

**The Relationship Between Place and Youth Volunteerism: Building Bonds and Breaking
Barriers**

Sean Pearce

Dissertation Submitted to the
Faculty of Graduate and Postgraduate Studies
in partial fulfillment of the requirements for the degree of
Doctor of Philosophy in Psychology

School of Psychology
Faculty of Social Sciences

University of Ottawa

Abstract

Volunteerism is a popular form of community engagement among youth and can involve helping organizations, such as nonprofits, as well as directly assisting neighbours or friends through informal types of helping. A large body of research has examined the different ways in which economic, social, and cultural resources impact on volunteerism. Fewer studies have considered the influence of place characteristics. This dissertation comprises three studies. The first study used secondary data to explore the moderating effects of urban/rural place of residence and certain resources (e.g., religiosity, work status) on youths' volunteer propensity and intensity. Results revealed significant urban/rural interactions. For example, belonging to youth groups (versus not) was particularly a strong lever for rural youth volunteerism, while higher religious attendance frequency was associated with greater volunteer intensities for urban youth. The second study used a mixed methods approach to investigate urban/rural differences in motivations for and barriers to volunteering, and skills acquired. Financial costs were associated with nonvolunteer status for rural youth, while urban nonvolunteers reported lacking interest. During the interviews, youth described reasons for volunteering, challenges to volunteering, and strategies to improve volunteerism. These discussions differed by urban/rural residence. Rural youth reported more contextual barriers, whereas urban youth questioned the significance of their impact. Rural youth discussed volunteering more as a general learning experience, whereas urban youth tended to mention specific skills they acquired (e.g., technical, interpersonal). In the third study, the relationships between perceptions of the neighbourhood environment (e.g., cohesion, amenities) and volunteer outcomes were explored. Results revealed that neighbourhood cohesion was particularly important to informal volunteering. Further, different clusters emerged based on volunteer type (informal/formal) and level of intensity. The findings from this dissertation suggest that understanding youth volunteerism within a socio-ecological

perspective can widen our understanding of the volunteer process, including antecedents, challenges, experiences, and outcomes. This research may have practical implications for nonprofit organizations. For example, methods of outreach should consider how the environment impacts on volunteerism when trying to recruit young volunteers. Finally, the literature on youth volunteerism may benefit by adopting a holistic approach to volunteerism that considers the different ways in which place characteristics, rather than only individual-level factors, influence youth community engagement.

Statement of Co-Authorship

Three studies comprise this thesis, all of which were prepared with my dissertation supervisor, Dr. Elizabeth Kristjansson, and some of which included other professors and colleagues. As first author on all studies, I conducted the literature reviews, designed the research questions, submitted the ethics applications, recruited participants (Study 2 and Study 3), analyzed the data, and interpreted the findings. Dr. Kristjansson provided insight into research questions, design and analyses, and edited all the studies; she is the second author on all studies. Dr. Louise Lemyre, a professor of Psychology, appears as third author on Study 1 and Study 2. Dr. Lemyre is the principal investigator of a larger team project on volunteerism and donating behaviour among Canadians. She assisted with the editing of these papers and helped with conceptualizing the findings. Celine Pinset, consultant and project manager, appears as fourth author on Study 1; she also assisted with the editing of this paper. Trista Takacs, a PhD candidate and colleague, appears as fourth author on Study 2 and contributed to the qualitative data analysis (e.g., coding) and editing of the manuscript.

Acknowledgements

I am very thankful for everybody who has supported me during this whole process. To my supervisor, Elizabeth Kristjansson, thank you for your feedback and suggestions, and all of your support that you provided along the way. Your positive and encouraging words are greatly appreciated, as well as your time and expertise. To Dr. Louise Lemyre and Celine Pinset, thank you for your helpful feedback; your insight has helped me become more of a critical thinker. Thank you to my committee members, John Sylvestre, Brad Cousins, and Dave Miranda. Your constructive comments and mentorship have improved my approaches to research design and data analysis. I felt that I was able to contact you anytime and that you were willing to assist me with any questions that I had. Thank you to my academic colleagues (Trista) who assisted with editing and interpretation of one of my studies and for being supportive as well.

A special thanks to the Stata technical group who answered many email questions that I had about the statistical program. As a first-time user of Stata there were many times that I needed statistical/technical guidance and your thorough and quick responses were always extremely helpful. Thank you to the study participants who were willing to discuss their views and experiences with volunteerism. I have learned more about youth volunteering and have also changed my perspectives on certain topics.

To my family and friends, thank you for your ongoing support throughout my doctoral dissertation. From the beginning, you always recognized that I was an academic at heart and had a thirst for knowledge, and I am thankful that you made this experience easier for me and supported me in my endeavours.

Acknowledging the RDC program and disclaimer

This research was supported by funds to the Canadian Research Data Centre Network (CRDCN) from the Social Science and Humanities Research Council (SSHRC), the Canadian Institute for Health Research (CIHR), the Canadian Foundation for Innovation (CFI) and Statistics Canada. Although the research and analysis are based on data from Statistics Canada, the opinions expressed do not represent the views of Statistics Canada or the Canadian Research Data Centre Network (CRDCN).

Table of Contents

Abstract	ii
Statement of Co-Authorship	iv
Acknowledgements	v
Acknowledging the RDC and disclaimer	iv
Table of Contents	vii
List of Tables	xi
List of Figures	xiii
Chapter 1: General Introduction	1
Conceptualizing and Operationalizing Volunteerism.....	2
Integrated Resources Theory of Volunteerism	4
Economic resources and volunteerism	7
Social resources and volunteerism	9
Cultural resources and volunteerism	14
Volunteerism Within a Socio-Ecological Framework.....	17
The Importance of Place and Volunteerism: Delineating Rural Versus Urban.....	19
Urban/rural economic resources and volunteerism	21
Urban/rural social resources and volunteerism	23
Urban/rural place culture and volunteerism	26
The Importance of Studying Youth Volunteerism.....	28
Gaps in the Literature.....	30
Objectives and Overview of Studies.....	33
References.....	37
Figure 1	75
Figure 2	76
Chapter 2: Predictors of Urban and Rural Youth Formal and Informal Volunteering: Does Place Matter?	77
Abstract.....	78
Introduction.....	79
Method	88
Data source	88
Participants	89

Measures	90
Independent variables.....	90
Dependent variables	91
Statistical Analysis.....	92
Results.....	93
Discussion.....	97
Limitations and future directions	103
Conclusion	104
References.....	106
Endnotes.....	121
Table 1	122
Table 2	123
Table 3	125
Table 4	126
Figure 1	127
Figure 2	128
Figure 3	129
Figure 4.....	130
Chapter 3: Understanding Volunteer Motivations, Barriers, and Experiences of Urban and Rural Youth: A Mixed Methods Analysis	131
Abstract.....	132
Introduction.....	133
Method	141
Quantitative Methodology.....	141
Data and participants	141
Variables.....	142
Statistical Analyses	144
Quantitative Results	146
Qualitative Methodology	149
Participants	149
Procedure and data analysis.....	149

Qualitative Results	151
Discussion	163
Limitations and future directions	168
Conclusion	170
References	172
Endnotes.....	188
Table 1	189
Table 2	190
Table 3	191
Table 4	192
Table 5	193
Table 6	194
Appendix A.....	195
Appendix B.....	196
Appendix C.....	202
Appendix D.....	203
Chapter 4: Physical and Social Perceptions of the Neighbourhood and Youth Volunteerism	204
Abstract.....	205
Introduction.....	206
Hypotheses	213
Method	214
Participants	214
Measures.....	214
Statistical Analysis.....	218
Results.....	220
Path analyses	221
Cluster analyses	224
Discussion.....	227
Limitations and future directions	232

Conclusion	233
References.....	235
Endnotes.....	255
Table 1	256
Table 2	257
Table 3	258
Table 4	259
Table 5	260
Table 6	261
Table 7	262
Figure 1	263
Figure 2	264
Figure 3	265
Figure 4	266
Figure 5	267
Appendix A.....	268
Chapter 5: General Discussion	269
Brief Summary.....	269
The Importance of Resources to Youth Volunteerism	271
Incorporating Place Effects Within a Resources Model.....	275
Implications for Research and Practice.....	280
Limitations	283
Future Research	285
Conclusions.....	288
References.....	290

List of Tables

Chapter 2

Table 1	Comparing Sociodemographic and Resource Characteristics by Place of Residence	122
Table 2	Comparing Youth Formal Volunteer Proclivity, Formal Hours Contributed, and Informal Volunteer Intensity	123
Table 3	Urban/Rural Interactions with Sociodemographic and Resource Characteristics and the Effect on Volunteer Outcomes	125
Table 4	Comparing Urban and Rural Formal Volunteering and Informal Volunteering by Key Characteristics	126

Chapter 3

Table 1	Comparing Sociodemographic and Resource Characteristics by Place of Residence	189
Table 2	Comparing Urban and Rural Youths' Volunteer Motives, Barriers, and Skills Acquired	190
Table 3	Comparing the Impact of Barriers and Motivations on Volunteer Proclivity and Hours Contributed for Urban and Rural Youth	191
Table 4	Number of Skills Acquired Through Formal Volunteering by Rural and Urban Residence	192
Table 5	Summary Comparing the Quantitative and Qualitative Findings Between Urban and Rural Youth	193
Table 6	Comparing and Contrasting Qualitative Findings by Urban Versus Rural Place of Residence	194

Chapter 4

Table 1	Factor Loadings for Principal Component Analysis with Varimax Rotation of Perceived Neighbourhood Problems	256
Table 2	Factor Loadings for Principal Component Analysis with Varimax Rotation of Neighbourhood Satisfaction Items	257

Table 3	Factor Loadings for Principal Component Analysis with Varimax Rotation of Barriers to Volunteer Items	258
Table 4	Comparing Indices Across Each Proposed Model Leading to Volunteering Intensity Outcomes and Perceived Barriers	259
Table 5	Standardized Indirect, Direct, and Total Effects Predicting Formal and Informal Volunteer Intensity for Parsimonious Models	260
Table 6	Clusters Based on K-means Analysis	261
Table 7	Predictors of Different Volunteer Clusters Based on Formal/Informal Volunteer Intensity (N=299)	262

List of Figures

Chapter 1

Figure 1	Examining components of human, social, and cultural capital in relation to volunteerism	75
Figure 2	Conceptual socio-ecological framework for understanding volunteerism	76

Chapter 2

Figure 1	Interaction graph. First panel: belong to youth groups; second panel: parents volunteer	127
Figure 2	Interaction graph. First panel: language spoken at home; second panel: gender	128
Figure 3	Interaction graph. First panel: employment status; second panel: student status	129
Figure 4	Interaction graph. First panel: religious attendance; second panel: time resided in the community	130

Chapter 4

Figure 1	Full path diagram predicting volunteer intensities	263
Figure 2	Model 3: Path diagram predicting volunteer intensities and including satisfaction with neighbourhood amenities	264
Figure 3	Model 4: Path diagram predicting volunteer intensities and including satisfaction with neighbourhood attractiveness	265
Figure 4	Model 1: Path diagram predicting perceived external barriers and including satisfaction with neighbourhood amenities	266
Figure 5	Model 2: Path diagram predicting perceived external barriers and including satisfaction with neighbourhood attractiveness	267

Chapter 1: General Introduction

Volunteerism is a primary pillar of social action, community development, and youth philanthropic engagement. There is much debate on how to specifically define and conceptualize volunteerism because it is multifaceted and varies by culture (e.g., Anheier & Salamon, 1999; Brown, 1999; Carson, 1999). The two types of volunteering most commonly studied in the literature are formal and informal volunteering. Formal volunteering is more structured and has been defined as ongoing, unpaid help, on behalf of an organization (e.g., Bekkers, 2007; Carson, 1999; Lee & Brudney, 2012; Penner, 2002; Smith, 1994; Wilson & Musick, 1997a). Five features were used to describe voluntary organizations in the *Canada Survey of Giving, Volunteering and Participating* (CSGVP): organized, nongovernmental, nonprofit distributing, self-governing, and voluntary (Salamon & Anheier, 1997). Informal volunteering is helping people directly outside organizational structures but excludes helping people in one's own household (e.g., Carson, 1999; Choi, Burr, Mutchler, & Caro, 2007; Finkelstein & Brannick, 2007; Gundelach, Freitag, & Stadelmann-Steffen, 2010; Lee & Brudney, 2012; Manatschal & Freitag, 2014; Wilson & Musick, 1997a). Both informal and formal volunteering can be subsumed under prosocial behaviour—that which is primarily performed to benefit and help others (e.g., Eisenberg & Fabes, 1998).

Canadians aged 15-24 volunteer more than any other age group. According to the *2013 General Social Survey—Giving, Volunteering and Participating*, 53% of youth volunteered on behalf of an organization, which was above the national average of 44% (Statistics Canada, 2013). On average, Canadian youth (aged 15-24) contributed 130 formal volunteer hours in 2010 (Vézina & Crompton, 2012). In other Canadian reports, 91% of youth aged 15-19 informally volunteered, and 88% of youth aged 20-24 informally volunteered (Sinha, 2013). Although the

volunteer rate is high among Canadian youth, they volunteer fewer hours than adults (Vézina & Crompton, 2012). Since volunteerism has been conceptualized in different ways, it is important to discuss the characteristics of this construct, as well as the relevance of a theory that captures its many dimensions. Currently, the importance of context has been relatively neglected in the volunteer literature and is a potentially fruitful area of research. Volunteerism has been associated with positive youth development, therefore this research has the potential to strengthen individuals and communities. The goals of this introductory chapter are to: (1) discuss the different conceptualizations of volunteerism in the literature; (2) discuss an integrated resources theory on youth volunteerism; (3) explore the relationship between place, resources, and the potential link to volunteerism; (4) identify gaps in the literature and the importance of studying youth volunteerism; and (5) provide a brief description and outline of each of my three studies.

Conceptualizing and Operationalizing Volunteerism

Volunteers come from diverse backgrounds with a constellation of attitudinal and demographic characteristics. The broad range of volunteer profiles makes it difficult to define a volunteer (Bussell & Forbes, 2002; Clary, Snyder, & Stukas, 1996). Many features of volunteerism have been outlined in the literature. For example, volunteering is a committed behaviour whereby time is given to benefit others (e.g., Snyder, 1993; Wilson, 2000, 2012); it is usually planned rather than spontaneous (e.g., Omoto & Snyder, 1995; Penner, 2002; Penner & Finkelstein, 1998; see review by Snyder & Omoto, 2007); and it is usually non-obligatory, such that people volunteer of their own free will without pecuniary gain (e.g., Omoto & Snyder, 1995; Shure, 1991; Van Til, 1988). Other researchers have defined volunteerism more broadly, for example, volunteer activities are those which involve no monetary gain and which benefits the

well-being of others (Mowen & Sujan, 2005). This definition does not clearly state that volunteering has to be voluntary. In this sense, mandatory community service can be considered a type of volunteering to some researchers. Cnaan, Handy, and Wadsworth (1996) reviewed several volunteer definitions and discussed key dimensions which could be considered on a continuum: the degree to which the activity was voluntary (e.g., obligation versus free will), the nature of the reward (e.g., degree of remuneration), the structure (e.g., formal versus informal), and the intended beneficiaries (e.g., strangers or friends).

It is also important to understand citizens' perceptions of volunteerism, because people may perceive volunteerism differently (e.g., informal versus formal), and this may impact on their motives for volunteering or barriers to volunteering. Cnaan et al. (1996) found that people perceived a volunteer as somebody who incurred a higher net cost from volunteering. Respondents were more likely to say a teenager who gave a speech on youth leadership was a volunteer, than a doctor who volunteered to deliver a paper at a conference. The doctor may be accustomed to delivering papers and it could also be in their best interest to build their reputation or advance their profession. Building on these findings, another study provided volunteer scenarios to participants and found that items most strongly considered "a volunteer" were teenagers helping in a soup kitchen, helping in the Big Brothers Big Sisters program, and helping the homeless (Handy Cnaan, Brudney, Ascoli, Meijs, & Ranade, 2000). People perceived volunteering as an activity that did not involve any remuneration and ranked it higher if it had value for society (Handy et al., 2000). While this study considered peoples' perceptions of volunteerism across different countries, it employed items from questionnaires and did not allow participants to freely discuss what volunteering personally meant to them.

Beyond definitional debate, there is a vast array of theories to help understand

volunteerism. Some researchers have conceptualized volunteering as a productive activity that has a certain market value (e.g., Herzog, Kahn, Morgan, Jackson, & Antonucci, 1989; Smith, 1981; Sundeen, 1988; Wilson & Musick, 1997a). Key figures in the volunteer literature, Wilson and Musick (1997a), developed four premises to define volunteerism: (1) volunteering is a productive activity whereby qualifications are necessary (e.g., skills, social networks); (2) volunteering includes collective action, such that people work together to achieve a common good; (3) the relationship between the recipient and volunteer is ethical, such that people are willing to give their time to others; and (4) different volunteer activities are related to each other (e.g., formal and informal volunteering are both included under ‘volunteering’ rather than as separate constructs). Wilson and Musick's (1997a) conceptualizations differed from Synder and Omoto (2007) because volunteering was not limited to organizations; informal helping was considered a form of volunteering. Overall, while volunteering is a broad and ambiguous concept, there are similar elements across all conceptualizations.

Integrated Resources Theory of Volunteerism

Many studies integrate several theories of volunteerism rather than explaining it with one theory, because volunteerism is transdisciplinary, complex with many layers, has multiple definitions, and has various meanings across different cultures and sub-groups (Hustinx, Cnaan, & Handy, 2010). Multidimensional approaches are often necessary to understand and conceptualize volunteerism because each theory can give their own perspective—each theory on their own is too narrow (Sherr, 2008).

This thesis focused on volunteering from a resource perspective, analogous to Wilson and Musick (1997a), who considered volunteering to be a form of consumption, such that individuals who possess the necessary resources (e.g., free time, better health, civic skills) are most likely to

volunteer. Resources are any factors that “smooth the path to voluntarism” (Wilson & Musick, 1998, p. 800), and therefore people with more resources are more equipped to volunteer.

According to this perspective, volunteerism shares commonalities with a labour force context.

Wilson and Musick (1997a) proposed a synthesis of many other theories and models (e.g., social capital theory, dominant status models), which considered the relationship between volunteerism and the interactions of demographic, sociodemographic, attitudinal, and sociocultural variables.

These resources also interact with several other factors (e.g., gender, race) in intricate ways to predict volunteering (e.g., Musick, Wilson, & Bynum, 2000; Selbee, 2004). Further, Wilson and Musick (1998) found that combinations of different resources were associated with volunteer hours and range of volunteer activities. Specifically, human capital indicators (e.g., education) amplified the effect of formal social interactions (e.g., church attendance) on volunteerism.

Individuals with high levels of social capital and human capital were more engaged in volunteerism.

For this dissertation, a resource perspective was selected over other theories because it is multidimensional and considers how several different factors impact on volunteerism. While the term *resource* is not defined with a clear set of boundaries, in all of our studies we included variables that have been commonly used in the volunteer literature (e.g., income, memberships in secondary associations, church attendance). The variables in this dissertation have been conceptualized as indicators of either social, cultural, or human capital. Alternative theories tend to be more limiting in scope compared to the resource theory. For example, the normative approach to volunteerism emphasizes the role of moral and social values (e.g., compassion), as well as norms in shaping prosocial behaviour (e.g., Janoski, Musick, & Wilson, 1998; see review by Siu, Shek, & Law, 2012). Essentially, people are guided by their values and by social norms

and they volunteer because they feel it is their duty to help and be good citizens. People volunteer if they feel volunteering is in accord with the larger society in which they are embedded (see discussion by Haski-Leventhal, 2009). However, this approach does not incorporate the importance of social networks as levers to volunteering, nor does it consider socioeconomic factors, such as income. Further, some scholars have proposed that values alone cannot predict volunteerism because peoples' values are too subjective and diverse, and may vary depending on the specific volunteer activity (Wilson, 2000).

Another leading theory of volunteerism is rational choice theory, which explains that volunteers assess the costs and benefits of volunteerism when deciding whether to volunteer or not (e.g., Handy et al., 2000; Handy & Mook, 2010; Smith, 1994; Wilson, 2000). Lee and Brudney (2009) used data from a large U.S survey and found support for the cost-benefit approach in relation to formal volunteering. Specifically, people who felt more embedded in their communities were more engaged in formal volunteerism; community embeddedness ensures that individuals will reap the benefits of volunteerism if everybody collectively contributes. On the other hand, hourly wages were negatively associated with the likelihood of volunteering. If people perceive that time spent volunteering will detract from potential wages earned through labour participation, they will be less inclined to volunteer (Lee & Brudney, 2009). Although this theory may explain peoples' strategies when deciding whether to volunteer, it seems to underestimate intrinsic motivations for volunteering, such as passions or interests. Additionally, it focuses on reasons for volunteering, whereas barriers to volunteering may be more reflective of lacking resources (both individual and community resources). Finally, this theory may be less applicable to informal volunteerism because there may be less costs associated with this type of helping (e.g., Mitani, 2013). Therefore, we support a resource theory

that considers how personal resources (e.g., skills, income), social resources, and cultural resources, are interlinked with many aspects of volunteerism.

Figure 1 summarizes different themes and indicators associated with resources, which can inform our understanding of the different stages of youth volunteerism. This type of integrated theory seems to cover a wide landscape of volunteer processes, including determinants, barriers, and outcomes. Further, we also consider how both individual-level resources and perceptions of community resources are related to volunteerism. The next section reviews the literature on these different types of resources and their relation to volunteerism. This will set the foundation for exploring the ways in which these resources are embedded in the larger context and why place characteristics may be essential to youth volunteerism.

Economic resources and volunteerism. According to the Organization of Economic Co-operation and Development (OECD), human capital is "the knowledge, skills, competencies, and attributes embodied in individuals which facilitates the creation of personal, social, and economic well-being" (OECD, 2001, p. 18). Income is a common measure of human capital. The literature supports that income is more important to formal volunteering than to informal volunteering (e.g., Lee & Brudney, 2012; Wilson & Musick, 1997a). Formal volunteerism may require greater investments (e.g., traveling, skill-building), whereas informal volunteering allows for more personal freedom (Cnaan et al., 1996). A wide body of scholarship has shown that people with higher incomes were more likely to formally volunteer (e.g., Bauer, Bredtman, & Schmidt, 2012; Brown & Zhang, 2013; Goss, 1999; Handy et al., 2010; Penner, 2002; Rosenthal, Feiring, & Lewis, 1998; Rotolo & Wilson, 2012; Sundeen & Raskoff, 2000; Wilson, 2000; Wilson & Musick, 1998; Woolley, 1998). Further, some studies found that people with elite occupations, professionals, and managers had high formal volunteer rates (DeVoe & Pfeffer,

2007; Musick & Wilson, 2007; Wilson & Musick, 1997b). People with higher income and education may attract organizations because these resources signal better credentials, larger number of contacts, skills, and knowledge (e.g., Choi & DiNitto, 2012; Wilson & Musick, 1997b; 1998; Wuthnow, 1998). People with lower incomes may lack the resources to volunteer. One study used data from the *2000 Social Capital Community Benchmark Survey* in America, and found that low-income residents in both urban and rural areas perceived more barriers to volunteering (Torgerson & Edwards, 2012).

Sundeen, Raskoff, and Garcia (2007) used data from a national, American survey, and found that people who did not formally volunteer were more likely to have lower education, lower wealth, and were not likely to be employed part-time. While this study used a large sample to explore the relationship between capital indicators and nonvolunteer status, it was limited to formal volunteerism, and certain capital measures were particularly biased towards adults (e.g., marital status, children in the household). Further, volunteer barriers were based on yes/no questions in this particular survey. Different methods should be employed (i.e., qualitative interviews) to allow respondents to freely discuss the degree to which certain factors are barriers to volunteering or perhaps report different barriers that may not be asked of in surveys.

Other studies have shown that part-time work was related to higher volunteer rates and that people who worked part-time volunteered more than those who were fully employed or unemployed (e.g., Caro & Bass, 1997; Hodgkinson & Weitzman, 1996; Okun, 1994a; Taniguchi, 2006). Though people who work full-time can accumulate more human capital, there is a trade-off such that they lack discretionary time to volunteer (Okun, 1994a; Wilson & Musick, 1997b). However, some studies have found that volunteer rates were higher for people who worked many hours (e.g., Wuthnow, 1998), and researchers have suggested that different types of jobs (i.e.,

prestigious, such as manager positions) may be more strongly linked to volunteerism (Smith, 1994; Wilson & Musick, 1997b). Since youth may still be developing their careers (and may not be secure in prestigious jobs), work hours may affect their volunteering differently than it would for adults who have permanent, full-time positions. More research is needed to gain a better understanding of the relationship between employment status and youth volunteerism.

Volunteering can also build human capital. Briefly, some outcomes related to formal volunteering include, acquisition of marketable skills, employability, and career advancement (e.g., Hirst, 2001; Holdsworth & Quinn, 2010; Jones, 2000; Riecken, Babakus, & Yavas, 1994; Smith, Holmes, Haski-Leventhal, Cnaan, Handy, & Brudney, 2010; Spera, Ghertner, Nerino, & DiTommaso, 2015; Wuthnow, 1998). More recently, a longitudinal study showed that youth who volunteered during adolescence had higher wages in young adulthood (Kim & Morgül, 2017). While volunteerism demands individual resources, it also supplies and builds resources in the form of skills and improved job prospects.

Social resources and volunteerism. Social capital is a ubiquitous concept and has been defined by researchers in different ways. Many researchers have posited that social capital is accrued through norms, social connections, and group memberships; and involves integration with family, friends, and community members (e.g., Coleman, 1988, 1990; Edwards, 2004; van Oorschot, Arts, & Gelissen, 2006). One eminent figure in the social capital literature, Robert Putnam, described social capital as "the connections among individuals—social networks and the norms of reciprocity and trustworthiness that arise from them" (Putnam, 2000, p. 19). According to Putnam (2000), social networks provide avenues for people to contribute to the common good because these networks foster norms that drive people to focus on the welfare of others.

The literature is rife with definitions of social cohesion and sense of community, which

are facets of social capital. Social cohesion is a multifarious construct, which comprises trust, reciprocity, and solidarity among members of a community (e.g., see discussion by Bruhn, 2009; Larsen, 2013; Tolsma, van der Meer, & Gesthuizen, 2009; Toye, 2007). An abundance of literature has shown that people who expressed a higher sense of cohesion and perceived greater connections within their community, were more propelled to participate in their communities (e.g., Brodsky, O'Campo, & Aronson, 1999; Clerkin, Paarlberg, Christensen, Nesbit, & Tschirhart, 2013; Dury, Willems, De Witte, De Donder, Buffel, & Véte, 2014; Mashek, Cannaday, & Tangney, 2007; Okun & Michel, 2006; Omoto & Snyder, 2010).

Other researchers have proposed that social capital is not merely having social connections but can be viewed as a resource (e.g., Bourdieu, 1986; Paxton, 1999; Wilson & Musick, 1997a). As Coleman explained: "Like other forms of capital, social capital is productive, making possible the achievement of certain ends that would not be attainable in its absence"(Coleman, 1988, S98). In this sense, social capital can be viewed as an asset that makes productive activities possible. This idea is elucidated in Lin and Erickson's definition:

A theory of social capital, therefore, focuses on the production and the returns of social capital and explicates how individual and collective actors invest in social relations through which they gain access to diverse and rich resources for expected returns. (2008, p. 4)

As drawn out above, social capital involves interactions and relationships with others and can be a salient resource. For this thesis, we espoused the resource conceptualization of social capital because the thrust of the current research was to understand how social capital acts as a lever to volunteering and how volunteerism builds social resources.

The importance of networks. There is substantial evidence that different forms of social

capital relate to volunteerism. Past studies have found that people with more social ties and connections were more likely to formally volunteer (e.g., Bekkers & Schuyt, 2008; Bowman, 2004; Clerkin et al., 2013; Duke, Skay, Pettingell, & Borowsky, 2009; Hodgkinson, 2003; Jones, 2006; Paik & Navarre-Jackson, 2011; Reed & Selbee, 2001; Ryan, Kerry, Agnitsch, Zhao, & Mullick, 2005; Sundeen & Raskoff, 2000; Taniguchi & Marshall, 2014; Wilson, 2000; Wilson & Musick, 1997a; Wuthnow, 1999), as well as people who belonged to organizational associations (e.g., Harootyan, 1996; Ladewig & Thomas, 1987; Okun & Michel, 2006; Selbee, 2004). Social networks foster volunteering by providing contacts, building trust, and promoting collective action (Wilson & Musick, 1997a).

Wilson and Musick (1997a) found that women, in particular, were more likely to informally volunteer, and this could be because they were more likely to talk and visit with friends. Lee and Brudney (2012) found that social networks were important catalysts to both formal and informal volunteering. In other studies, having more social contacts and being part of associations increased the likelihood of being asked to volunteer (e.g., Brady, Schlozman, & Verba, 1999; Brown, 1999; Freeman, 1997; Musick et al., 2000; Putnam, 2000; Wilson & Musick, 1997a). In turn, being asked to volunteer is a strong predictor of volunteering (e.g., Brown, 1999; Bryant, Jeon-Slaughter, Kang, & Tax, 2003; Independent Sector, 1996, 2001). There are different network mechanisms involved in social capital, which can help explain the relevance of networks to volunteering. For example, *closure networks*, which are characterized by dense and cohesive networks, can affect the flow of information (Burt, 2000; Coleman, 1990). Burt (2000) explained that information is most likely to flow within groups before flowing between groups. Therefore, people who are part of close-knit and dense networks may be informed about volunteering opportunities sooner than people who are more excluded, because

information takes time to spread.

Teenagers may also learn about volunteering through their social contacts, such as teachers, parents, and friends (e.g., Johnson, Beebe, Mortimer, & Snyder, 1998; Sundeen & Raskoff, 2000). Schools can be conceptualized as a source of social capital (see review by Parcel, Dufur, & Zito, 2010) because schools allow youth to build many social connections and to learn about volunteer opportunities. Further, in Canada, some provinces require high school students to complete mandatory community service. For example, in Ontario, high school students are required to complete 40 hours of community service to graduate (Ministry of Education and Training, 1999).

Metz and Youniss (2005) found that school-based mandatory service was positively associated with youths' future intentions to volunteer, even for youth who were initially less inclined to volunteer. Findings from a sample of Ontario, high school students, revealed that those who completed mandatory service were more civically engaged in the future (Pancer, Brown, Hendersen, & Ellis-Hale, 2007). However, this finding was specific to youth who had positive experiences with their past volunteering and who were more committed (Pancer et al., 2007). Community service programs can be beneficial as they inculcate civic responsibilities in youth and helps them to acquire political knowledge (e.g., Niemi, Hepburn, & Chapman, 2000).

Despite these positive findings, the literature is mixed. Some research suggests that mandatory service may not be that effective for youth development. Some studies have found that students who participated in required service during high school, were no more likely to volunteer in the future than students who had never volunteered (e.g., Padanyi, Meinhard, & Foster, 2003; Planty & Regnier, 2003). While school may offer opportunities for youth to volunteer, it is also important to consider youths' perceptions of these services and how to

improve volunteerism.

Parental encouragement has also been related to youth volunteering (e.g., Clerkin, Paynter, & Taylor, 2009; Huebner & Mancini, 2003). Research has shown consistently that youth with parents who volunteer were more likely to volunteer themselves (e.g., Andolina, Jenkins, Zukin, & Keeter, 2003; Bekkers, 2007; Grimm, Dietz, Spring, Arey, & Foster-Bey, 2005; Mustillo, Wilson, & Lynch, 2004; Reed & Selbee, 2001; Sundeen & Raskoff, 1994, 2000; van Goethem, van Hoof, van Aken, Raaijmakers, Boom, & Orobio de Castro, 2012; Wilson, 2000). Family influences are important because parents may transmit core values related to civic orientations to their children (e.g., Pratt, Hunsberger, Pancer, & Alisat, 2003; review by Smetana, Campione-Barr, & Metzger, 2006). Parental volunteerism may be viewed as a facet of social capital because parents may encourage the flow of information and social contacts to their children, thus bridging and bonding networks. Friends may also be crucial to volunteering. In one study, adolescents volunteered as one way to maintain relationships (McLellan & Youniss, 2003). Overall, having social connections and knowing others who volunteer act as vehicles to volunteerism.

Beyond the individual-level, studies have found that collectivistic societies (e.g., strong cohesive in-groups) had higher volunteering rates (Mattis, Jagers, Hatcher, Lawhon, Murphy, & Murray, 2000; Parboteeah, Cullen, & Lim, 2004; Smith, 1994), and that social norms in the community impacted on philanthropic behaviour and social action (e.g., Finkelstein, Penner, & Brannick, 2005; Marquis, Glynn, & Davis, 2007). Taken together, youth with more social resources are more likely to engage in volunteerism. Youth who are exposed to volunteerism may experience a growth in social capital because volunteerism allows for people to interact with others, and thus builds social trust and reduces stereotypes (Flanagan, Gill, & Galloway, 2005). This

in turn fosters the development of stronger relationships and networks.

