

An Empirical Examination of Formal and Informal Volunteering in Canada

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Abstract Using data from the 2008 General Social Survey of Canada, this study examines the factors associated with individuals' propensity to engage in formal and informal volunteering. The results show that social networks increase the likelihood of both formal and informal volunteering, but social trust and human capital increase only the likelihood of formal volunteering and not of informal care. The findings also reveal interesting cultural influences and regional differences in the propensity to engage in formal and informal volunteering, especially between French-speaking Canadians and English-speaking Canadians, and those living in Quebec and outside of Quebec. Native-born Canadians are more likely to volunteer than their immigrant counterparts, but they are similar to immigrants in the propensity to provide informal care. Additionally, women are found to be more likely to engage in formal volunteering and informal care than men. Theoretical and practical implications of the findings are discussed.

Résumé Cette étude se penche, à la lumière des données de l'Enquête sociale générale du Canada de 2008, sur les facteurs associés à l'inclinaison des individus à réaliser des activités bénévoles formelles et informelles. Les résultats démontrent que les réseaux sociaux augmentent la probabilité de ces deux types de bénévoles, mais que la confiance sociale et le capital humain ne rehaussent que les activités bénévoles volontaires probables et non la prestation informelle de soins. Les résultats révèlent aussi des influences culturelles et différences régionales intéressantes dans l'inclinaison des individus à réaliser des activités bénévoles formelles et informelles, surtout entre les Canadiens francophones et anglophones et ceux vivant au Québec et en dehors. Les Canadiens d'origine sont plus enclins au bénévolat que

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leurs homologues immigrants, mais les deux groupes ont la même inclinaison envers la prestation de soins informels. Les femmes sont en outre plus enclines à participer à des activités bénévoles formelles et informelles que les hommes. Les implications théoriques et pratiques des résultats sont ici traitées.

Zusammenfassung Diese Studie untersucht anhand von Daten aus der 2008 in Kanada durchgeführten allgemeinen Bevölkerungsumfrage (General Social Survey) die Faktoren im Zusammenhang mit der Neigung von Personen zur Ausübung einer formellen und informellen ehrenamtlichen Tätigkeit. Die Ergebnisse zeigen, dass soziale Netzwerke die Wahrscheinlichkeit für die Ausübung sowohl einer formellen als auch einer informellen ehrenamtlichen Tätigkeit erhöhen, während soziales Vertrauen und Humankapital lediglich die Wahrscheinlichkeit einer formellen ehrenamtlichen Tätigkeit, nicht aber einer informellen Fürsorge erhöhen. Die Ergebnisse zeigen zudem interessante kulturelle Einflüsse und regionale Unterschiede in Verbindung mit der Neigung zur Ausübung einer formellen und informellen ehrenamtlichen Tätigkeit, insbesondere zwischen französisch und englisch sprechenden Kanadiern und zwischen den Bewohner von Quebec und den Menschen außerhalb Quebecs. Die Wahrscheinlichkeit für die Ausübung einer ehrenamtlichen Tätigkeit ist unter gebürtigen Kanadiern größer als bei Einwanderern; doch die Neigung zur Bereitstellung einer informellen Fürsorge ist ähnlich. Weiterhin zeigt sich, dass Frauen eher zu einer formellen ehrenamtlichen Tätigkeit und informellen Fürsorge neigen als Männer. Es werden theoretische und praktische Implikationen der Ergebnisse diskutiert.

Resumen Utilizando datos de la Encuesta Social General 2008 de Canadá, el presente estudio examina los factores asociados a la propensión de los individuos a participar en actividades formales e informales de voluntariado. Los resultados muestran que las redes sociales aumentan la probabilidad del voluntariado tanto formal como informal, pero la confianza social y el capital humano aumentan solamente la probabilidad del voluntariado formal y no de los cuidados informales. Los hallazgos revelan también influencias culturales y diferencias regionales interesantes en la propensión a participar en actividades de voluntariado formales e informales, especialmente entre canadienses de habla francesa y canadienses de habla inglesa, y aquellos que viven en Quebec y fuera de Quebec. Hay más probabilidades de que los nativos canadienses realicen voluntariado que sus contrapartes inmigrantes, pero son similares a los inmigrantes con respecto a la propensión a proporcionar cuidados informales. Asimismo, se encontró que hay más probabilidades de que las mujeres participen en actividades de voluntariado formales y cuidados informales que los hombres. Se tratan también las implicaciones teóricas y prácticas de los hallazgos.

Keywords Informal volunteering · Formal volunteering · Social networks · Trust · Human capital · Cultural influences

Introduction

The volunteering literature squarely defines and studies formal volunteering. Although volunteering is defined as a pro-social behavior that provides “help to others, a group, an organization, a cause, or the community at large, without expectation of material reward” (Musick and Wilson 2008, p. 3), most of the literature focuses on only one dimension of this activity, which is undertaken through an organization. There is considerable research on the determinants of formal volunteering, but much less attention is paid to other pro-social behaviors, although they are ubiquitous in society (Independent Sector 1999; Wilson 2012; Wilson and Musick 1997). Indeed, recent critiques of civil society have pointed to the fact that participation in pro-social behaviors is multifaceted and by simply focusing on formal volunteering, scholars miss the plurality of behaviors which enable civic engagement (Cnaan and Parks 2015). This paper is a first step in including behaviors not done through organizations what we call informal volunteering, in a model of pro-social behaviors. In doing so we recognize that while individuals may want to participate in formal volunteering, they may not be able to do so unless institutions exist that enable such behaviors (Handy and Greenspan 2009; Devlin 2015). Thus, a model of pro-social behaviors would be incomplete where it does not include other forms such as informal volunteering.

Informal volunteering may include a number of activities such as unpaid, informal neighborly support and care, activities which are not usually thought of as volunteering (Cnaan et al. 1996). We know little about the factors that may influence informal volunteering, such as individuals’ socioeconomic characteristics, personalities, social networks, and community context. Very few studies have examined the relationship of these factors to informal volunteering or the relationship between informal and formal volunteering (Finkelstein and Brannick 2007). In this paper, we seek to improve our understanding of informal volunteering, the connection between these two distinct forms of volunteering as well as the differences (and similarities) in the factors that influence the proclivities to volunteer.

