	.0192219	-.0070418	.018525	-.0139647	.0209006
A Few Times a Month	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted
A Few Times a Week	-.0071344	.0158085	-.0103995	.0152391	-.0064246	.0172028
Everyday	.0116793	.0228225	.0167871	.0218933	.00291	.024842

Table 2.2: Frequency of Telephone Contact with Relatives

Category	Basic Regression		Reduced Regression		No Work Variables	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
Not in The Last Month	-.0761689	.0331105	-.059359	.0309576	-.0649025	.03584
Once A Month	-.0536439	.0267356	-.0441349	.0255168	-.0550438	.0290196
A Few Times a Month	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted
A Few Times a Week	.0127213	.0154217	.0115983	.0147668	.0093482	.0167635
Everyday	.0242388	.020631	.0186601	.0197106	.0274358	.0224641

Table 2.3: Frequency of Computer Contact with Relatives

Category	Basic Regression		Reduced Regression		No Work Variables	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
Not in The Last Month	.025197	.0165686	.0123649	.0158845	.0403994	.0180181
Once A Month	.0246847	.022	.0086491	.0213421	.0189456	.0239642
A Few Times a	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted

Month					
A Few Times a Week	.0022944	.0186048	-.002824	.0179347	-.0026898	.020222
Everyday	-.0498695	.0292642	-.0489416	.0281519	-.0430407	.0318941

Table 2.4: Frequency of Face-to-Face Contact with Friends

Category	Basic Regression		Reduced Regression		No Work Variables	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
Not in The Last Month	-.028917	.0374817	Omitted	Omitted	-.017553	.0408177
Once A Month	-.0222363	.0272717	Omitted	Omitted	-.0336589	.0297666
A Few Times a Month	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted
A Few Times a Week	-.0193899	.0156562	Omitted	Omitted	-.021345	.0170428
Everyday	-.0292764	.0194944	Omitted	Omitted	-.0109192	.0212189

Table 2.5: Frequency of Telephone Contact with Friends

Category	Basic Regression		Reduced Regression		No Work Variables	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
Not in The Last Month	-.0203756	.0335479	Omitted	Omitted	-.0283284	.0365342
Once A Month	-.0002502	.0293016	Omitted	Omitted	-.0174604	.0319821
A Few Times a Month	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted
A Few Times a Week	-.0056854	.0159144	Omitted	Omitted	-.0102715	.0173266
Everyday	.015178	.0210523	Omitted	Omitted	.0098329	.0228885

Table 2.6: Frequency of Computer Contact with Friends

Category	Basic Regression		Reduced Regression		No Work Variables	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
Not in The Last Month	-.0526264	.0263568	-.0636148	.0252191	-.0545617	.0286909
Once A Month	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted
A Few Times a Month	.020663	.0270148	.0137973	.025831	.0125614	.02941
A Few Times a Week	.0240874	.0269606	.0138025	.0255039	.0230031	.0293517
Everyday	-.0289376	.0305342	-.0283229	.0284805	-.0290658	.0332198

Table 2.7: Frequency of Group Meetings or Activities Attendance

Category	Basic Regression		Reduced Regression		No Work Variables	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
Not in The Past Year	.0390486	.0285192	.0245213	.0269735	.0388569	.0310843
Once or Twice a Year	.0514715	.0202067	.0367959	.0194932	.0591363	.022013
Once a Month	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted
A Few Times a Month	-.0096721	.0188437	-.0209811	.0181808	-.0065878	.0205415
At Least Once A Week	-.0124359	.0169498	-.0280083	.0162427	-.0111256	.0184641

Network Composition Variables:

Table 3.1: Amount of Friends that Speak the Same Mother-Tongue As the Respondent

Category	Basic Regression		Reduced Regression		No Work Variables	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
All	-.0020541	.0271058	Omitted	Omitted	.009301	.0294803
Most	-.0208821	.0283325	Omitted	Omitted	.0015046	.030792
About Half	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted
Few	-.0564415	.0358911	Omitted	Omitted	-.0441928	.03902
None	-.0114199	.0389546	Omitted	Omitted	.0160987	.0423508