Cultural resources and volunteerism. There are different elements that comprise cultural capital, such as dispositions that guide someone's tastes and forms of cultural expression (e.g., music) that can be transmitted to others (Bourdieu, 1984,1986). Bourdieu's conceptualizations of cultural capital were heavily influenced by class structures (e.g., degrees symbolize aptitude), whereas other researchers have proposed that cultural capital should be viewed more generally to encompass many different forms of capital (e.g., Hyyppä, 2010). Wilson and Musick (1997a) posited that cultural capital can involve the acquisition and consumption of "symbolic goods", such as acting out or expressing your values. For the purposes of this thesis, we adopted the view of Wilson and Musick (1997a), who expanded on Bourdieu's definition by considering the moral and normative component of cultural capital in relation to volunteerism.

Cultural capital can include what Wilson and Musick (1997a) described as a "culture of benevolence": Individuals volunteer because they feel they should be helping others in society. Many people believe that helping others through volunteerism is vital and important to society (Sundeen, 1992; Uslaner, 2002; Wuthnow, 1994). People volunteer as a civic duty, sense of obligation, or feel it is their responsibility (e.g., Campbell, 2006; Hodgkinson & Weitzman 1996; Okun, 1994b; Reed & Selbee, 2003; Verba, Scholzman, & Brady, 1995).

Moral orientations and altruistic values are important cultural facets of volunteerism (Wilson & Musick, 1997a). These motivations to volunteer can be considered forms of cultural capital because motives usually involve moral incentives (Choi & DiNitto, 2012). Different moral incentives may be related to the broader societal values and customs in which youth are embedded. For example, youth may volunteer to contribute to their communities and help others,

as they feel it is the moral thing to do. Clary et al. (1998) developed the Volunteer Functions Inventory (VFI), which included six motivations to volunteer, one being values—humanitarian concern and desire to help others. A large body of research has demonstrated that volunteers were motivated by moral and prosocial values (e.g., Aydinli, Bender, Chasiotis, Cemalcilar, & van de Vijver, 2014; Carlo, Okun, Knight, & de Guzman, 2005; Chacón, Pérez, Flores, & Vecina, 2011; Finkelstein & Brannick, 2007; Muthuri, Matten, & Moon, 2009; Okun & Schultz, 2003; Omoto & Snyder, 1993; Schondel & Boehm, 2000; van Goethem et al., 2012; Wymer, 1997).

Dunn, Chambers, and Hyde (2016) conducted a systematic review and they reported that altruistic motives (e.g., desire to help others) were the most common motives among episodic volunteers. Other-oriented empathy—concern for the welfare of others—has also been linked to formal volunteering (e.g., Omoto & Snyder, 1995; Omoto, Snyder, & Hackett, 2010; Penner, 2002; Penner & Finkelstein, 1998) and to informal volunteering (Finkelstein & Brannick, 2007). Different motivations may also be related to formal volunteer intensity. Handy et al. (2010) found that students motivated by résumé building formally volunteered more episodically, whereas students who volunteered for more altruistic reasons volunteered more regularly.

Although altruistic motives are important drivers of volunteering, it is important to note that youth report a range of different motives for volunteering, some of which are more egoistic. Studies have shown that many young people decide to volunteer for career and socially-oriented reasons (e.g., Holdsworth & Quinn, 2010; Tessier, Minh-Nguyet, & Gagnon, 2006). Therefore, these types of motives do not reflect cultural capital, but rather they are associated with a desire to build human and social capital.

Religiosity can also be considered a cultural resource and has been heralded as a principal

gateway to formal volunteerism (e.g., Beyerlein & Hipp, 2006; Gibson, 2008; Grimm et al., 2005; McLellan & Youniss, 2003; Monsma 2007; Musick & Wilson, 1998; Paik & Navarre-Jackson, 2011; Park & Smith, 2000; Perks & Haan, 2011; Ruiter & De Graaf, 2006; van Tienen, Scheepers, Reitsma, & Schilderman, 2011; Wilson & Musick 1997a; Woolley, 1998; Zaff, Moore, Papillo, & Williams, 2003). Social networks through church attendance are important to volunteering because religious social ties have been linked to higher proclivity to volunteer (e.g., Becker & Dhingra, 2001; Campbell & Yonish, 2003; Lewis MacGregor, & Putnam, 2012; Merino, 2013; Paik & Navarre-Jackson, 2011; Park & Smith, 2000; Putnam & Campbell, 2010). Studies have found that secular volunteer rates were higher for nonreligious individuals who had friends with a religious affiliation (Lim & MacGregor, 2012; Merino, 2013), and thus congregational networks may be important for fostering volunteerism, regardless of individual religious identity.

As with the bulk of the volunteer literature, fewer studies have examined religiosity and informal volunteerism. Van Tienen et al. (2011) found that measures of spirituality were linked to informal volunteering but not to formal volunteering, and thus concluded that individual religiosity (rather than religious attendance) may be a stronger determinant of helping neighbours, relatives, or friends. Subjective dispositions, namely empathy and religious mind (i.e., individual religiosity, spirituality), were found to be associated with both formal and informal volunteerism in representative sample of Japanese residents, aged 25-59 (Mitani, 2013). However, Mitani (2013) only used one measure of informal volunteerism (caring for the elderly), whereas informal helping can involve a range of different activities. Additionally, studies need to address whether these results still hold for youth.

Different leisure activities can also be considered types of cultural capital, such as sports

(e.g., Stempel, 2005). Specifically, one study found that in a sample of undergraduate students, cultural capital was fostered through sports participation, which in turn predicted better well-being (Lee, Chung, & Park, 2016). Involvement in sports may be reflective of cultural capital because people who share the same interests and values have stronger sense of community (Warner & Dixon, 2013), and may be exposed to other cultural events (Lee et al., 2016). It seems reasonable to conceive that youth who are part of social and/or cultural activities would have more available resources to invest in volunteerism.

Despite this extensive literature, the relationship between the context and volunteerism has been mostly untapped. While Wilson and Musick (1997a) conceptualized volunteerism as requiring human, social, and cultural resources, one missing piece that needs to be considered is the importance of place characteristics. Certain resources may have differential effects on volunteerism depending on physical, social, and cultural attributes of localities.

Volunteerism Within a Socio-Ecological Framework

Socio-ecological models consider ways in which the fusion of different dimensions of the environment (e.g., physical, social, cultural) shape behaviour and outcomes (e.g., Baltes, Lindenberger, & Staudinger, 2006; Stokols, 1996; Thelen & Smith, 2006; World Health Organization, 1986). Youth developmental trajectories are impacted by systematic interrelations within the social environment—family, friends, workplace, neighbourhood, and culture (e.g., Lerner, 2002, 2004a, 2004b, 2006; Offer, 1969).

The most eminent figure in the socio-ecological literature is perhaps Bronfenbrenner, who proposed that different contexts and systems impact human development (Bronfenbrenner, 1979, 1986, 1994). Bronfenbrenner (1976) described environments as consisting of human, social, and cultural elements, which unequivocally links to the different resources explored

previously. In his older theories, Bronfenbrenner described the following systems: microsystem, mesosystem, exosystem, and macrosystem (Bronfenbrenner, 1979, 1994). The microsystem includes interactions with the immediate environment (e.g., parents, neighbourhood), while the mesosystem and exosystem are more distal influences on child development (e.g., interactions with teachers and parents). The macrosystem includes the effects of the larger cultures, attitudes, lifestyles, and customs in society, on human development (e.g., Bronfenbrenner, 1979, 1994).

Figure 2 was constructed by the first and second authors (Sean Pearce and Elizabeth Kristjansson) and outlines an overview of our hybrid, conceptual framework. The concept of person-context relations (e.g., Bronfenbrenner & Moriss, 2006) can be applied to youth volunteerism. For example, individual factors (e.g., gender, employment status) and contextual factors (e.g., urban/rural) may interact to impact on youth volunteer behaviour. Our intention was not to directly test this model; we only suggest the importance of understanding the synergy between individual, microsystem-level factors, and the larger macrosystem. As presented in our conceptual model, our focus was not on mesosystem or exosystem factors.

Additionally, our conceptual model can be elucidated through other ecological models which consider behaviour settings—structural and dynamic attributes, time and space boundaries, and standing patterns of behaviour (Barker, 1968; Schoggen, 1989). Optimal or overpopulated areas (e.g., urban centers) exert less pressure on residents because there are several people to fill different roles (Schoggen & Schoggen, 1988). In underpopulated settings (e.g., rural towns), there is a shortage of persons relative to positions, which generates more pressure for people to maintain the setting. Since rural areas have more roles to fulfill and are less diverse, people may be more socially knit and know one another. This in turn may nurture greater sense of community and cohesion which encourages people to be more active in their

communities (e.g., Caldwell & Boyd, 2009; Onyx & Bullen, 2000). Urban areas may have looser social networks and thus citizens are less likely to volunteer (Stadelmann-Steffen & Freitag, 2011). Graddy and Wang (2008) found that larger community size decreased sense of community, which in turn decreased the likelihood of volunteering. Reed and Selbee (2000) found that community size was negatively related to formal and informal volunteerism.

Differences in volunteering may be a reflection of the larger cultural and social forces in regions and not merely their size. Hooghe and Botterman (2012) found that community size and population density in Belgium did not impact active versus passive membership in voluntary associations. Place-based influences on volunteerism include, but are not limited to: place attachment (e.g., Zeldin & Topitzes, 2002); area-level economic insecurity (Coulthard, Walker, & Morgan, 2002); and the ‘class’ of neighbourhoods (e.g., Mohan, Twigg, Barnard, & Jones, 2006). Therefore, socio-ecological perspectives that consider many interacting factors within an individuals' social ecology may shed light on youth volunteerism.

The Importance of Place and Volunteerism: Delineating Rural Versus Urban

There are many differences between urban and rural place of residence in terms of resources, which may influence community engagement. One challenge is that there is no clear consensus in the literature on how to define rural versus urban. For the purposes of this thesis, the definition of urban and rural was based on Statistics Canada's Statistical Area Classification (SAC). Urban youth were defined as residents living in either Census Metropolitan Areas (CMAs) or Census Agglomeration areas (CAs). A CMA has a total population of at least 100,000 of which 50,000 or more must live in the core—a population center (Statistics Canada, 2011). A CA must have a core population of at least 10,000 (Statistics Canada, 2011). According to this delineation, CMAs and CAs encompass towns and municipalities where over 50% of the

labour force commute to an urban core (Statistics Canada, 2011).

Rural youth were defined as residents living outside of CMAs or CAs. This included metropolitan influenced zones (MIZs): strong, moderate, and weak MIZs, and no MIZs. Metropolitan influenced zones are based on the proportion of residents that commute to work in the urban core(s) of CMAs or CAs (Statistics Canada, 2011). For example, a strong MIZ is defined as 30% (or more) people in the total employed labour force of a municipality that works in any CMAs/CAs urban core (Statistics Canada, 2011). Following this same definition, a moderate MIZ is 5-30%, a weak MIZ is less than 5%, and no MIZ is where nobody commutes to the urban core of a CMA or CA. Residents living in any of the three MIZs or no MIZs are farther from and less influenced by larger urban centers and live in the countryside or small towns (e.g., du Plessis, Beshiri, Bollman, & Clemenson, 2001). These urban/rural definitions were adopted as they are the standard definitions used in many Canadian studies (e.g., Rural Canada Profile series). Many Canadian reports that have examined population differences by region (e.g., median income, education level), have used this urban/rural divide (e.g., Sorensen & Aylward, n.d.) This rural definition comprises different zones based on urban influence (e.g., strong influenced zones, no influenced zones), but for statistical purposes we did not consider different degrees of rurality. The sample sizes would have been too small, which would have led to empty cell sizes for some of our analyses. Additionally, there is no strong empirical or theoretical support for distinct, inner-city regions in Canada. In other countries (e.g., U.S), inner-cities may be characterized by low-income or social housing, whereas the boundaries for such regions are not clear in a Canadian context.

Rural areas can be quite diverse depending on the specific country and region being studied (Bollman & Beshiri, 2000; Crockett, Shanahan, & Jackson-Newsom, 2000; OECD,

1993). Dimensions of rurality often include occupational (e.g., agricultural industries), ecological (e.g., population density), sociocultural (e.g., norms, community ties), and traditionalism components (Bealer, Willits, & Kuvlesky, 1965; Crockett et al., 2000). People in the countryside have described themselves as broadly skilled, plain, closely connected to nature, and independent (Bell, 1992). Although ‘urban’ and ‘rural’ as contemporary constructs are continuing to evolve, the literature marks classic urban/rural differences. For example, compared to urban regions, rural regions are comprised of social relations that are less segmented, there is less bureaucracy, there is greater integration, and there is more emphasis on family/community values (see Haggerty, n.d.).

Urban/rural individual assets and volunteerism. Differences in personal resources (e.g., income, health) exist between urban and rural residents, which may impact on volunteerism. Reports suggest that rural residents, compared to urban residents, have lower median income, are more likely to live in poverty, have lower educational attainment, and demonstrate less healthy behaviour (e.g., Bollman & Beshiri, 2000; Kirby & LeBreton, 2002; Looker, 1993, 2001; Rural Secretariat, 2005).

Poverty in rural areas can be problematic because of long distance travel and the requirement of a vehicle for transportation (e.g., Herold & Kaye, 2001; O’Leary, 2008; Reimer, 2009; Rural Ontario Institute, 2009). Rural residents need to travel farther than urban residents to access services and this can restrict mobility and prevent involvement in larger economic and social activities (e.g., Fairbairn & Gustafson, 2008; Garasky, Morton, & Greder, 2006; Halseth & Ryser, 2006; Marr, 2012). Specifically, researchers have found that transportation limited accessibility to employment and recreational activities for rural youth in Ontario (e.g., Gilbert & O’Brien, 2005; Herold & Kaye, 2001). These challenges may be encumbering to volunteerism;

transportation has been cited as a common barrier for rural volunteers (Shrestha & Cihlar, 2004).

Employment opportunities also differ in urban versus rural areas. Studies have found that rural youth felt their job opportunities were limited (Looker, 2001); were stressed when trying to find jobs (DeYoung, 1995); were less likely to have full-time work and access to summer work than urban youth (Looker, 2001; Vera-Toscana, Phimister, & Weersink, 2001); and had lower wages and benefits than urban youth (Seyfrit & Danner, 1998). Furthermore, managerial positions and higher skilled jobs were more likely to be taken by outsiders than rural youth themselves (Seyfrit & Danner, 1998). In other reports, rural youth were more likely to be in lower-status occupations (e.g., Finnie, Lascelles, & Sweetman, 2005; Looker, 2001). Since employment is related to volunteerism (e.g., Lee & Brudney, 2009; Wilson, 2000), employed rural youth may have an advantage to volunteer over nonworking rural youth.

In rural areas people are less likely to stay in school and to obtain a university degree (Bollman, 1999; Fellegi, 1996; Finnie et al., 2005; Looker & MacKinnon, 1997). One Canadian study found that rates of degree attainment were positively correlated with city size, such that people in larger urban centers were more likely to seek higher degrees (Brown, Newbold, & Beckstead, 2010). Higher educational attainment is strongly related to higher volunteer rates (e.g., Bekkers, 2006; Brown & Ferris, 2007; Wilson & Musick, 1997a, 1998). Some rural youth may be less likely to become involved in their communities because they may possess fewer skills and connections to attract organizations.

Health issues are particularly problematic for rural youth. Studies have shown that boys and girls in rural Canada rated their health more poorly than those in metro regions (Mitura & Bollman, 2004; Tremblay, Dahinten, & Kohen, 2003); and that the depression rate was higher in rural and Northern areas of Canada than in metro cities (Mitura & Bollman, 2004). Furthermore,

more rural youth engaged in drug and alcohol abuse, smoked cigarettes, and had higher suicide rates (e.g., Jennissen, 1992). In other studies, functional limitations, depression, and health problems were barriers to volunteering (e.g., Li & Ferraro, 2006; Tang, Morrow-Howell, & Choi, 2010). Shrestha and Cihlar (2004) reported that healthcare problems were common issues for rural volunteers. The literature appears to suggest that rural residents face more challenges related to human capital compared to their urban counterparts. This may have implications for rural youth volunteerism.

Urban/rural social resources and volunteerism. Social capital may impact youth volunteerism differently by urban/rural contexts. Putnam (2000) found that rural Americans were more likely to engage in community projects, volunteer, and help strangers, whereas metropolitan residents belonged to fewer groups/clubs, had fewer exchanges with family, and shorter friendships. Strong family and community connections comprise the essence of rural culture (e.g., Burnell, 2003; Haas & Lambert, 1995; Hofferth & Iceland, 1998; Howley, 2006; Onyx & Bullen, 2000; Smith, Beaulieu, & Seraphine, 1995). Rural areas are very integrated and emphasize the importance of adolescent-adult relationships (Mekos & Elder, 1996), for example, teachers are highly likely to know parents (e.g., Looker & Mackinnon, 1999). Communities that stress the importance of family and collective action allow for social capital to flourish (e.g., Smith et al., 1995).

Network capital, one component of social capital, includes the social ties that foster community participation, and this was found to be essential in rural areas (Wellman, Quan-Haase, Witte, & Hampton, 2001). Compared to metropolitan areas, rural communities are composed of more personal networks (e.g., friends), which are characterized by long-term relations (e.g., Beggs, Haines, & Hurlbert, 1996). In rural settings, people with personal ties

generally live in the same vicinity and everyone is likely to know one another (Stern & Fullerton, 2009). In line with Wilson and Musick (1997a), these social resources should promote volunteering among rural residents because social networks and cohesion are strong predictors of volunteerism. Living in close proximity to friends may translate into higher frequency of face-to-face contact, which may foster helping behaviour. In rural areas, there are lower formal qualifications to volunteer; informal volunteerism may be particularly prevalent because individuals personally know those they are helping (Kilpatrick & Fulton, 2003).

Different network systems may have different effects on volunteerism depending on context. Despite the ubiquity of social media in today's society, not all youth have equal access to the internet, which may make face-to-face interactions an important resource. For example, in rural places, youth who are more isolated or lack social contacts may be at a disadvantage, because internet access is limited compared to in urban areas. Rural places still lack broadband high-speed technology and many residents still use dial-up connections (Stern, Adams, & Elsasser, 2009; Whitacre & Mills, 2006). In rural Canada, residents have expressed their concerns with internet connectivity, labeling rural areas as 'blackout zones' and voicing their concerns with the restrictions that youth could face with employment and community involvement (Saltzman, 2016). Additionally, Bruce (1999) conducted interviews with several rural voluntary organizations across Canada, and found that they heavily rely on informal contacts and word of mouth to recruit new members. These findings suggest that in rural places, having larger social networks may be essential to youths' volunteerism. However, it is important to note that rural areas are diverse, and thus internet access depends on a range of individual-level factors as well.

In rural areas, youth may have stronger place attachment and stronger affiliations with

peers. One study found that more rural youth were described as popular and fewer were rejected, compared to urban youth (Darling, Munsch, & Foster-Clark, 1991). Furthermore, reports have shown that rural youth felt safer in their communities, reported less crime, and had a stronger sense of place than did urban youth (Bauch, 2001; Fellegi, 1996; Theodori & Theodori, 2014). Urban areas are more segregated by income, employment type, and education level, whereas in rural communities, people live closer together and there is less separation (Debertin & Goetz, 2013). Since cities are larger and diverse, networks may also be more diverse (Hofferth & Iceland, 1998). Urban centers may be less cohesive.

On the other hand, rural areas tend to be more homogenous, which may have repercussions for youth who are different and less traditional (e.g., different language, new to the area). These residents may have fewer support networks or experience lower tolerance (Crockett et al., 2000). According to Putnam (2000), *bonding social capital* includes strong ties with homophilic groups (e.g., similar religion, ethnicity), whereas *bridging social capital* involves affiliations with diverse groups. Since rural residents have long-term relationships with people who they may exclusively identify with (especially kin), they may have strong bonding social capital, but this could hinder cultural and social exchanges with other group members (Flora & Flora, 1993). Wilson and Sanyal (2013) conducted interviews in two small towns to learn about residents' attitudes toward community engagement. They found that one town collaborated together and shared visions with many community members, but the other town had less positive perceptions of outsiders and encountered communication barriers. Similarly, certain aspects of rural communities have been shown to be parochial. Chavez (2005) found that in one town, long-term white residents perceived a dissolution of social interactions in their communities, after the introduction of different ethnic groups. Since place can be part of one's identity, rural youth who

are culturally dissimilar from long-term residents or who have stronger feelings of ‘otherness’ may find it more challenging to integrate in their communities.

According to Onyx and Bullen (2000), minorities or people with fewer resources (e.g., income, education) living in rural areas may have lower access to social capital. One study found that rural students who were part of peer groups that were not conventional were marginalized (Schonert-Reichl, Elliott, & Bills, 1995). The problem of "old versus new" can arise in rural areas, such that newcomers may not be accepted, encounter difficulties building networks, and thus become isolated (Hodge & Qadeer, 1983). This tension may be less problematic in urban areas that are more culturally diverse and where there is higher tolerance for differences (Fischer, 1995). Urban areas may be stronger in bridging social capital because of the cultural and social diversity of cities. Facets of social capital may thus have different effects on rural versus urban youths’ volunteerism, depending on specific demographic and resource characteristics. However, some of these studies are dated and therefore research is needed to better understand whether these findings are applicable to modern contexts.

Urban/rural place culture and volunteerism. Cultural resources include values and attitudes of society. Given the unique patterns and histories of place, regional differences in volunteerism may exist. In rural areas, mutual help is essential and embodies the spirit of rural culture (Hodge & Qadeer, 1983). Urban residents are less reliant on neighbours or friends because their concept of help is more professionalized, whereas rural residents may lack the resources for specialized help (Hodge & Qadeer, 1983). One study found that higher urbanization was related to lower informal volunteering (Gundelach et al., 2010). Historically, rural residents engaged in many acts of neighbourliness (e.g., sharing domestic items), and many legions and community clubs assisted others in need (Vidich & Bensman, 1958).

For some rural residents, volunteering in churches or at schools was part of family tradition and can even be part of their livelihood (Lamers, 1994). Some people in rural areas may volunteer for business-related reasons; residents may become board members to support commodity interests or certain political campaigns (Lamers, 1994). Rural youth may thus perceive volunteering as a lifestyle or to give back to their community.

Small towns may have a civic culture. The volunteer sector is essential to rural Canada because it provides many services: fire departments, search-and-rescue teams, literacy services, tourism, hospice services at home, cultural events, and extracurricular and other social activities for youth (e.g., Fairbairn & Gustafson, 2008; Nurse, 2007). One study found that rural charities in Ontario focused on "other community benefits" (e.g., animal protection, agricultural societies, volunteer fire departments) more so than their urban counterparts (Barr, McKeown, Davidman, McIver, & Lasby, 2004).

Church is also an important cultural element in rural places. Church-related activities historically encompassed the bulk of all rural social activities, and several churches were involved with social programs and public life (Vidich & Bensman, 1958). The extant literature showed that rural residents more strongly adopted religious and family values (Wagenfeld, 2003) and were more likely to attend religious services (e.g., Benson, Donahue, & Erickson, 1989). More recently, religious communities have been found to play an important role in the vitality of rural areas (Furbey, Dinham, Farnell, Finneron, & Wilkinson, 2006). Mainstream religious communities (e.g., Protestant, Catholic) can help foster social cohesion in rural places—they provide services for those in need and construct community activities (e.g., Farnell, Hopkinson, Jarvis, Martineau, & Hein, 2006). For example, Andrews (2011) found that Protestant communities particularly enhanced the integration of immigrants in rural areas. However, this

literature is ambiguous. One recent study found that urban residents were more active in religious voluntary organizations than were rural residents (Matthews, Pendakur, & Young, 2009). Further research is needed to examine how religiosity may impact volunteerism differently by region. While this literature suggests cultural differences between urban and rural regions, it is important to note that some of these studies are dated, and there is a need to explore these findings in contemporary settings.

In light of these economic, social, and cultural differences in urban/rural areas, understanding how place characteristics are implicated in youth volunteerism would be a valuable piece to explore, especially since volunteerism is linked to youth benefits. Our epistemology was based on the premise that spatial entities naturally and historically consist of various social, cultural, and physical characteristics, which should have an impact on residents as individuals do not live in a vacuum and are influenced by the larger environment.

The Importance of Studying Youth Volunteerism

Volunteerism is especially important to youth (aged 15-24; United Nations, n.d.; WHO, 2015) because adolescence is a crucial developmental period for prosocial behaviour—deeper concern for helping others and enhanced “emotional responsiveness” (see review by Eisenberg, Cumberland, Guthrie, Murphy, & Shepard, 2005). Further, many educational institutions promote volunteering by creating service programs (e.g., Alliance for Service Learning in Education Reform, 1993; Clary, Snyder, & Stukas, 1998; Fiske, 2002; Griffith, 2012; McCarthy & Tucker, 2002; Pancer et al., 2007; Reed, Jernstedt, Hawley, Reber, & DuBois, 2005; Sutherland et al., 2006). Service programs act as pathways to generating formal volunteering activities and can directly provide students with volunteer experiences and opportunities. Additionally, college and university application review boards often consider high school

volunteer experiences (Adler & Goggin, 2005; Youth Engagement, 2002). In this sense, volunteering can be another credential for one's matriculation. Formal volunteering is embedded in the school system and is continuing to be an important part of North American culture. This may partly explain why the volunteer rate is so high among youth.

To date, most studies have focused on benefits of formal volunteering, which has been shown to contribute to improved social, physical, and mental well-being for volunteers (e.g., Piliavin & Siegl, 2007; Wilson, 2000). It can also contribute to positive development. Historically, positive youth development was conceptualized as a lack of adverse or negative behaviours (e.g., Benson, Scales, Hamilton, & Sesma, 2006). This prototypical conceptualization witnessed a contemporary shift when Positive Youth Development (PYD) manifested as a framework that focused on the potential inherent in all youth. The PYD framework posits that youth are capable of being successful and outlines theories, strategies, and models for healthy development (e.g., Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2004; Lerner, 2006; Lerner, Lerner, Almerigi, Theokas, & Lerner, 2005; Lerner et al., 2005; Moore & Halle, 2001; Porter, 2010). This framework is rooted in developmental system theories, which emphasize the plasticity of human development. It posits that development is based on interacting systems, such as biological, psychological, family, and community characteristics (e.g., Catalano et al., 2004; Ford & Lerner, 1992; Lerner, 2006; Lerner & Steinberg, 2004).

Human development is derived from reciprocal interactions in one's environment (e.g., Bronfenbrenner, 1979), and these strong and supportive relationships can nourish positive development in youth (e.g., Bronfenbrenner & Morris, 1998; Catalano et al., 2004; Gould, Flett, & Lauer, 2012; Ullrich-French & McDonough, 2013). Different ecological and social resources (e.g., family, neighbourhood, school), can be perceived as "developmental assets" (Benson et al.,

2006) which seed healthy youth development. Ferris, Oosterhoff, and Metzger (2013) found that participation in community and school organizations (e.g., church, sports) was linked to higher academic achievement and less problem behaviour, for a sample of rural youth. Key domains of healthy youth development include: competence, confidence, connection, character, and caring (e.g., Bowers, Li, Kiely, Brittan, Lerner, & Lerner, 2010; Lerner et al., 2005). According to Lerner et al. (2005), these indicators of PYD will most likely emerge when youth are immersed in contexts that are favourable and adaptive to building their inner strengths and capacities.

Generally, volunteerism should foster youth development because youth learn best through direct experience, exploration, and reflection (e.g., Kuperminc, Holditch, & Allen, 2001; Youniss, McLellan, Su, & Yates, 1999). Indeed, volunteerism has been linked to positive youth development (e.g., Feldman & Matjasko, 2005; Gardner, Roth, & Brooks-Gunn, 2008; Mahoney, Larson, Eccles, & Lord, 2005; Roth & Brooks-Gunn, 2003; Zaff et al., 2003). Volunteering can be a learning experience for youth and allows for them to acquire important skills (e.g., leadership, career), build social connections, and enhance prosocial attitudes (e.g., Shye, 2010; Siu et al., 2012).

Youth who have fewer resources in terms of social, cultural, and economic assets, are less likely to volunteer and thus may be less likely to experience positive development. Learning more about youth volunteering can shed light on ways to make volunteering satisfying for youth and contribute to healthy development, especially for youth who may not have the means to become involved or who are vulnerable to exclusion.

Gaps in the Literature

There are several deficiencies in the literature on youth volunteerism. First, to our knowledge, no studies have situated youth volunteerism within an integrated resources

framework. Studies have only explicitly used this theory with all age groups more generally (e.g., Bryant et al., 2003; Curtis, Grabb, & Baer, 1992; Selbee, 2004; Wilson & Musick, 1998). Some of these studies particularly have important conceptual and methodological limitations. For example, Wilson and Musick (1998) used data from *America's Changing Lives* survey, which was limited to people aged 25 and older. Further, respondents were asked only about five organizations where they may have volunteered (e.g., church, school), which fails to consider several other organizations (e.g., environmental, arts). This dissertation employed data from the CSGVP (for two of our studies), which asked respondents about 15 different formal volunteer activities—this would more confidently ensure that all volunteering efforts were captured and not overlooked.

Another major gap is the lack of studies on informal volunteering. Much of the literature has either focused only on formal volunteering or treated informal volunteering as being subsumed within a broad definition of volunteering. Although these types of volunteering are related, there are also differences between them. A large percentage of Canadians engage in informal volunteering (over 85% in the CSGVP; Vézina & Crompton, 2012), and thus more research in this area would be enlightening.

There is an especial dearth of studies considering the relationship between youth volunteerism and the larger contextual environment. To address this lacuna, it is critical to understand youth volunteerism holistically. As previously outlined, it is conceivable to suspect differences in formal and informal volunteerism between urban and rural youth. Studies have found that urbanization is related to a lower likelihood of volunteering (e.g., Oliver, 2000; Sundeen, 1992; Verba et al., 1995; Wallace & Pichler, 2009). However, most of these studies only examined city size, which some research contends is not the best determinant of

volunteerism (e.g., Anderson, 2009; Haddad, 2004). Studies that do consider place of residence as a determinant of volunteering often use a single measure (i.e., urban/rural) and do not explore potential reasons for these differences. Further, these studies were not specific to youth and did not consider how several different resources may impact regional differences in volunteering.

Torgerson and Edwards (2012) contrasted perceived obstacles to community involvement in urban and rural residents, and they examined whether this differed depending on demographic factors (e.g., gender, employment, income). However, despite discussing volunteering in their study, their dependent variable was based on barriers to community involvement. The operationalization of this variable is ambiguous with regards to the types of activities respondents engaged in (i.e., formal or informal) and whether this variable was even measuring volunteerism. This study also did not consider how a wide range of social and cultural variables (e.g., values) may impact perceived barriers differently by urban/rural regions. Additionally, the literature on neighbourhoods and youth volunteerism is particularly scarce. More attention should be given to the relationship between neighbourhood characteristics (e.g., availability of amenities, perceived problems, cohesion) and youth formal and informal volunteering. There is also a need for more qualitative research on motivations, barriers, and facilitators of volunteering for urban and rural youth (Torgerson & Edwards, 2012). This methodology will allow for in depth understanding of volunteerism rather than having youth respond about these topics through closed-ended questions. Finally, the quality of the extant literature on youth volunteerism can be improved. Many studies have not employed sophisticated analyses (e.g., moderation, mediation) to understand processes involved in youth volunteerism, nor have they studied large samples representative of the Canadian youth population. The qualitative studies on youth volunteerism have been limited to interviews, whereas mixed methods would allow for more detailed and

broader understanding of volunteering. It is crucial to gain a better understanding of how place of residence is linked to volunteerism and ultimately positive youth development.

Objectives and Overview of Studies

This thesis was designed to further expand on the youth volunteer literature and to address gaps by using a variety of sophisticated methodology. The epistemological stance we adopted was similar to a constructivist perspective; we strongly believe that a range of methods are useful and can be valid for studying social phenomena. We adhere to the notion that there are multiple ways of knowing. This is why we particularly employed mixed methods, to obtain results from both data driven analyses (e.g., surveys) as well as qualitative interviews to understand how youth construct meaning through lived experiences. The principal purpose was to link many concepts from the integrated resources theory of volunteerism and situate the findings within a socio-ecological perspective. Its objectives included:

1. To learn about the predictors of youth volunteerism and intensity of volunteerism.
2. To better understand volunteerism from the perspective of youth, including barriers and facilitators to, their experiences with, and benefits of volunteerism.
3. To understand whether and how volunteerism differs for rural and urban youth, especially how resources impact volunteerism differently depending on place of residence.
4. To explore how neighbourhood perceptions (e.g., cohesion) and specific characteristics of place may impact volunteerism, such as barriers and volunteer frequency.