Volunteering includes many types of activities, each with differing costs and benefits to the volunteer. According to Cnaan et al. (1996), it is the net cost of volunteering that defines whether an action is more or less of a volunteer activity. They include only formal volunteering done at an organization and further suggest that an activity undertaken is volunteering when the sum of private costs exceed the sum of the private and public benefits to the volunteer who is engaging in the activity (Handy et al. 2000).

Formal volunteering includes the contribution of time to a variety of activities, with the one common denominator that it is done under the aegis of an organization; while informal volunteering also represents different types of activities that are undertaken without the sponsorship of an organization. Informal volunteering includes assisting neighbors, colleagues, or friends directly through caretaking activities or providing physical labor to do house- or yardwork (Reed and Selbee 2001). Clearly, both types of volunteering generate benefits to society at large, yet the majority of the studies examine the determinants of formal volunteering.

Lee and Brudney (2012) use data from the Independent Sector (2001) to examine the correlation between participation in formal and informal volunteering, and the determinants of each type of volunteering in the United States. Their determinants include membership in religious and other organizations, employment status, household information, and college education, while controlling for gender, age, income, minority status, and region. Overall, they found that formal and informal volunteering are empirically interrelated. On a similar note, Finkelstein and Brannick (2007) examined dispositional determinants for American undergraduates' informal volunteering and showed that the model of formal volunteering can be applied to informal volunteering and the dispositional determinants were similar. The two dimensions of informal volunteering—people-oriented and task-oriented—were both correlated with motives of helping and role identity. The items used to measure informal volunteering by Finkelstein and Brannick (2007) came from Canadian and US sources, and hence, there is no a priori reason that our findings based on a Canadian sample should be different.

Formal volunteering is a well-established phenomenon in many cultures (especially in western countries) with concomitant existence of organizations that facilitate and broker volunteers' giving of time and services to those who need assistance. However, without such institutional support, it is conceivable that those who would like to give assistance by volunteering would choose to do it informally. As Handy and Greenspan (2009) found, immigrants to Canada from countries that did not have a deeply embedded culture of volunteering did not engage in formal volunteering, but often engaged in informal volunteering.

Other scholars have argued that members of different ethnic groups, especially those who are marginalized, and poor may be more active in informal volunteering than formal volunteering (Carson 1999; Wilson and Musick 1997) due to access to opportunities. They provide 'caretaking' behaviors that are often performed by government or non-profit organizations that may exclude them at the expense of catering to the mainstream (Boddie 2004; Latting 1990; Smith et al. 1999; Williams 2002).

During the course of an individual's life, it is likely that he or she will move back and forth across a "spectrum" of volunteer activities—from the most informal and direct to the most formal and mediated (Williams 2003). The relationship between formal and informal volunteering may be influenced by an individual's gender, race, education, income, employment, marital status, the presence of children, and immigrant status. Furthermore, individuals' social networks, community connections, associational participation, and other related factors might have different influences on the proclivity to volunteer formally and informally.

In this study, we expand on the work of Lee and Brudney (2012) in several ways. We extend their study to a different country, Canada (which has a similar culture of volunteering), and also to two different types of informal volunteering: informal care and informal house/yardwork.¹ In addition to the determinants used by Lee and

¹ We started the research with just two types of volunteering: informal volunteering and formal volunteering. Our original measure of informal volunteering derived from the responses to two questions: one on informal care and the other on informal housework. When the two forms of informal volunteering were combined, gender was not a significant predictor of informal volunteering. However, when we

Brudney (2012), we examine two other determinants suggested in related literature that influence formal and informal volunteering: (1) trust (Brown and Ferris 2007; Bekkers 2012; Brooks and Lewis 2001) and (2) cultural influences (Laforest and Reed 2003). To their control variables, we add urban versus rural habitation (Reed and Selbee 2001), immigrant status (Wang and Handy 2014), and the locus of control (Allen and Rushton 1983; Smith 1994).

Literature Review

There is extensive literature on formal volunteering, predominantly in the US context, with only a handful of empirical studies that have focused on informal volunteering. In addition, different views exist on how formal and informal volunteering are related. Some think informal volunteering can be channeled into more formal modes of engagement (Lee and Brudney 2012), while others think that informal help could lead to role overloading and therefore lower the propensity or level of formal volunteering.

Politicians have different opinions on what they think is the best nature of engagement for society. For instance, Blair (1999) suggested that informal volunteering could be channeled into more formal modes of engagement. Others such as Brown (2005) suggest that ‘centers of neighborliness’ can be used as more formal spaces of activity to facilitate informal activity and encourage volunteering at a small-scale level among neighbors.

To fully understand how formal and informal volunteering are related, we explore the factors associated with the decision to engage in different types of volunteering. In this section, we organize the literature around our central independent variables and conclude each section with relevant hypotheses.

Social Networks

Social capital, defined as a person’s social networks, has been found to play a critical role in creating opportunity structures for voluntary participation. Existing literature on volunteering shows robust findings of positive correlations between a person’s social capital and volunteering (Brown and Ferris 2007; Lee and Brudney 2012; Wang and Handy 2014). Social capital provides links to other members of society and is an important source of support, information, and further social contacts (Putnam 2001). Formal social networks are often measured by the number of groups and associations to which a person belongs (Kawachi et al. 1997) and the informal social networks by the number of friends and their interactions (Putnam 2001).

Footnote 1 continued

further explored the two dimensions of informal volunteering, particularly gender dynamics, we found that females were significantly more likely to engage in informal care but were less likely to engage in informal housework. We think this is an important finding that would add to our current knowledge of gender dynamics in informal volunteering which has not been addressed very much in the literature. Therefore, we focus on two separate forms of informal volunteering in this study.