Table 3.2: Amount of Friends that Are From An Ethnic Background that is Visibly Different from that of the Respondent

Category	Basic Regression		Reduced Regression		No Work Variables	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
None	.0731393	.0261569	.080676	.0239862	.0425231	.0283962
Most	.0411895	.0246659	.0417387	.0230283	.0113846	.0267534
About Half	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted
Few	.0600437	.0373016	.0568709	.0351674	.0032121	.0404295
All	.0496554	.0481333	.0333567	.0457712	.0033542	.0521591

Table 3.3: Amount of Friends that Are of the Same Sex As the Respondent

Category	Basic Regression		Reduced Regression		No Work Variables	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
All	-.0277329	.0196966	Omitted	Omitted	-.0389383	.0214661
Most	.0025384	.013631	Omitted	Omitted	-.0175263	.014825
About Half	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted
Few	-.0557283	.0265025	Omitted	Omitted	-.0610378	.0288117
None	.0568752	.1050307	Omitted	Omitted	-.0838415	.1124677

Table 3.4: Amount of Friends that Have The Same Education Level As the Respondent

Category	Basic Regression		Reduced Regression		No Work Variables	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
All	.0283778	.0203705	Omitted	Omitted	.0518971	.0221792
Most	.0351133	.0162675	Omitted	Omitted	.0561918	.017701
About Half	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted
Few	.0189903	.0215431	Omitted	Omitted	.0367297	.0234752
None	-.0182152	.0432222	Omitted	Omitted	-.0182624	.0471291

Table 3.5: Amount of Friends that Are From a Family Income that is Similar to that of the Respondent

Category	Basic Regression		Reduced Regression		No Work Variables	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
All	-.0314622	.0230053	Omitted	Omitted	-.0055461	.0250269
Most	.0039059	.0149611	Omitted	Omitted	.0029569	.0162888
About Half	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted
Few	.0226652	.0186707	Omitted	Omitted	.0280267	.0202948
None	.0048486	.03939	Omitted	Omitted	.0044485	.042924

Table 3.6: Amount of Friends that are in the Same Age Group As the Respondent

Category	Basic Regression		Reduced Regression		No Work Variables	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
All	.0200711	.0208369	.0067053	.018894	.0236577	.022699
Most	.0327452	.0160435	.0375865	.0150425	.0373732	.0174757
About Half	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted
Few	-.0152489	.0223801	-.0302557	.0207986	-.0019268	.0243525
None	.0505196	.0587541	.0022696	.0527893	.055884	.064218

Other Controls for Dispersed Variable Regressions:

Table 4.1: Age Group

Category	Basic Regression		Reduced Regression		No Work Variables	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
15 to 17	-1.038321	.0602427	-1.01764	.0571754	-1.333682	.0632206
18 to 19	-.817451	.0454384	-.8059115	.0439418	-.9551279	.0488618
20 to 24	-.4530639	.0296204	-.4261519	.0283031	-.5189877	.0321574
25 to 29	-.2027779	.0239469	-.1938308	.0230935	-.2012685	.0261099
30 to 34	-.1300836	.0224412	-.1188621	.0217351	-.1339856	.0244527
35 to 39	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted
40 to 44	.0273738	.021795	.0315135	.0209033	.0363199	.0237688
45 to 49	.0204938	.0230126	.0313347	.0220709	.0365237	.025089
50 to 54	.0680016	.0249861	.0659021	.0239228	.0576513	.0272703
55 to 59	.0541713	.0282551	.0530783	.0268819	.0445134	.0308565
60 to 64	.0399898	.0418579	.0170825	.0393529	.0029991	.045191
65 to 69	.2332136	.0646957	.2359015	.0608222	.134322	.0697177
70 to 74	.3022597	.1261587	.2024862	.1152683	.1613312	.1296963
75 to 79	-.3408778	.3485782	.1223376	.2500887	-.0978891	.3818837
80 and older	Drop	Drop	Drop	Drop	Drop	Drop

Table 4.2: Sex

Category	Basic Regression		Reduced Regression		No Work Variables	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
Male	.2065427	.014357	.2086908	.0135891	.2769921	.0154238
Female	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted

Table 4.3: Marital Status

Category	Basic Regression		Reduced Regression		No Work Variables	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
Married	.0321304	.0178497	.0240655	.0168057	.0361174	.0194615
Living Common-Law	.0164143	.0229063	.0061156	.0219585	.0207237	.0249989
Widowed	.1323863	.0550409	.1360696	.0503249	.1546053	.0601123
Separated	.025641	.0318572	.0238297	.0306373	.0499464	.0347898
Divorced	.0761097	.0273792	.0548679	.0261256	.0984138	.0298291
Single (Never Married)	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted

Table 4.4: Province of Residence

Category	Basic Regression		Reduced Regression		No Work Variables	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
Newfoundland and Labrador	-.1509293	.0295842	-.1471974	.0283587	-.1905868	.0321705
Prince Edward Island	-.1726014	.0409359	-.1662822	.039099	-.1968521	.0444702
Nova Scotia	-.1495151	.0283495	-.1306648	.0272967	-.1655937	.0307546
New Brunswick	-.1658836	.0287194	-.1613079	.0275327	-.1894359	.0312523
Quebec	-.0609462	.0186211	-.0573118	.017721	-.1095649	.0202451
Ontario	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted
Manitoba	-.1257613	.0279257	-.1107597	.0265612	-.1358212	.0303939
Saskatchewan	-.0914698	.0285043	-.0917534	.0272659	-.1038126	.0308935
Alberta	-.016458	.0227814	.004098	.0216558	-.0095137	.0248309
British Columbia	-.0409841	.0195272	-.0254654	.0187803	-.0685955	.0211853

Table 4.5: Urban/ Rural Indicator

Category	Basic Regression		Reduced Regression		No Work Variables	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
Larger Urban Centres	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted
Rural and Small Towns	-.0549738	.0168393	-.0541638	.0160984	-.0650811	.018307
Prince Edward Island	Drop	Drop	Drop	Drop	Drop	Drop

Table 4.6: Main Activity of Respondent in the Last Year

Category	Basic Regression		Reduced Regression		No Work Variables	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
Working at a paid job or business	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted
Looking for Paid Work	-.3080867	.0559757	-.2413138	.0515162	-.7227723	.0582778
Going to School	-.4331716	.0303722	-.4475427	.0291815	-.8253435	.030633
Caring for Children	-.3708365	.0354262	-.3452669	.0342806	-.7202135	.0371095
Household Work	-.4970802	.0622739	-.4751386	.058018	-.9285956	.0653085
Retired	.1198772	.0613854	.1604764	.0560772	-.3383804	.0641334
Maternity/ Paternity Leave	-.0131438	.1061841	-.0041245	.1070066	-.2034655	.1118635
Long Term Illness	-.2424686	.1111295	-.2392521	.1071469	-.5133505	.1212671
Other	-.1510125	.0739744	-.1761071	.0693298	-.551208	.078309

Table 4.7: North American Industrial Classification

Category	Basic Regression		Reduced Regression		No Work Variables	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
Agriculture	-.2828263	.0753129	-.2729813	.0726754	-.0841994	.081278
Forestry, Fishing, Mining, Oil and Gas	.1655621	.0519066	.1520021	.049616	.1751181	.0564711
Utilities	.2447945	.0610163	.235451	.0598668	.2132517	.0668275
Construction	-.0490283	.039216	-.0488139	.0370525	-.0669421	.0426173
Manufacturing	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted
Trade	-.2007334	.0297367	-.2051944	.0284256	-.2079765	.0324121
Transportation and Warehousing	-.0355938	.0373582	-.0580707	.0352801	-.0389426	.0407644
Finance, Insurance, Real Estate and Leasing	.0359396	.0324528	.0281879	.0311362	.0218979	.0354142
Professional, Scientific and Technical Services	.0182559	.0321342	-.0067674	.0306412	-.0214905	.0349896
Management, Administrative and other Support	-.2256124	.0421607	-.22678	.0403503	-.2859283	.045689
Educational Services	-.1764857	.0331508	-.191575	.0317361	-.2586177	.0360865
Health Care and	-.1996507	.0328513	-.2078559	.031482	-.2542211	.0357653