This thesis comprised three studies. Study 1 was a quantitative study, which examined predictors of youth formal volunteer proclivity, and formal and informal volunteering intensity,

through secondary data. Analyses were based on data from the combined 2007 and 2010 Canada Survey of Giving, Volunteering and Participating (CSGVP). Multivariate regressions were employed to determine whether economic resources, sociocultural resources, and sociodemographics impacted on volunteering. Additionally, we examined whether urban/rural contexts moderated the relationship between different resources (e.g., whether parents volunteer, religious attendance) on volunteer outcomes. Our general hypothesis was that youth who had more resources would be more invested in formal and informal volunteerism than youth who had fewer resources. Further, these differences (between youth with resources vs. youth who lacked resources) would be greater in rural areas than in urban areas. This study fulfilled objectives (1) and (3). These analyses contribute to the advancement of knowledge in predictors of youth volunteerism and the differential impacts depending on urban/rural residency.

Study 2 was a mixed methods study aimed at better understanding youth experiences with volunteerism. This study was informed by an ecological perspective as well as a resource theory. The aim was to consider how resources could be linked to motives for and barriers to volunteering, and skills acquired, for urban/rural youth. Specifically, the quantitative portion was based on CSGVP survey data and compared urban/rural differences in reasons for volunteering and reasons for not volunteering more. Multiple regression was conducted to determine the barriers and facilitators related to volunteer status and volunteer hours. We also examined the relationship between types of activities and the number of skills acquired, and whether this differed by urban/rural region. The qualitative section comprised semi-structured interviews with diverse youth in Renfrew County (rural) and Ottawa (urban). The purpose of the interviews was to gain insight about youth volunteerism topics (e.g., perceptions, methods to improve volunteering) that were not fully captured in the survey and to explore the quantitative findings

more deeply. This study fulfilled a mixture of objectives (2) and (3).

Study 3 went beyond the regional focus of urban/rural. It considered one city (Ottawa, the capital of Canada), as a case study to examine relationships between perceived neighbourhood attributes (e.g., cohesion, satisfaction with neighbourhood amenities) and volunteerism. Rather than focusing on individual-level resources, this study examined how perceptions of community resources impacted on volunteering. Participants were undergraduate students from a university in Ontario, Canada, who completed online questionnaires. Path analyses were conducted to trace the pathways through which different neighbourhood factors related to each other and to informal and formal volunteer outcomes. We hypothesized that youth who had better perceptions of their neighbourhood would be more engaged in volunteerism. We also explored the relationship between perceptions of the neighbourhood and perceived volunteer barriers. Finally, cluster analysis was employed to determine whether youth could be grouped based on volunteer type (informal/formal) and intensity, and whether neighbourhood factors differentiated these groups. This study predominantly fulfilled objective (4).

This thesis represents a unique contribution to the literature. It provided a clearer portrait of which youth are most likely to volunteer and who may be excluded or may have poorer access to volunteer opportunities. It also explored whether resources had different impacts on formal versus informal volunteering. To date, most research on youth volunteerism has only been on formal volunteerism. This dissertation also considered how the contextual environment influenced volunteerism, by exploring more complex relationships between individual assets, sociocultural resources, and the importance of place. The qualitative portion investigated youth perceptions and experiences with volunteerism, and strategies and methods to improve volunteerism, which could ultimately foster positive youth development at large. This work

could be useful for public policy and nongovernmental agencies, when trying to attract young volunteers. Further, nonprofits may learn different approaches to make volunteering more satisfactory for both youth and organizations. Finally, this research may shed light on the recruitment and retention of young volunteers and possibly the need for nonprofits to consider place characteristics in this process.

References

- Adler, P.R. & Goggin, J. (2005). What do we mean by "civic engagement"? *Journal of Transformative Education*, 3, 236-253. doi: 10.1177/1541344605276792
- Alliance for Service Learning in Education Reform. (1993). Standards of quality for school-based service learning. *Equality and Excellence in Education*, 26, 71-73.
doi:10.1080/1066568930260216
- Anderson, M.R (2009). Beyond membership: A sense of community and political behavior. *Political Behavior*, 31, 609-627. doi:10.1007/s11109-009-9089-x
- Andolina, M.W., Jenkins, K., Zukin, C., & Keeter, S. (2003). Habits from home, lessons from school: Influences on youth civic engagement. *PS: Political Science & Politics*, 36, 275-280. doi:10.1017/S104909650300221X
- Andrews, R. (2011). Religious communities, immigration, and social cohesion in rural areas: Evidence from England. *Rural Sociology*, 76, 535-561. doi: 10.1111/j.1549-0831.2011.00057.x
- Anheier, H.K., & Salamon, L.M. (1999). Volunteering in cross national perspective: Initial comparisons. *Law and Contemporary Problems*, 62, 43-66. Retrieved from <http://scholarship.law.duke.edu/lcp/vol62/iss4/3/>
- Aydinli, A., Bender, M., Chasiotis, A., Cemalcilar, Z., & van de Vijver, F.J.R. (2014). When does self-reported prosocial motivation predict helping? The moderating role of implicit prosocial motivation. *Motivation and Emotion*, 38, 645–658. doi:10.1007/s11031-014-9411-8
- Baltes, P.B., Lindenberger, U., & Staudinger, U.M. (2006). Lifespan theory in developmental psychology. In R.M. Lerner (Ed.), *Theoretical models of human development. Volume 1*

- of Handbook of Child Psychology* (6th ed.; pp. 559-664). Hoboken, NJ: Wiley. doi:
10.1002/9780470147658.chpsy0111
- Barker, R. (1968). *Ecological psychology*. Stanford, CA: Stanford University Press.
- Barr, C., McKeown, L., Davidman, K., McIver, D., & Lasby, D. (2004). *The Rural Charitable Sector Research Initiative: A portrait of the nonprofit and voluntary sector in rural Ontario* (ISBN 1-55401-078-0). Retrieved from
http://www.imaginecanada.ca/sites/default/files/www/en/library/rural/rural_report.pdf
- Bauch, P. (2001). School-community partnerships in rural schools: Leadership, renewal, and a sense of place. *Peabody Journal of Education*, 76, 204-221. doi:
10.1207/S15327930pje7602_9
- Bauer, T., Bredtman, J., & Schmidt, C. (2012). Time vs. money: The supply of voluntary labor and charitable donations in Europe. *European Journal of Political Economy*, 32, 80-94. doi: 10.1016/j.ejpoleco.2013.06.006
- Bealer, R.C., Willits, F.K., & Kuvlesky, W.P. (1965). Rurality in American society: Some implications of alternative definitions. *Rural Sociology*, 30, 255-266.
- Becker, P.E., & Dhingra, P.H. (2001). Religious involvement and volunteering: Implications for civil society. *Sociology of Religion*, 62, 315-335. doi: 10.2307/3712353
- Beggs, J.J., Haines, V.A., & Hurlbert, J.S. (1996). Revisiting the rural-urban contrast: Personal networks in nonmetropolitan and metropolitan settings. *Rural Sociology*, 61, 306-325.
- Bekkers, R. (2006). Traditional and health related philanthropy: The role of resources and personality. *Social Psychology Quarterly*, 69, 349-366. doi:10.1177/019027250606900404

Bekkers, R. (2007). Intergenerational transmission of volunteering. *Acta Sociologica*, 50, 99-114. doi: 0.1177/0001699307077653.

Bekkers, R., & Schuyt, T. (2008). And who is your neighbor? Explaining the effect of religion on charitable giving and volunteering. *Review of Religious Research*, 50(1), 74–96. Retrieved from <http://www.rug.nl/research/portal/files/2749496/BekkersR-AndWho-2008.pdf>

Bell, M.M. (1992). The fruit of difference: The rural-urban continuum as a system of identity. *Rural Sociology*, 57(1), 65-82. doi: 10.1111/j.1549-0831.1992.tb00457.x

Benson, P. L., Donahue, M. J., & Erickson, J. A. (1989). Adolescence and religion: A review of the literature from 1970 to 1986. *Research in the Social Scientific Study of Religion*, 1, 153-181.

Benson, P.L., Scales, P.C., Hamilton, S.F., & Sesma, A., Jr. (2006). Positive youth development: Theory, research, and applications. In R.M. Lerner & W. Damon (Eds.), *Theoretical models of human development. Volume 1 of Handbook of Child Psychology* (6th ed.; 894-941). Hoboken, NJ: Wiley. doi: 10.1002/9780470147658.chpsy0116

Beyerlein, K., & Hipp, J.R. (2006). From pews to participation: the effect of congregational activity and context on bridging civic engagement. *Social Problems*, 53, 97–117. doi: 10.1525/sp.2006.53.1.97

Bollman, R.D. (1999). *Human Capital and Rural Development: What are the linkages?* (No. 21-601-MIE99039). Ottawa: Agriculture Division, Statistics Canada.

Bollman, R.D., & Beshiri, R. (2000). *Rural and small town Canada: a demographic overview*. Presented to the Conference on the New Rural Economy, Alfred.

Bourdieu, P. (1984). *Distinction*. Cambridge, MA: Harvard University Press.

- Bourdieu, P. (1986). The forms of capital. In J.G. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241-258). New York, NY: Greenwood Press.
- Bowers, E.P., Li, Y., Kiely, M.K., Brittan, A., Lerner, J.V., & Lerner, R.M. (2010). The Five Cs model of positive youth development: A longitudinal analysis of confirmatory factor structure and measurement invariance. *Journal of Youth and Adolescence*, 39, 720–735. doi: 10.1007/s10964-010-9530-9
- Bowman, W. (2004). Confidence in charitable institutions and volunteering. *Nonprofit and Voluntary Sector Quarterly*, 33, 247-270. doi: 10.1177/0899764004263420
- Brady, H.E., Schlozman, K.L., & Verba, S. (1999). Prospecting for participants: Rational expectations and the recruitment of political activists. *The American Political Science Review*, 93, 153–168. doi: 10.2307/2585767
- Brodsky, A.E., O'Campo, P.J., & Aronson, R.E. (1999). PSOC in community context: Multi-level correlates of a measure of psychological sense of community in low-income, urban neighborhoods. *Journal of Community Psychology*, 27, 659-679. doi:10.1002/(SICI)1520-6629(199911)27:6<659::AID-JCOP3>3.0.CO;2-#
- Bronfenbrenner, U. (1976). The experimental ecology of education. *Educational Researcher*, 5, 5-15. doi: 10.3102/0013189X005009005
- Bronfenbrenner, U. (1979). *The ecology of human development*. London: Harvard University Press.
- Bronfenbrenner, U. (1986). Recent advances in research on the ecology of human development. In R.K. Silbereisen, K. Eyferth & G. Rudinger (Eds.), *Development as action in context* (pp.287-309). Berlin: Springer Berlin Heidelberg. doi: 10.1007/978-3-662-02475-1_15
- Bronfenbrenner, U. (1994). Ecological models of human development. In *International*

- Encyclopedia of Education, Vol. 3* (2nd ed.; pp. 1643-1647). Oxford: Elsevier. Retrieved from <http://www.psy.cmu.edu/~siegler/35bronfenbrenner94.pdf>
- Bronfenbrenner, U., & Morris, P.A. (1998). The ecology of developmental processes. In W. Damon, & R.M. Lerner (Eds.), *Theoretical models of human development, Vol. 1: Handbook of child psychology*, (5th ed.; pp. 993–1028). New York, NY: Wiley.
- Bronfenbrenner, U., & Morris, P.A. (2006). The bio ecological model of human development. In W. Damon & R.M. Lerner (Eds.), *Handbook of child psychology, Vol. 1: Theoretical models of human development* (6th ed., pp. 793-828). New York: John Wiley.
- Brown, E. (1999). The scope of volunteer activity and public service. *Law and Contemporary Problems*, 62, 17-42. Retrieved from <http://scholarship.law.duke.edu/lcp/vol62/iss4/2/>
- Brown, E., & Ferris, J. (2007). Social capital and philanthropy: An analysis of the impact of social capital on individual giving and volunteering. *Nonprofit and Voluntary Sector Quarterly*, 38, 85-99. doi: 10.1177/0899764006293178
- Brown, W.B., Newbold, K.B., & Beckstead, D. (2010). Growth and change in human capital across the Canadian urban hierarchy, 1996-2001. *Urban Studies*, 47, 1571-1586. doi: 10.1177/0042098009353625
- Brown, E., & Zhang, Y. (2013). Is volunteer labor part of household production? Evidence from married couples. *Review of Economics of the Household*, 11, 341-369. doi: 10.1007/s11150-011-9138-1
- Bruhn, J. (2009). *The concept of social cohesion*. (pp. 31-48). doi: 10.1007/978-1-4419-0364-8_2
- Bryant, W.K., Jeon-Slaughter, H., Kang, H., & Tax, A. (2003). Participation in philanthropic activities: Donating money and time. *Journal of Consumer Policy*, 26(1), 43-73. doi:

10.1023/A:1022626529603

- Burnell, B.A. (2003). The 'real world' aspirations of work-bound rural students. *Journal of Research in Rural Education*, 18, 104–113. Retrieved from http://jrre.vmhost.psu.edu/wp-content/uploads/2014/02/18-2_1.pdf
- Burt, R.S. (2000). The network structure of social capital. *Research in Organizational Behaviour*, 22, 345-423. doi: 10.1016/S0191-3085(00)22009-1
- Bussell, H. & Forbes, D. (2002). Understanding the volunteer market: The what, where, who and why of volunteering. *International Journal of Nonprofit and Voluntary Sector Marketing*, 7, 244-257. doi: 10.1002/nvsm.183
- Caldwell, R., & Boyd, C.P. (2009). Coping and resilience in farming families affected by drought. *Rural and Remote Health*, 9: 1088. Retrieved from http://www.rrh.org.au/publishedarticles/article_print_1088.pdf
- Campbell, D. (2006). *Why we vote: How schools and communities shape our civic life*. Princeton, NJ: Princeton University Press.
- Campbell, D.E., & Yonish, S.J. (2003). Religion and volunteering in America. In C. E. Smidt (Ed.), *Religion as Social Capital: Producing the Common Good* (pp. 87-106). Waco, TX: Baylor University Press.
- Carlo, G., Okun, M.A., Knight, G., de Guzman, M.R.T. (2005). The interplay of traits and motives on volunteering: agreeableness, extraversion and prosocial value motivation. *Personality and Individual Differences*, 38, 1293-1305. doi: 10.1016/j.paid.2004.08.012
- Caro, F., & Bass, S. (1997). Receptivity to volunteering in the immediate post-retirement period. *Journal of Applied Gerontology*, 16, 427-442. doi:10.1177/073346489701600403
- Carson, D.E. (1999). On defining and measuring volunteering in the United States and Abroad.

- Law and Contemporary Problems*, 62, 67–71. Retrieved from <http://scholarship.law.duke.edu/cgi/viewcontent.cgi?article=1147&context=lcp>
- Catalano, R.F., Berglund, M.L., Ryan, J.A.M., Lonczak, H.S., & Hawkins, J.D. (2004). Positive youth development in the United States: research findings on evaluations of positive youth development programs. *Annals of the American Academy of Political and Social Science*, 591, 98–124. doi: 10.1177/0002716203260102
- Chacón, F., Pérez, T., Flores, J. & Vecina, L. (2011). Motives for volunteering: categorization of volunteers' motivations using open-ended questions. *Psychology in Spain*, 15, 48-56. Retrieved from <http://www.psychologyinspain.com/content/full/2011/15005.pdf>
- Chavez, S. (2005). Community, ethnicity, and class in a changing rural California town. *Rural Sociology*, 70, 314-335. doi:10.1526/0036011054831224
- Choi, N.G., Burr, J.A., Mutchler, J.E., & Caro, F.G. (2007). Formal and informal volunteer activity and spousal caregiving among older adults. *Research on Aging*, 29, 99–124. doi: 10.1177/0164027506296759
- Choi, N.G., & DiNitto, M.D. (2012). Predictors of time volunteering, religious giving, and secular giving: Implications for non-profit organizations. *Journal of Sociology and Social Welfare*, 39, 93-120. Retrieved from http://www.wmich.edu/hhs/newsletters_journals/jssw_institutional/institutional_subscribers/39.2.Choi.pdf
- Clary, E.G., Snyder, M., Ridge, R.D., Copeland, J., Stukas, A.A., Haugen, J... & Miene, P. (1998). Understanding and assessing the motivations of volunteers: A functional approach. *Journal of Personality and Social Psychology*, 74, 1516-1530. doi: 10.1037/0022-3514.74.6.1516

Clary, E.G., Snyder, M., & Stukas, A.A. (1996). Volunteers' motivations: Findings from a national survey. *Nonprofit and Voluntary Sector Quarterly*, 25, 485-505.

doi:10.1177/0899764096254006

Clary, E.G., Snyder, M., & Stukas, A.A. (1998). Service-learning and psychology: Lessons from the psychology of volunteers' motivations. In R.G. Bringle & D.K. Duffy (Eds.), *With service in mind: Concepts and models for service-learning in psychology* (pp. 35-50).

Washington, DC: American Association of Higher Education.

Clerkin, R.M., Paarlberg, L.E., Christensen, R.K., Nesbit, R., & Tschirhart, M. (2013). Place, time and philanthropy: Exploring geographic mobility and philanthropic engagement.

Public Administration Review, 73(1), 97-106. doi: 10.1111/j.1540-6210.2012.02616.x

Clerkin, R.M., Paynter, S.R., & Taylor, J.K. (2009). Public service motivation in undergraduate giving and volunteering decisions. *The American Review of Public Administration*, 39,

675-698. doi: 10.1177/0275074008327512

Cnaan, R., Handy, F., & Wadsworth, M. (1996). Defining who is a volunteer: Conceptual and empirical considerations. *Nonprofit and Voluntary Sector Quarterly*, 25, 364-383.

doi: 10.1177/0899764096253006

Coleman, J.S. (1988). Social capital in the creation of human capital. *American Journal of*

Sociology, 94, 95-120. doi: 10.1086/228943

Coleman, J.S. (1990). *Foundations of Social Theory*. Cambridge, Mass: Harvard University Press.

Coulthard, M., Walker, A., & Morgan, A. (2002). People's perceptions of their neighbourhood and community involvement. London: The Stationery Office.

Crockett, L.J., Shanahan, M.J., & Jackson-Newsom, J. (2000). Rural youth: Ecological and life

- course perspectives. *Adolescent Diversity in Ethnic, Economic, and Cultural Contexts: Advances in Adolescent Development*, 10, 43-74. doi: 10.4135/9781452225647.n3
- Curtis, J.E., Grabb, E.G., & Baer, D.E. (1992). Voluntary association membership in fifteen countries: A comparative analysis. *American Sociological Review*, 57, 139–152. doi: 10.2307/2096201
- Darling, N., Munsch, J., & Foster-Clark, F.S. (1991). *Functional characteristics of the social networks of more and less competent early adolescents*. Paper presented at the Hartman Conference on Children and Their Families, New London, CT.
- Debertin, D.L., & Goetz, S.J. (2013). *Social capital formation in rural, urban, and suburban communities* (University of Kentucky Staff Paper No.474). Retrieved from <http://ageconsearch.umn.edu/bitstream/159102/2/s474%20Social%20Capital%20Debertin%20complete.pdf>
- DeVoe, S., & Pfeffer, J. (2007). Hourly payment and volunteering: The effects of organizational practices on decisions about time use. *Academy of Management Journal*, 50, 783–98. doi: 10.5465/AMJ.2007.26279171
- DeYoung, A.J. (1995). Construction and staffing the cultural bridge: The school as change agent in rural Appalachia. *Anthropology and Education*, 26, 168-192. doi: 10.1525/aeq.1995.26.2.05x1253e
- Duke, N.N., Skay, C.L., Pettingell, S.L., & Borowsky, I.W. (2009). From adolescent connections to social capital: Predictors of civic engagement in young adulthood. *The Journal of Adolescent Health: Official Publication of the Society for Adolescent Medicine*, 44, 161-168. doi:10.1016/j.jadohealth.2008.07.007
- Dunn, J., Chambers, S.K., & Hyde, M.K.(2016). Systematic review of motives for episodic

- volunteers. *Voluntas*, 27(1), 425-464. doi: 10.1007/s11266-015-9548-4
- Du Plessis, V., Beshiri, R., Bollman, R.D., & Clemenson, H. (2001). *Definitions of rural* (no. 21-006-XIE). Rural and Small Town Canada Analysis Bulletin, 3. Statistics Canada.
- Dury, S., Willems, J., De Witte, N., De Donder, L., Buffel, T., & Vêrte, D. (2014). Municipality and neighbourhood influences on volunteering in later life. *Journal of Applied Gerontology*, 35, 601-626. doi: 10.1177/0733464814533818
- Edwards, R. (2004). Present and absent in troubling ways: families and social capital debates. *The Sociological Review*, 52(1), 1-21. doi:10.1111/j.1467-954X.2004.00439.x
- Eisenberg, N., Cumberland, A., Guthrie, I.K., Murphy, B.C., & Shepard, S.A. (2005). Age change in prosocial responding and moral reasoning in adolescence and early adulthood. *Journal of Research on Adolescence*, 15, 235-260. doi: 10.1111/j.1532-7795.2005.00095.x
- Eisenberg, N., & Fabes, R.A. (1998). Prosocial development. In W. Damon (Ed.), *Handbook of child psychology: Volume 3. Social, emotional, and personality development* (5th ed.; pp. 779-862). New York: Wiley.
- Fairbairn, J., & Gustafson, L. (2008). *Beyond freefall: Halting rural poverty* (Final report of the Standing Senate Committee on Agriculture and Forestry, 39th Parliament—2nd session). Retrieved from the Parliamentary Internet website:
<https://sencanada.ca/content/sen/committee/392/agri/rep/rep09jun08-e.pdf>
- Farnell, R., Hopkinson, J., Jarvis, D., Martineau, J., & Hein, J.R. (2006). *Faith in rural communities: Contributions of social capital to community vibrancy*. Stoneleigh Park, England: Acora
- Feldman, A., & Matjasko, J.L. (2005). The role of school-based extracurricular activities in

- adolescent development: A comprehensive review and future directions. *Review of Educational Research*, 75, 159–210. doi: 10.3102/00346543075002159
- Fellegi, I.P. (1996). *Understanding rural Canada: Structures and trends* (Catalogue No. 21F0016XIE). Ottawa, ON: Statistics Canada.
- Ferris, K.A., Oosterhoff, B., & Metzger, A. (2013). Organized activity involvement among rural youth: Gender differences in associations between activity type and developmental outcomes. *Journal of Research in Rural Education*, 28(15), 1-16. Retrieved from <http://jrre.psu.edu/articles/28-15.pdf>
- Finkelstein, M.A., & Brannick, M.T. (2007). Applying theories of institutional helping to informal volunteering: motives, role identity, and prosocial personality. *Social Behaviour and Personality: An International Journal*, 35, 101-114. doi: 10.2224/sbp.2007.35.1.101
- Finkelstein, M.A., Penner, L.A., & Brannick, M.T. (2005). Motive, role identity, and prosocial personality as predictors of volunteer activity. *Social Behavior and Personality*, 33, 403-418. doi: 10.2224/sbp.2005.33.4.403
- Finnie, R., Lascelles, E., & Sweetman, A. (2005). *Who goes? The direct and indirect effects of family background on access to post-secondary education* (Research Paper Series, No.237). Retrieved from Statistics Canada website [http://www5.statcan.gc.ca/olc-olc.action?ObjId=11F0019M2005237&ObjType=46&lang=en&limit=0](http://www5.statcan.gc.ca/olc-olc/action?ObjId=11F0019M2005237&ObjType=46&lang=en&limit=0)
- Fischer, C. (1995). The subcultural theory of urbanism: A twentieth-year assessment. *American Journal of Sociology*, 101, 543-577. doi: 10.1086/230753
- Fiske, E. B. (2002). *Learning in deed: The power of service-learning for American schools*. New York: National Commission on Service-Learning.

- Flanagan, C.A, Gill, S., & Galloway, L.S. (2005). Social participation and social trust in adolescence: the importance of heterogeneous encounters. In A.M Omoto (Ed.), *Processes of Community Change and Social Action. The Claremont Symposium on Applied Social Psychology* (pp. 149–66). Mahwah, NJ: Erlbaum.
- Flora, C.B., & Flora, J.L. (1993). Entrepreneurial social infrastructure: a necessary ingredient. *The Annals of the American Academy of Political and Social Sciences*, 529, 48-58.
doi: 10.1177/0002716293529001005
- Ford, D.H., & Lerner, R.M. (1992). *Developmental systems theory: An integrative approach*. Newbury Park, CA: Sage Publications.
- Freeman, R.B. (1997). Working for nothing: The supply of volunteer labor. *Journal of Labor Economics*, 15(1), 140-166. doi: 10.1086/209859
- Furbey, R., Dinham, A., Farnell, R., Finneron, D., & Wilkinson, G. (2006). *Faith as social capital: Connecting or dividing*. York, England: Joseph Rowntree Foundation.
- Garasky, S., Morton, L.W., & Greder, K.A. (2006). The effects of the local food environment and social support on rural food insecurity. *Journal of Hunger & Environmental Nutrition*, 1, 83-103. doi:10.1300/J477v01n01_06
- Gardner, M., Roth, J., & Brooks-Gunn, J. (2008). Adolescents' participation in organized activities and developmental success 2 and 8 years after high school: do sponsorship, duration, and intensity matter? *Developmental Psychology*, 44, 814-830. doi: 10.1037/0012-1649.44.3.814
- Gibson, T. (2008). Religion and civic engagement among America's youth. *The Social Science Journal*, 45, 504-514. doi:10.1016/j.soscij.2008.07.007.
- Gilbert, R., & O'Brien, C. (2005). *Child and youth friendly land-use and transport planning*

- guidelines*. Retrieved from The Centre for Sustainable Transportation website:
http://cst.uwinnipeg.ca/documents/Guidelines_ON.pdf
- Goss, K. (1999). Volunteering and the long civic generation. *Nonprofit and Voluntary Sector Quarterly*, 28, 378–415. doi: 10.1177/0899764099284002
- Gould, D., Flett, R., & Lauer, L. (2012). The relationship between psychosocial developmental and the sports climate experienced by underserved youth. *Psychology of Sport & Exercise*, 13, 80–87. doi:10.1016/j.psychsport.2011.07.005
- Graddy, E., & Wang, L. (2008). Community foundation development and social capital. *Nonprofit and Voluntary Sector Quarterly*, 38, 392–412. doi: 10.1177/0899764008318609
- Griffith, J. (2012). A decade of helping: Community service among recent high school graduates attending college. *Nonprofit and Voluntary Sector Quarterly*, 41, 786-801. Doi: 10.1177/0899764011417720
- Grimm, R. Jr., Dietz, N., Spring, K., Arey, K., & Foster-Bey, J. (2005). *Building active citizens: The role of social institutions in teen volunteering* (Youth Helping America Series, Brief 1). Retrieved from the Corporation for National & Community Service website:
https://www.nationalservice.gov/pdf/05_1130_LSA_YHA_study.pdf
- Gundelach, B., Freitag, M., & Stadelmann-Steffen, I. (2010). Making or breaking informal volunteering: Welfare statism and social capital in a sub-national comparative perspective. *European Societies*, 12, 627–652. doi: 10.1080/14616696.2010.497224
- Haas, T., & Lambert, R. (1995). To establish the bonds of common purpose and mutual enjoyment. *Phi Delta Kapan*, 7, 136-142.
- Haddad, M.A. (2004). Community determinates of volunteer participation and the promotion

- of civic health: The case of Japan [Special issue]. *Nonprofit and Voluntary Sector Quarterly*, 33, 8-31. doi:10.1177/0899764004265434
- Haggerty, J.L. (n.d.). Urban sociology. In E.F. Borgatta & R.J.V Montgomery (Eds.), *Encyclopedia of Sociology* (2nd edition, 5 vol. set). Macmillan Reference USA.
- Halseth, G., & Ryser, L. (2006). Trends in service delivery: Examples from rural and small town Canada, 1998 to 2005. *Journal of Rural and Community Development*, 1, 69-90.
Retrieved from http://nre.concordia.ca/_ftp2004/reports/jrdc/JRCD-2006-48.pdf
- Handy, F., Cnaan, R.A., Brudney, J.L., Ascoli, U., & Meijs, L.C. (2000). Public perception of “who is a volunteer”: An examination of the net-cost approach from a cross-cultural perspective. *Voluntas*, 11, 45-65. doi: 10.1023/A:1008903032393
- Handy, F., Cnaan, R.A., Hustinx, L., Kang, C., Brudney, J.L., Haski-Leventhal, D. & Zrinscak, S. (2010). A cross-cultural examination of student volunteering: Is it all about resume building? *Nonprofit and Voluntary Sector Quarterly*, 39, 498-523.
doi:10.1177/0899764009344353.
- Handy, F., & Mook, L. (2010). Volunteering and volunteers: Benefit-cost analyses. *Research on Social Work Practice*, 21, 412-420. doi: 10.1177/1049731510386625
- Harootyan, R.A. (1996). Volunteer activity by older adults. In J. E. Birren (Ed.), *Encyclopedia of : Age, aging and the aged* (Vol. 2, pp. 613-620). San Diego, CA: Academic Press.
- Haski-Leventhal, D. (2009). Altruism and volunteerism: The perception of altruism in four disciplines and their impact on the study of volunteerism. *Journal for the Theory of Social Behaviour*, 39, 271-299. doi: 10.1111/j.1468-5914.2009.00405.x
- Herold, M., & Kaye, K. (2001). *Rural youth and mobility: An emerging rural transportation issue* (Rural Transportation Series No.2). University of Guelph.