One accepted understanding of the link between social capital and volunteering is that people with more extensive social networks are also more likely to volunteer. It is found that ‘being asked to volunteer’ is one of the primary answers people give when asked why they volunteer (Independent sector 2002). Therefore, those with greater social capital are also more likely to know more people and thus more likely to be asked to volunteer. Indeed, Musick and Wilson (2008) confirm this; their empirical findings show that the probability of being asked to volunteer increases with a person’s social capital. Other scholars, sociologists, political scientists, and economists have provided different explanations for why social capital is positively correlated from the vantage point of their disciplines (see Hustinx et al. 2010 for a full discussion of the various disciplinary theories explaining the role of social capital in volunteering).

Social capital is generally operationalized in the volunteering literature as the number of organizations an individual belongs to; we follow this operationalization and further control for an individual’s religiousness, as most religions include in their theology a duty to serve others and most studies find memberships in religious organizations highly correlated with formal volunteering (Cnaan et al. 1993; Wilson and Musick 1997) and informal volunteering (Lee and Brudney 2012). Thus, we hypothesize,

H₁ More formal social networks, both religious and secular, increase the likelihood of both formal and informal volunteering.

In addition to formal memberships, an individual’s connection to local communities and personal networks could influence the likelihood of being asked to volunteer as well as obtaining information on opportunities to volunteer, thereby increasing the propensity to volunteer for organizations and help others. Prior studies find that long-term residents are more likely to be civically engaged than new arrivals (Coulthard, et al., 2002; Perkins, et al., 1996; Rotolo et al. 2010). One explanation is that it takes time for people to learn about volunteering opportunities and join voluntary associations within the community. Additionally, long-term residents may be more willing to volunteer for the public good of the community because they have more of a stake in the safety and quality of life in the community. Similarly, an individual with a stronger sense of belonging in their particular community would probably be more willing to undertake the costs associated with volunteering than someone less attached who may not value the benefits of the public good produced through volunteering.

There is no a priori reason for suggesting that the effect of community attachment and a sense of belonging differs on formal and informal volunteering, as individuals who feel connected to their communities would be willing to help in whichever way needed. However, knowing your neighbor may suggest that in terms neighborly help you are more likely to engage in informal volunteering than if you did not know your neighbor. Thus, we hypothesize,

H₂ Length of residence increases the likelihood of formal and informal volunteering.

H₃ Sense of belonging increases the likelihood of formal and informal volunteering.

H₄ Knowing more neighbors increases the likelihood of formal and informal volunteering.

Individual Trust

The extant literature on volunteering suggests various correlations between trust and people's decision to volunteer. Most of these studies focus on formal volunteering. For example, Brown and Ferris (2007) find that individuals' trust in others and in their community is important determinants of volunteering in the United States. Bekkers (2012) conducted longitudinal analysis using panel data from the Netherlands. He finds that people with low trust are more likely to quit volunteering, and hence, volunteers exhibit higher levels of trust—a result of self-sorting. In a study of religious and secular participation in Canada, Wang and Handy (2014) find that native-born Canadians who trust others more are more likely to volunteer in both religious and secular organizations. However, social trust does not matter for immigrants' decision to volunteer or participate in either religious or secular organizations. In this study, we argue that the more trusting an individual is, the higher the likelihood of formal volunteering. Social trust, particularly trusting strangers, may or may not matter in an individual's decision to help others informally as most of the informal volunteering is done to help people they know. Thus, we hypothesize,

H₅ Higher levels of trust in others increase the likelihood of formal volunteering but not informal volunteering.

Locus of Control

The locus of control is an index that measures the extent to which individuals believe that their life chances are under their control (Wallston et al. 1978). Several studies have indicated that individuals are more likely to engage in formal volunteering when they feel in control of their lives (Spector 1982; Smith 1994; Allen and Rushton 1983). Following this literature, we posit that if individuals believe that they are in control of their lives, they are more likely to participate in formal volunteering and in the creation of a public good that can impact their lives. The higher the index, the more likely individuals are to engage in formal volunteering, but this may not necessarily impact their informal volunteering, which is often done episodically and spontaneously by the individual. Thus, we hypothesize,

H₆ Higher levels of control of one's life increase the likelihood of formal volunteering but not informal volunteering.

Human Capital

There is a general consensus in the literature that education, a component of human capital, increases the propensity to volunteer for formal organizations. However, it is less clear whether education also increases the chances of caring for others or helping others with house- or yardwork. As informal help often derives from a sense of obligation, or is done for people living in a geographic proximity, it does not necessarily require skills obtained through higher education. It is likely then that human capital does not influence the propensity of informal volunteering. In their study of formal and informal volunteering, Lee and Brudney (2012) find that college education does not seem to make a difference in people's decision of informal volunteering. Thus, we hypothesize,

H₇ Higher education increases the likelihood of formal volunteering, but not informal volunteering.

Cultural Influences

Native-Born Status

Surveys on volunteering often report that immigrants are much less likely to volunteer for formal organizations than their native counterparts due to their unfamiliarity with social customs and civic culture of the host country, lack of social connections in the community, and language barriers (Day and Devlin 1996; Musick and Wilson 2008; Sundeen et al. 2007; Tossutti 2003; Wang and Handy 2014). Immigrants may have a higher preference for informal volunteering as it does not require prior knowledge of the culture of volunteering and organizations that are accessible for such opportunities (Handy and Greenspan 2009; Smith et al. 1999). Based on the literature, we hypothesize,

H₈ Native-born Canadians are more likely to engage in formal volunteering, but not informal volunteering, than immigrants.

A study focusing on linguistic subpopulations in five regions in Canada found systematic differences in the ways that Canadians expressed what constituted the 'common good.' This was attributed to different civic and religious traditions in these regions that included British Columbia, the Prairies, Ontario, Quebec, and the Atlantic provinces. For instance, the meaning and pattern of volunteering was related more to skill development in British Columbia, whereas faith and religion played an important role in the Prairies. In Ontario, there was a strong sense of individualism, whereas in the Atlantic regions, there was a strong sense of community. Quebec was particularly distinctive. French-speaking volunteers were motivated by a general concern for the wellbeing of the collective, focusing on social needs and reducing inequality (Laforest and Reed 2003, 2). Other research found that there is a preference to charitable giving over formal volunteering in Quebec. Quebecers were particularly oriented toward informal helping (Reed and Selbee 2000). Scholars argue that Quebecers have less trust in formal organizations

because of the traditional dominance of the Catholic Church and the English economic elite, and as a result participate more in informal means of helping (Reed and Selbee 2000). Thus, we hypothesize,

French-speaking Canadians in Quebec will have different patterns of formal and informal volunteering than other Canadians.