Category	Basic Regression		Reduced Regression		No Work Variables	
Social Assistance						
Information, Culture and Recreation	-.1214448	.0345174	-.1416909	.0330919	-.1728801	.0375185
Accommodation and Food Services	-.2974601	.0397702	-.3252155	.0379278	-.3160396	.0430161
Other Services	-.3179747	.0385274	-.3368528	.0368066	-.3414052	.0417076
Public Administration	.0376964	.030937	.0217322	.0295185	.0048246	.0337163

Table 4.8: Standard Occupational Classification

Category	Basic Regression		Reduced Regression		No Work Variables	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
Management Occupations	.1832814	.0236046	.1880101	.0226979	.2770172	.0255159
Business, Finance and Administrative Occupations	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted
Natural and Applied Sciences	.1009295	.0255825	.1022615	.0244702	.0885194	.0278949
Health Occupations	.2951791	.0324864	.282092	.0314408	.3125382	.0354367
Occupations in Social Science, Education	.1091181	.0261222	.110152	.0252619	.1165324	.0284202
Artistic/Culture/ Recreation/Sport	-.0993265	.032726	-.100182	.0315841	-.1315647	.0352878
Sales and Services Occupations	-.0565986	.020567	-.0490848	.0197539	-.0609365	.0223568
Trades, Transport and Equipment	.0010131	.0280362	.0085444	.0266395	-.0014721	.0304559
Occupations Unique to Primary Industry	-.0897184	.0550787	-.0837604	.053658	-.1681004	.0590875
Occupations Unique to Processing and Manufacturing	-.0334231	.0389684	-.0600683	.0371839	-.0432378	.0423658

Table 4.9: Highest Level of Education Obtained

Category	Basic Regression		Reduced Regression		No Work Variables	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
Doctorate/Masters/Some Graduate	.39143	.0297596	.3986208	.0284469	.4564953	.0323654
Bachelor's Degree	.2768941	.0238573	.2801273	.0227543	.3008474	.0259972
Diploma/ Certificate	.1056087	.0243509	.1015735	.0231686	.1174324	.0265425

from Community College						
Diploma/Certificate form Trade/Technical school	.0778044	.0250171	.0686619	.023781	.0782717	.0272715
Some University	.0741285	.0279236	.0709007	.0267622	.0684789	.0303544
Some Community College/CEGEP/nursing	.0991751	.0313704	.0674777	.0297784	.100265	.0340998
Some Trade/Technical School	.0676246	.0377733	.0510758	.0352474	.0591638	.0411398
High School Diploma	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted
Some Secondary/ High School	-.0399766	.0346727	-.0474033	.0324463	-.0566513	.0375631
Elementary School/ No School	-.1495646	.1237475	-.1213394	.1125056	-.0436593	.1322405

Table 4.10: Main Source of Income Over the Last Year

Category	Basic Regression		Reduced Regression		No Work Variables	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
No Income	Drop	Drop	Drop	Drop	Drop	Drop
Wages, Salaries, Commissions and tips	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted
Employment Insurance	.1815799	.0551554	.1777965	.0523753	.0059724	.0590711
Worker's Compensation	.4494877	.1864057	.512526	.1758005	.2710638	.2039765
Benefits from Canada or Quebec Pension Plan	-.3452482	.1214764	-.3567742	.1125197	-.5402793	.1307429
Retirement Pensions, Superannuation and Annuities	.4210408	.0675554	.4126153	.0613877	.1324967	.0722288
Basic Old Age Security	-.6858697	.2938597	-.3576971	.231175	-.701918	.2789055
Guaranteed Income Supplement or Spouse Allowance	.1417715	.226583	.1221395	.2286764	-.0150658	.2475496
Child Tax Benefit	-1.026318	.2560971	-1.063037	.2616471	-1.243909	.2530186
Provincial or Municipal Social Assistance or Welfare	.158007	.0991324	.037888	.0921248	-.1791269	.107799
Child Support/Alimony	.3901957	.147698	.3203061	.1333361	.0494169	.1610595
Other Income	.2605092	.038757	.2479936	.0370089	.0575198	.0412447