- Herzog, A.R., Kahn, R.L., Morgan, J.N., Jackson, J.S., & Antonucci, T.C. (1989). Differences in productive activities. *Journal of Gerontology*, 44, 129–138. doi: 10.1093/geronj/44.4.S129
- Hirst, A. (2001). *Links between volunteering and employability*. Research Report RR309. London: Department for Education and Skills.
- Hodge, G.D., & Qadeer, M.A. (1983). *Towns & villages in Canada. The importance of being unimportant*. Canada, Toronto: The Butterworth Group of Companies.
- Hodgkinson, V.A. (2003). Volunteering in global perspective. In P. Dekker & L. Halman (Eds.), *The values of volunteering* (pp. 35-53). New York, NY: Springer US. doi: 10.1007/978-1-4615-0145-9_3
- Hodgkinson, V.A., & Weitzman, M.S. (1996). *Giving and volunteering in the United States*. Washington, DC: Independent Sector.
- Hofferth, S., & Iceland, J. (1998). Social capital in rural and urban communities. *Rural Sociology*, 63, 574-598. doi: 10.1111/j.1549-0831.1998.tb00693.x
- Holdsworth, C., & Quinn, J. (2010). Student volunteering in English higher education. *Studies in Higher Education*, 35(1), 113- 127. doi:10.1080/03075070903019856
- Hooghe, M., & Botterman, S. (2012). Urbanization, community size, and population density. Is there an urban-rural divide in participation in voluntary organizations or social network formation? *Nonprofit and Voluntary Sector Quarterly*, 41(1), 120-144. doi: 10.1177/0899764011398297
- Howley, C.W. (2006). Remote possibilities: Rural children's educational aspirations. *Peabody Journal of Education*, 82, 62-80. doi: 10.1207/S15327930pje8102_4
- Huebner, A.J., & Mancini, J.A. (2003). Shaping structured out-of-school time use among youth:

- The effects of self, family, and friend systems. *Journal of Youth Adolescent*, 32, 453-463.
doi: 10.1023/A:1025990419215
- Hustinx, L., Cnaan, R.A., & Handy, F. (2010). Navigating theories on volunteering: a hybrid map for a complex phenomenon. *Journal for the Theory of Social Behaviour*, 40, 410-434. doi: 10.1111/j.1468-5914.2010.00439.x
- Hyypä, M. T. (2010). *Healthy ties: Social capital, population health and survival*. Dordrecht, the Netherlands: Springer.
- Independent Sector. (1996). *America's teenage volunteers: Civic participation begins early in life*. Washington, DC: Independent Sector.
- Independent Sector. (2001). *Giving and volunteering in the United States*. Washington, DC: Independent Sector.
- Janoski, T., Musick, M., & Wilson, J. (1998). Being Volunteered? The impact of social participation and pro-social attitudes on volunteering. *Sociological Forum*, 13, 495-519. doi: 10.1023/A:1022131525828
- Jennissen, T. (1992). *Health issues in rural Canada* (Political and Social Affairs Division, No.BP-325E). Retrieved from <http://publications.gc.ca/Collection-R/LoPBdP/BP/bp325-e.htm>
- Johnson, M.K, Beebe, T., Mortimer, J.T., & Snyder, M. (1998). Volunteering in adolescence: a process perspective. *Journal of Research on Adolescence*, 8, 309-330. doi: 10.1207/s15327795jra0803_2
- Jones, F. (2000). *Youth volunteering on the rise* (Perspectives, No. 75-001-XPE). Retrieved from Statistics Canada website:
http://ivt.crepuq.qc.ca/popactive/documentation2002_A/2000/pear2000012001s1a04.p

df

- Jones, K.S. (2006). Giving and volunteering as distinct forms of civic engagement: The role of community integration and personal resources in formal helping. *Nonprofit and Voluntary Sector Quarterly*, 35, 249–266. doi: 10.1177/0899764006287464
- Kilpatrick, S., & Fulton, A. (2003). *Developing effective learning programs: What extension can learn from the fields of adult education and learning communities*. Paper presented at the Australasia Pacific Extension Network Forum (2003: Hobart, Tas.), Hobart, Tasmania.
- Kim, J., & Morgül, K. (2017). Long-term consequences of youth volunteering: Voluntary versus involuntary service. *Social Science Research*, 1-16. doi:10.1016/j.ssresearch.2017.05.002
- Kirby, M.J.L., & LeBreton, M. (2002). *The health of Canadians—The Federal role* (Final report, Vol. 6 recommendations for reform). Retrieved from <https://sencanada.ca/content/sen/committee/372/soci/rep/repoct02vol6-e.htm>
- Kuperminc, G.P., Holditch, P.T., & Allen, J.P. (2001). Volunteering and community service in adolescence. *Adolescent Medicine*, 12, 445-457. Retrieved from https://www.researchgate.net/publication/11748872_Volunteering_and_community_service_in_adolescence
- Ladewig, H., & Thomas, J.K. (1987). *Assessing the impact on former 4-H members: The 4-H Alumni Study*. Retrieved from ERIC database: <http://files.eric.ed.gov/fulltext/ED282681.pdf>
- Lamers, C. (1994). Volunteers: Rural versus urban. *The Journal of Volunteer Resources Management*, 3.4. Retrieved from http://www.cjvrm.org/past/Canadian_Journal_1994-4.pdf
- Larsen, C.A. (2013). *The rise and fall of social cohesion. The construction and de-*

- construction of social trust in the USA, UK, Sweden and Denmark*. Oxford: Oxford University Press.
- Lee, Y., & Brudney, J.L. (2009). Rational volunteering: a benefit-cost approach. *International Journal of Sociology and Social Policy*, 29, 512-530. doi: 10.1108/01443330910986298
- Lee, Y., & Brudney, J.L. (2012). Participation in formal and informal volunteering: Implications for volunteer recruitment. *Nonprofit Management and Leadership*, 23, 159-180. doi: 10.1002/nml.21060
- Lee, S., Chung, J.E., & Park, N. (2016). Linking cultural capital with subjective well-being and social support: The role of communication networks. *Social Science Computer Review*, 34,172-196. doi: 10.1177/0894439315577347
- Lerner, R.M. (2002). *Concepts and theories of human development* (3rd ed.). Mahwah, NJ: Lawrence Erlbaum Associates.
- Lerner, R.M. (2004b). Diversity in individual↔context relations as the basis for positive development across the life span: A developmental systems perspective for theory, research, and application. *Research in Human Development*, 1, 327-346. doi: 10.1207/s15427617rhd0104_5
- Lerner, R.M. (2004a). *Liberty: Thriving and civic engagement among American youth*. Thousand Oaks, CA: Sage Publications.
- Lerner, R.M. (2006). Editor's introduction: Developmental science, developmental systems, and contemporary theories. In R.M. Lerner & W. Damon (Eds.), *Theoretical models of human development. Volume 1 of Handbook of Child Psychology* (6th ed.; pp. 1-17). doi:10.1002/9780470147658.chpsy0101
- Lerner, R.M. Lerner, J.V., Almerigi, J.B., & Theokas, C. (2005). Positive youth development: A

view of the issues. *Journal of Early Adolescence*, 25, 10-16.

doi: 10.1177/0272431604273211

Lerner, R.M., Lerner, J.V., Almerigi, J.B, Theokas, C., Phelps, E., Gestsdottir, S.,... von Eye, A. (2005). Positive youth development, participation in community youth development programs, and community contributions of fifth grade adolescents: Findings from the first wave of the 4-H Study of Positive Youth Development. *Journal of Early Adolescence*, 25, 17-71. doi: 10.1177/0272431604272461

Lerner, R.M., & Steinberg, L. (Eds.). (2004). *Handbook of adolescent psychology* (2nd ed.). Hoboken, NJ: John Wiley & Sons Inc.

Lewis, V.A., MacGregor, C.A., & Putnam, R.D. (2012). Religion, networks, and neighborliness: The impact of religious social networks on civic engagement. *Social Science Research*, 42, 331–346. doi: 10.1016/j.ssresearch.2012.09.011

Li, Y., & Ferraro, K.F. (2006). Volunteering in middle and later life: Is health a benefit, barrier, or both? *Social Forces*, 85, 497-519. doi:10.1353/sof.2006.0132

Lim, C., & MacGregor, C.A. (2012). Religion and volunteering in context: Disentangling the contextual effects of religion on voluntary behavior. *American Sociological Review* 77, 747–779. doi: 10.1177/0003122412457875

Lin, N., & Erickson, B. (2008). *Social capital: An international research program*. Oxford: Oxford University Press.

Looker, E.D. (1993). Interconnected transitions and their costs: gender and urban/rural differences in the transition to work. In P. Anisef & P. Axelrod (Eds.), *Transitions: Schooling and employment in Canada* (pp. 43-64). Toronto, ON: Thompson Educational Publishing, Inc.

- Looker, E.D. (2001). *Policy research issue for Canadian youth: an overview of human capital in rural and urban areas*. Hull, Quebec: Applied Research Branch, Human Resources Development Canada.
- Looker, E.D., & MacKinnon, D. (1997, February). *Transitions beyond high school: The process and its meaning for rural youth*. Paper presented to the National Conference on Rural Education, Saskatoon, SK.
- Looker, E.D., & MacKinnon, D. (1999, April). *Under the influence: The role of significant others in youths' occupational and educational choices*. Paper presented to the Fourth National Congress on Rural Education, Saskatoon, SK.
- Lucas, R. (1971). *Minetown, Milltown, Railtown: Life in Canadian communities of single industry*. Toronto: University of Toronto Press.
- Mahoney, J.L., Larson, R.W., Eccles, J.S., & Lord, H. (2005). *Organized activities as contexts of development: Extracurricular activities, after-school and community programs*. Mahwah, NJ: Erlbaum.
- Manatschal, A., & Freitag, M. (2014). Reciprocity and volunteering. *Rationality and Society*, 26, 208-235. doi: 10.1177/1043463114523715
- Marquis, C., Glynn, M.A., & Davis, G.F. (2007). Community isomorphism and corporate social action. *Academy of Management Review*, 32, 925–945. Retrieved from http://webuser.bus.umich.edu/gfdavis/Papers/marquis_glynn_davis_07.pdf
- Marr, E. (2012). *Assessing transportation disadvantage and public transportation opportunities in rural Ontario: A case study of Huron County* (Doctoral Thesis, The University of Guelph, Ontario, Canada). Retrieved from <http://perthhuron.unitedway.ca/wp-content/uploads/2014/01/Assessing-Transportation-Disadvantage-and-Public->

- Transportation-Opportunities-in-Rural-Ontario-A-Case-Study-of-Huron-County.pdf
- Mashek, D., Cannaday, L.W., & Tangney, J.P. (2007). Inclusion of community in self scale: A single item pictorial measure of community connectedness. *Journal of Community Psychology*, 35, 257-275. doi: 10.1002/jcop.20146
- Matthews, R., Pendakur, R., & Young, N. (2009). Social capital, labour markets, and job-finding in urban and rural regions: Comparing paths to employment in prosperous cities and stressed rural communities in Canada. *The Sociological Review*, 57, 305-330. doi: 10.1111/j.1467-954X.2009.01831.x
- Mattis, J.S., Jagers, R.J., Hatcher, C.A., Lawhon, G.D., Murphy, E.J., & Murray, Y.F. (2000). Religiosity, volunteerism, and community involvement among African American men: An exploratory analysis. *Journal of Community Psychology*, 28, 391– 406. doi: 10.1002/1520-6629(200007)28:43.0.CO;2-A
- McCarthy, A.M., & Tucker, M.L. (2002). Encouraging community service through service learning. *Journal of Management Education*, 28, 629-647. doi: 10.1177/1052562902238322
- McLellan, J.A., & Youniss, J. (2003). Two systems of youth service: determinants of voluntary and required youth community service. *Journal of Youth and Adolescence*, 32, 47-58. doi: 10.1023/A:1021032407300
- Mekos, D., & Elder, G.H. (1996, March). *Community ties and the development of competence in rural youth*. Paper presented at the Biennial meeting of the Society for Research in Adolescence, Boston.
- Merino, S.M. (2013). Religious social networks and volunteering: Examining recruitment via close ties. *Review of Religious Research*, 55, 509-527. doi:10.1007/s13644-013-0113-6

- Metz, E., & Youniss, J. (2005). Longitudinal gains in civic development through school-based required service. *Political Psychology*, 26, 413–37. doi:10.1111/j.1467-9221.2005.00424.x
- Ministry of Education and Training (1999). *Ontario secondary schools, grades 9 to 12: Program and diploma requirements 1999*. Retrieved from the Ministry of Education and Training website: <http://www.edu.gov.on.ca/eng/document/curricul/secondary/oss/oss.pdf>
- Mitani, H. (2013). Influences of resources and subjective dispositions on formal and informal volunteering. *Voluntas*, 25, 1022-1040. doi: 10.1007/s11266-013-9384-3
- Mitura, V., & Bollman, R. D. (2004). *Health status and behaviours of Canada's youth: a rural-urban comparison* (Rural and Small Town Canada Analysis Bulletin, No. 21-006-X).
- Mohan, J., Twigg, L., Barnard, S., & Jones, K. (2006). Volunteering, geography and welfare: A multilevel investigation of geographical variations in voluntary action. In C. Milligan and D. Conradson (Eds.), *Landscapes of voluntarism: New spaces of health, welfare and governance* (pp. 267-284). Bristol, UK: Policy Press.
- Monsma, S.V. (2007). Religion and philanthropic giving and volunteering: Building blocks for civic responsibility. *Interdisciplinary Journal of Research on Religion*, 3, 1556-3723.
- Moore, K.A., & Halle, T.G. (2001). Preventing problems vs. promoting the positive: What do we want for our children? *Advances in Life Course Research*, 6, 141-170. doi: 10.1016/S1040-2608(01)80009-5
- Mowen, J.C., & Sujan, H. (2005). Volunteer behavior: A hierarchical model approach for investigating its trait and functional motive antecedents. *Journal of Consumer Psychology*, 15, 170-182. doi: 10.1207/s15327663jcp1502_9
- Musick, M.A., & Wilson, J. (2007). *Volunteers: A social profile*. Bloomington: Indiana

University Press.

Musick, A.M., Wilson, J., & Bynum, W.B Jr. (2000). Race and formal volunteering: The differential effects of class and religion. *Social Forces*, 78, 1539–1570.

doi: 10.1093/sf/78.4.1539

Mustillo, S., Wilson, J., & Lynch, S.M. (2004). Legacy volunteering: a test of two theories of intergenerational transmission. *Journal of Marriage and Family*, 66, 530-541. doi:

10.1111/j.1741-3737.2004.00036.x

Muthuri, J.N., Matten, D., & Moon, J. (2009). Employee volunteering and social capital:

Contributions to corporate social responsibility. *British Journal of Management*, 20,

75-89. doi: 10.1111/j.1467-8551.2007.00551.x

Niemi, R.G., Hepburn, M.A., & Chapman, C. (2000). Community service by high school

students: A cure for civic ills? *Political Behavior*, 22(1), 45-69. doi:

10.1023/A:1006690417623

Nurse, A. (2007). Qualified differences: Diversity and the cultural dynamics of small-town

Canada. In B. Reimer (Ed.), *Our diverse cities* (pp. 59-63). Retrieved from

http://canada.metropolis.net/pdfs/ODC_Summer07_3_en.pdf

Offer, D. (1969). *The psychological world of the teen-ager*. New York, NY: Basic Books.

Okun M.A. (1994a). Predictors of volunteer status in a retirement community. *International*

Journal of Aging and Human Development, 36, 57–74. doi: 10.2190/89U5-BBB5-LA35-

Y435

Okun, M.A. (1994b). The relation between motives for organizational volunteering and

frequency of volunteering by elders. *Journal of Applied Gerontology*, 13, 115-126. doi:

10.1177/073346489401300201

- Okun, M.A., & Michel, J. (2006). Sense of community and being a volunteer among the young-old. *Journal of Applied Gerontology*, 25, 173-188. doi: 10.1177/0733464806286710
- Okun, M.A., & Schultz, A. (2003). Age and motives for volunteering: A test of hypotheses derived from socioemotional selectivity theory. *Psychology and Aging*, 18, 231-239. doi: 10.1037/0882-7974.18.2.231
- O'Leary, S. (2008). *The economic disadvantage of transportation for women in northern Ontario* (Master Thesis, University of Guelph, Guelph, Ontario).
- Oliver, E. (2000). City size and civic involvement in Metropolitan America. *American Political Science Review*, 94, 361-373. doi:10.2307/2586017
- Omoto, A.M., & Snyder, M. (1993). AIDS volunteers and their motivations: Theoretical issues and practical concerns. *Nonprofit Management and Leadership*, 4, 157-176. doi: 10.1002/nml.4130040204
- Omoto, A.M., & Snyder, M. (1995). Sustained helping without obligation: Motivation, longevity, and service and perceived attitude change among AIDS volunteers. *Journal of Personality and Social Psychology*, 68, 671-686. doi: 10.1037/0022-3514.68.4.671
- Omoto, A.M., & Snyder, M. (2010). Influences of psychological sense of community on voluntary helping and prosocial action. In S. Stuermer & M. Snyder (Eds), *The psychology of prosocial behavior: Group processes, intergroup relations, and helping* (pp. 223-243). Oxford, UK: Wiley-Blackwell. doi:10.1002/9781444307948.ch12
- Omoto, A.M, Snyder, M. & Hackett, J. (2010). Personality and motivational antecedents of activism and social engagement. *Journal of Personality*, 78, 1703–1734. doi: 10.1111/j.1467-6494.2010.00667.x
- Onyx, J., & Bullen, P. (2000). Measuring social capital in five communities. *The Journal of*

- Applied Behavioral Sciences*, 36, 23-42. doi: 10.1177/0021886300361002
- Organization for Economic Co-Operation and Development (1993). *What Future for Our Countryside? A Rural Development Policy*. Paris, OCDE.
- Organization for Economic Co-Operation and Development (2001). *The well-being of nations: The role of human and social capital* (Centre for Educational Research and Innovation). Retrieved from <http://www.oecd.org/site/worldforum/33703702.pdf>
- Padanyi, P., Meinhard, A., & Foster, M. (2003). *A study of a required youth service program that lacks structure: Do students really benefit?* 32nd Annual ARNOVA (Association of Research on Nonprofit Organizations and Voluntary Action) Conference, Denver, Colorado.
- Paik, A., & Navarre-Jackson, L. (2011). Social networks, recruitment, and volunteering: are social capital effects conditional on recruitment? *Nonprofit and Voluntary Sector Quarterly*, 40, 476-496. doi: 10.1177/0899764009354647
- Pancer, S.M., Brown, S.D., Henderson, A., & Ellis-Hale, K. (2007). *The impact of high school mandatory community service programs on subsequent volunteering and civic engagement* (ISBN# 1-55401-296-1). Retrieved from Imagine Canada website: http://sourceosbl.ca/sites/default/files/resources/files/WLU_MandatoryVolunteering_Feb07_2007.pdf
- Parboteeah, K.P., Cullen, J.B., & Lim, L. (2004). Formal volunteering: A cross-national test. *Journal of World Business*, 39, 431-441. doi:10.1016/j.jwb.2004.08.007
- Parcel, T.L., Dufur, M.J., & Zito, R.C. (2010). Capital at home and at school: A review and synthesis. *Journal of Marriage and Family*, 72, 828-846. doi: 10.1111/j.1741-3737.2010.00733.x

- Park, J., & Smith, C. (2000). To whom much has been given..." religious capital and community voluntarism among churchgoing Protestants. *Journal for the Scientific Study of Religion*, 39, 272–286. doi: 10.1111/0021-8294.00023
- Paxton, P. (1999). Is social capital declining in the United States? A multiple indicator assessment. *American Journal of Sociology*, 105(1), 88-127. doi: 10.1086/210268
- Penner, L.A. (2002). Dispositional and organizational influences on sustained volunteerism: An interactionist perspective. *Journal of Social Issues*, 58, 447-467. doi: 10.1111/1540-4560.00270
- Penner, L.A., & Finkelstein, M.A. (1998). Dispositional and structural determinants of volunteerism. *Journal of Personality and Social Psychology*, 74, 525–537. doi: 10.1037/0022-3514.74.2.525
- Perks, T., & Haan, M. (2011). Youth religious involvement and adult community participation: Do levels of youth religious involvement matter? *Nonprofit and Voluntary Sector Quarterly*, 40, 107-129. doi: 10.1177/0899764009357794
- Piliavin, J.A., & Siegl, E. (2007). Health benefits of volunteering in the Wisconsin Longitudinal Study. *Journal of Health and Social Behavior*, 48, 450-464.
doi:10.1177/002214650704800408
- Planty, M., & Regnier, M. (2003). *Volunteer service by young people from high school through early adulthood*. NCES National Center for Education Statistics, US Department of Education. Retrieved from <http://nces.ed.gov/pubs2004/2004365.pdf>
- Porter, R.I. (2010). Invited commentary: The positive youth development perspective is an exciting direction for adolescent and family policies and programs. *Journal of Youth and Adolescence*, 39, 839–842. doi: 10.1007/s10964-010-9554-1.

- Pratt, M.W., Hunsberger, B., Pancer, S.M., & Alisat, S. (2003). A longitudinal analysis of personal values socialisation: Correlates of a moral self-ideal in late adolescence. *Social Development*, 12, 563–585. doi: 10.1111/1467-9507.00249
- Putnam, R.D. (2000). *Bowling Alone: The Collapse and Revival of American Community*. New York, NY: Simon and Schuster Paperbacks.
- Putnam, R.D., & Campbell, D.E. (2010). *American grace: How religion divides and unites us*. New York: Simon & Schuster.
- Reed, V.A., Jernstedt, G.C., Hawley, J.K., Reber, E.S., & DuBois, C.A. (2005). Effects of a small- scale, very short-term service learning experience on college students. *Journal of Adolescence*, 28, 359- 368. doi:10.1016/j.adolescence.2004.08.003
- Reed, P.B., & Selbee, L.K. (2000). *Formal and informal volunteering and giving: Regional and community patterns in Canada*. Retrieved from the Nonprofit Sector Knowledge Base Project website: <http://www3.carleton.ca/casr/Formal.pdf>
- Reed, P., & Selbee, L.K. (2001). The civic core in Canada: dispositional in charitable giving, volunteering, and civic participation. *Nonprofit and Voluntary Sector Quarterly*, 30, 761-780. doi: 10.1177/0899764001304008
- Reed, P., & Selbee, L.K. (2003). Do people who volunteer have a distinctive ethos? A Canadian study. In P. Dekker & L. Halman (Eds.), *The values of volunteering: A cross-cultural perspective* (pp. 91-110). New York: Kluwer Academic.
- Reimer, B. (2009, May). *Rural Canada: challenges and opportunities*. Retrieved from http://www.fcm.ca/Documents/reports/Rural_Canada_Challenges_and_Opportunities_EN.pdf
- Riecken, G., Babakus, E., & Yavas, U. (1994). Facing resource attraction challenges in the non-

- profit sector: A behaviouristic approach to fundraising and volunteer recruitment. *Journal of Professional Services Marketing*, 1(1), 45-70.
- Rosenthal, S., Feiring, C., & Lewis, M. (1998). Political volunteering from late adolescence to young adulthood: Patterns and predictors. *Journal of Social Issues*, 54, 477–493.
doi: 10.1111/j.1540-4560.1998.tb01231.x
- Roth, J.L., & Brooks-Gunn, J. (2003). What exactly is a youth development program? Answers from research and practice. *Applied Developmental Science*, 7, 94–111. doi:
10.1207/S1532480XADS0702_6
- Rotolo, T., & Wilson, J. (2012). State-level differences in volunteerism research in the United States. *Nonprofit and Voluntary Sector Quarterly*, 41, 452-473. doi:
10.1177/0899764011412383
- Ruiter, S., & De Graaf, N.D. (2006). National context, religiosity and volunteering: Results from 53 countries. *American Sociological Review*, 71, 191–210. doi:
10.1177/000312240607100202
- Rural Ontario Institute (2009). *Accelerating rural transportation solutions: Ten community case studies from Ontario*. Retrieved from the Rural Ontario Institute website:
<http://www.ruralontarioinstitute.ca/file.aspx?id=c3296740-5db4-436e-a56a-07e5e0cddf16>
- Rural Secretariat (2005). *National rural profile: A ten-year census analysis (1991-2001)*. Retrieved from the Government of Canada website:
<http://www.rural.gc.ca/RURAL/display-afficher.do?id=1245156720975&lang=eng>
- Ryan, V., Kerry, D., Agnitsch, A., Zhao, L., & Mullick, R. (2005). Making sense of voluntary participation: A theoretical synthesis. *Rural Sociology*, 70, 287-313. doi:

10.1526/0036011054831198

Salamon, L. M., & Anheier, H. K. (1997). *Defining the Nonprofit Sector: A Cross-National Analysis*. Manchester: Manchester University Press.

Saltzman, A. (2016). *No connectivity: the internet 'blackout zone' that is rural Canada*.

Retrieved from CBCnews website: <http://www.cbc.ca/news/business/no-connectivity-the-internet-blackout-zone-that-is-rural-canada-1.3792786>

Schoggen, P. (1989). *Behavior settings*. Stanford, CA: Stanford University Press.

Schoggen, P. & Schoggen, M. (1988) Student voluntary participation and high school size. *The Journal of Educational Research*, 81, 288-293. doi: 10.1080/00220671.1988.10885837

Schondel, C.K., & Boehm, K.E. (2000). Motivational needs of adolescent volunteers. *Adolescence*, 35, 335-344.

Schonert-Reichl, K A., Elliott, J.P., & Bills, D.B. (1995, April). *"I feel that a rural education is a wonderful thing": Rural school students' narratives of their rural school education ten years after high school graduation*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.

Selbee, K.L. (2004). *Volunteering in Canada: An application of social resources theory to the likelihood of being a volunteer, and to the determination of volunteer effort* (Doctoral thesis, Carleton University, Ottawa, Canada). Retrieved from <http://www3.carleton.ca/casr/Dissert.pdf>

Seyfrit, C.L., & Danner, J.E. (1998). *Attitudes and aspirations of rural youth: a comparison of Alaska Native high school students and students in rural Virginia*. Presented to the 3rd International Congress of Arctic Social Sciences, Copenhagen, Denmark.

Sherr, M.E. (2008). *Social work with volunteers*. Chicago: Lyceum Books.

- Shrestha, B., & Cihlar, C. (2004). *Volunteering in under-resourced rural communities: Final report*. Retrieved from Points of Light Foundation website: https://archives.iupui.edu/bitstream/handle/2450/588/101_RuralCommunities.pdf?sequence=1
- Shure, R. (1991). Volunteering: continuing expansion of the definition and practical application of altruistic motivation. *Journal of Volunteer Administration*, 9, 36-41.
- Shye, S. (2010). The motivation to volunteer: a systemic quality of life theory. *Social Indicators Research*, 98, 183-200. doi: 10.1007/s11205-009-9545-3
- Sinha, M. (2013). *Spotlight on Canadians: Results from the General Social Survey* (Catalogue no. 89-652-X2015003). Retrieved from Statistics Canada website: <http://www.statcan.gc.ca/pub/89-652-x/89-652-x2015003-eng.pdf>
- Siu, A.M.H., Shek, D.T.L., & Law, B. (2012). Prosocial norms as a positive youth development construct: A conceptual review. *The Scientific World Journal*, 2012, 19-27. doi: 10.1100/2012/832026
- Smetana, J.G., Campione-Barr, N., & Metzger, A. (2006). Adolescent development in interpersonal and societal contexts. *Annual Review of Psychology*, 57, 255–28. doi: 10.1146/annurev.psych.57.102904.190124
- Smith, D.H. (1981). Altruism, volunteers and volunteering. *Journal of Voluntary Action Research*, 10, 21-36. doi: 10.1177/08997640810100010
- Smith, D.H. (1994). Determinants of voluntary association participation and volunteering: A literature review. *Nonprofit and Voluntary Sector Quarterly*, 23, 243–263. doi: 10.1177/089976409402300305
- Smith, M.H., Beaulieu, L.J., & Seraphine, A. (1995). Social capital, place of residence and college attendance. *Rural sociology*, 60, 363-380. doi: 10.1111/j.1549-

0831.1995.tb00578.x

- Smith, K.A., Holmes, K., Haski-Leventhal, D., Cnaan, R.A., Handy, F., & Brudney, J.L. (2010). Motivations and benefits of student volunteering: comparing regular, occasional, and non-volunteers in five countries. *Canadian Journal of Nonprofit and Social Economy Research*, 1(1), 65-81. doi:10.22230/cjnser.2010v1n1a2
- Snyder, M. (1993). Basic research and practical problems: The promise of a “functional” personality and social psychology. *Personality and Social Psychology Bulletin*, 19, 251-264. doi: 10.1177/0146167293193001
- Snyder, M., & Omoto, A.M. (2007). Social action. In A.W. Kruglanski & E.T. Higgins (Eds.), *Social Psychology: A handbook of basic principles* (2nd ed., pp. 940-961), New York: Guilford.
- Sorensen, M., & Aylward, J. (n.d.). *Rural Canada profile: A ten-year census analysis (1991-2001)*. (Government of Canada Publications, Ottawa ON: Rural Secretariat.) Retrieved from <http://publications.gc.ca/site/archivee-archived.html?url=http://publications.gc.ca/collections/Collection/A114-13-1-2001E.pdf>
- Spera, C., Ghertner, R., Nerino, A., & DiTommaso, A. (2015). Out of work? Volunteers have higher odds of getting back to work. *Nonprofit and Voluntary Sector Quarterly*, 44, 886-907. doi: 10.1177/0899764015605928
- Stadelmann-Steffen, I., & Freitag, M. (2011). Making civil society work: Models of democracy and their impact on civic engagement. *Nonprofit and Voluntary Sector Quarterly*, 40, 526-551. doi: 10.1177/0899764010362114
- Statistics Canada. (2011). *Census dictionary* (Catalogue no. 98-301-X2011001). Retrieved from Statistics Canada website: <https://www12.statcan.gc.ca/census->

recensement/2011/ref/dict/geo009-eng.cfm

Statistics Canada. (2013). *Table 119-0009 -Volunteer rate and distribution of volunteer hours, by age group, Canada, provinces, occasional (percent unless otherwise noted)*, CANSIM (database). Retrieved from

<http://www5.statcan.gc.ca/cansim/a26?lang=eng&retrLang=eng&id=1190009&pattern=119-0001..119-0016&tabMode=dataTable&srchLan=-1&p1=-1&p2=31>

Stempel, C. (2005). Adult participation sports as cultural capital: A test of Bourdieu's theory of the field of sports. *International Review for the Sociology of Sport*, 40, 411–432.

doi:10.1177/1012690206066170

Stern, M.J., Adams, A.E., & Elsasser, S. (2009). How levels of Internet proficiency affect usefulness of access across rural, suburban, and urban communities. *Sociological Inquiry*, 79, 391-417.

Stern, M.J., & Fullerton, A.S. (2009). The network structure of local and extra-local voluntary participation: The role of core social networks. *Social Science Quarterly*, 90, 553-575.

Stokols, D. (1996). Translating socio ecological theory into guidelines for community health promotion. *American Journal of Health Promotion*, 10, 282-298. doi: 10.4278/0890-1171-10.4.282

Sundeen, R.A. (1988). Explaining participation in coproduction: A study of volunteers. *Social Science Quarterly*, 69, 546-568.

Sundeen, R.A. (1992). Differences in personal goals and attitudes among volunteers. *Nonprofit and Voluntary Sector Quarterly*, 21, 271–91. doi: 10.1177/089976409202100306

Sundeen, R.A., & Raskoff, S.A. (1994). Volunteering among teenagers in the United States. *Nonprofit and Voluntary Sector Quarterly*, 23, 383-403. doi:

10.1177/089976409402300407

Sundeen, R.A., & Raskoff, S.A. (2000). Ports of entry and obstacles: Teenagers' access to volunteer activities. *Nonprofit Management and Leadership*, 11, 179-197. doi:

10.1002/nml.11204

Sundeen, R.A., Raskoff, S.A., & Garcia, M.C. (2007). Differences in perceived barriers to volunteering to formal organizations. *Nonprofit Management & Leadership*, 17, 279-300

doi: 10.1002/nml.150

Sutherland, D., Doerkson, M., Hanslip, T., Roberts, J., Stewart, S., Sagnes, E., & Friesen-Storz,

T. (2006). *Youth volunteerism: Measuring the benefits of community service learning*

programs (Imagine Canada ISBN# 1-55401-231-7). Retrieved from Imagine Canada

website: <http://www.imaginecanada.ca/sites/default/files/www/en/library/kdc->

[cdc/report_youth_volunteerism_sutherland.pdf](http://www.imaginecanada.ca/sites/default/files/www/en/library/kdc-cdc/report_youth_volunteerism_sutherland.pdf)

Tang, F., Morrow-Howell, N., & Choi, E. (2010). Why do older volunteers stop volunteering?

Ageing & Society, 30, 859-878. doi:10.1017/S0144686X10000140.

Taniguchi, H. (2006). Men's and women's volunteering: Gender differences in the effects of

employment and family characteristics. *Nonprofit and Voluntary Sector Quarterly*, 35(1),

83-101. doi: 10.1177/0899764005282481

Taniguchi, H. (2012). The determinants of formal and informal volunteering: Evidence from the

American Time Use Survey. *International Journal of Voluntary and Nonprofit*

Organizations, 23, 920-939. doi: 10.1007/s11266-011-9236-y

Taniguchi, H., & Marshall, G.A. (2014). The effects of social trust and institutional trust on

formal volunteering and charitable giving in Japan. *Voluntas: International Journal of*

Voluntary and Nonprofit Organizations, 25, 150-175. doi:10.1007/s11266-012-9328-3

- Tessier, S., Minh-Nguyet, N., & Gagnon, K. (2006). *Youth volunteerism: Research report* (ISBN# 1-55401-263-5). Retrieved from Imagine Canada website:
http://www.imaginecanada.ca/sites/default/files/www/en/library/kdc-cdc/laval_youthstudy_report.pdf
- Thelen, E., & Smith, L.B. (2006). Dynamic systems theories. In R.M. Lerner (Ed.), *Theoretical models of human development. Volume 1 of Handbook of Child Psychology* (6th ed.; pp.258-312). Hoboken, NJ: Wiley. doi:10.1002/9780470147658.chpsy0106
- Theodori, A.E., & Theodori, G.L. (2014). Perceptions of community and place and the migration intentions of at-risk youth in rural areas. *Journal of Rural Social Sciences*, 29, 103-121.
- Tolsma, J., van der Meer, T., & Gesthuizen, M. (2009). The impact of neighbourhood and municipality characteristics on social cohesion in the Netherlands. *Acta Politica*, 44, 286-313. doi:10.1057/ap.2009.6
- Torgerson, M., & Edwards, M.E. (2012). Demographic determinants of perceived barriers to community involvement: Examining rural/urban differences. *Nonprofit and Voluntary Sector Quarterly*, 42, 371-390. doi: 10.1177/0899764012440181
- Toye, M. (2007). *Social cohesion: The Canadian urban context* (The Library of Parliament, PRB 07-56E). Retrieved from the Parliament of Canada website:
<http://www.loppar.gc.ca/content/lop/researchpublications/prb0756-e.htm#socialcohesion>
- Tremblay, S., Dahinten, S., & Kohen, D. (2003). *Factors related to adolescents' self-perceived health* (no. 82-003-XIE). Supplement to Health Reports. Ottawa: Statistics Canada.
- Ullrich-French, S., & McDonough, M.H. (2013). Correlates of long-term participation in a physical activity based positive youth development program for low-income youth:

- Sustained involvement and psychosocial outcomes. *Journal of Adolescence*, 36, 279-288.
doi: 10.1016/j.adolescence.2012.11.006
- United Nations (n.d.). *Definition of youth*. Retrieved from Department of Economic and Social Affairs website: <http://www.un.org/esa/socdev/documents/youth/fact-sheets/youth-definition.pdf>
- Uslaner, E. (2002). *The moral foundation of trust*. Cambridge, UK: Cambridge University Press.
- Van Goethem, A.J.A., van Hoof, A., van Aken, M.A.G, Raaijmakers, Q.A.W., Boom, J., & Orobio de Castro, B. (2012). The role of adolescents' morality and identity in volunteering. Age and gender differences in a process model. *Journal of Adolescence*, 35, 509-520. doi: 10.1016/j.adolescence.2011.08.012
- Van Oorschot, W., Arts, W., & Gelissen, J. (2006). Social capital in Europe: Measurement and social and regional distribution of a multifaceted phenomenon. *Acta Sociologica*, 49, 149-167. doi: 10.1177/0001699306064770
- Van Tienen, M., Scheepers, P., Reitsma, J., & Schilderman, H. (2011). The role of religiosity for formal and informal volunteering in the Netherlands. *International Journal of Voluntary and Nonprofit Organizations*, 22, 365-389. doi.10.1007/s11266-010-9160-6
- Van Til, J. (1988). *Mapping the third sector*. Washington, DC: Foundation Center.
- Vera-Toscano, E., Phimister, E., & Weersink, A. (2001). *The dynamics of income and employment in rural Canada: the risk of poverty and exclusion* (Working paper No. 43). Retrieved from Research in Agricultural & Applied Economics website: <http://ageconsearch.umn.edu/handle/28020>
- Verba, S., Schlozman, K.L., & Brady, H. (1995). *Voice and equality: Civic voluntarism in American politics*. Cambridge, MA: Harvard University Press.