H9a French-speaking Canadians in Quebec are likely to participate less in formal volunteering than other Canadians.

H9b French-speaking Canadians in Quebec are likely to participate more in informal volunteering than other Canadians.

Control Variables

The literature on volunteerism shows that gender, age, employment status, marital status, children, income, homeownership, and urban/rural status are correlated with an individual's decision to volunteer. Most studies show that women are more likely than men to volunteer for formal organizations (Hodgkinson et al. 1992; Mesch et al. 2006; Wilson 2000) due to their role-related norms, more caring nature, greater empathy, and greater availability (Wilson and Musick 1997; Tiehen 2000). Prior studies also show that women tend to volunteer for or participate in different types of organizations from men (Musick and Wilson 2008; Popielarz 1999). This finding can be extended to informal volunteering. We expect women may engage in informal volunteering that is consistent with the caregiver role, while men may engage in informal help that requires more manual labor.

Formal volunteering that is instrumentally driven compared to informal volunteering is more likely to happen at a younger age. One reason is that formal volunteering can help younger people build their resumes. Employment could also provide opportunities for individuals to develop networks and civic skills, and increases their chances of volunteering, particularly formal volunteering. Thus, we expect the younger age groups to be more engaged in formal volunteering than informal volunteering (Handy et al. 2010). However, working full time could also reduce the free time available for unpaid voluntary work (Wilson 2000), both formally and informally. In contrast, retired individuals may have less social connections, which could lower their chances of formal volunteering, but would have more time to offer unpaid help to acquaintances or neighbors by caring for children or doing yard- or housework.

Family structure could also influence the proclivity of formal and informal volunteering. Marriage is often found to be associated with higher rates of volunteering (Rossi 2001; Rotolo and Wilson 2006). The presence and the number of children in the household are found to increase parental volunteering and formal volunteering overall (Musick and Wilson 2008; Wilson and Musick 1997). However, in terms of informal volunteering, having children may increase child-oriented informal help, but could lower the chances of helping others with other types of yard- or housework.

In terms of financial resources, most large surveys find that income and homeownership are positively correlated to volunteering (Hall et al. 2009; Rotolo et al. 2010). Many focus on Smith's (1994) "dominant status" and availability of resources as explanations for formal volunteering, but these may be unrelated to the proclivity for informal volunteering.

We also control for where the respondent lives: urban or rural, as the urbanity influences levels of volunteering. A study of volunteering in Canada shows that small towns and rural areas have higher rates of formal volunteering than urban areas, while the rate of informal help is similar in large urban and other areas (Reed and Selbee 2001). In this study, we control for these socio-demographic variables so we can estimate the influences of our main independent variables on formal and informal volunteering described above.

Data and Methods

Data used for this study derive from the 2008 General Social Survey (GSS) of Canada Cycle 22 on Social Networks. The General Social Survey gathers data to monitor changes in the living conditions and wellbeing of Canadians over time and to provide immediate information on specific social policy issues of current or emerging interest. The survey is a cross-sectional national survey. Data were collected between February and November, 2008. The target population includes all persons 15 years of age and older in Canada excluding full-time residents of institutions and residents of the Yukon, Northwest Territories, and Nunavut.

Households were selected by Random Digit Dialing. The telephone numbers in the sample were selected using the Elimination of Non-working Banks technique, which identifies all working banks for an area (i.e., to identify all sets of 100 telephone numbers with the same first eight digits containing at least one number that belongs to a household) and thus eliminates all numbers within non-working banks from the sampling frame. Each of the ten provinces was divided into strata for sampling purposes, and many of the Census Metropolitan Areas (CMAs) were each considered separate strata. This resulted in 27 total strata. A total of 20,401 samples were selected for Cycle 22. After deleting samples with missing values of variables included in this study, a total of 14,882 respondents are included in the analysis.²

Dependent Variables

There are three dependent variables included in this study: formal volunteering, informal care, and informal yard- or housework. *Formal volunteering* is a binary

² A comparison of the reduced sample included in the analysis ($n = 14,882$) and the excluded cases ($n = 5519$) shows that the reduced sample has equal share of married persons, homeowners, and urban residents with the excluded cases but are slightly more educated, younger, more likely to be native (82 vs. 70 %) and employed (77 vs. 61 %), less likely to be retired (14 vs. 28 %) and female (49 vs. 57 %), and have slightly higher number of children on average (0.50 vs. 0.43) and higher income than the excluded cases. The original samples are weighed to be nationally representative. We have adjusted the weight for the reduced sample in the analysis.

variable measuring whether the respondent did unpaid volunteer work for any organization in the last 12 months, with 1 being yes and 0 being no. For informal volunteering, the respondents were asked three questions: How many hours were spent in last week (1) looking after one or more children outside of his/her household without pay; (2) providing unpaid care or assistance to one or more seniors living outside of his/her household; and (3) doing unpaid housework, yardwork, or home maintenance for persons living outside of his/her household. *Informal care* is coded as 1 if the respondent answered that they spent any time caring for children or seniors living outside of his/her household without pay and is coded as 0 otherwise. *Informal house/yardwork* is coded as 1 if the respondent spent any time doing unpaid housework, yardwork, or home maintenance for persons living outside of his/her household and 0 otherwise. We separate house/yardwork from informal care, as we are interested in exploring the gender dimension of informal volunteering. Furthermore, informal volunteering has been underexplored in the literature in a disaggregate form. The particular activities indicated are also driven by the limitations of the survey questions available.