Table 4.11: Number of Weeks Worked in the Past Year

Category	Basic Regression		Reduced Regression		No Work Variables	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
1 to 52	.0165744	.0006114	.0163234	.000585	Omitted	Omitted

Table 4.12: Number of Hours Worked at All Jobs in a Week

Category	Basic Regression		Reduced Regression		No Work Variables	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
1 to 75 or more	.0148205	.0005568	.0150441	.0005339	Omitted	Omitted

Indexes:

Table 5.1: Regression Including Reduced and Base Indexes

Index	Base Regression		No Work Variables	
	Coefficient	Standard Error	Coefficient	Standard Error
Quantity Base Index	.1853997	.0769063	.3692917	.0834096
Quantity Reduced Index	.133461	.0794122	.3080177	.0860518
Quality Base Index	.0528828	.0440061	.0531437	.0479235
Quality Reduced Index	.0725251	.0352896	.0718398	.0382966
Composition Base Index	-.1723093	.0494697	-.1835785	.0537434
Composition Reduced Index	-.1615296	.0346092	-.1583533	.0375377

Other Controls for Index Regressions:

Table 6.1: Age Group

Category	Basic Indexes in Base Regression		Reduced Indexes in Base Regression		Basic Indexes with No Work Variables		Reduced Indexes with No Work Variables	
	Coefficient	Std. Error	Coefficient	Std. Error	Coefficient	Std. Error	Coefficient	Std. Error
15 to 17	-1.043812	.0599463	-1.034348	.057117	-1.323355	.0628739	-1.318806	.0598544
18 to 19	-.8335331	.045155	-.8242389	.0440056	-.9609654	.0485354	-.944725	.047141
20 to 24	-.4702957	.0294877	-.4472174	.0282825	-.5354754	.0319914	-.5065339	.0306087
25 to 29	-.2076502	.0240027	-.2030056	.023168	-.2068172	.0261614	-.2016828	.025193
30 to 34	-.1339641	.0225923	-.1219798	.021858	-.1398814	.0246043	-.1269613	.0237497
35 to 39	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted
40 to 44	.0271575	.0219222	.0335228	.0210275	.0345068	.0238925	.0397986	.0228484
45 to 49	.0171679	.023183	.0286912	.0222052	.0329698	.0252535	.0417827	.0241212
50 to 54	.0539475	.025055	.0575256	.0239945	.0439868	.0273243	.046515	.0261093
55 to 59	.0391118	.0283723	.0456621	.0269809	.0314761	.0309618	.0425429	.0293535
60 to 64	.0303751	.0419971	.007582	.0394607	-.0087443	.0453158	-.0350676	.0425187
65 to 69	.1983505	.0649562	.2181048	.0610722	.093081	.0699637	.1187156	.0653604
70 to 74	.2635809	.1265573	.1964725	.1157536	.1218896	.1301675	.0688712	.1200764
75 to 79	-.3940526	.3516486	.097859	.2518662	-.1287918	.3849877	.1195908	.2752643
80 and older	Drop	Drop	Drop	Drop	Drop	Drop	Drop	Drop

Table 6.2: Sex

Category	Basic Indexes in Base Regression		Reduced Indexes in Base Regression		Basic Indexes with No Work Variables		Reduced Indexes with No Work Variables	
	Coefficient	Std. Error	Coefficient	Std. Error	Coefficient	Std. Error	Coefficient	Std. Error
Male	.2079551	.0139869	.2070604	.0134262	.2790644	.0150213	.2812361	.0143616
Female	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted

Table 6.3: Marital Status

Category	Basic Indexes in Base Regression		Reduced Indexes in Base Regression		Basic Indexes with No Work Variables		Reduced Indexes with No Work Variables	
	Coefficient	Std. Error	Coefficient	Std. Error	Coefficient	Std. Error	Coefficient	Std. Error
Married	.0359835	.017459	.0302219	.0166899	.0367525	.0190235	.0319419	.0181284
Living Common-Law	.0264224	.0228708	.0128851	.0220353	.0271436	.0249471	.0155212	.0239771
Widowed	.1455378	.0554111	.1405907	.0506495	.1639206	.0604837	.1485224	.0549551
Separated	.0321272	.0319752	.0311244	.0307611	.0542408	.0349027	.0516719	.0334982
Divorced	.0787927	.0275163	.0566721	.0262651	.0999766	.0299604	.0755831	.0285202
Single (Never Married)	Drop	Drop	Drop	Drop	Drop	Drop	Drop	Drop