- Vézina, M., & Crompton, S. (2012). *Volunteering in Canada* (No.11-008-x). Retrieved from Statistics Canada website: <http://www.statcan.gc.ca/pub/11-008-x/2012001/article/11638-eng.pdf>
- Vidich, A.J., & Bensman, J. (1958). *Small town in mass society. Introduction and chapter 12 copyright 1968*. Princeton, New Jersey: Princeton University Press.
- Wagenfeld, M.O. (2003). A snapshot of rural and frontier America. In B. H. Stamm (Ed.), *Rural behavioral health care: An interdisciplinary guide*. Washington, DC: American Psychological Association.
- Wallace, C., & Pichler, F. (2009). More participation, happier society? A comparative study of civil society and the quality of life. *Social Indicators Research, 93*, 255-274
doi:10.1007/s11205-008-9305-9
- Warner, S., & Dixon, M.A. (2013). Sports and community on campus: Constructing a sports experience that matters. *Journal of College Student Development, 54*, 283–298.
doi:10.1353/csd.2013.0044
- Wellman, B., Quan-Haase, A., Witte, J., & Hampton, K. (2001). Does the Internet increase, decrease, or supplement social capital? *American Behavioral Scientist, 45*, 436- 455. doi: 10.1177/00027640121957286
- Whitacre, B.E., & Mills, B.F. (2006). Infrastructure and the rural urban divide in high-speed residential Internet access. *International Regional Science Review, 30*, 249-273.
- Wilson, J. (2000). Volunteering. *Annual Review of Sociology, 26*, 215-240. doi: 10.1146/annurev.soc.26.1.215
- Wilson, J. (2012). *Volunteerism research: a review essay. Nonprofit and Voluntary Sector Quarterly, 41*, 176–212. doi: 10.1177/0899764011434558

- Wilson, J. & Musick, M. (1997a). Who cares? Toward an integrated theory of volunteer work. *American Sociological Review*, 62, 694-713. doi: 10.2307/2657355
- Wilson, J., & Musick, M. (1997b). Work and volunteering: The long arm of the job. *Social Forces*, 76, 251-272. doi: 10.1093/sf/76.1.251
- Wilson, J., & Musick, M. (1998). The contribution of social resources to volunteering. *Social Science Quarterly*, 79, 799-814.
- Wilson, L.P., & Sanyal, N. (2013). The best of times, the worst of times: Antecedents for and effectiveness of community engagement in two small rural towns. *Journal of Community Engagement and Scholarship*, 6, 70-82.
- Woolley, F. (1998, October). *Social cohesion and voluntary activity: Making Connections*. Paper session presented at the CSLS Conference on the State of Living Standards and the Quality of Life in Canada, Ottawa.
- World Health Organization (1986). *Ottawa charter for health promotion*. Geneva: WHO.
- World Health Organization (2015). *Adolescent health*. Retrieved from World Health Organization website: http://www.who.int/topics/adolescent_health/en
- Wuthnow, R. (1994). *God and Mammon in America*. New York, NY: Free Press.
- Wuthnow, R. (1998). *Loose connections: Joining together in America's fragmented communities*. Cambridge: Harvard University Press.
- Wuthnow, R. (1999). Mobilizing civic engagement: The changing impact of religious involvement. In T. Skocpol & M. Fiorina (Eds.), *Civic engagement in American democracy* (pp. 331–363). Washington, DC: Brookings.
- Wymer, W.W (1997). A religious motivation to volunteer? Exploring the linkage between volunteering and religious values. *Journal of Nonprofit and Voluntary Sector Marketing*,

5, 3-18. doi: 10.1300/J054v05n03_02

Youniss, J., McLellan, J.A., Su, Y., Yates, M. (1999). The role of community service in identity development: Normative, unconventional, and deviant orientations. *Journal of Adolescent Research*, 14,249-262. doi:10.1177/0743558499142006

Youth engagement (2002). *Basic facts and trends*. College Park, MD: Center for Information and Research on Civic Learning and Engagement (CIRCLE), School of Public Policy, University of Maryland.

Zaff, J.F., Moore, K.A., Papillo, A.R., & Williams, S. (2003). Implications of extracurricular activity participation during adolescence on positive outcomes. *Journal of Adolescent Research*, 18, 599-630. doi: 10.1177/074355840325477

Zeldin, S., & Topitzes, D. (2002). Neighborhood experiences, community connection, and positive beliefs about adolescents among urban adults and youth. *Journal of Community Psychology*, 30, 647–669. doi:10.1002/jcop.1002

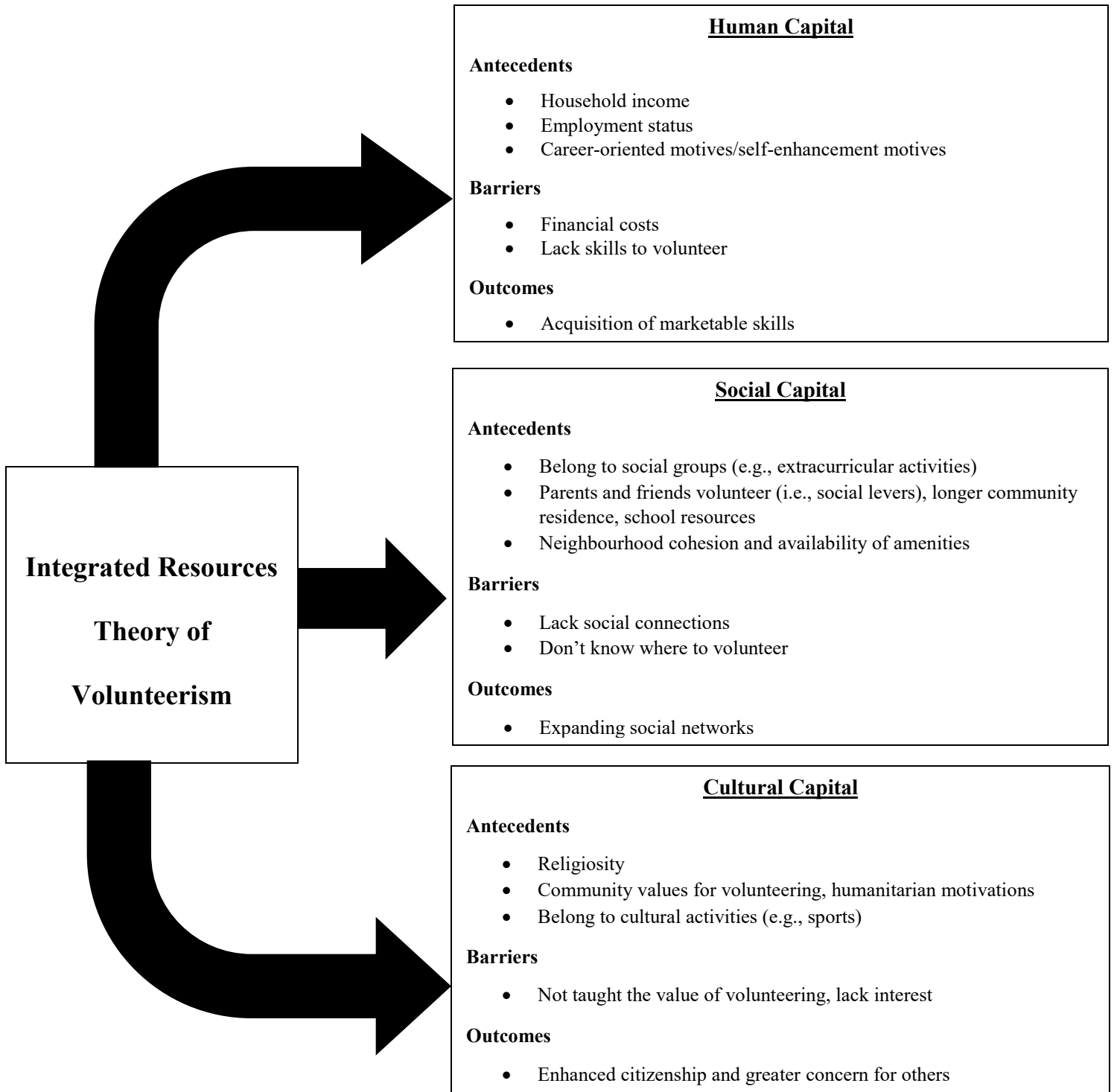


Figure 1. Summary outlining different ways in which volunteerism can be interpreted from a resource perspective, including elements of human capital, social capital, and cultural capital.

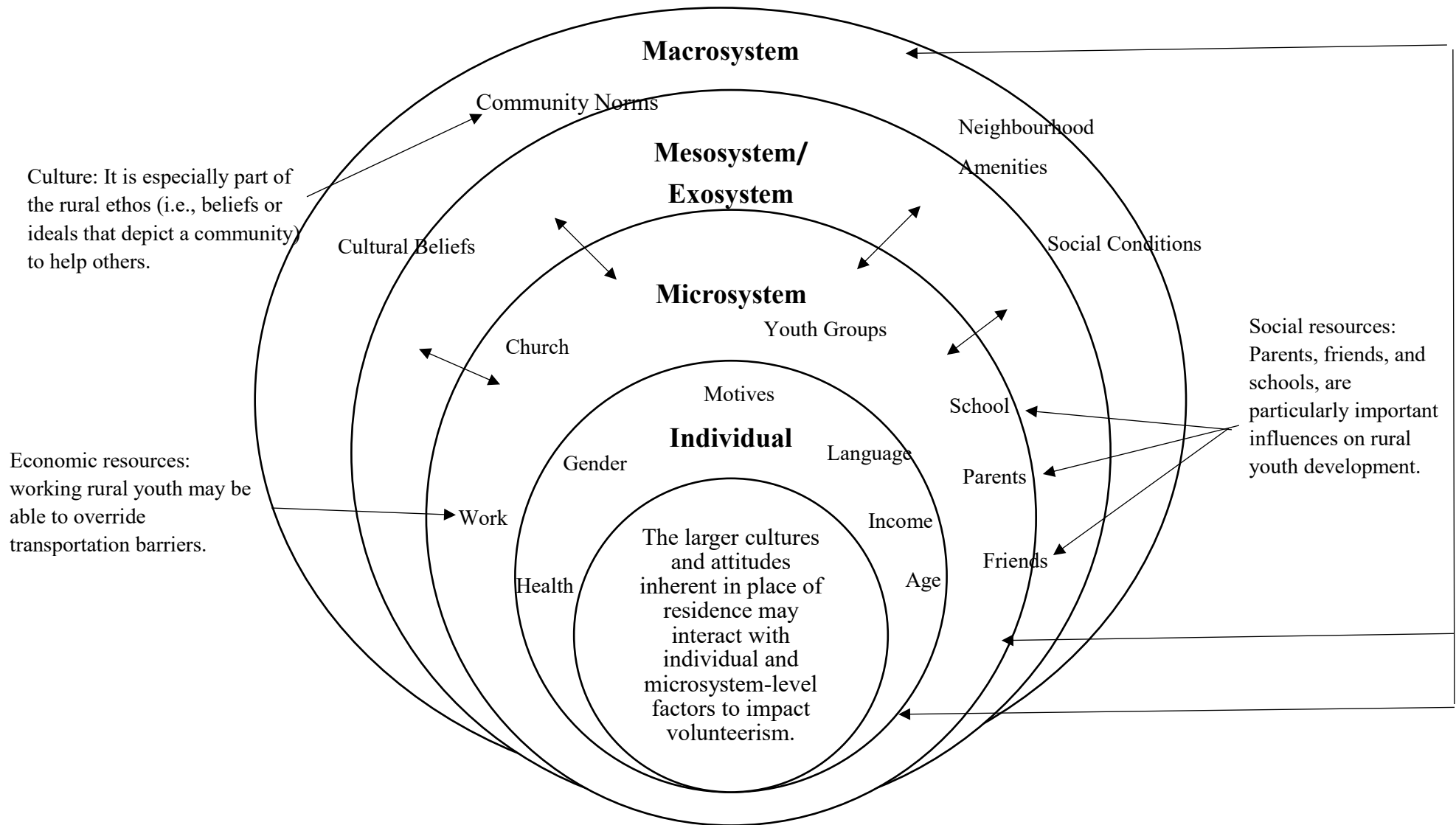


Figure 2. Conceptual model illustrating how social, economic, and cultural resources at different ecological levels can impact rural youth volunteerism. The model specifically suggests that macrosystem factors can interact with factors in the innermost spheres (e.g., individual, microsystem) to impact volunteerism. Adapted from Bronfenbrenner (1979).

Running Head: PREDICTORS OF YOUTH VOLUNTEERISM

Chapter 2: Study 1

Predictors of Urban and Rural Youth Formal and Informal Volunteering: Does Place
Matter?

Sean Pearce, Elizabeth Kristjansson, Louise Lemyre, and Celine Pinset

University of Ottawa

Abstract

Researchers have theorized that individuals with more resources are more likely to volunteer. This paper investigated whether and how urban/rural contexts moderate the effects of different sociodemographics and resources on youths' formal and informal volunteering. Regressions were conducted on data from the 2007 and 2010 Canada Survey of Giving, Volunteering and Participating. Urban/rural interactions differed depending on the type of volunteering. In rural settings, youth who were attending school, had parents who volunteered, worked full-time, and belonged to youth groups (versus not) were especially more likely to formally volunteer. Some variables associated with rural youth informal volunteering were belonging to youth groups and being female. Religious attendance was particularly important to urban formal and informal volunteering. Only in urban settings, speaking non-English at home related to higher informal volunteering intensity. Certain variables related differently to volunteering depending on urban/rural residence; methods of outreach should be tailored to engage particular youth.

Keywords: volunteering, urban, rural, youth, ecological, resources, informal volunteering, social capital

Predictors of Urban and Rural Youth Formal and Informal Volunteering: Does Place Matter?

Volunteering is an important form of social engagement and community contribution for youth (aged 15-24). Formal volunteering is done on behalf of organizations, such as nonprofits (e.g., Smith, 1994; Wilson & Musick, 1997), while informal volunteering involves directly helping nonhousehold members (e.g., Carson, 1999; Finkelstein & Brannick, 2007; Steinberg, Rooney, & Chin, 2002). Previous Canadian surveys reported high informal volunteer rates among youth groups (e.g., 91% of respondents aged 15-19; Sinha, 2013) and high formal volunteer rates (e.g., 58% of respondents aged 15-24; Vézina & Crompton, 2012). Some reports revealed that youth contributed fewer hours than most other age groups (Vézina & Crompton, 2012), while others showed that youth had more time to volunteer than adults and were very committed (e.g., Haski-Leventhal, Ronel, York, & Ben-David, 2008; Kulik, 2007). More research is needed to understand predictors of youths' proclivity to volunteer and their volunteering intensities.

Personal resources are important to volunteering. Research has shown that people with more social capital (e.g., social ties/connections), human capital (e.g., higher income), and cultural capital (e.g., community values, religiosity) were more likely to volunteer (e.g., Hodgkinson, 2003; Wilson, 2000; Wilson & Musick, 1997, 1998). Factors related to contributing more formal volunteer hours include, having higher income and education (Vézina & Crompton, 2012) and feeling more integrated in social groups and wanting to help others (Choi & DiNitto, 2012). Wilson and Musick (1997) described "culture of benevolence" as one component of volunteering; people volunteer as a reflection of the culture in which they are embedded. Therefore, contextual factors may be important for shaping youth volunteerism.

Situating Volunteerism Within an Ecological Perspective

Characteristics of place may impact on philanthropic behaviour. Rural organizations tend to be smaller and receive less government funding than urban nonprofits (Barr, McKeown, Davidman, McIver, & Lasby, 2004), thus they are more dependent on volunteers. There is some evidence that rural youth have higher volunteer rates than urban youth (Kirby, Marcelo, & Kawashima-Ginsberg, 2009). Rural residents have strong sense of identity and belonging with their community and work together in many aspects of living (e.g., Nelson & Park, 2012). Sense of community may be weaker in large metropolitan areas, and thus people are less likely to be recruited for civic volunteerism (Shah, McLeod, & Yoon, 2001). Despite these findings, this literature may reflect social trends at the time, therefore new research is warranted.

This research can be informed by Bronfenbrenner's (1979) ecological systems theory, which discussed the ways in which different systems interact to influence youth development. For example, the microsystem includes factors in the immediate environment (e.g., parents, school), while the macrosystem includes the broader cultures and attitudes in society. Person-context interactions (e.g., Bronfenbrenner & Morris, 2006) may relate to youth volunteering, such that the interconnections between individual factors (e.g., gender, religiosity) and contextual factors (urban/rural) may impact on volunteer proclivity and intensities.

According to behaviour setting theory, rural areas represent underpopulated settings (those which contain more roles than people), whereas urban areas have more people than roles (Barker, 1968; Schoggen, 1989). Rural members may accept several different roles to maintain their setting. Previous research has shown that youth in smaller schools were more involved in extracurricular activities and that this was associated with community engagement—greater participation in civic groups, sports teams, charity, and welfare organizations (e.g., Barker &

Gump, 1964; review by Steven & Peltier, 1994). Given these different social and structural dynamics, the impact of resources on volunteering may be amplified or attenuated by place of residence. For example, because social relationships are emphasized in rural areas, rural youth who have more connections in their community (e.g., belong to youth groups, church) may be particularly engaged in volunteerism through these networks.

Individual Assets and Youth Volunteerism: Urban and Rural Differences

People with dominant statuses are more likely to formally volunteer. In past studies, volunteer rates were higher for students from higher income families (e.g., Clerkin, Paynter, & Taylor, 2009; Handy et al., 2010); students who worked up to 15 hours a week, compared to unemployed youth (Dote, Cramer, Dietz, & Grimm, 2006); and for people in good health (Wilson & Musick, 1997).

Differences in economic resources and health exist in rural versus urban areas. In one report, rural Canadian youth rated their health as poorer; were more likely to be obese, smoke, and consume alcohol; and lived in lower income households (Tremblay, Dahinten, & Kohen, 2003). Looker (1993) reported that rural youth were less likely to have full-time work than urban youth. Employed rural youth, compared to nonworking rural youth, may have advantages that help them to volunteer: informal contacts, skills, a strong family reputation, and can afford transportation (Cartmel & Furlong, 2000). According to Granovetter (1974), work relations can be considered weak ties, which are defined as infrequent connections that are less homogenous than strong ties (e.g., personal connections). Weak ties have been shown to widen access to information (Granovetter, 1974). In one study, it was found that rural residents may particularly use weak ties as paths to employment (Matthews, Pendakur, & Young, 2009). If we conceptualize volunteerism within a market orientation (e.g., Wilson & Musick, 1997), then

these weak connections may be important levers to rural youths' volunteering, because these contacts may increase the likelihood that youth will hear about volunteer opportunities. In urban settings, there is less isolation, and information may be more easily accessible to everyone.

On the other hand, individual assets (e.g., socioeconomic status) may be less important to informal volunteering. Studies have found that informal volunteers had lower income and education than formal volunteers (Lee & Brudney, 2012); informal volunteering in the United Kingdom was ubiquitous among unemployed people and those in rental accommodations (Williams, 2002); informal volunteering was not related to income across several European countries (Plagnol & Huppert, 2010); and that time spent on educational activities and paid work reduced the likelihood of informal volunteering (Taniguchi, 2012). These findings may especially be relatable to rural areas. Mutual help is part of the ethos of rural culture (Hodge & Qadeer, 1983), and youth with fewer assets may still informally help because of the emphasis on community ties and cohesion. A study from Canada found that people with lower incomes had stronger sense of belonging than those in higher income groups, and that sense of belonging increased on a continuum from urban to rural (Kitchen, Williams, & Chowhan, 2012).

Hypothesis 1: Labour force status appears to most strongly embody facets of human capital (e.g., disposable income, skills). In rural settings, youth who are employed will have higher odds of formal volunteering and will dedicate more formal volunteer hours, than nonworking rural youth. This gap will be less pronounced for urban youth. However, in rural settings, there will be no difference in informal volunteer intensity for employed youth versus nonworking youth.

Social/Cultural Resources and Youth Volunteerism: Urban and Rural Differences

Parental volunteering. Several facets of social and cultural capital influence formal and

informal volunteering. Studies have shown that youth who have parents who volunteer and/or who are part of community activities were more likely to volunteer themselves (e.g., Barber, Mueller, & Ogata, 2013; Gibson, 2008; McLellan & Youniss, 2003; Sundeen & Raskoff, 2000; Wilson, 2000). Parental volunteering may encourage prosocial values in their children because parents act as role models who socialize youth to volunteer (e.g., Bekkers, 2004; Janoski & Wilson, 1995). This modeling effect may be especially influential for rural youth, because strong family and community relationships characterize rural areas (e.g., Burnell, 2003), and youth from farm families have been shown to especially confide in their parents (Esterman & Hedlund, 1995). Further, Hebblethwaite (2014) found that in Canada, urban and rural families believed that rural settings were particularly important for fostering family cohesion (e.g., through family leisure). In rural areas, people are more dependent on kin-centered and long-standing relationships (Beggs, Haines, & Hurlbert, 1996). Word of mouth may be an important source of information flow for rural youths' community engagement. Rural youth whose parents are connected to the community may have larger networks, which would increase their chances of hearing about formal and informal volunteer opportunities.

Hypothesis 2: In rural settings, youth with parents who volunteer will be more engaged in formal and informal volunteerism, than youth whose parents do not volunteer. The magnitude of this gap will be smaller in urban settings.

Youth groups, schools, and religion. Belonging to social groups has also been linked to formal and informal volunteerism. Hodgkinson (2003) found that volunteers were much more likely to be members of associations (e.g., political parties, sports) than nonvolunteers. Participation in extracurricular activities can empower youth and foster social capital, such as building networks and friendships (e.g., Larson, Hansen, & Moneta, 2006; Schaefer, Simpkins,

Vest, & Price, 2012; Wigfield, Eccles, Schiefele, Roeser, & Davis-Kean, 2006). Youth in extracurricular activities are exposed to community concerns and gain skills by working with organizations and adults; this becomes part of a value system whereby they want to contribute to the common good (Hart, Donnelly, Youniss, & Atkins, 2007; Zaff, Moore, Papillo, & Williams, 2003). This may be especially important to rural youth who are active in social groups because many residents perceived benefits to rural living, such as supportive networks, neighbourliness, shared values, comfort, trust, and shared capital (Abbott-Chapman, Johnston, & Jetson, 2014). Individuals who are more connected will be more inclined to volunteer, to benefit their local communities (Ryan, Agnitsch, Zhao, & Mullick, 2005). In one study, collectivism, the desire to build social ties, and intrinsic motivations were related to informal volunteering (Finkelstein, 2012). Rural youth who are not involved in any social groups may be more isolated.

Schools may also be an important social resource for students. In one study, students who volunteered beyond their school community service hours, were those who possessed the following characteristics: had parents who volunteered, came from homes where religious beliefs were important, were open-minded about different backgrounds, and placed higher values on caring and trusting (Padanyi, Baetz, Brown, & Henderson, 2009). For rural youth particularly, schools may be a salient gateway to building connections and learning about volunteer opportunities—rural schools act as social hubs that nurture community activities and harvest social capital (Bauch, 2001; Burney & Cross, 2006). In another study, rural students were found to have stronger connection with peers than urban students (Crockett, Shanahan, & Jackson-Newsom, 2000). Rural youth who lack these connections may have less insight into community activities, such as volunteer opportunities.

Religious attendance is also strongly related to volunteerism; youth who attend religious

services regularly are more likely to formally volunteer (e.g., Gibson, 2008; Perks & Haan, 2011; Sundeen & Raskoff, 2000). Previous studies have shown that religion was an important aspect of vitality in rural communities (Furbey, Dinham, Farnell, Finneron, & Wilkinson, 2006) and that rural youth were more engaged in religious activities than urban youth (Benson, Donahue, & Erickson, 1989). Rural youth may attend church to network and integrate into their community, and religiosity may be influenced by family ties and social identities (King, Elder, & Whitback, 1997). In urban areas, religion may play less of a central role in community affairs. Religious attendance does not have a clear relationship with informal volunteering. Van Tienen, Scheepers, Reitsma, and Schilderman (2011) found that spirituality (i.e., individual religiosity) was related to informal volunteering, whereas church attendance was related to formal volunteering. Social networks through church attendance may be more important to formal than informal volunteering and this warrants further exploration. Overall, since many religious doctrines emphasize helping other people, youth who identify as religious may be more engaged in volunteerism, than nonreligious youth.

Although rural settings may have stronger social connections and support, urban settings are more culturally diverse, less conventional, and have higher tolerance for differences, whereas there is more homogeneity in rural areas (Fischer, 1995; House, Landis, & Umberson, 1988). Given the strong social support and homogenous nature of rural areas, youth who are new to the community, and who are not involved in social groups or religious affiliations, may find it more challenging to become socially integrated into their communities and henceforth, to volunteer. Youth who have resided longer in their community may have more social networks and stronger place attachment because long-term residence allows for strong social ties and interactions to form (Goudy, 1990; Rotolo, Wilson, & Hughes, 2010).

Hypothesis 3: Belonging to social/cultural institutions will be related to greater involvement in formal and informal volunteerism. Specifically, in rural settings, youth who belong to youth groups (versus not), attend school (versus nonstudents), and who attend religious services frequently (versus less frequently), will be more engaged in formal and informal volunteerism. The magnitude of these differences will be smaller in urban settings.

Hypothesis 4: In rural settings, youth who have resided longer in their community (versus those who resided fewer years) will be more engaged in formal and informal volunteerism. This difference will be smaller in urban regions.

Sociodemographics and Youth Volunteerism: Urban and Rural Differences

Age is related to volunteerism. One study revealed that a larger percentage of youth aged 15-19 formally volunteered compared to youth aged 20-24 (Lasby & Bakker, 2010). This may be because in many provinces in Canada, teenagers are required to complete community service hours to graduate high school.

Language may also be related to volunteerism but the literature is mixed. One study found that French speakers in Quebec, Canada, were less likely to formally volunteer than residents in other provinces (Wang, Mook, & Handy, 2016). Other reports showed that people whose first language was not English or French were less likely to formally volunteer (Smith, 2012), and one potential explanation is that non-English speaking youth may not know where to volunteer (Ramakrishnan & Viramontes, 2006). Past research has demonstrated that lack of fluency in the host language deters immigrants' propensity to formally volunteer (e.g., Tucker & Santiago, 2013; Wang & Handy, 2013). This finding may be stronger in rural settings where linguistic diversity is weaker, which may create challenges for youth whose language is not the majority.

These results run counter to those of other research. For example, having non-English speaking parents has recently been related to a higher likelihood of volunteering (Ishizawa, 2015), and some children use bilingual skills in their volunteering activities (Stepick, Stepick, & Labissiere, 2008). One Canadian study on sport volunteering found few differences between Anglophones and Francophones (Safai, Harvey, Lévesque, & Donnelly, 2007).

Similarly, studies have found that culture and language do not impede informal volunteering for certain ethnic groups (e.g., Handy & Greenspan, 2008; Jang, Wang, & Yoshioka, 2016). Further, Quebecers are more likely to informally volunteer because they may have less trust in formal organizations due to historical roots; the governance of the Catholic Church and English elitists may have hindered the development of a strong civic culture among Francophones (Reed & Selbee, 2000). These equivocal findings emphasize the need to explore these relationships further.

Finally, gender differences in volunteering may exist by place of residence. Rural women are more likely to be part of community organizations, whereas men participate in associations for industry, such as agricultural production (Peter, Bell, Jarnigan, & Bauer, 2000). In one study, rural female adolescents were found to exhibit higher levels of prosocial behaviour (e.g., volunteering, donating, doing favours) than rural males, and this could be related to gender socialization processes (Carlo, Crockett, Randall, & Roesch, 2007). Women are also more likely to informally volunteer than are men (e.g., Wang et al., 2016; Wilson & Musick, 1997). In rural Canada, the cultural belief is that women do the caregiving because they are expected to care for the elderly, relatives, or spouse, when they are sick (e.g., Bedard, Koivuranla, & Stuckey, 2004; Cuellar & Butts, 1999; Kubik & Moore, 2003). However, not all informal activities involve caregiving. In light of what has been termed the *rural masculine* (e.g., Campbell & Bell, 2000),

males may also engage in informal activities, such as yard work, fixing automobiles, or maintenance. The notion of rural masculinities is that perceptions of maleness are often associated with symbols of rurality, such as farmers, cowboys, and loggers (Campbell & Bell, 2000). In rural areas, young males are often valued on their practical skills and manual labour (Brandth & Haugen, 2000; Grimsrud, 2007) and express their masculinity through hunting and their 'handyman' skills (Bye, 2009). Place characteristics can shape gender and social identities, such that 'real men' are often perceived as those who are rugged in the countryside, who work with machinery and rough terrains (e.g., Campbell, 2000; Saugeres, 2002). Therefore, rural males may engage in manual types of helping to maintain their identity. Since there is a dearth of literature on urban/rural informal volunteerism by gender, more research is needed to dissect potential differences.

Hypothesis 5: In rural settings, females compared to males will have higher odds of formal volunteering and will contribute more formal volunteer hours. These differences will be less drastic in urban areas.

The present study examines how different sociodemographics and resources impact youths' proclivity to volunteer and their volunteer intensity, and whether this is moderated by urban/rural residence. The variables used were based on secondary analysis of data and were not intended to fully capture the complexities of different resources on volunteering.

Method

Data Source

For the present study we combined the datasets from the 2007 and 2010 Canada Survey of Giving, Volunteering and Participating (CSGVP) to increase the sample size for youth.¹ The CSGVP is a national survey with a cross-sectional design that aims to understand trends in

volunteering and giving behaviour for respondents aged 15 years and up. The CSGVP initially began in 1997 and was designed to be conducted every three years. In 2007, the sample size for the 10 provinces was 20,510 (Statistics Canada, 2007), while in 2010 it was 14,059 (Statistics Canada, 2010a). In 2007, the survey was conducted between September 10th and December 8th. In 2010, it was conducted between September 14th and December 10th.

Within the 10 provinces, the sample was generated using Random Digit Dialing (RDD), a stratified design using probability sampling (Statistics Canada, 2007, 2010a). Twenty-seven strata were formed. The RDD methodology generates telephone numbers randomly, and this method was refined to exclude “nonworking banks”—those which did not include at least one residential telephone number. All respondents were contacted by telephone (through a computer-assisted telephone interviewing system) by trained interviewers, whereby one person per household was selected at random. For the provincial component, the institutionalized population and persons without a land phone line were excluded, but the latter were accounted for by weighting estimates.² In 2010 the response rate for provinces was 55.7% and in 2007 it was 54.4%. A series of steps were taken to adjust for weighting (see Statistics Canada, 2007, 2010a).

Participants

The sample comprised youth ($M_{age} = 19.20$ years, age range: 15-24 years). This age range is consistent with previous CSGVP reports (e.g., Vézina & Compton, 2012) and follows the standard definition of youth (United Nations, n.d.). After the 2007 and 2010 surveys were combined, there were 3,065 youth who were eligible to be included in our analyses (available data on place of residence variable). After listwise deletion³, the sample size was 2,892. Within this sample, 22% were rural (78% urban), and 49% were female. Students comprised the majority of the sample (70%), and 67% of the sample were employed. Thirty-four percent were

in the higher household income category (\$100,000 and above), and only 9% were in the lowest household income group. Thirty-five percent reported excellent health and 23% attended religious services weekly/monthly.

Measures

Independent variables.