Independent Variables

The independent variables of this study can be grouped into six categories: social network, trust, locus of control, human capital, cultural influences, and control variables.

Social network variables measure the respondent's connection to formal organizations, local communities, and neighbors, respectively. First, social networks can be formed by memberships in organizations. To measure this type of organizational connection, we look at the respondent's membership in religious and secular organizations. *Religious membership* is a binary variable, coded as 1 if the respondent was a member or participant in a religious-affiliated group (such as a church youth group or choir) in the past 12 months and as 0 otherwise. *Secular membership* is coded as 1 if the respondent was a member or participant in any of the following secular organizations: a union or professional association, a political party or group, a sports or recreational organization, a cultural, education or hobby organization, a school group, neighborhood, civic or community association, a service club or fraternal organization, or any other type of secular organizations in the past 12 months, and as 0 otherwise. Secondly, social networks can be embedded in local communities. *Live Local* measures the length of time the respondent has lived in his/her current city or local community. It ranges from less than 6 months to 10 years and over. *Belong community* measures the respondent's sense of belonging to his/her local community and ranges from 1 (very weak) to 4 (very strong). Thirdly, social networks include connections with neighbors. *Know neighbor* measures the extent to which the respondent knows the people in his or her neighborhood, which ranges from 0 (none) to 3 (most).³

³ The survey questions ignore the possibility of having relatives in the immediate vicinity. Thus, some informal volunteering may be carried out by relatives who are not in the immediate vicinity.

Table 1 Variable measurements and descriptive statistics ($N = 14,882$)

Variables	Measurement	Mean/median/percentage
<i>Dependent variables</i>		
Formal volunteering	1: Did unpaid volunteer work for any organization in the last 12 months; 0: no	43.2
Informal care	1: Spent time looking after children without pay or providing unpaid care or assistance to seniors outside of household in the last week (month); 0: no	29.3
Informal house/yardwork	1: Spent time doing unpaid housework, yardwork, or home maintenance for persons who live outside household in the last week (month); 0: no	16.4
<i>Independent variables</i>		
Religious membership	1: The respondent was a member or participant in a religious-affiliated group (such as a church youth group or choir) in the past 12 months; 0: otherwise	17.4
Secular membership	1: The respondent was a member or participant in a secular organization: a union or professional association, a political party or group, a sports or recreational organization, a cultural, educational or hobby organization, a school group, neighborhood, civic or community association, a service club or fraternal organization, any other type of secular organization in the past 12 months; 0 otherwise	64.8
Live local	Length of time the respondent has lived in current city or local community: 1: Less than 6 months; 2: 6 months to <1 year; 3: 1 year to <3 years; 4: 3 years to <5 years; 5: 5 years to <10 years; 6: 10 years and over	10 years and over
Belong community	The respondent's sense of belonging to his/her local community: 1: very weak; 2: somewhat weak; 3: somewhat strong; 4: very strong	Somewhat strong
Know neighbor	The respondent knows most, many, a few, or none of the people in his/her neighborhood: 0: none; 1: a few; 2: many; 3: most	A few
Trust	To what extent the respondent trusts strangers, on a scale of 1 (Cannot be trusted at all) to 5 (Can be trusted a lot)	2.1
Self-control	The index measures the extent to which individuals believe that their life chances are under their control. It ranges from 0 to 28	19.3
Education	Highest level of education obtained by the respondent: 1: Some secondary/elementary schooling 2: High school diploma 3: Some university/community college 4: Diploma/certificate from community college or trade/technical 5: Doctoral/masters/bachelor's degree	Diploma from community college or trade/technical
Native	1: Canadian-born; 0: foreign-born	84.6

Table 1 continued

Variables	Measurement	Mean/median/percentage
English in Quebec	The respondent lives in Quebec and the household language is English	1.8
English other	The respondent lives in non-Quebec region and the household language is English	71.4
French in Quebec	The respondent lives in Quebec and the household language is French	18.0
French other	The respondent lives in non-Quebec region and the household language is French	2.2
Other in Quebec	The respondent lives in Quebec and the household speaks other language	1.3
Other non-Quebec	The respondent lives in non-Quebec region and the household speaks other language	5.3
Female	1: Female; 0: male	54.6
Age	Age group of the respondent, including 15–19, 20–29, 30–39, 40–49, 50–59, 60–69, 70–79, and 80 years and over	40–49
Employed	1: Worked at a paid job or were self-employed at any time during the past 12 months; 0 otherwise	72.3
Retired	1: Retired; 0 otherwise	18.9
Children	Number of child(ren) ages 0–14 living in the respondent's household: 0: none; 1: one child; 2: two children; 3: 3 or more children	None (73.4)
Married	1: Married or living with a partner 0: Widowed, separated, divorced, single	57.7
Income	Annual personal income of the respondent 1: No income; 2: <\$5000; 3: \$5000–\$9999; 4:\$10 K–\$14,999; 5: \$15 K–19,999; 6: \$20 K–29,999; 7: \$30 K–\$39,999; 8: \$40 K–\$49,999; 9: \$50 K–59,999 10:\$60 K–\$79,999; 11: \$80 K–\$99,999; 12: ≥\$100 K	\$30,000–\$39,999
Homeowner	1: Dwelling owned by a member of the household; 0: no	76.3
Urban	1: Larger urban centers; 0: rural and small town	77.4

Trust measures the extent to which the respondent trusts strangers. It has a scale of 1–5 where 1 means strangers “cannot be trusted at all” and 5 means they “can be trusted a lot.” *Self-control* is an index that measures the extent to which individuals believe their life chances are under their control. It ranges from 0 to 28, with a higher score indicating greater self-control.

Human capital is measured by the respondent's highest level of education obtained, ranging from some secondary/elementary schooling, high school diploma, some university/community college, diploma/certificate from community college or trade/technical school to doctoral/masters/bachelor's degree.