Table 6.4: Province of Residence

Category	Basic Indexes in Base Regression		Reduced Indexes in Base Regression		Basic Indexes with No Work Variables		Reduced Indexes with No Work Variables	
	Coefficient	Std. Error	Coefficient	Std. Error	Coefficient	Std. Error	Coefficient	Std. Error
Newfoundland and Labrador	-.136933	.0291513	-.1383225	.0280916	-.1762209	.0316798	-.1808317	.0304612
Prince Edward Island	-.1700868	.0410389	-.1612919	.0391873	-.1954367	.0445569	-.1851371	.0422542
Nova Scotia	-.152315	.0283028	-.1287162	.0273133	-.1670076	.0306935	-.1471384	.0295716
New Brunswick	-.163797	.028432	-.1587787	.0273764	-.1839286	.0309298	-.1834446	.0296282
Quebec	-.0383693	.0180307	-.0401685	.0173374	-.0871043	.0195866	-.0905694	.0187944
Ontario	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted
Manitoba	-.1207487	.0280896	-.1041121	.026743	-.1331568	.0305557	-.125259	.0290117
Saskatchewan	-.0853045	.0285613	-.0854214	.0273847	-.0958043	.0309369	-.096085	.0296049
Alberta	-.0152544	.022795	.0036954	.0217135	-.0123493	.0248345	.006487	.0236059
British Columbia	-.0380684	.019505	-.0239277	.0188113	-.0683637	.0211435	-.0564025	.0203243

Table 6.5 : Urban/Rural Indicator

Category	Basic Indexes in Base Regression		Reduced Indexes in Base Regression		Basic Indexes with No Work Variables		Reduced Indexes with No Work Variables	
	Coefficient	Std. Error	Coefficient	Std. Error	Coefficient	Std. Error	Coefficient	Std. Error
Larger Urban Centres	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted
Rural and	-.052081	.016774	-.0503506	.0160914	-.0631505	.0182329	-.0601247	.0174527

Small Towns								
Prince Edward Island	Drop	Drop	Drop	Drop	Drop	Drop	Drop	Drop

Table 6.6: Main Activity of Respondent in the Last Year

Category	Basic Indexes in Base Regression		Reduced Indexes in Base Regression		Basic Indexes with No Work Variables		Reduced Indexes with No Work Variables	
	Coefficient	Std. Error	Coefficient	Std. Error	Coefficient	Std. Error	Coefficient	Std. Error
Working at a paid job or business	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted
Looking for Paid Work	-.3358632	.0563474	-.2655513	.0518205	-.7531919	.0585818	-.6849021	.0535067
Going to School	-.4397168	.0304254	-.4501963	.0292439	-.833247	.0306527	-.8443179	.0293775
Caring for Children	-.3710327	.035572	-.3480589	.034443	-.7180291	.0372698	-.6955672	.0360294
Household Work	-.4978397	.0626814	-.4828393	.0583586	-.9334408	.0656946	-.9098297	.061144
Retired	.1274059	.0616755	.1609222	.0564451	-.3361669	.0644076	-.2693836	.0589913
Maternity/ Paternity Leave	.0054332	.1070131	.0068025	.1077635	-.1824804	.1127227	-.1841311	.1132202
Long Term Illness	-.228323	.1120571	-.2250041	.107934	-.5042852	.1221938	-.5359035	.1172777
Other	-.1605511	.0743913	-.1911053	.0697453	-.5570862	.0787385	-.5693243	.0738472