Place of residence. We derived a variable, such that urban included census metropolitan areas (CMA) and census agglomeration areas (CA). According to Puderer (2009), a CMA has a core of at least 50,000 whereas a CA has a core of at least 10,000. Rural areas included zones outside of CMAs and CAs (strong, moderate, and weak metropolitan influenced zones, and noninfluenced zones). Metropolitan influenced zones were based on the proportion of residents in the labour force who commute to a core of a CMA or CA.

Sociodemographics. Gender was dichotomous (0 = female; 1 = male), and age was a continuous variable. Language spoken most often at home was dichotomized (0 = other; 1 = English). French was included in the 'other' category to avoid small cell sizes—the number of cases in logistic regression should be from five to nine to be considered reliable (Vittinghoff & McCulloch, 2007). Survey year (2007/2010) was also included.

Resource indicators. Household income had five levels: less than \$20,000, \$20,000 to less than \$40,000, \$40,000 to less than \$60,000, \$60,000 to less than \$100,000 and \$100,000 or more. This variable was imputed by Statistics Canada. Labour force status was derived based on whether participants worked at a job or business in the week prior to the survey and consisted of three categories: did not work (either unemployed or not in the labour force), part-time work (less than 30 hours per week), and full-time work (30 hours or more per week). Participants who were absent because of vacation were included as employed. This classification was based on the

standard definition of work hours (Statistics Canada, 2010b). Self-reported general health had four levels: excellent, very good, good, and fair/poor.

Student status was derived based on whether respondents were currently attending school, college, or university, and if so, their level of education. This comprised three categories: nonstudents, high school students (did not graduate high school and were currently attending school), and post-secondary students (either graduated high school, had a post-secondary diploma or university degree, but were currently attending school). Length of time resided in the community had three levels: less than three years, three to less than 10 years, and 10 or more years. These categories were created based on adequate cell size requirements. Additionally, we included whether youth participated in an organized team sport, belonged to a youth group (e.g., Guides or Scouts), saw somebody they admired helping others, were active in student government, and/or had parents who volunteered in the community (0=no; 1=yes). Religious attendance consisted of four levels (attended religious services weekly/monthly, 1-4 times a year, not at all, not religious).

Dependent variables.

Formal volunteer proclivity. Respondents were asked whether they did any activities without pay on behalf of a group or organization in the last 12 months before the survey (0 = no; 1 = yes). These activities came from a list, which the interviewer read to the respondent and included activities such as, fundraising, canvassing, conservation, coaching, etc. Youth who answered 'yes' to at least one of the activities were considered volunteers, and youth who answered 'no' for all of the options were nonvolunteers.

Formal volunteer hours. Volunteers were asked to indicate how many hours (within the last 12 months prior to the survey) they dedicated to the main organization that they volunteered

for but could also indicate the number of hours for another two organizations where they invested the most time. If they volunteered for more than three organizations, they could also indicate the hours contributed here. For this regression, we included one additional variable: whether youth approached the organization themselves (0 = no; 1 = yes).

Informal volunteer intensity. We derived a variable for informal volunteer intensity. There were six different informal volunteer activities in the CSGVP: (1) worked at somebody's house (e.g., cooking, yard work); (2) helped with shopping or driving; (3) helped with coaching, teaching, tutoring, or assisted with reading; (4) paperwork tasks (e.g., banking); (5) health-related or personal care; and (6) other activities. Participants were asked how often they engaged in each of these activities within the last year: 0 = not at all (i.e., nonvolunteers), 1 = once or twice, 2 = three or four times, 3 = once a month, 4 = once a week, and 5 = daily or almost daily. For each of these six activities, participants could score between 0.0 and 5.0 on activity frequency.

We conducted Principal Component Analysis (PCA) on these six activities with Varimax rotation and used factor loading cut-offs of 0.40. We found that a one-factor solution best fit our data (only one eigenvalue greater than 1). We summed these responses such that the scale range was between 0.0 and 30.0 units of intensity ($\alpha = 0.66$). Despite this low alpha, we used one scale based on theoretical reasoning; all items were related to informal helping activities. The variable was treated as continuous.

Statistical Analysis

Analyses were conducted in Stata, version 14.0. We conducted multivariate logistic regression to examine whether youth volunteered (yes/no) and multiple regression for number of hours volunteered and informal volunteer intensity. We assessed urban/rural residence as a

moderator of eight key variables (outlined in our hypotheses) to predict volunteering and volunteer intensity. To interpret the nature of the moderation effects, post-hoc probing methods were used. We manipulated the zero point of the moderator (Holmbeck, 2002), such that urban was coded as 0 in one model, and then rural was coded as 0 in another model. The odds ratio (or coefficient) of the predictor variable represents its conditioned effect on the outcome when the moderator is coded 0 (Holmbeck, 2002). For all models, this method allowed us to determine whether the relationship between the variable of interest and volunteering was significant for urban youth, rural youth, or for both but to different degrees (Holmbeck, 2002). Sampling and bootstrap weights were applied to account for sampling bias and to produce accurate estimates for the Canadian youth population. For example, weighting was adjusted based on factors such as the number of telephone lines in the household, non-responses, selecting only one household member, and bootstraps were used for estimating variances. Variables were entered simultaneously into our models.

Results

Comparing Included Versus Excluded Cases

Our focus was on urban/rural differences, thus youth who had missing data on this variable (postal code not stated) were excluded. Chi-square analyses were conducted to examine differences between youth included in our analyses ($n = 3,065$) and those who were excluded ($n = 270$). A lower proportion of missing cases, compared to eligible cases, were volunteers, $\chi^2(1) = 20.14$, $p < .001$ (53.8% vs. 58.8%); had resided in their community for 10 or more years, $\chi^2(1) = 15.85$, $p < .001$ (60.8% vs. 64.9%); saw somebody they admired helping others, $\chi^2(1) = 25.39$, $p < .001$ (52.4% vs. 58.0%); belonged to youth groups, $\chi^2(1) = 9.41$, $p < .05$ (41.0% vs. 44.2%), were part of student government, $\chi^2(1) = 63.14$, $p < .001$ (13.9% vs. 19.8%); had parents who

volunteered, $\chi^2(1) = 5.13$, $p < .05$ (44.4% vs. 47.0%); and attended religious services weekly/monthly, $\chi^2(1) = 6.15$, $p < .05$ (21.3% vs. 23.3%). In sum, missing cases appeared to have fewer resource indicators.

A greater proportion of missing cases were male, $\chi^2(1) = 43.09$, $p < .001$ (58.6% vs. 50.9%); high school students, $\chi^2(1) = 13.93$, $p < .05$ (36.7% vs. 32.8%); in the lowest income category, $\chi^2(1) = 41.20$, $p < .001$ (13.9% vs. 9.5%); in good health, $\chi^2(1) = 15.73$, $p < .001$ (25.9% vs. 21.6%); and from the 2010 survey, $\chi^2(1) = 50.98$, $p < .001$ (56.7% vs. 49.1%). While the CSGVP data came from a representative sample of youth across Canada's 10 provinces, we exercise caution in generalizing these findings because missing cases appeared to have fewer resource indicators and their profiles were different than the included sample.

Descriptive Results

There were significant differences in sample characteristics for rural and urban youth (Table 1). Sixty-six percent of rural youth volunteered compared to 57% of urban youth, $\chi^2(1) = 121.97$, $p < .001$. A greater proportion of rural youth had lived 10 or more years in their community, $\chi^2(1) = 428.77$, $p < .001$; had parents who volunteered, $\chi^2(1) = 67.70$, $p < .001$; were part of student government, $\chi^2(1) = 73.83$, $p < .001$; belonged to youth groups, $\chi^2(1) = 48.33$, $p < .001$; were on sports teams, $\chi^2(1) = 15.45$, $p < .001$; were high school students, $\chi^2(1) = 496.43$, $p < .001$; and worked full-time, $\chi^2(1) = 84.76$, $p < .001$. Rural youth had more social resources.

A greater proportion of urban youth were in the highest household income category (\$100,000 or more), $\chi^2(1) = 11.13$, $p < .001$; were postsecondary students, $\chi^2(1) = 827.66$, $p < .001$; had excellent health, $\chi^2(1) = 7.64$, $p < .001$; were not religious, $\chi^2(1) = 137.68$, $p < .001$; and were not in the labour force, $\chi^2(1) = 52.07$, $p < .001$.

[Insert Table 1 here]

Formal Volunteer Proclivity: Main Effects and Interactions

Table 2 presents the regression results for formal volunteer proclivity, formal hours volunteered, and informal volunteer intensity, without any interactions added. The regression on formal volunteer hours was based on a subsample of youth (i.e., only volunteers). Rural youth had higher odds of volunteering than urban youth (OR = 1.37, 95% CI [1.28, 1.47], $p < .001$). Some of the strongest predictors of formal volunteer proclivity were: attending religious services weekly/monthly, being a high school student, having parents who volunteer, speaking English, and living in the community for 10 or more years.

[Insert Table 2 here]

Herein, we report significant urban/rural interactions. The interactions for all of our analyses (formal volunteer proclivity, formal volunteer hours, and informal volunteer intensity) are shown in Table 3 for comparison.

[Insert Table 3 here]

Figure 1-Figure 4 graphically display all urban/rural interactions. For rural youth, English speakers had higher odds of formal volunteering than youth who spoke another language at home (OR = 1.85, 95% CI [1.60, 2.15], $p < .001$). The magnitude of this gap was lower for urban youth (OR = 1.35, 95% CI [1.26, 1.44], $p < .001$). Only in rural areas, males had lower odds of formal volunteering than females.

We found significant interactions between place of residence and resource factors, to predict formal volunteer proclivity. Only for rural youth, working full-time increased the odds of volunteering by 79% (1.79-1.00) compared to nonworking youth. High school students had higher odds of formal volunteering than nonstudents, particularly in rural than in urban settings (OR = 3.59 and 1.53, respectively). In rural regions especially, belonging to youth groups,

having parents who volunteered (versus not), and residing in the community for longer than three years, were related to higher odds of volunteering. For urban youth, attending religious services weekly/monthly (compared to being nonreligious), increased the odds of volunteering by 137% (OR = 2.37, $p < .001$), whereas in rural settings, the odds for comparable youth were only increased by 31% (OR=1.31, $p < .001$). Post-hoc results for all interaction effects are shown in Table 4.

[Insert Table 4 here]

Formal Volunteer Hours: Main Effects and Interactions

Formal volunteer hours were highly skewed and kurtotic and thus a log transformation was applied (mean ordered log hours = 3.74, SD = 1.56). In terms of interpretation, for every one unit increase in the predictor variable, the outcome variable would change by its designated coefficient in the ordered log scale. For youth in general, having more social/cultural resources (e.g., weekly/monthly religious attendance, part of sports team, student government, parents volunteer) was related to volunteering more hours. Youth in rural settings volunteered fewer hours than urban youth (Table 2).

We found some significant urban/rural interactions (Table 3). Comparisons for urban/rural results are displayed in Table 4. Only in urban settings, males volunteered fewer hours than females ($B = -0.13$, $p < .001$). In rural settings, having parents who volunteered (versus not) was related to volunteering more hours ($B = 0.45$, $p < .001$). This gap was less pronounced for urban youth ($B = 0.19$, $p < .001$). Belonging to youth groups was more strongly associated with volunteering more hours, for rural youth.

Only in rural areas, postsecondary students (compared to nonstudents) volunteered more hours ($B = 0.20$, $p < .05$). Urban youth who lived 10 or more years in their community dedicated

more hours volunteering ($B = 0.17, p < .001$) than urban youth who lived less than three years in their community. In rural settings, comparable youth dedicated fewer hours ($B = -0.17, p < .05$). Urban youth who attended religious services weekly/monthly volunteered more hours than nonreligious youth ($B = 0.50, p < .001$). This was not found for rural youth.

Informal Volunteer Intensity: Main Effects and Interactions

Some factors that related to a higher informal volunteer intensity were: seeing somebody you [respondent] admired helping others, being part of student government, frequent religious attendance, longer community residence, and being in good health (compared to excellent health; Table 2). There was no difference in informal volunteer intensity between urban and rural youth.

There were significant urban/rural interactions (Table 3). Rural males informally volunteered less frequently than rural females ($B = -1.51, p < .001$), whereas the opposite was found in urban settings ($B = 0.16, p < .05$). Only for urban youth, English speakers informally volunteered at a lower intensity than youth who spoke another language at home ($B = -0.48, p < .001$). Urban youth who belonged to youth groups (versus not) had lower informal volunteer intensity ($B = -0.21, p < .05$), whereas the opposite was found for rural youth ($B = 0.50, p < .001$). Being a student (high school or postsecondary) was related to lower informal volunteering, especially in rural areas. Only in urban settings was working full-time (versus not working) related to a higher informal volunteer frequency ($B = 1.35, p < .001$).

Discussion

These urban/rural findings suggest that the influence of resources on volunteering can be subsumed within a larger ecological framework. Specifically, individuals are embedded in multiple, interactive, and dynamic contextual systems, which can influence their development, either directly or indirectly (Bronfenbrenner & Morris, 2006). Youth volunteering was

influenced by individual factors (e.g., religiosity, labour force status), but the effects of these factors depended on the larger environment in which youth were embedded.

Employment Status Versus Household Income

We found that youth with higher household incomes were no more likely to volunteer than youth with lower household incomes. This has been found in other studies with Canadian respondents of all ages (Wang et al., 2016). However, lower income youth volunteered for fewer hours than students of higher socioeconomic status, even though low socioeconomic status youth may be more generous and prosocial than their higher social class counterparts because of their sensitivity to helping others and their social values (Piff, Kraus, Côté, & Cheng, 2010). Perhaps more commitment involves greater economic resources (e.g., traveling costs).

We found that in rural settings, youth who were employed were more likely to volunteer. However, there was no difference between employed and nonworking rural youth in their informal volunteering intensity (hypothesis 1 was mostly supported). In rural regions, work may provide social contacts for formal volunteerism, whereas youth may help neighbours and relatives (informal volunteering) regardless of employment status because this type of volunteering is less professionalized (Finkelstein & Brannick, 2007). For youth in general, we found that working part-time was especially related to higher odds of formal volunteering, which is consistent with other reports (e.g., Dote et al., 2006; Einolf, 2011). However, working full-time or part-time was not related to volunteering more hours, for urban and rural youth. Time constraints are barriers to volunteering (e.g., Sundeen & Raskoff, 2000; Sundeen, Raskoff, & Garcia, 2007), and work limits discretionary time (Wilson, 2000).

The Importance of Role Models and Networks: The Case of Rural Communities

In the present study, urban/rural residency moderated an association between parental

volunteering and youth formal volunteering but this was not true for informal volunteering (hypothesis 2 was not fully supported). In this case, rural youth with parents who volunteer were especially more likely to formally volunteer. Past studies have shown that rural youth were more influenced by people close to them, such as friends and parents (e.g., Leung, Wright, & Foster, 1987; Mekos & Elder, 1996). Elder and Conger (1999) found that youth in farm families spent more time in community activities and were asked for advice more often by their parents. In rural settings, youth who have parents who volunteer may have wider (and perhaps more professional) networks, which may increase their chances to formally volunteer, whereas informal volunteerism may be more readily accessible to everybody.

We found mixed support for hypothesis 3. We expected that in rural settings there would be differences in formal volunteering and informal volunteering, between youth who were part of social/cultural groups and youth who were not part of these groups. We found this to be true mostly for youth who belonged to youth groups, whereas the findings were mixed for religious attendance. Rural youth who participate in extracurricular activities may also volunteer to feel part of their social group or to maintain a certain reputation. Theodori and Theodori (2014) found that rural youth perceived their community as one where they feel safe, everybody knows everybody, people are friendly, and there is strong community attachment—rural youth in social groups may feel more invested in their communities. Conversely, some rural youth have perceived their communities as isolating, such as lacking in social activities and entertainment, and problematic because of long distance (Hedlund, 1993). Rural youth who lack connections may encounter more difficulties volunteering.

Urban and rural students were more likely to formally volunteer than nonstudents (although this gap was greater in rural areas as hypothesized). A history of volunteerism is

crucial when applying for jobs or school applications, therefore students may volunteer to compete (Handy et al., 2010). This may explain why in both regions, high school students had lower informal volunteer intensity, because career opportunities and external rewards are less likely to be acquired through informal volunteering (Finkelstein, 2012). Schools are especially embedded in the rural culture and can cultivate community identity and participation in recreational and civic affairs (Lyson, 2002). Rural nonstudents may have difficulties finding formal volunteer opportunities if they no longer have school as a significant support system.

We also found that, in rural settings, residing in the community for fewer than three years was particularly related to lower formal volunteer proclivity and lower informal helping. One explanation for this finding is that it may take more time for rural newcomers to belong to their setting because rural areas have greater homogeneity, denser social networks, and stronger ties (Crockett et al., 2000). Surprisingly, in rural settings, longer community residence was associated with contributing fewer formal volunteer hours, which does not support hypothesis 4. Youth who have resided in their community for many years may be more engaged with informal volunteering to maintain connections in their local communities.

The Unique Role of Religiosity

Attending religious services weekly/monthly (compared to being nonreligious) was related to greater investment in formal volunteering. This difference was more pronounced in urban regions than in rural regions. This does not support hypothesis 3. Religious attendance in urban areas may be important for youth development. In an urban youth sample, King and Furrow (2004) found that religious activity impacted on moral behaviour (e.g., empathy), but this was mediated by social capital measures (e.g., trust, relationships).

In urban settings, youth who had a religious affiliation but who did not attend religious

services were less invested in formal volunteering than were nonreligious youth. This suggests that in urban areas, formal volunteering could be linked more to the social milieu of church and face-to-face interactions, which may increase the chance of being approached to volunteer (e.g., Campbell & Yonish, 2003; Musick & Wilson, 2008). Others have found that congregational membership in church, rather than subjective religiosity, was related more to formal volunteerism (e.g., Becker & Dhingra, 2001; Park & Smith, 2000).

One peculiar finding was that rural youth who identified as religious (but did not attend services) had the highest informal volunteer intensity. In rural areas, informal volunteering could thus be encouraged through religiosity in general (e.g., values of helping neighbours), whereas social networks through religious attendance may be more important for formal volunteering. Studies have shown that subjective religiosity (e.g., importance of religious beliefs) was related to general helping behaviour (e.g., Saroglou, 2006; Wuthnow, 2004), which resembles informal volunteering. Future studies should consider the religious beliefs and values of rural youth who do not attend religious services but who identify as religious and how this may impact on their philanthropic behaviour.

Linguistic Diversity and Gender Norms

Youth who spoke English at home were more likely to formally volunteer and to volunteer more hours, than were youth who spoke French or another language at home. This difference was more noticeable in rural areas. Urban regions may have more diverse volunteer opportunities to accommodate people from different cultural and linguistic backgrounds. Metropolitan areas in Canada have a higher percentage of immigrants than rural areas (Beshiri & He, 2009), and greater diversity in cities has been linked to higher levels of tolerance and social capital (Onyx & Bullen, 2000). However, lack of linguistic diversity in rural settings cannot fully

explain our findings, given that many areas in Canada are also homogenous Francophone. Future studies should examine French and other languages separately to understand possible cultural differences in urban versus rural regions.

Interestingly, we found that urban youth whose language spoken at home was non-English, informally volunteered more frequently. Previous studies have found that ethnic groups and immigrants were more informally than formally engaged because this type of volunteering was more readily accessible (e.g., Carson, 1999; Handy & Greenspan, 2009). Closer investigation of our results showed that of those urban youth whose language at home was non-English, 32% were born outside Canada, whereas for comparable rural youth, only 3% were born outside Canada. Perhaps in the current study, urban youth who spoke different languages were helping relatives or acquaintances who shared cultural similarities. Due to data restrictions, we could not examine ethnic identity or year of immigration, which should be explored in future studies.

In rural settings, females were more likely to formally volunteer than males, but did not invest any more hours than males (hypothesis 5 was not fully supported). This may be elucidated through Schoggen's (1989) concept of underpopulated settings: Fewer people than roles mean that a select few may undertake more responsibilities. In rural areas, some organizations may have stronger gender norms (e.g., firefighters, maintenance), and these positions may be in demand and require more hours. For example, fire departments are involved in many voluntary activities in rural communities (review by Thompson & Bono, 1993), and almost all rural firefighters are male (Perkins, 1989).

Closer examination of our results revealed that a greater proportion of rural males, than rural females, volunteered in first-aid and firefighting (7.6% vs. 3.8%), whereas in urban regions

the opposite was found (2.8% vs. 4.0%). Further, a greater proportion of rural males, than rural females, volunteered in the maintenance/repair of facilities (22.5% vs. 10.5%), whereas this gender gap was less pronounced in urban regions (10.2% vs. 5.5%). Rural males who are volunteering in these sectors may need to invest many hours. Rural females were more invested in informal volunteering, and perhaps this reflects the prosocial norms of rural culture.

We found that age was negatively related to volunteer rate. Teenagers may volunteer more because community service is mandatory to graduate high school (e.g., Padanyi et al., 2009). However, age was positively related to formal volunteer hours, which suggests that teenagers may volunteer episodically, whereas older youth may be more committed to long-term activities. We also found differences in survey year and volunteer rate. From this alone it would be difficult to draw conclusions but it is important that we included survey year in our models to account for potential differences.

Limitations and Future Directions

This study showed that resource indicators differentially impacted on youth volunteering, depending on urban/rural residence. Our study also has limitations that need to be addressed. There are several other resource factors that could impact youth volunteer behaviour that were not available in the survey (e.g., perceptions of neighbourliness, sense of cohesion, skills, values). Additionally, youth excluded from our analyses were less likely to volunteer and had fewer resources (e.g., lower household income), and thus our results may not be free of bias. We also found urban/rural differences in sociodemographic and resource characteristics, and therefore caution should be exercised when comparing these two samples. These analyses were based on self-report and cross-sectional data. Directions of causality cannot be established with cross-sectional data. Furthermore, analysis on volunteer hours focused on a subsample (i.e.,

volunteers only), which also may create a selection bias as nonvolunteers were not included. We cannot say which factor lead to which effect or if their reported subjective appraisal matched actual levels or reasons. Youth may have also engaged in different types of informal activities that were not part of the questionnaire.

We could not investigate other key variables that may have been important predictors of youth volunteering. For example, youth often become involved in volunteering by being asked to volunteer (e.g., Kirby et al., 2009). This was not asked of all participants in the CSGVP. The data did not allow us to determine whether youth volunteered for mandatory community service hours or not. Other factors also need to be considered, such as personality characteristics, family structure, volunteer opportunities in urban versus rural areas, and the quality of past volunteer experiences. We also suggest focusing on features such as trust, commitment, and satisfaction with previous organizations and how this may impact volunteering. Finally, for statistical purposes, our rural sample comprised metropolitan influenced zones and noninfluenced zones. Future studies could decompartmentalize rural even further.

Conclusion

By understanding how different factors interact with urban/rural context, organizations can be more strategic when recruiting young volunteers. Different methods of outreach are necessary to engage youth in volunteerism, depending on geographic location, sociodemographic, and resource characteristics. Indicators of social/cultural resources seemed especially important to rural youths' volunteerism. Additionally, it would be useful to consider informal and formal volunteering as separate constructs rather than grouping them under one umbrella term. Full-time employment was related to rural youth formal volunteerism but not to informal volunteerism. In urban settings, youth who spoke non-English at home had lower odds

of formal volunteering than English speakers but informally volunteered at higher intensities. Therefore, there may be different pathways through which youth volunteer depending on the context and type of volunteering.

References

- Abbott-Chapman, J., Johnston, R., & Jetson, T. (2014). Rural belonging, place attachment, and youth educational mobility: Rural parents' views. *Rural Society*, 23, 296-310. doi: 10.1080/10371656.2014.11082072
- Barber, C., Mueller, T.C., & Ogata, S. (2013). Volunteerism as purpose: examining the long-term predictors of continued community engagement. *Educational Psychology*, 33, 314-333. doi:10.1080/01443410.2013.772775
- Barker, R. (1968). *Ecological psychology*. Stanford, CA: Stanford University Press.
- Barker, R., & Gump, P. (Eds.). (1964). *Big school, small school*. Stanford, CA: Stanford University Press.
- Barr, C., McKeown, L., Davidman, K., McIver, D., & Lasby, D. (2004). *A portrait of the nonprofit and voluntary sector in rural Ontario* (ISBN 1-55401-078-0). Retrieved from Canadian Centre for Philanthropy website: http://www.imaginecanada.ca/sites/default/files/www/en/library/rural/rural_report.pdf
- Bauch, P. (2001). School-community partnerships in rural schools: Leadership, renewal, and a sense of place. *Peabody Journal of Education*, 76, 204-221. doi: 10.1207/S15327930pje7602_9
- Becker, E.P., & Dhingra, H.P. (2001). Religious involvement and volunteering: Implications for civil society. *Sociology of Religion*, 62, 315-335. doi: 10.2307/3712353
- Bedard, M., Koivuranla, A., & Stuckey, A. (2004). Health impact on caregivers of providing informal care to a cognitively impaired older adult: rural versus urban settings. *Canadian Journal of Rural Medicine*, 9, 15-23. Retrieved from <https://www.srpc.ca/PDF/cjrm/vol09n1/pg15.pdf>

- Beggs, J.J., Haines, V.A., & Hurlbert, J.S. (1996). Revisiting the rural-urban contrast: Personal networks in nonmetropolitan and metropolitan settings. *Rural Sociology*, 61, 306-325.
- Bekkers, R. (2004). *Giving and volunteering in the Netherlands: Sociological and psychological perspectives* (Doctoral thesis, Utrecht University, Utrecht, Netherlands). Retrieved from https://renebekkers.files.wordpress.com/2011/08/bekkers_phd_dissertation_04.pdf
- Benson, P. L., Donahue, M. J., & Erickson, J. A. (1989). Adolescence and religion: A review of the literature from 1970 to 1986. *Research in the Social Scientific Study of Religion*, 1, 153-181.
- Beshiri, R., & He, J. (2009). *Immigrants in rural Canada: 2006* (Catalogue No. 21-006-X). Retrieved from Rural and Small Town Canada Analysis Bulletin website: <http://www.statcan.gc.ca/pub/21-006-x/21-006-x2008002-eng.pdf>
- Brandth, B., & Haugen, M., (2000). From lumberjack to business manager: masculinity in the Norwegian forestry press. *Journal of Rural Studies*, 16, 343–355. doi:10.1016/S0743-0167(00)00002-4
- Bronfenbrenner, U. (1979). *The ecology of human development*. London: Harvard University Press.
- Bronfenbrenner, U., & Morris, P.A. (2006). The bio ecological model of human development. In W. Damon & R.M. Lerner (Eds.), *Handbook of child psychology, Vol. 1: Theoretical models of human development* (6th ed., pp. 793-828). New York: John Wiley.
- Burnell, B.A. (2003). The ‘real world’ aspirations of work-bound rural students. *Journal of Research in Rural Education*, 18, 104–113. Retrieved from http://jrre.vmhost.psu.edu/wp-content/uploads/2014/02/18-2_1.pdf

- Burney, V.H., & Cross, T.L. (2006). Impoverished students with academic promise in rural settings: 10 lessons from project aspire. *Gifted Child Today*, 29, 14–21. doi:10.4219/gct-2006-200.
- Bye, L.M. (2009). ‘How to be a rural man’: Young men’s performances and negotiations of rural masculinities. *Journal of Rural Studies*, 25, 278-288. doi:10.1016/j.jrurstud.2009.03.002
- Campbell, H. (2000). The glass phallus: pub(lic) masculinity and drinking in rural New Zealand. *Rural Sociology*, 65, 562–581. doi:10.1111/j.1549-0831.2000.tb00044.x
- Campbell, H., & Bell, M.M. (2001). The question of rural masculinities. *Rural Sociology*, 65, 532-546. doi:10.1111/j.1549-0831.2000.tb00042.x
- Campbell, D.E., & Yonish, S.J. (2003). Religion and volunteering in America. In C.E. Smidt (Ed.), *Religion as Social Capital: Producing the Common Good* (pp. 87-106). Waco, TX: Baylor University Press.
- Carlo, G., Crockett, L.J., Randall, B.A., & Roesch, S.C. (2007). A latent growth curve analysis of prosocial behavior among rural adolescents. *Journal of Research on Adolescence*, 17, 301-324. doi: 10.1111/j.1532-7795.2007.00524.x
- Carson, D.E. (1999). On defining and measuring volunteering in the United States and Abroad. *Law and Contemporary Problems*, 62, 67–71. Retrieved from <http://scholarship.law.duke.edu/cgi/viewcontent.cgi?article=1147&context=lcp>
- Cartmel, F., & Furlong, A. (2000). *Youth unemployment in rural areas* (Research Report No. 18). Retrieved from Work and Opportunities Series: https://www.researchgate.net/publication/37183899_Youth_Unemployment_in_Rural_Areas
- Choi, G.N., & DiNitto, M.D. (2012). Predictors of time volunteering, religious giving, and secular giving: Implications for nonprofit organizations. *Journal of Sociology and Social*

- Welfare*, 39, 93-120. Retrieved from http://www.wmich.edu/hhs/newsletters_journals/jssw_institutional/institutional_subscribers/39.2.Choi.pdf
- Clerkin, R.M., Paynter, S.R., & Taylor, J.K. (2009). Public service motivation in undergraduate giving and volunteering decisions. *The American Review of Public Administration*, 39, 675-698. doi: 10.1177/0275074008327512
- Crockett, L.J., Shanahan, M.J., & Jackson-Newsom, J. (2000). Rural youth: Ecological and life course perspectives. *Adolescent diversity in Ethnic, Economic, and Cultural Contexts: Advances in Adolescent Development*, 10, 43-74. doi: 10.4135/9781452225647.n3
- Cuellar, N., & Butts, J.B. (1999). Caregiver distress: what nurses in rural settings can do to help. *Nursing Forum*, 34, 24-30. doi: 10.1111/j.1744-6198.1999.tb00990.x
- Dote, L., Cramer, K., Dietz, N., & Grimm, R. (2006). *College students helping America*. Retrieved from Corporation for National & Community Service website: http://www.nationalservice.gov/pdf/06_1016_RPD_college_full.pdf
- Einolf, C.J. (2011). Gender differences in the correlates of volunteering and charitable giving. *Nonprofit and Voluntary Sector Quarterly*, 40, 1092-1112. doi:10.1177/0899764010385949
- Elder, G.H., & Conger, R.D. (1999). *Children of the land: Adversity and success in rural America*. Chicago, IL: University of Chicago Press.
- Esterman, K., & Hedlund, D. (1995). Comparing rural adolescents from farm and nonfarm families. *Journal of Research in Rural Education*, 11, 84-91. Retrieved from http://jrre.vmhost.psu.edu/wp-content/uploads/2014/02/11-2_9.pdf
- Finkelstein, A.M. (2012). Dispositional correlates of informal volunteering. *Current research in*

- Social Psychology*, 18, 60-69. doi:10.1.1.364.1040
- Finkelstein, A.M., & Brannick, T.M. (2007). Applying theories of institutional helping to informal volunteering: motives, role identity, and prosocial personality. *Social Behaviour and Personality: An International Journal*, 35, 101-114. doi: 10.2224/sbp.2007.35.1.101
- Fischer, C. (1995). The subcultural theory of urbanism: A twentieth-year assessment. *American Journal of Sociology*, 101, 543-577. doi: 10.1086/230753
- Furbey, R., Dinham, A., Farnell, R., Finneron, D., & Wilkinson, G. (2006). *Faith as social capital: Connecting or dividing*. York, England: Joseph Rowntree Foundation.
- Gibson, T. (2008). Religion and civic engagement among America's youth. *The Social Science Journal*, 45, 504-514. doi:10.1016/j.sosci.2008.07.007
- Goudy, W.J. (1990). Community attachment in a rural region. *Rural Sociology*, 55, 178-198.
- Granovetter, M. (1974). *Getting a job: A study of contacts and careers*. Cambridge, MA: Harvard University Press.
- Grimsrud, G.M. (2007). Identitet i grenseland. (Identity in a marginal region). In S. Berger, G. Forsberg, & M. Ørbeck (Eds.), *Indre Skandinaviens – en gränsregion under omvandling* (pp. 17–24). Karlstad University Press, Karlstad.
- Handy, F., Cnaan, R.A., Hustinx, L., Kang, C., Brudney, J.L., Haski-Leventhal, D., & Zrinscak, S. (2010). A cross-cultural examination of student volunteering: Is it all about resume building? *Nonprofit and Voluntary Sector Quarterly*, 39, 498-523. doi:10.1177/0899764009344353.
- Handy, F., & Greenspan, I. (2009). Immigrant volunteering: A stepping stone to integration? *Nonprofit and Voluntary Sector Quarterly*, 38, 956–982. doi: 10.1177/0899764008324455

- Hart, D., Donnelly, T.M., Youniss, J., & Atkins, R. (2007). High school community service as a predictor of adult voting and volunteering. *American Educational Research Journal*, 44, 197-219. doi: 10.3102/0002831206298173
- Haski-Leventhal, D., Ronel, B.N., York, S.A., & Ben-David, M.B. (2008). Youth volunteering for youth: Who are they serving? How are they being served? *Children and Youth Services Review*, 30, 834-846. doi:10.1016/j.childyouth.2007.12.011
- Hebblethwaite, S. (2014). "Grannie's got to go fishing": Meanings and experiences of family leisure for three-generation families in rural and urban settings. *World Leisure Journal*, 56(1), 42–61. doi: 10.1080/04419057.2013.876588
- Hedlund, D. (1993). Listening to rural adolescents: views on the rural community and the importance of adult interactions. *Journal of Research in Rural Education*, 9, 150-159. Retrieved from http://jrre.vmhost.psu.edu/wp-content/uploads/2014/02/9-3_3.pdf
- Hodge, G.D., & Qadeer, M.A. (1983). *Towns & villages in Canada. The importance of being unimportant*. Canada: The Butterworth Group of Companies.
- Hodgkinson, V.A. (2003). Volunteering in global perspective. In P. Dekker & L. Halman (Eds.), *The values of volunteering* (pp. 35-53). New York, NY: Springer, US. doi: 10.1007/978-1-4615-0145-9_3
- Holmbeck, G.N. (2002). Post-hoc probing of significant moderational and mediational effects in studies of pediatric populations. *Journal of Pediatric Psychology*, 26, 87-96. doi:10.1093/jpepsy/27.1.87
- House, J.S., Landis, K.R., & Umberson, D. (1988). Social relationships and health. *Science*, 241, 540-545. Retrieved from <http://www.fundacion-salto.org/documentos/Social%20relationships-Health,%20Science,%201988.pdf>

- Ishizawa, H. (2015). Civic participation through volunteerism among youth across immigrant generations. *Sociological Perspectives*, 58, 264-285. doi:10.1177/0731121414556843
- Jang, H.S., Wang, L., & Yoshioka, C.F. (2016). The impact of acculturation on informal and formal volunteering of Korean Americans in the United States. *Journal of Public and Nonprofit Affairs*, 2(1), 31-47. doi:10.20899/jpna.2.1.31-47
- Janoski, K., & Wilson, J. (1995). Pathways to voluntarism: Family socialization and status transmission models. *Social Forces*, 74(1), 271-292. doi:10.1093/sf/74.1.271
- King, V., Elder, G. H., & Whitbeck, L. B. (1997). Religious involvement among rural youth: An ecological and life-course perspective. *Journal of Research on Adolescence*, 7, 431-456. doi:10.1207/s15327795jra0704_5
- King, E. P., & Furrow, L.J. (2004). Religion as a resource for positive youth development: Religion, social capital, and moral outcomes. *Developmental Psychology*, 40, 703-713. doi: 10.1037/0012-1649.40.5.703
- Kirby, E.H., Marcelo, K.B., & Kawashima-Ginsberg, K. (2009). *Volunteering and college experience*. Retrieved from The Center for Information & Research on Civic Learning and Engagement website: http://www.civicyouth.org/PopUps/FactSheets/College_Volunteering.pdf
- Kitchen, P., Williams, A., & Chowhan, J. (2012). Sense of community belonging and health in Canada: a regional analysis. *Social Indicators Research*, 107, 103-126. doi: 10.1007/s11205-011-9830-9
- Kubik, W., & Moore, R.J. (2003). Changing roles of Saskatchewan farm women: qualitative and quantitative perspectives. In R. Black & A. Nurse (Eds.), *The trajectories of rural life: new perspectives on rural Canada* (pp. 25-36). Regina: Canadian Plains Research

Center, University of Regina.