Cultural influences consist of two variables. The first variable looks at whether the respondent was born in Canada. *Native* is coded as 1 if the respondent was born in Canada and as 0 otherwise. The second variable is the respondent's home language and the region in which they live in Canada. It includes six categories: English-speaking in Quebec, English-speaking in other areas, French-speaking in Quebec, French-speaking in other areas, other-language-speaking in Quebec, and other-language-speaking in non-Quebec areas. French-speaking respondents living in Quebec are used as the baseline comparison group in the analysis.

Control variables include gender, age, employment status, children, marital status, income, homeownership, and urban status. Detailed explanations of the measurements of control variables are provided in Table 1.

Methods

Since the three dependent variables—formal volunteering, informal care, and informal house/yardwork—are significantly correlated to each other, multivariate probit regression method would allow us to examine the factors associated with the decision to volunteer, controlling for the inter-correlation among these three types of volunteering activities. However, due to the complexity of obtaining and interpreting the marginal effect of each independent variable on the three dependent variables in multivariate probit models, we decided to use the probit model. We compared the results of both models, and they were very similar in terms of both the significance of the independent variables and the magnitude of the coefficients (the results of the multivariate probit models will be provided based on request).⁴ The marginal effects of independent variables on each type of volunteering are then calculated and reported based on the probit models. All models are weighed to make the sample representative of the general population. Data analyses are conducted in STATA.

Descriptive statistics of the sample

Table 1 reports descriptive statistics of the variables included in this study. Over 40 % of the sample volunteered for organizations in the last 12 months of the survey. In comparison, less than 30 % of respondents reported providing informal care to others, and only 16 % reported helping others with informal house- or yardwork. In comparison to national studies, the rate of formal volunteering

⁴ The multivariate probit model shows that the association between formal volunteering and informal care is 0.133 ($p < 0.001$), the association between formal volunteering and informal yardwork is 0.094 ($p < 0.001$), and the association between informal care and informal yardwork is 0.357 ($p < 0.001$). The results suggest that formal volunteering has low but statistically significant associations with two types of informal volunteering: informal care and informal yardwork, respectively. The low associations may explain the similar coefficients we got from the multivariate probit models and the probit model. Future studies can explore whether and how moderate and high associations between formal and informal volunteering may influence the coefficients using different methods.

Table 2 Probit regression results and marginal effects ($N = 14,882$)

Variables	Formal volunteering		Informal care		Informal yardwork	
	β (Std. Err.)	dy/dx	β (Std. Err.)	dy/dx	β (Std. Err.)	dy/dx
Religious membership	0.71 (0.04)***	0.28	0.30 (0.04)***	0.10	0.14 (0.04)***	0.04
Secular membership	0.81 (0.03)***	0.30	0.19 (0.03)***	0.06	0.16 (0.04)***	0.04
Live local	0.03 (0.01)*	0.01	0.05 (0.01)***	0.02	0.03 (0.01)*	0.01
Belong community	0.14 (0.02)***	0.05	0.06 (0.02)**	0.02	0.02 (0.02)	0.00
Know neighbor	0.08 (0.02)***	0.03	0.06 (0.02)***	0.02	0.08 (0.02)***	0.02
Trust	0.09 (0.01)***	0.03	-0.00 (0.01)	-0.00	0.02 (0.02)	0.00
Self-control	0.02 (0.00)***	0.01	0.00 (0.00)	0.00	-0.00 (0.00)	-0.00
Education	0.07 (0.01)***	0.03	-0.01 (0.01)	-0.00	-0.00 (0.01)	-0.00
Native born	0.12 (0.04)**	0.05	0.06 (0.04)	0.02	0.17 (0.05)***	0.04
English in Quebec	0.22 (0.10)*	0.09	-0.14 (0.10)	-0.04	-0.09 (0.12)	-0.02
English in other area	0.41 (0.04)***	0.15	-0.18 (0.03)***	-0.06	0.15 (0.04)***	0.03
French in other area	0.27 (0.10)**	0.11	-0.10 (0.10)	-0.03	-0.01 (0.11)	0.00
Other language in Quebec	0.06 (0.13)	0.02	-0.22 (0.11)	-0.07	-0.05 (0.14)	-0.01
Other language in non-Quebec	0.21 (0.08)**	0.08	-0.26 (0.08)***	-0.08	-0.04 (0.09)	-0.01
Female	0.08 (0.03)**	0.03	0.14 (0.03)***	0.05	-0.23 (0.03)***	-0.05
Age	-0.12 (0.04)**	-0.05	0.31 (0.04)***	0.10	0.22 (0.05)***	0.05
Age ²	0.01 (0.00)*	0.00	-0.03 (0.00)***	-0.01	-0.04 (0.01)***	-0.01
Employed	0.06 (0.05)	0.02	-0.08 (0.05)	-0.03	0.08 (0.06)	0.02
Retired	0.04 (0.06)	0.02	0.09 (0.05)	0.03	0.15 (0.06)*	0.04
Children	0.05 (0.02)**	0.02	0.06 (0.02)***	0.02	-0.09 (0.02)***	-0.02
Married	-0.00 (0.03)	-0.00	0.04 (0.03)	0.01	-0.03 (0.04)	-0.01
Income	-0.02 (0.01)***	-0.01	0.00 (0.01)	0.00	-0.01 (0.01)	-0.00
Homeowner	0.00 (0.04)	0.00	0.03 (0.04)	0.01	-0.05 (0.04)	-0.01
Urban	-0.08 (0.03)*	-0.03	-0.04 (0.03)	-0.01	-0.01 (0.04)	-0.00
Constant	-2.28 (0.14)***	-	-1.90 (0.14)***	-	-1.75 (0.16)***	-
Pseudo R ²	0.16	-	0.04	-	0.03	-
Log pseudolikelihood	-8491.80	-	-8417.85	-	-6383.05	-

Table 2 continued

Variables	Formal volunteering		Informal care		Informal yardwork	
	β (Std. Err.)	dy/dx	β (Std. Err.)	dy/dx	β (Std. Err.)	dy/dx
Wald Chi-square	1826.39***	–	418.89***	–	281.23***	–

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

reported in this study is similar to the rate (46 %) reported by the 2007 Canada Survey of Giving, Volunteering and Participation (CSGVP) (Hall et al. 2009).