Table 6.7: North American Industrial Classification

Category	Basic Indexes in Base Regression		Reduced Indexes in Base Regression		Basic Indexes with No Work Variables		Reduced Indexes with No Work Variables	
	Coefficient	Std. Error	Coefficient	Std. Error	Coefficient	Std. Error	Coefficient	Std. Error
Agriculture	-.2663421	.0757017	-.2563	.0729809	-.0753735	.0816743	-.0621124	.0781848
Forestry, Fishing, Mining, Oil and Gas	.1715627	.0521835	.1572517	.0499022	.1758985	.0567337	.1596123	.05415
Utilities	.2634532	.061409	.2565056	.0602345	.230611	.0672056	.2201403	.0657596
Construction	-.0592376	.0394533	-.0549815	.0372829	-.0763761	.0428544	-.0730795	.0403857
Manufacturing	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted
Trade	-.2070122	.029978	-.2091294	.028611	-.212803	.0326615	-.2172923	.0311046
Transportation and Warehousing	-.0378899	.0376058	-.0562579	.035524	-.0379936	.0410085	-.055877	.0386521
Finance, Insurance, Real Estate and Leasing	.0390903	.0326534	.031608	.0313353	.0286248	.0356109	.0229283	.034089
Professional,	.0152356	.0323074	-.0059168	.0307877	-.0221604	.0351591	-.0502031	.0334019

Category	Coefficient	Std. Error	Coefficient	Std. Error	Coefficient	Std. Error	Coefficient	Std. Error
Scientific and Technical Services								
Management, Administrative and other Support	-.2367341	.0424637	-.2359434	.0406085	-.2971946	.0459843	-.2856033	.0439123
Educational Services	-.1785022	.0333507	-.1827847	.0319167	-.2583421	.0362867	-.2599518	.0346481
Health Care and Social Assistance	-.2043389	.0330681	-.2045993	.031685	-.2578813	.0359762	-.2566774	.0343951
Information, Culture and Recreation	-.1264823	.0347686	-.1393512	.0332911	-.1768863	.0377681	-.188574	.0360985
Accommodation and Food Services	-.3008232	.0400367	-.323971	.0381699	-.3189853	.0432894	-.3400551	.0411952
Other Services	-.3213448	.0387501	-.3368042	.0370047	-.346959	.0419237	-.3556807	.0399866
Public Administration	.0344858	.0311242	.0262566	.0296847	.0045498	.033907	-.0031428	.0322684

Table 6.8: Standard Occupational Classification

Category	Basic Indexes in Base Regression		Reduced Indexes in Base Regression		Basic Indexes with No Work Variables		Reduced Indexes with No Work Variables	
	Coefficient	Std. Error	Coefficient	Std. Error	Coefficient	Std. Error	Coefficient	Std. Error
Management Occupations	.1916594	.0237473	.1927711	.0228129	.2847491	.0256602	.2887024	.0245898
Business, Finance and Administrative Occupations	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted
Natural and Applied Sciences	.10193	.0257615	.10387	.0246119	.0902766	.0280668	.0878827	.0267347
Health Occupations	.3093641	.0326746	.2936044	.0315825	.3302015	.0356169	.3136785	.0343439
Occupations in Social Science, Education	.1151375	.0263247	.1126714	.0254149	.1231382	.0286309	.1173904	.0275663
Artistic/Culture/ Recreation/Sport	-.091378	.032997	-.0996388	.0317887	-.1248814	.035562	-.1287892	.0342116
Sales and Services Occupations	-.0560425	.0207085	-.0513583	.0198822	-.058158	.0224967	-.0532348	.0215495
Trades, Transport and Equipment	-.0028964	.0281261	.0049712	.026771	-.003075	.0305385	.0092106	.029006
Occupations Unique to Primary Industry	-.0912839	.0553886	-.0910995	.053926	-.1597643	.0593727	-.1595286	.0577218
Occupations Unique to	-.0501207	.0391176	-.0643808	.0373463	-.0537608	.0425025	-.0634895	.0404698