- Kulik, L. (2007). Predicting responses to volunteering among adolescents in Israel: The contribution of personal and situational variables. *Voluntas*, 18(1), 35-54. doi: 10.1007/s11266-007-9028-6
- Larson, R.W., Hansen, D.M., & Moneta, G. (2006). Differing profiles of developmental experiences across types of organized youth activities. *Developmental Psychology*, 42, 849–863. doi: 10.1037/0012-1649.42.5.849
- Lasby, D., & Bakker, P. (2010). *The giving and volunteering of youth: Findings from the Canada Survey of Giving, Volunteering and Participating*. Retrieved from Imagine Canada website: <http://www.socialimpactsquared.com/wp-content/uploads/2012/12/Giving-Volunteering-of-Youth.pdf>
- Lee, Y., & Brudney, J.L. (2012). Participation in formal and informal volunteering: Implications for volunteer recruitment. *Nonprofit Management and Leadership*, 23, 159-180. doi: 10.1002/nml.21060
- Leung, J., Wright, B.W., & Foster, S.F. (1987). Perceived parental influence and adolescent post secondary career plans. *High School Journal*, 70,173-79.
- Looker, D.E. (1993). Interconnected transitions and their costs: gender and urban-rural differences in transitions to work. In P. Anisef & P. Axelrod (Eds.), *Transitions: Schooling and Employment in Canada* (pp. 43-64). Toronto, ON: Thompson Educational Publishing.
- Lyson, A.T. (2002). What does a school mean to a community? Assessing the social and economic benefits of schools to rural villages in New York. *Journal of Research in Rural Education*, 17, 131-137. Retrieved from <http://files.eric.ed.gov/fulltext/ED464777.pdf>

- Matthews, R., Pendakur, R., & Young, N. (2009). Social capital, labour markets, and job-finding in urban and rural regions: Comparing paths to employment in prosperous cities and stressed rural communities in Canada. *The Sociological Review*, 57, 306-330. doi: 10.1111/j.1467-954X.2009.01831.x
- McLellan, J.A., & Youniss, J. (2003). Two systems of youth service: determinants of voluntary and required youth community service. *Journal of Youth and Adolescence*, 32, 47-58. doi: 10.1023/A:1021032407300
- Mekos, D., & Elder, G.H. (1996, March). *Community ties and the development of competence in rural youth*. Paper presented at the Biennial meeting of the Society for Research in Adolescence, Boston.
- Musick, A.M., & Wilson, J. (2008). *Volunteering: A Social Profile*. Indianapolis: Indiana University Press.
- Nelson, C.H., & Park, J. (2012). The rural-urban continuum as place: What can be learned from the Canadian Community Health Survey (CCHS)-Mental Health and Well-being? In J.C. Kulig & A.M. Williams (Eds.), *Health in rural Canada* (pp. 137-156). Vancouver: UBC Press.
- Onyx, J., & Bullen, P. (2000). Measuring social capital in five communities. *The journal of Applied Behavioral Sciences*, 36, 23-42. doi: 10.1177/0021886300361002
- Padanyi, P., Baetz, M., Brown, S., & Henderson, A. (2009). *Does required volunteering work? Results from Ontario's high school community service program* (Fact Sheet No. 23). Retrieved from the Southern Ontario Social Economy Research Alliance website: <http://socialeconomycentre.ca/PDF/factsheets/requiredvolunteering.pdf>
- Park, Z.J., & Smith, C. (2000). To whom much has been given...': Religious capital and

- community voluntarism among churchgoing Protestants. *Journal for the Scientific Study of Religion*, 39, 272-286. doi: 10.1111/0021-8294.00023
- Perkins, B.K. (1989). Volunteer firefighting in the United States: A descriptive study. *Nonprofit and Voluntary Sector Quarterly*, 18, 269–277. doi:10.1177/089976408901800308
- Perks, T., & Haan, M. (2011). Youth religious involvement and adult community participation: Do levels of youth religious involvement matter? *Nonprofit and Voluntary Sector Quarterly*, 40, 107-129. doi: 10.1177/0899764009357794
- Peter, G., Bell, M.M., Jarnigan, S., & Bauer, S. (2000). Coming back across the fence: Masculinity and the transition to sustainable agriculture. *Rural Sociology*, 65, 215-33. doi: 10.1111/j.1549-0831.2000.tb00026.x
- Piff, K.P., Kraus, W.M., Côté, S., & Cheng, H.B. (2010). Having less, giving more: The influence of social class on prosocial behaviour. *Journal of Personality and Social Psychology*, 99, 771-784. doi: 10.1037/a0020092
- Plagnol, A., & Huppert, F.A. (2010). Happy to help? Exploring the factors associated with variations in rates of volunteering across Europe. *Social Indicators Research*, 97, 157-176. doi: 10.1007/s11205-009-9494-x
- Puderer, H.A. (2009). *Urban perspectives and measurement: Geography working paper series* (No. 2009001). Retrieved from Statistics Canada website: <http://www.statcan.gc.ca/pub/92f0138m/92f0138m2009001-eng.pdf>
- Ramakrishnan, S.K., & Viramontes, C. (2006). *Civic inequalities: Immigrant volunteerism and community organizations in California*. Sacramento, CA: Public Policy Institute of California.
- Reed, P.B., & Selbee, L.K. (2001). *Formal and informal volunteering and giving: Regional*

- and community patterns in Canada*. Retrieved from the Nonprofit Sector Knowledge Base Project website: <http://www3.carleton.ca/casr/Formal.pdf>
- Rotolo, T., Wilson, J., & Hughes, E.M. (2010). Homeownership and volunteering: An alternative approach to studying social inequality and civic engagement. *Sociological Forum*, 25, 570–587. doi: 10.1111/j.1573-7861.2010.01196.x
- Ryan, D.V., Agnitsch, A.K., Zhao, L.L., & Mullick, R. (2005). Making sense of voluntary participation: A theoretical synthesis. *Rural Sociology* 70, 287-313.
doi: 10.1526/0036011054831198
- Safai, P., Harvey, J., Lévesque, M., & Donnelly, P. (2007). Sport volunteerism in Canada. Do linguistic groups count? *International Review for the Sociology of Sport*, 42, 425-439.
doi: 10.1177/1012690208089835
- Saroglou, V. (2006). Religion's role in prosocial behavior: Myth or reality? *Psychology of Religion Newsletter*, 31, 1-8. Retrieved from <http://www.apadivisions.org/division-36/publications/newsletters/religion/2006/04-issue.pdf>
- Saugeres, L. (2002). Of tractors and men: masculinity, technology and power in a French farming community. *Sociologia Ruralis*, 42, 143–159. doi:10.1111/1467-9523.00207
- Schaefer, R.D., Simpkins, D.S., Vest, E.A., & Price, D.C. (2012). The contribution of extracurricular activities to adolescent friendships: new insights from social network analysis. *Developmental Psychology*, 47, 1141-1152. doi: 10.1037/a0024091
- Schoggen, P. (1989). *Behavior settings*. Stanford, CA: Stanford University Press.
- Shah, D.V., McLeod, J.M., & Yoon, S.H. (2001). Communication, context and, community: An exploration of print, broadcast and internet influences. *Communication Research*, 28, 464-506. doi: 10.1177/009365001028004005

- Shrestha, B., & Cihlar, C. (2004). *Volunteering in under-resourced rural communities: Final report*. Retrieved from Points of Light Foundation website: https://archives.iupui.edu/bitstream/handle/2450/588/101_RuralCommunities.pdf?sequence=1
- Sinha, M. (2013). *Spotlight on Canadians: Results from the General Social Survey* (Catalogue no. 89-652-X2015003). Retrieved from Statistics Canada website: <http://www.statcan.gc.ca/pub/89-652-x/89-652-x2015003-eng.pdf>
- Smith, D.H. (1994). Determinants of voluntary association participation and volunteering: A literature review. *Nonprofit and Voluntary Sector Quarterly*, 23, 243–263.
doi: 10.1177/089976409402300305
- Smith, A. (2012). The changing effects of community characteristics on volunteering in Canada. *Canadian Public Policy*, 38, 361-373. doi: 10.1353/cpp.2012.0033
- Statistics Canada. (2007). *Microdata user guide: Canada Survey of Giving, Volunteering and Participating, 2007*.
- Statistics Canada. (2010a). *Microdata user guide: Canada Survey of Giving, Volunteering and Participating, 2010*. Retrieved from <http://abacus.library.ubc.ca/jspui/bitstream/10573/42719/2/2010gid-eng.pdf>
- Statistics Canada. (2010b). *Classification of full-time and part-time work hours*. Retrieved from Statistics Canada website: <http://www.statcan.gc.ca/eng/concepts/definitions/labour-class03b>
- Steinberg, K.S., Rooney, P.M., & Chin, W. (2002). Measurement of volunteering: a methodological study using Indiana as a test case. *Nonprofit and Voluntary Sector Quarterly*, 31, 484-501. doi: 10.1177/0899764002238097
- Stepick, A., Stepick, D.C., & Labissiere, Y. (2008). South Florida's immigrant and youth civic

- engagement: Major engagement: Minor differences. *Applied Development Science*, 12, 57–65. doi:10.1080/10888690801997036
- Stevens, G.N., & Peltier, L.G. (1994). A review of research on small-school student participation in extracurricular activities. *Journal of Research in Rural Education*, 10, 116-120. Retrieved from http://jrre.vhost.psu.edu/wp-content/uploads/2014/02/10-2_2.pdf
- Sundeen, R.A., & Raskoff, S.A. (2000). Ports of entry and obstacles: Teenagers' access to volunteer activities. *Nonprofit Management and Leadership*, 11, 179-197. doi: 10.1002/nml.11204
- Sundeen, A.R., Raskoff, A.S., & Garcia, C.M. (2007). Differences in perceived barriers to volunteering to formal organizations. *Nonprofit Management & Leadership*, 17, 279-300. doi: 10.1002/nml.150
- Taniguchi, H. (2012). The determinants of formal and informal volunteering: Evidence from the American Time Use Survey. *International Journal of Voluntary and Nonprofit Organizations*, 23, 920-939. doi: 10.1007/s11266-011-9236-y
- Theodori, A.E., & Theodori, G.L. (2014). Perceptions of community and place and the migration intentions of at-risk youth in rural areas. *Journal of Rural Social Sciences*, 29, 103-121. Retrieved from <http://www.ag.auburn.edu/auxiliary/srsa/pages/Articles/JRSS%202014%2029/1/JRSS%202014%2029%201%20103-121.pdf>
- Thompson, M.A., & Bono, A.B. (1993). Work without wages: The motivation for volunteer firefighters. *American Journal of Economics and Sociology*, 52, 323–343. doi: 10.1111/j.1536-7150.1993.tb02553.x
- Tremblay, S., Dahinten, S., & Kohen, D. (2003). Factors related to adolescents' self-perceived health. *Health Reports*, 14, 7-16.

- Tucker, C.M., & Santiago, A.M. (2013). The role of acculturation in the civic engagement of Latino immigrants. *Advances in Social Work*, 14(1), 178-205. Retrieved from <https://journals.iupui.edu/index.php/advancesinsocialwork/article/viewFile/3750/13460>
- Turcotte, M. (2005). *Social engagement and civic participation: are rural and small town populations really at an advantage?*(No.21-006-XIE). Retrieved from Statistics Canada website: <http://publications.gc.ca/Collection/Statcan/21-006-X/21-006-XIE2005004.pdf>
- United Nations (n.d.). *Definition of youth*. Retrieved from Department of Economic and Social Affairs website: <http://www.un.org/esa/socdev/documents/youth/fact-sheets/youth-definition.pdf>
- Van Tienen, M., Scheepers, P., Reitsma, J., & Schilderman, H. (2011). The role of religiosity for formal and informal volunteering in the Netherlands. *International Journal of Voluntary and Nonprofit Organizations*, 22, 365-389. doi:10.1007/s11266-010-9160-6
- Vézina, M., & Crompton, S. (2012). *Volunteering in Canada* (No.11-008-x). Retrieved from Statistics Canada website: <http://www.statcan.gc.ca/pub/11-008-x/2012001/article/11638-eng.pdf>
- Vittinghoff, E., & McCulloch, C. E. (2007). Relaxing the rule of ten events per variable in logistic and Cox regression. *American Journal of Epidemiology*, 165, 710–718. doi:10.1093/aje/kwk052
- Wang, L., & Handy, F. (2013). Religious and secular voluntary participation by immigrants in Canada: How trust and networks affect decision to participate. *Voluntas, International Journal of Voluntary and Nonprofit Organizations*, 25, 1559-1582. doi:10.1007/s11266-013-9428-8.
- Wang, L., Mook, L., & Handy, F. (2016). An empirical examination of formal and informal

- volunteering in Canada. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, 139-161. doi:10.1007/s11266-016-9725-0
- Wigfield, A., Eccles, J.S., Schiefele, U., Roeser, R., & Davis-Kean, P. (2006). Development of achievement motivation. In N. Eisenberg, W. Damon, & R.M Lerner (Eds.), *Handbook of child psychology: Vol. 3, Social, emotional, and personality development* (6th ed.; pp. 933-1002). Hoboken, NJ: John Wiley & Sons Inc.
- Williams, C.C. (2002). Harnessing voluntary work: A fourth sector approach. *Policy Studies*, 23, 247-260. doi: 10.1080/0144287022000046019
- Wilson, J. (2000). Volunteering. *Annual Review of Sociology*, 26, 215-240. doi: 10.1146/annurev.soc.26.1.215
- Wilson, J., & Musick, M.A. (1997). Who cares? Toward an integrated theory of volunteer work. *American Sociological Review*, 62, 694-713. doi: 10.2307/2657355
- Wilson, J. & Musick, M.A. (1998). The contribution of social resources to volunteering. *Social Science Quarterly*, 79, 799-814
- Wuthnow, R. (2004). *Saving America? Faith-based services and the future of civil society*. Princeton: Princeton University Press.
- Zaff, J.F., Moore, K.A., Papillo, A.R., & Williams, S. (2003). Implications of extracurricular activity participation during adolescence on positive outcomes. *Journal of Adolescent Research*, 18, 599-630. doi: 10.1177/074355840325477

Endnotes

¹Permission was received to access the CSGVP master files, which were available at the Carleton Ottawa Outaouais Local Research Data Centre (COOL-RDC). This thesis was part of a larger project funded by Employment and Social Development Canada (ESDC).

²Participants from the Territories were recruited with a different methodology, thus we did not include them in our analyses. This would produce inaccuracies when combining the datasets.

³We decided that listwise deletion was the best option to handle the nature of our missing data because many of our variables were categorical; imputing categorical data is not strongly recommended (Allison, 2001). Further, of our eligible cases, less than 6% of our data were missing.

⁴Allison (2013) recommends using a measure of R^2 by Tjur (2009). This particular method is useful for logistic regression in Stata. It is calculated by taking the difference in means of the predicted probabilities of two events. Retrieved from: <http://statisticalhorizons.com/r2logistic>

Table 1

Comparing Sociodemographic and Resource Characteristics by Place of Residence

Variable	Urban (n=2,255)		Rural (n=637)	
	%	95% CI	%	95% CI
Male (Female ^b)	50.2	[49.9, 50.6]	54.5	[53.2, 55.7]***
Age	M=19.3	SD=2.9	M=18.8	SD=2.9***
English (Other language ^b)	71.1	[70.6, 71.7]	70.6	[69.5, 71.7]
Household income				
Less than \$20,000	9.3	[8.9, 9.7]	10.5	[9.8, 11.3]*
\$20,000 to less than \$40,000	14.8	[14.4, 15.2]	15.2	[14.3, 16.1]
\$40,000 to less than \$60,000	16.7	[16.2, 17.1]	16.9	[16.0, 17.8]
\$60,000 to less than \$100,000	25.3	[24.7, 25.9]	25.7	[24.5, 26.9]
\$100,000 or more ^b	34.0	[33.3, 34.6]	31.6	[30.4, 32.8]*
Fair/poor health	6.5	[6.2, 6.8]	6.3	[5.8, 6.9]
Good health	21.0	[20.5, 21.5]	25.0	[24.0, 26.0]***
Very good health	36.8	[36.2, 37.4]	34.9	[33.7, 36.1]*
Excellent health ^b	35.7	[35.1, 36.4]	33.8	[32.6, 35.0]*
Full-time work	24.5	[24.0, 25.1]	30.8	[29.6, 32.1]***
Part-time work	31.5	[30.9, 32.1]	30.4	[29.2, 31.6]
Not working ^b	44.0	[43.3, 44.6]	38.7	[37.5, 40.0]***
High school student	31.7	[31.2, 32.3]	38.7	[37.4, 39.9]***
Postsecondary student	40.5	[39.9, 41.2]	22.0	[20.9, 23.0]***
Nonstudent ^b	27.7	[27.2, 28.3]	39.4	[38.0, 40.7]***
Time in community				
10 years or more	62.7	[62.1, 63.4]	76.2	[75.2, 77.3]***
3 to less than 10 years	21.8	[21.2, 22.4]	14.8	[13.8, 15.8]***
Less than 3 years ^b	15.5	[15.0, 16.0]	9.0	[8.4, 9.6]***
Part of sports teams (No ^b)	65.5	[64.3, 68.2]	68.1	[67.0, 69.2]***
Belong to youth groups (No ^b)	43.4	[42.8, 44.1]	48.3	[47.1, 49.6]***
Student government (No ^b)	18.9	[18.4, 19.4]	24.3	[23.2, 25.5]***
Admired person helps (No ^b)	58.1	[57.5, 58.7]	57.9	[56.6, 59.2]
Parents volunteer				
Yes	46.0	[45.4, 46.7]	52.1	[50.9, 53.4]***
No ^b	51.0	[50.4, 51.7]	44.5	[43.2, 45.8]***
Missing	2.9	[2.6, 3.2]	3.3	[2.9, 3.7]
Religious attendance				
Monthly/weekly	23.8	[23.3, 24.4]	20.9	[20.0, 21.7]***
1-4 times year	21.3	[20.8, 21.9]	29.8	[28.5, 31.1]***
Not at all	20.8	[20.2, 21.3]	22.6	[21.5, 23.8]*
Not religious ^b	34.0	[33.4, 34.7]	26.7	[25.6, 27.8]***
Survey year 2010 (2007 ^b)	48.9	[48.5, 49.3]	50.3	[49.1, 51.4]
Volunteer	57.4	[56.8, 58.1]	65.7	[64.3, 67.1]***

Note. %=proportion of the weighted sample included in the logistic analyses; CI=confidence interval. ^bReference category for subsequent analyses. For dichotomous variables, proportions were based on the category that was coded 1. *p <.05. ***p <.001.

Table 2

Main Effects Comparing Youth Formal Volunteer Proclivity, Formal Hours Contributed, and Informal Volunteer Intensity

Variable	Formal Volunteer Proclivity (n=2,892)		Formal Volunteer Hours (n=2,029)		Informal Volunteer Intensity (n=2,875)	
	OR (SE)	95% CI	Coeff. (SE)	95% CI	Coeff. (SE)	95% CI
Gender (Female ^b)						
Male	1.00(.03)	[0.95, 1.06]	-0.09(.02)***	[-0.13, -0.05]	-0.09(.08)	[-0.23, 0.05]
Age	0.90(.01)***	[0.89, 0.91]	0.05(.00)**	[0.04, 0.06]	0.05(.02)*	[0.01, 0.08]
Language (Other ^b)						
English	1.41(.04)**	[1.33, 1.50]	-0.00(.02)	[-0.05, 0.04]	-0.40(.07)***	[-0.54, -0.25]
Household income						
Less than \$20,000	0.97(.05)	[0.88, 1.07]	-0.08(.04)*	[-0.16, -0.00]	0.11(.11)	[-0.10, 0.32]
\$20,000 to <\$40,000	0.96(.04)	[0.89, 1.03]	0.00(.03)	[-0.06, 0.06]	0.05(.10)	[-0.14, 0.24]
\$40,000 to <\$60,000	0.89(.04)*	[0.82, 0.96]	0.05(.03)	[-0.01, 0.10]	0.41(.10)***	[0.21, 0.61]
\$60,000 to \$100,000	1.25(.05)***	[1.16, 1.35]	0.16(.02)***	[0.11, 0.20]	-0.17(.08)*	[-0.32, -0.02]
\$100,000 or more ^b	1.00					
General health						
Fair/poor	0.50(.03)***	[0.45, 0.56]	-0.01(.04)	[-0.10, 0.08]	0.04(.13)	[-0.22, 0.30]
Good	0.87(.03)***	[0.81, 0.93]	-0.15(.03)***	[-0.20, -0.09]	1.07(.09)***	[0.88, 1.25]
Very good	0.87(.03)***	[0.82, 0.93]	-0.14(.02)***	[-0.18, -0.10]	0.62(.07)***	[0.47, 0.76]
Excellent ^b	1.00					
Employment status						
Full-time	1.08(.04)	[1.00, 1.16]	0.02(.04)	[-0.05, 0.10]	1.08(.11)***	[0.87, 1.29]
Part-time	1.36(.04)***	[1.28, 1.45]	0.01(.02)	[-0.03, 0.05]	0.67(.08)***	[0.52, 0.82]
Not working ^b	1.00					
Attending school						
High school	1.87(.09)***	[1.70, 2.06]	-0.08(.04)	[-0.16, 0.00]	-0.56(.11)***	[-0.78, -0.33]
Postsecondary	1.57(.05)***	[1.47, 1.68]	-0.02(.04)	[-0.09, 0.05]	-0.20(.09)*	[-0.38, -0.01]
Nonstudent ^b	1.00					
Time in community						
10 or more years	1.58(.06)***	[1.48, 1.70]	0.13(.03)***	[0.06, 0.19]	0.44(.08)***	[0.28, 0.61]
3 to less than 10 years	1.10(.04)*	[1.02, 1.20]	0.13(.03)***	[0.06, 0.20]	0.48(.11)***	[0.27, 0.69]
Less than 3 years ^b	1.00					

Part of sports teams						
Yes (No ^b)	1.12(.03)***	[1.06, 1.19]	0.23(.02)***	[0.19, 0.28]	1.00(.07)***	[0.86, 1.13]
Belong to youth groups						
Yes	1.18(.03)***	[1.12, 1.25]	0.11(.02)***	[0.07, 0.15]	-0.08(.06)	[-0.20, 0.04]
Student government						
Yes (No ^b)	1.75(.07)***	[1.62, 1.89]	0.20(.02)***	[0.15, 0.24]	1.05(.08)***	[0.90, 1.20]
Admired person helps						
Yes (No ^b)	1.40(.04)***	[1.32, 1.49]	0.22(.02)***	[0.18, 0.26]	1.58(.07)***	[1.45, 1.71]
Parents volunteer						
Yes (No ^b)	1.28(.04)***	[1.21, 1.36]	0.23(.02)***	[0.19, 0.27]	0.71(.07)***	[0.57, 0.85]
Missing	0.82(.05)*	[0.73, 0.92]	-0.05(.05)	[-0.15, 0.05]	-1.14(.19)***	[-1.51, -0.76]
Religious attendance						
Weekly/monthly	2.22(.09)***	[2.05, 2.40]	0.44(.02)***	[0.39, 0.49]	0.76(.08)***	[0.60, 0.92]
1-4 times year	1.18(.04)***	[1.10, 1.26]	0.11(.03)***	[0.06, 0.17]	0.59(.09)***	[0.42, 0.76]
Not at all	0.79(.03)***	[0.74, 0.84]	-0.22(.03)***	[-0.28, -0.16]	0.31(.09)***	[0.14, 0.48]
Not religious ^b	1.00					
Place of residence						
Rural (Urban ^b)	1.37(.05)***	[1.28, 1.47]	-0.37(.02)***	[-0.42, -0.32]	0.08(.07)	[-0.06, 0.22]
Survey year (2007 ^b)						
2010	1.06(.03)*	[1.01, 1.12]	0.08(.02)***	[0.04, 0.12]	-0.16(.06)*	[-0.29, -0.04]
Approached organization						
Yes (No ^b)	-		0.62(.02)***	[0.58, 0.66]	-	
Constant	1.88(.28)***	[1.41, 2.52]	1.89(.14)***	[1.62, 2.16]	3.59(.38)***	[2.85, 4.33]
Pseudo R ²	0.15					
Adjusted R ²			0.12		0.08	
Wald Chi-square	5,737.82***		3,053.95***		3,752.09***	

Note. OR= odds ratio; SE=bootstrapped standard errors; CI=confidence interval; ^breference category. All variables were adjusted for the other variables listed in the table. Pseudo R² was based on Tjur (2009).⁴

*p<.05. ***p<.001.

Table 3

Urban/Rural Interactions with Sociodemographic and Resource Characteristics and the Effect on Volunteer Outcomes

Variable	<u>Volunteer Proclivity</u>		<u>Volunteer Hours</u>		<u>Informal Volunteer Intensity</u>	
	OR (SE)	95% CI	Coeff (SE)	95% CI	Coeff (SE)	95% CI
Male x urban/rural	0.84(.06)*	[0.73, 0.97]	0.18(.05)*	[0.08, 0.29]	-1.67(.14)***	[-1.94, -1.41]
English-speaking x urban/rural	1.38(.11)***	[1.17, 1.62]	0.32(.05)***	[0.22, 0.42]	0.33(.15)*	[0.04, 0.63]
Employment status						
Full-time x urban/rural	1.89(.17)***	[1.58, 2.25]	0.10(.08)	[-0.05, 0.25]	-1.15(.20)***	[-1.54, -0.76]
Part-time x urban/rural	0.94(.09)	[0.77, 1.13]	0.08(.06)	[-0.03, 0.19]	-1.07(.18)***	[-1.42, -0.72]
Attending school						
High school x urban/rural	2.35(.21)***	[1.98, 2.80]	0.06(.06)	[-0.06, 0.19]	-1.02(.22)***	[-1.45, -0.60]
Postsecondary x urban/rural	1.25(.12)*	[1.03, 1.51]	0.25(.08)*	[0.09, 0.40]	-0.57(.23)*	[-1.02, -0.12]
Time in community						
10 or more years x urban/rural	1.07(.12)	[0.87, 1.33]	-0.34(.08)***	[-0.49, -0.19]	0.35(.20)	[-0.05, 0.75]
3 to less than 10 years x urban/rural	1.49(.22)*	[1.11, 2.00]	-0.22(.09)*	[-0.39, -0.05]	0.73(.27)*	[0.21, 1.25]
Belong to youth groups						
Yes x urban/rural	1.17(.09)*	[1.00, 1.36]	0.20(.04)***	[0.11, 0.29]	0.71(.13)***	[0.46, 0.96]
Parents volunteer						
Yes x urban/rural	1.28(.10)*	[1.10, 1.50]	0.26(.05)***	[0.17, 0.35]	0.09(.13)	[-0.16, 0.35]
Missing x urban/rural	1.34(.21)	[0.99, 1.82]	0.60(.10)***	[0.40, 0.78]	1.62(.38)***	[0.88, 2.37]
Religious attendance						
Weekly/monthly x urban/rural	0.55(.05)***	[0.46, 0.56]	-0.46(.08)***	[-0.61, -0.31]	0.06(.18)	[-0.30, -0.42]
1-4 times year x urban/rural	0.63(.06)***	[0.52, 0.76]	-0.15(.07)*	[-0.28, -0.01]	-0.14(.18)	[-0.49, 0.21]
Not at all x urban/rural	1.17(.11)	[0.97, 1.40]	-0.24(.06)***	[-0.36, -0.11]	1.34(.18)***	[0.97, 1.70]
Constant	2.40(.37)***	[1.77, 3.25]	1.91(.14)***	[1.64, 2.18]	3.63(.38)***	[2.89, 4.38]
Pseudo R ²	0.16	Adjusted R ²	0.13		0.09	
Wald Chi-square ^a	6,895.19***		3,867.88***		4,511.18***	

Note. OR= odds ratio; SE=bootstrapped standard errors; CI=confidence interval. ^a=Wald Chi-square after resource characteristics and all interactions were included in the model. Reference categories were the same as in Table 1. All variables were adjusted for the other variables listed in the table. For these interactions, rural was dummy coded as 1 and urban as 0.

*p <.05. ***p <.001.