In terms of organizational connections, the majority of respondents (65 %) were members or participants in a secular organization, while only less than 1 out of 5 respondents (17 %) was a member or participant in a religious-affiliated group in the past 12 months. As for connections with local communities, most of the respondents (71 %) had lived in their current city or local community for 10 years and more, and have a relatively strong sense of belonging to the local community. Close to half of the respondents (47 %) know at least a few people in their neighborhoods.

The respondents of the survey reported relatively low levels of social trust. On average, the respondents felt that they could not trust strangers. In terms of human capital, 29 % of the respondents obtained a diploma/certificate from community college or trade/technical school.

Over four-fifths (85 %) of the respondents were born in Canada. Among the respondents, over 71 % speak English at home and live in non-Quebec regions, and only 1.8 % speak English at home and live in Quebec. The majority of the French-speaking respondents live in Quebec compared to other regions (18 vs. 2.2 %).

In terms of socio-demographic characteristics, a little over half of the respondents are female (55 %), and the median age of all respondents is between 40 and 49. Close to three-quarters of the respondents (72 %) are employed, and one-fifth of the respondents (19 %) are retired. Over half of the respondents (58 %) are married or living with a common-law partner, while most of the respondents (73 %) have no children ages 0–14 living in the household. Additionally, most of the respondents (76 %) live in owner-occupied houses and the median personal income of the respondent is \$30,000–\$39,999. Approximately 80 % of the respondents reside in larger urban centers. On average, the respondents believe that their life chances are somewhat under their control.

Results

Table 2 presents the probit regression results and the marginal effects (dy/dx) of each independent variable on the dependent variables: formal volunteering, informal care, and informal house/yardwork, respectively. The Wald Chi-square tests suggest that all three models fit well. Below we report the findings regarding factors most likely to influence formal and informal volunteering, respectively.

Formal Volunteering

The formal volunteering model explains about 16 % of the variance in the likelihood of doing unpaid work for organizations. Social networks significantly increase the chance of formal volunteering. The probability of formal volunteering increases by about 28 % points for the respondents who are members of a religious group compared to their counterparts ($p < 0.001$). Being a member of a secular group also increases one's chances of volunteering for formal organizations by about 30 % points ($p < 0.001$). This finding supports our Hypothesis 1.

The number of years lived in a community also increases the probability of formal volunteering by 1 % point per year ($p < 0.05$). The results show that those who have a higher sense of belonging are more likely to volunteer for organizations ($p < 0.001$). People who know more neighbors are also more likely to engage in formal volunteering ($\beta = 0.14$; $p < 0.001$). These findings are consistent with our hypotheses 2–4 regarding the associations between formal volunteering and local community and neighborhood's social networks. We note that these are not causal explanations but associational. Hence, further longitudinal studies are required to tease out the time order for the relationship of these variables, such as does belonging to community encourage volunteering or does volunteering give the individual a sense of belonging.

In addition, the results show that trusting individuals are more likely to volunteer for organizations ($\beta = 0.09$; $p < 0.001$). Similarly, those who have a higher sense of self-control are more likely to volunteer formally ($\beta = 0.02$; $p < 0.001$). These results support Hypotheses 5 and 6 regarding formal volunteering. As noted earlier, since this is not a longitudinal study, the positive associations we observe could suggest that formal volunteering helps develop trust or a higher sense of self-control or vice versa. Additional studies using longitudinal data are required to establish a causal relation.

In terms of human capital, the results support Hypothesis 7, showing that a higher level of education increases the probability of formal volunteering ($\beta = 0.07$; $p < 0.001$).

In terms of cultural influences, the results show that Canadian-born individuals are more likely to volunteer formally than those who were born in other countries, which supports Hypothesis 8 ($p < 0.01$). Interestingly, the results indicate that French-speaking individuals in Quebec are significantly less likely to engage in formal volunteering than English-speaking respondents in Quebec (lower by 9 % points, $p < 0.05$). Additionally, French-speaking individuals living in Quebec are less likely to engage in formal volunteering than all respondents living in non-Quebec regions, no matter what language they speak at home. This finding is consistent with Hypothesis 9.

In terms of socio-demographics, women are more likely to volunteer for organizations than men. Mid-aged persons are most likely to volunteer formally than those in other age groups. Individuals with more children living in the household are also more likely to volunteer for organizations. Residents of urban regions have a lower chance of formal volunteering than their rural counterparts.

Surprisingly, the results suggest that a higher income lowers the chance of formal volunteering.

Informal Volunteering: Informal Care

Individuals' social networks also increase their chances of providing unpaid care for children and assisting seniors outside of household. Those who are members of a religious group or a secular group are 10 and 6 %, respectively, more likely to offer informal care to others compared to their non-religious or secular member counterparts. An additional year of living in the community increases the chances of informal care by 2 % ($p < 0.001$). People who have a stronger sense of belonging and who know more neighbors are also more likely to provide informal care to others. These findings support our Hypotheses 1–5.

Trusting strangers and self-control are not strongly associated with the propensity for informal care, which is consistent with our expectations (H_5 and H_6).

Human capital, the level of education, does not seem to matter in the decision to provide informal care either, which supports Hypothesis 7.

In terms of cultural resources, as we expected, native-born Canadians are not significantly different from immigrants in their propensity to help other people. Interestingly, the results also show that French-speaking individuals in Quebec are significantly more likely to provide informal care than people who speak either English or other non-French languages in non-Quebec regions. In this type of informal volunteering, there was no significant difference between French speakers and other non-French speakers in Quebec. Controlling for other factors in the model, the likelihood of engaging in informal care for French-speaking respondents in Quebec is 6 % points higher than English-speaking respondents in non-Quebec regions and 8 % points higher than those who speak other languages in non-Quebec regions. The findings partially support Hypothesis 9.