Processing and Manufacturing								

Table 6.9: Highest Level of Education Obtained

Category	Basic Indexes in Base Regression		Reduced Indexes in Base Regression		Basic Indexes with No Work Variables		Reduced Indexes with No Work Variables	
	Coefficient	Std. Error	Coefficient	Std. Error	Coefficient	Std. Error	Coefficient	Std. Error
Doctorate/ Masters/Some Graduate	.4110216	.0293074	.4140539	.0282131	.4755387	.031833	.4807947	.0305807
Bachelor's Degree	.2885501	.0237273	.2899864	.0226768	.3116484	.0258322	.3160227	.0246391
Diploma/ Certificate from Community College	.1124068	.0244673	.1075332	.0232695	.1242853	.0266462	.1203148	.0252794
Diploma/Certificate form Trade/Technical school	.0842439	.025149	.074802	.0239153	.0853697	.0273902	.0787344	.0259857
Some University	.0780966	.0279917	.0724394	.0267925	.0733425	.0304009	.0710941	.0290449
Some Community College/ CEGEP /nursing	.1023455	.0315732	.0682356	.0299554	.1069833	.0342963	.0706239	.032461
Some Trade/ Technical School	.0743673	.0379977	.0528654	.0354698	.0678167	.041364	.0349167	.0384825
High School Diploma	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted
Some Secondary/ High School	-.0605391	.0348727	-.0636144	.0326346	-.0754034	.0377594	-.0777222	.0352201
Elementary School/ No School	-.1915503	.1241485	-.1393843	.1131375	-.0725902	.1326317	-.0192955	.1210968

Table 6.10: Main Source of Income Over the Last Year

Category	Basic Indexes in Base Regression		Reduced Indexes in Base Regression		Basic Indexes with No Work Variables		Reduced Indexes with No Work Variables	
	Coefficient	Std. Error	Coefficient	Std. Error	Coefficient	Std. Error	Coefficient	Std. Error
No Income	Drop	Drop	Drop	Drop	Drop	Drop	Drop	Drop
Wages, Salaries, Commissions and tips	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted	Omitted
Employment Insurance	.1879432	.0555881	.1794305	.0527186	.0089732	.0595009	.0158371	.0563342
Worker's Compensation	.4223299	.1873825	.51181	.1769841	.2224008	.2049079	.3036095	.1930041
Benefits from Canada or Quebec Pension Plan	-.3760785	.1221499	-.3790191	.1130688	-.5691075	.1314168	-.5472962	.1191812
Retirement Pensions, Superannuation and Annuities	.430604	.0680207	.422987	.061796	.1429342	.0727327	.1275094	.0660558

Basic Old Age Security	-.6254925	.295735	-.3571669	.2327378	-.5773826	.2807406	-.4965625	.2326915
Guaranteed Income Supplement or Spouse Allowance	.1362309	.2283051	.1365002	.23005	.0035037	.2493778	.0174731	.2506574
Child Tax Benefit	-1.060758	.2622559	-1.079721	.265336	-1.280499	.2573947	-1.289691	.2589502
Provincial or Municipal Social Assistance or Welfare	.1502019	.0998038	.0335403	.0926471	-.182922	.108491	-.3292046	.0987358
Child Support/Alimony	.4185877	.1488462	.3071609	.1344117	.0444053	.1622655	-.0422624	.1460808
Other Income	.2669435	.0390004	.2491375	.0372446	.0636789	.0414752	.0341192	.0394064

Table 6.11: Number of Weeks Worked in the Past Year

Category	Basic Indexes in Base Regression		Reduced Indexes in Base Regression		Basic Indexes with No Work Variables		Reduced Indexes with No Work Variables	
	Coefficient	Std. Error	Coefficient	Std. Error	Coefficient	Std. Error	Coefficient	Std. Error
1 to 52	.0166259	.000614	.0162758	.0005881	Omitted	Omitted	Omitted	Omitted

Table 6.12: Number of Hours Worked at All Jobs in a Week

Category	Basic Indexes in Base Regression		Reduced Indexes in Base Regression		Basic Indexes with No Work Variables		Reduced Indexes with No Work Variables	
	Coefficient	Std. Error	Coefficient	Std. Error	Coefficient	Std. Error	Coefficient	Std. Error
1 to 75 or more	.0147728	.0005589	.0150108	.0005366	Omitted	Omitted	Omitted	Omitted

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