As we expected, women are found to be more likely to engage in informal care than men ($\beta = 0.14$; $p < 0.001$). Having more children living in the household also increases the propensity of helping others take care of their children or assisting seniors ($\beta = 0.06$; $p < 0.001$). On the other hand, employment status, being married, income level, home ownership, living in urban areas, and perceived self-control do not seem to affect the decision to provide informal care to others.

Informal Volunteering: House- or Yardwork

The results show that social networks remain important correlates to informal help with house/yardwork. Social network variables, except sense of belonging, all increase the propensity of helping others with house/yardwork. These findings partially support our hypotheses. However, social trust, locus of control, and human capital appear to have no significant associations with informal help with house/yardwork.

The results also show that French-speaking individuals in Quebec have a significantly lower chance of helping others with house/yardwork than English-speaking people in non-Quebec regions ($\beta = 0.15$; $p < 0.001$). Additionally, those

who were born in Canada are more likely to provide informal yardwork help to others than immigrants ($\beta = 0.17$; $p < 0.001$).

Women are significantly less likely to help others with house/yardwork than men ($\beta = -0.23$; $p < 0.001$). Having more children in the household also lowers the propensity of providing informal house/yardwork help to others ($\beta = -0.09$; $p < 0.001$). Interestingly, the results show that retirees are significantly more likely to help others with house/yardwork ($\beta = 0.15$; $p < 0.05$).

Discussion

The study of formal volunteering, informal care, and informal yardwork in Canada reveals a few important similarities and differences on the correlates of various types of volunteering behavior.

First, our findings suggest that social networks affect formal and informal volunteering in a similar way. Both religious and secular organization memberships increase Canadians' propensity to engage in formal volunteering, informal care, and informal house/yardwork. It can partly be explained by the fact that formal organizational involvement, either religious or secular, helps expand individuals' institutional as well as personal connections, and therefore increases their chances of being asked to volunteer. Additionally, rootedness in a community fosters both formal volunteering and informal volunteering. Those who have lived in a community longer and know more neighbors are more likely to volunteer for formal organizations and help others.

Second, trust and locus of control seem to matter more for the decision to engage in formal volunteering than for the decision to volunteer informally. This finding suggests that in formal institutional settings, trust is an important lubricant that encourages individual involvement, as is the degree to which individuals believe they are in control of their life changes. However, in informal social settings, as most helping behavior occurs between acquaintances, trust is no longer a determining factor in people's decision to help. Additionally, informal volunteering often occurs when a particular need is observed (i.e., an older or lonely neighbor in need of assistance, an un-shoveled path, etc.) while helping a formal organization in promoting a cause may require trust, as the volunteers may not readily observe the outcomes of their work, particularly when the outcomes may occur in faraway places or not be easily measured.

Third, human capital also matters only for formal volunteering, but not for informal care or informal house/yardwork. This corroborates with the findings of Lee and Brudney's (2012) study on formal and informal volunteering in the United States. People with higher education are probably more aware of social issues, more socially active, and have more access to information on formal volunteering opportunities, which all potentially increase their propensity to volunteer for organizations. In the informal help realm, however, educated people would probably be as likely as less-educated people to help neighbors.

Fourth, cultural influences play a significant role in shaping different types of volunteering behavior in Canada. There are different patterns of formal volunteering

for native-born and immigrant populations. French-speaking people in Quebec are found to be less likely to volunteer formally than English-speaking people in Quebec. Additionally, they are more likely to help others taking care of children and elderly, but less likely to engage in formal volunteering than English- or other-language-speaking people in non-Quebec regions. This suggests a major cultural difference in the propensity for formal and informal volunteering. Scholars have reported regional and cultural differences in volunteering in Canada in prior studies (Reed and Selbee 2000). However, none have shown the different influences of language and regional factors on formal volunteering, informal volunteering, and informal house/yardwork separately. The findings of this study will extend our knowledge in this aspect. Additionally, the findings suggest that in countries with multiple languages and cultures like Switzerland and Belgium, it is important to consider the potential cultural influences on pro-social behavior.

Conclusion

To date, existing literature on volunteering has focused much attention on formal volunteering (doing unpaid work for an organization) but very little on informal volunteering (doing unpaid work for strangers, acquaintances, friends, and other individuals). Our research distinguished between formal and informal volunteering, and as such, was able to provide new insights. In this paper, we explored the factors that influence these two distinct behaviors and found that as hypothesized, there are certain factors common to them and some that are not. The results of the models (i.e., low pseudo R^2 of the two informal volunteering models reported in Table 2) suggest that future research needs to explore other correlates of informal volunteering.

This study has limitations. Being a cross-sectional design, we cannot infer the causality of these determinants. A longitudinal design, on the other hand, could help tease out whether individuals who are trusting volunteer or whether it is volunteering that generates trust. A carefully designed longitudinal study might unearth different directional causalities among factors that are associated with either formal or informal volunteering.

Our measure of informal volunteering has two different behaviors: providing care to individuals who are not in the immediate household and the other which includes housework, yardwork, or home maintenance. We did not include other informal helpful behaviors—such as helping other people besides children and seniors, care to animals, picking up litter, or other acts that are important in the community—as the data are not available in this nationally representative survey. The level of informal care could be higher if various aspects of informal care are included. Future surveys and studies on informal volunteering might include such helping behaviors.

Furthermore, our measure for informal work was derived from the question “Last week, how many hours did you spend doing unpaid housework, yardwork or home maintenance for persons who live outside your household?” It is possible that some informal care and housework/yardwork measured by this question could be

mediated by an organization, and it is unclear whether respondents engaged in this type of volunteering are reporting it as formal or informal volunteering. Given the nature of the question we assumed it is informal volunteering. Future surveys could include additional questions or instructions to capture this aspect of informal volunteering.

Furthermore, the informal volunteering variables were developed based on the hours volunteered in the last week prior to the study, which could undercount informal volunteering if someone did not volunteer informally in the last week but did so anytime in the past 12 months. In addition, readers need to use caution in interpreting the overall rate of informal volunteering in Canada and in comparing results across dependent variables with different time frames (12 months versus 1 week). Future surveys need to examine formal and informal volunteering within the same time frame.

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