Table 4

Comparing Urban and Rural Formal Volunteering and Informal Volunteering by Key Characteristics

Variable	<u>Volunteer Proclivity</u>		<u>Volunteer Hours</u>		<u>Informal Volunteer Intensity</u>	
	Urban (n=2,255) OR(SE)	Rural (n=637) OR(SE)	Urban (n=1,571) Coeff(SE)	Rural (n=458) Coeff(SE)	Urban (n=2,229) Coeff(SE)	Rural (n=628) Coeff(SE)
Gender						
Male	1.03(.03)	0.87(.06)*	-0.13(.02)***	0.06(.05)	0.16(.08)*	-1.51(.12)***
Language						
English	1.35(.04)***	1.85(.14)***	-0.05(.03)*	0.27(.05)***	-0.48(.08)***	-0.14(.13)
Employment status						
Full-time	0.95(.04)	1.79(.14)***	-0.01(.04)	0.09(.07)	1.35(.13)*	0.20(.15)
Part-time	1.36(.05)***	1.27(.12)*	-0.01(.02)	0.07(.05)	0.88(.09)*	-0.19(.15)
Attending school						
High school	1.53(.08)***	3.59(.29)***	-0.08(.05)	-0.01(.06)	-0.40(.14)*	-1.42(.17)***
Postsecondary	1.43(.06)***	1.78(.15)***	-0.05(.04)	0.20(.07)*	-0.07(.12)	-0.65(.17)***
Time in community						
10 or more years	1.59(.06)***	1.71(.17)***	0.17(.03)***	-0.17(.07)*	0.37(.09)***	0.72(.18)***
3 to less than 10 years	1.08(.05)	1.61(.22)*	0.16(.04)**	-0.06(.08)	0.35(.12)*	1.08(.24)***
Belong to youth groups	1.15(.04)***	1.34(.09)***	0.09(.02)***	0.28(.04)***	-0.21(.07)*	0.50(.10)***
Parents volunteer						
Yes	1.25(.04)***	1.60(.11)***	0.19(.02)***	0.45(.04)***	0.72(.08)***	0.82(.11)***
Missing	0.81(.06)*	1.08(.15)	-0.18(.06)*	0.41(.08)***	-1.27(.21)***	0.35(.32)
Religious attendance						
Monthly/weekly	2.37(.11)***	1.31(.10)***	0.50(.03)***	0.04(.07)	0.71(.09)***	0.77(.15)***
1-4 times year	1.28(.05)***	0.81(.07)*	0.12(.03)***	-0.02(.06)	0.63(.10)***	0.48(.16)*
Not at all	0.76(.03)***	0.88(.08)	-0.17(.03)***	-0.40(.05)***	0.13(.10)	1.47(.15)***

Note. OR= odds ratio; SE=bootstrapped standard errors; CI=confidence interval; Coeff. =coefficient. Reference categories were the same as in Table 1. All variables were adjusted for the other variables listed in the table. Dummy coding was adjusted accordingly such that in the first model urban was coded as 0 and in the second model rural was coded as 0.

*p <.05. ***p <.001.

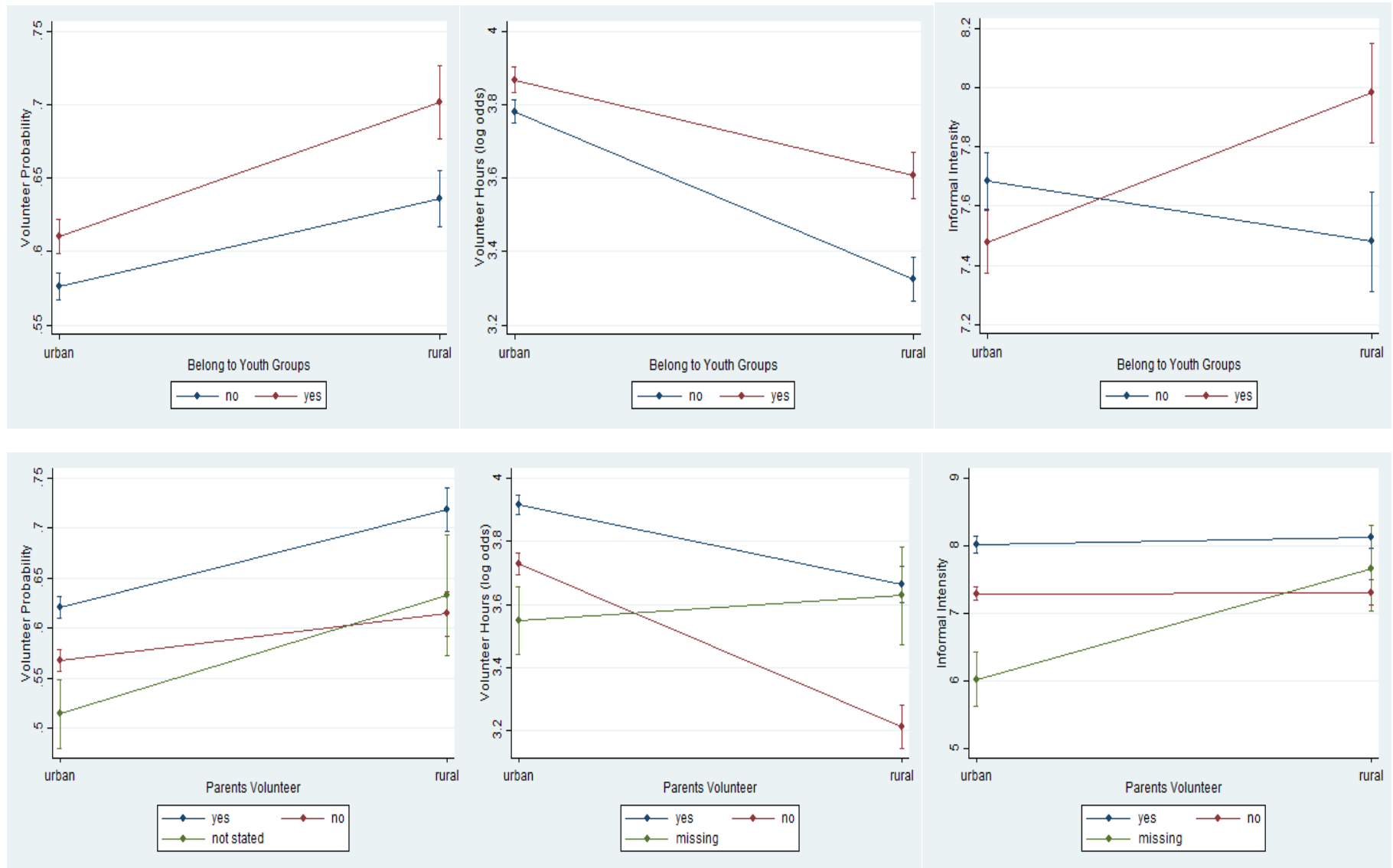


Figure 1. Comparing urban/rural and the impact of different resources (first panel: belong to youth groups; second panel: whether parents volunteer) on formal volunteer proclivity, formal hours, and informal volunteer intensity. 95% confidence intervals are displayed.

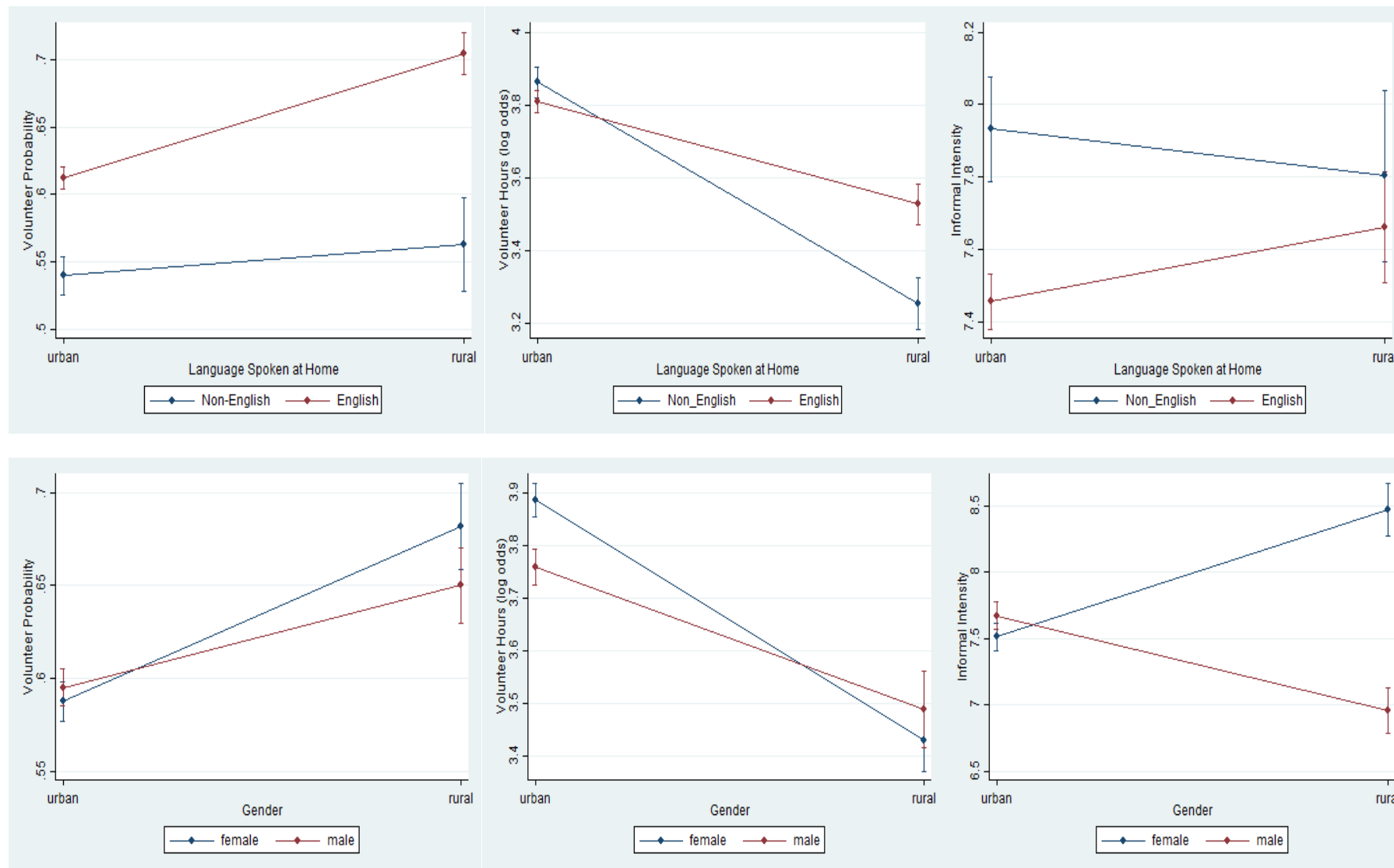


Figure 2. Comparing urban/rural and the impact of different resources (first panel: language spoken at home; second panel: gender) on formal volunteer proclivity, formal hours, and informal volunteer intensity. 95% confidence intervals are displayed.

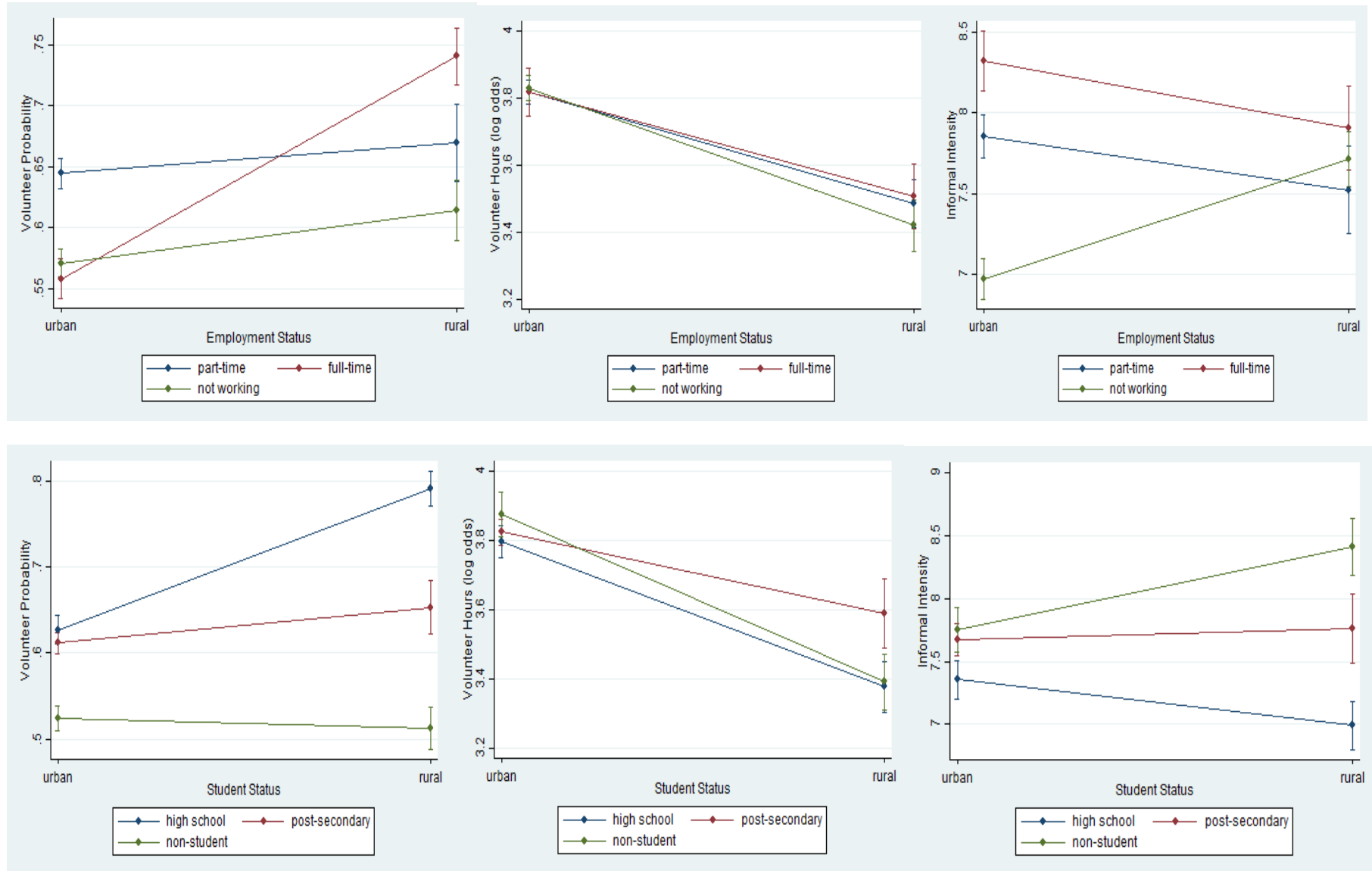


Figure 3. Comparing urban/rural and the impact of different resources (first panel: employment status; second panel: student status) on formal volunteer proclivity, formal hours, and informal volunteer intensity. 95% confidence intervals are displayed

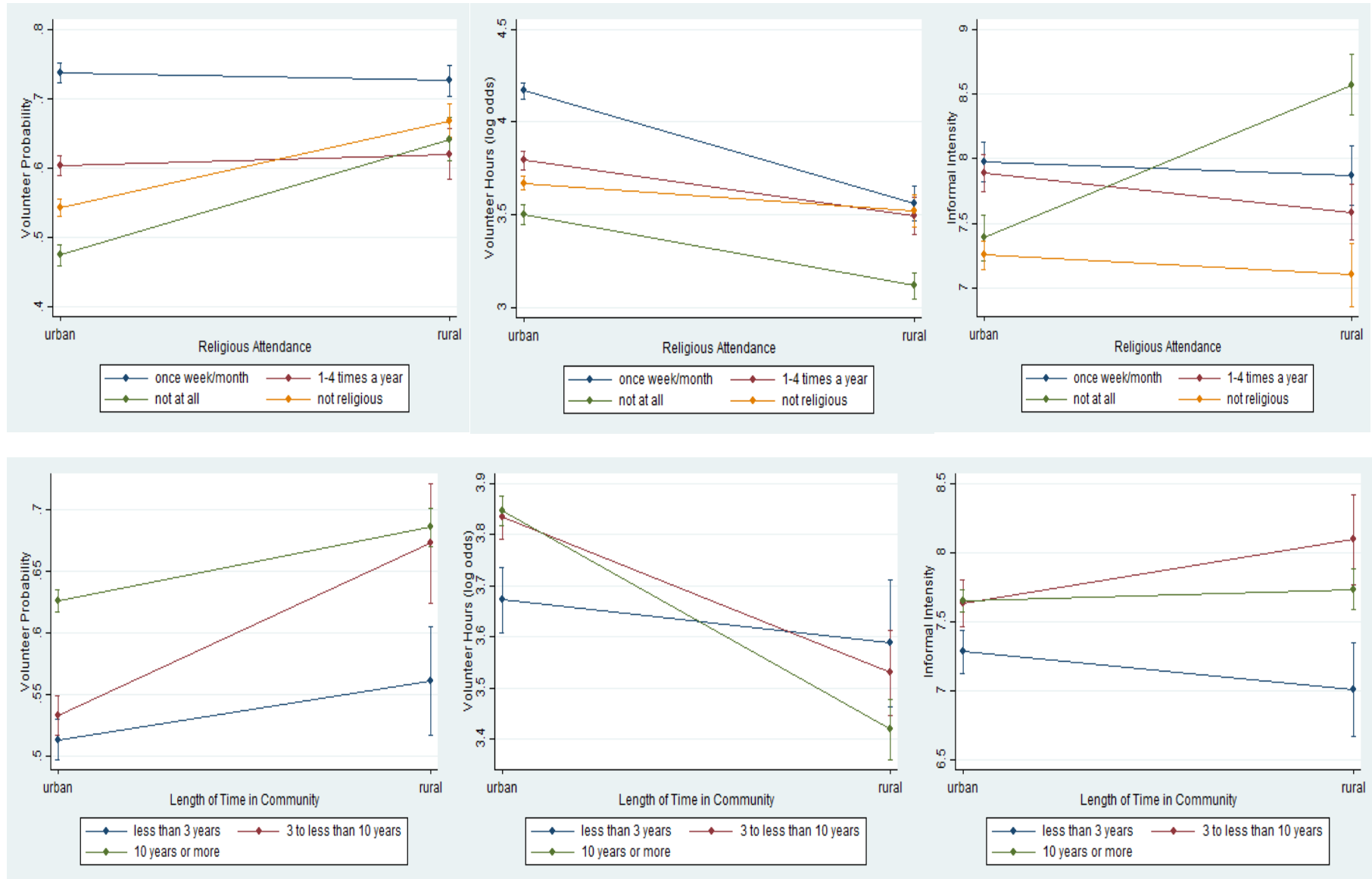


Figure 4. Comparing urban/rural and the impact of different resources (first panel: religious attendance; second panel: time resided in community) on formal volunteer proclivity, formal hours, and informal volunteer intensity. 95% confidence intervals are displayed.

Running Head: VOLUNTEER EXPERIENCES AND OUTCOMES

Chapter 3: Study 2

Understanding Volunteer Motivations, Barriers, and Experiences of Urban and Rural Youth: A
Mixed Methods Analysis

Sean Pearce, Elizabeth Kristjansson, Louise Lemyre, and Trista Takacs

University of Ottawa

Abstract

The sociocultural, physical attributes, and dynamics of place may influence youth volunteerism. A sequential mixed methods design was employed whereby data was used from the 2007/2010 Canada Survey of Giving, Volunteering and Participating to explore differences in volunteer motivations, barriers, and skills acquisition between urban and rural youth. Then, thirty-one semi-structured interviews were conducted with youth to expand on the findings and explore the phenomena and themes. Survey findings indicated that rural youth reported more social motives and financial barriers to volunteer, and gained the most skills through fundraising. Urban youth were motivated to explore their strengths, while one common barrier was not being asked to volunteer. Topics that emerged from the interviews included: negative and positive experiences, barriers (e.g., limited opportunities), positive outcomes (e.g., networking), and methods to improve volunteering (e.g., advertising). Rural youth mentioned more contextual barriers, whereas urban youth discussed interpersonal challenges. Stakeholders and organizations should consider contextual factors when applying methods to recruit and retain young volunteers.

Keywords. volunteering, positive youth development, youth, rural, urban, mixed methods, motivations, ecological, resources

Understanding Volunteer Motivations, Barriers, and Experiences of Urban and Rural Youth: A
Mixed Methods Analysis

Youth are actively engaged in volunteerism, which generally includes two types: formal volunteering, which is done on behalf of an organization (e.g., Smith, 1994; Wilson & Musick, 1997), and informal volunteering, which is directly helping people outside one's household (e.g., Carson, 1999; Finkelstein & Brannick, 2007). To date, most literature has focused on formal volunteering, especially in terms of motivations, barriers, and outcomes. Studies on formal volunteerism have demonstrated its importance to young people as it has been linked to Positive Youth Development (PYD)—a framework which focuses on nourishing the positive potential in youth (e.g., Lerner, 2002; Lerner et al., 2005; Roth & Brooks-Gunn, 2003). The Five C's model posits that five domains are essential for PYD: connection, character, caring, compassion, and confidence (Lerner et al., 2005; Roth & Brooks-Gunn, 2003). These characteristics have been used by practitioners, parents, and youth themselves to characterize "thriving youth" (King et al., 2005). Lerner et al. (2005) conducted a longitudinal study on fifth grade youth and found that these Five C's were attained through formal volunteering activities. However, there is a need to understand the contextual environment in which volunteering takes place. No study, to our knowledge, has examined how indicators of PYD may differentially manifest for urban versus rural volunteers.

Given the spatial, social, and cultural structures inherent in geography, it is possible that volunteer antecedents and outcomes may differ by urban/rural contexts. According to Bronfenbrenner (1994), individuals are enmeshed in a social ecology. Bronfenbrenner (1979) theorized that individuals are embedded within ecological systems, such as the microsystem (e.g., schools, community groups) and the macrosystem (e.g., traditions and cultures). Person-

context interrelationships are crucial to development (Bronfenbrenner & Morris, 2006) because individuals are part of a collective based on social norms and cultural values (Bronfenbrenner, 2000). Further, the PYD framework is rooted in the notion that biological, psychological, family, and community characteristics impact on youth development (e.g., Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2004; Lerner, 2006). The current study was informed by an ecological perspective; context plays an important role in youth development, and volunteerism involves youth interacting within broader spheres of their environment.

Additionally, volunteerism is related to social, cultural, and economic resources. It is well documented that individuals with more resources tend to volunteer more (e.g., Forbes & Zampelli, 2014; Smith, 1994; Wilson, 2000; Wilson & Musick, 1997). Research has found positive relationships between adolescent volunteering and participation in group memberships (e.g., extracurricular activities) and socioeconomic status (Eisenberg et al., 2009). We attempt to extend this literature by considering the ways in which resources may relate differently to volunteer motivations, barriers, and overall experiences, depending on one's ecological niche.

Wilson and Musick (1997) found that indicators of social capital (e.g., frequency in which people interacted with neighbours), cultural capital (e.g., religious attendance), and human capital (e.g., family income) predicted formal volunteerism. We propose that other dimensions of volunteerism, rather than only determinants of volunteering, can also be enlightened through a resource perspective. In terms of motivations, volunteering for career-oriented reasons may reflect a desire to build human capital, and volunteering for community values may reflect cultural capital. In this sense, volunteerism can be understood as a productive activity that requires both tangible resources (e.g., social networks) and also a resource driven mindset (e.g., motivated by community morals). Regarding barriers, lacking finances to volunteer may reflect

lower economic resources, whereas not knowing where to volunteer may insinuate fewer social resources (e.g., lack of connections). Finally, volunteerism can also build resources, such as human assets (e.g., technical skills), social resources (e.g., relationships), and cultural resources (e.g., enhanced compassion for others).

Motivations for Volunteering

Exploring motivations to volunteer is a well-trodden path. Briefly, people formally volunteer to help others and to contribute to their community (e.g., Clary et al., 1998); to fulfill civic duties and for compassionate reasons (Clerkin, Paynter, & Taylor, 2009); for social reasons, such as inclusion (e.g., Friedland & Morimoto, 2005; Haski-Leventhal, 2009; Jaffe, Sasson, Knobler, Aviel, & Goldberg, 2012); for family, religious, and community values (Grönlund, 2011); and to gain knowledge, enhance skills, for job opportunities, and career exploration (e.g., Andolina, Jenkins, Keeter, & Zukin, 2002; Clary et al., 1998; Gunderson & Gomez, 2003; Holdsworth, 2010; Tessier, Minh-Nguyet, & Gagnon, 2006). In one study, people informally volunteered to expand their social networks and for intrinsic reasons, such as expressing values (Finkelstein, 2012).

There is however a dearth of studies on urban/rural differences in volunteer motivations. Further, we are not aware of any studies that have examined the differential impacts of motivations on youths' volunteering hours, by urban/rural place of residence. Since rural areas are characterized by strong community ties (Crockett, Shanahan, & Jackson-Newsom, 2000) and a high sense of collective community (Ritchey, 2006), rural youth may be more influenced by their social networks. Kilpatrick, Stirling, and Orpin (2010) found that rural youth wanted to give back to their community and to develop social connections through volunteering. In one report, rural residents most commonly learned about formal volunteering through personal connections

and word of mouth (Bruce, Jordan, & Halseth, 1999). Further, Huebner and Mancini (2003) found that rural adolescents were more likely to formally volunteer if they perceived that their parents and peers were strong advocates for community engagement. Faid (1987) directly compared rural versus urban motives for volunteering and found that more rural volunteers felt obligated to help and were more likely to volunteer if they knew somebody in the organization. Therefore, desire to build social resources through volunteerism may be especially important to rural youth. Additionally, rural areas emphasize community and family values (Beggs, Haines, & Hurlbert, 1996), and hence rural youth may be motivated by cultural norms and invest in their communities to maintain these feelings of cohesion.

Career-oriented motivations are common among young volunteers (e.g., Holdsworth & Quinn, 2010; Tessier et al., 2006). Some unemployed youth in Ontario, Canada, believed that formal volunteering would improve their likelihood of finding jobs (Febbraro, 2001). In North America volunteer rates are higher than in other countries; résumé building is a norm in these regions and volunteering can signal positive attributes of an individual (e.g., Handy et al., 2010). These findings may be even stronger in urban settings. A recent study from a Canadian survey found that urbanicity was related to volunteering to improve employability (Chum et al., 2015). Furthermore, rural residents tend to focus more on social cohesion and reciprocity, whereas urbanites focus on self-development (Wuthnow, 1998). Urban youth may thus be more likely to mention egoistic reasons for volunteering, such as self-enhancement (e.g., acquiring skills).

Barriers and Challenges to Volunteering

Much of the volunteer literature has focused on reasons for volunteering, rather than factors that hinder volunteerism. Some youth barriers to formal volunteering include, lack of confidence in skills and abilities (e.g., Kahn, Hewes, & Ali, 2009; Low, Butt, Ellis Paine, &

Davis Smith, 2007); as well as lack of time, interest, transportation, and not being asked to volunteer (Independent Sector, 2001; Scales & Leffert, 1999; Sherrod, Flanagan, & Youniss, 2002; Sundeen & Raskoff, 2000). Other barriers include too many commitments, unaware of opportunities, worrying about risks and liabilities (Gage & Thapa, 2012; Hutin, 2008); and feeling unfulfilled, other obligations, and emotional distress (Veludo-de-Oliveira, Pallister, & Foxall, 2013).

Barriers to volunteering can be linked to fewer resources. Lichter, Shanahan, and Gardner (2002) found that youth of lower socioeconomic status (e.g., poverty, single-parent households) in childhood were less likely to volunteer during adolescence. Sundeen, Raskoff, and Garcia (2007) found that perceived barriers to formal volunteerism differed by social class and other sociodemographic characteristics. Noncitizens and unemployed people reported lacking information to volunteer, whereas people who reported lacking interest were in larger cities, ethnic minorities, and had lower incomes. We are not aware of any studies that focused on barriers to informal volunteering. This may be because informal volunteering, compared to formal volunteering, is easily accessible to many people, including deprived populations (e.g., Williams, 2002) and people with disabilities (Shandra, 2017).

Currently, there is a paucity of empirical research on youth barriers to volunteerism in urban and rural areas. Inadequate transportation and communication may be particularly burdensome for rural volunteers (e.g., Edwards, Torgerson, & Sattem, 2009; Shrestha & Cihlar, 2004; Torgerson & Edwards, 2012). Other challenges for rural volunteers, include: isolation, lack of resources and collaboration, and healthcare problems (Shrestha & Cihlar, 2004). However, rural communities are close-knit and therefore youth may have more connections to volunteer. For example, intergenerational closure, which is defined one way as parents knowing

the parents of their children's friends (Carbonaro, 1998), can be considered a social resource and may be linked to strong community attachment for rural youth (Schneider & Borman, 1993). Having more networks in rural areas may increase the likelihood of being asked to volunteer. In urban areas, youth who are new to the city may not know where to volunteer or feel overwhelmed when seeking opportunities.

Despite what may appear as stronger social channels to volunteering in rural settings, rural youth may experience more stress in relation to volunteering. This can be explicated with behaviour setting theory (Barker, 1968, Schoggen, 1989). Rural areas have more roles than people, and thus some people may accept several different roles to sustain their setting. These underpopulated settings are more prone to burnout (Schoggen, 1989). Bruce et al. (1999) found Canadian rural nonprofit organizations had difficulties with recruitment and volunteer burnout. Finally, rural areas may be limited in the range of organizations available to youth (Hardré, Sullivan, & Crowson, 2009). Lack of opportunities in rural areas may hinder volunteerism if youth do not have access to community resources. This can be linked to the resource theory; living in regions with fewer opportunities may be especially difficult for those rural youth who also lack personal and social resources (e.g., income, networks). Rural youth may need to travel to find places to volunteer, which could be challenging if they can't afford transportation, or if they lack connections to hear about other opportunities.

Volunteering Outcomes: Benefits and Skills

The link between formal volunteering and youth empowerment has been well documented. Youth who volunteer, compared to youth who do not, display more positive profiles. Formal volunteering has been related to indicators of human capital, such as better academic achievements, greater civic knowledge, and higher self-efficacy (e.g., Niemi, Hepburn,

& Chapman, 2000; Schmidt, Shumow, & Kackar, 2007; Taylor & Pancer, 2007; Vogelgesang & Astin, 2000); as well as to higher odds of finding employment (e.g., Kamerade, 2013; Katz & Rosenberg, 2005; Newton, Oakley, & Pollard, 2011). Volunteerism has also been related to acquisition of political, social, decision-making, and employment skills (Roker, Player, & Coleman, 1999); and improvements in confidence, leadership, organization, and communication skills (e.g., Arches & Fleming, 2006; Bundick, 2011; Kay & Bradsbury, 2009; Simha, Topuzova, & Albert, 2011; Taylor et al., 2003).

Formal volunteerism has also been linked to acquisition of social and cultural resources, for example, building networks and gaining interpersonal skills (e.g., Kay & Bradsbury, 2009; Ockenden & Stuart, 2014; Qian & Yarnal, 2010); and social transformation and community concern (e.g., Chacón, Pérez, Flores, & Vecina, 2011; McLellan & Youniss, 2001; Morsillo & Prilleltensky, 2007). One meta-analysis of 62 studies revealed that students acquired social skills through volunteering (Celio, Durlak, & Dymnicki, 2011). Importantly, volunteerism has been found to improve morality, such that young volunteers felt more committed to their communities and helping those in need (Billig, Root, & Jesse, 2009). Finally, volunteerism may help increase youths' life satisfaction, personal meaningfulness, and being hopeful about the future (e.g., Bundick, 2011; Froh, Kashdan, Yurkewicz, Fan, Allen, & Glowacki, 2010).

To our knowledge, there is no literature on the outcomes associated specifically with youths' informal volunteering. However, a review by Krause (2006) on older adults, revealed that helping others had many health benefits (e.g., enhanced psychological well-being) similar to that of formal volunteering.

The quality of volunteer experiences seems important for youth development. A study with high school students found that youth who rated their volunteer experience of high quality

had higher interpersonal skills and were less likely to bully others (Gebbia, Maculaitus, & Camenzuli, 2012). This suggests that volunteering can strengthen values, such as empathy and compassion, which are components of PYD.

There is very little empirical research on place of residence and volunteer outcomes. Fritz, Karmazin, Barbuto, and Burrow (2003) studied 4-H volunteers (a global, nonprofit organization to engage youth) and found that urban volunteers rated the quality of 4-H programs slightly higher than rural volunteers (Fritz, et al., 2003). This study did not examine differences in actual skills acquired or outcomes of volunteering. Ludden (2011) found that rural adolescents who participated in civic activities were more involved in extracurricular and academic activities. Similarly, Duncan, Duncan, Strycker, and Chaumeton (2002) found that civic engagement was related to fewer problem behaviours and greater school involvement for a sample of urban youth. To our knowledge, no studies have directly compared urban and rural youth in terms of the benefits and skills gained through volunteering. Given the limited research in this domain, these analyses were more exploratory.

Present Study

The objective of the current study is to better understand youth volunteering, including the antecedents (e.g., predictors, motives) of volunteering, experiences of volunteering, barriers related to volunteering, as well as the outcomes of volunteering. Specifically, we examine whether there are differences in motivations for and barriers to volunteering for urban versus rural youth and how this may impact on volunteer proclivity and hours contributed. We were also interested in whether there were differences in outcomes of volunteering, for urban and rural youth. A secondary aim was to investigate the factors that contribute to potential differences.

Method

A sequential transformative design was employed whereby our quantitative methods preceded our qualitative methods, priority was placed on the qualitative findings, and the results were integrated during interpretation (Creswell, Plano Clark, Gutmann, & Hanson, 2003). Based on guidelines from Greene (2007), we focused on four purposes for using mixed methods. The first purpose was *Development*, which involved using “the results from one method to inform the development of another method” (Greene, 2007, p. 102). We used quantitative results from the Canada Survey of Giving, Volunteering and Participating (CSGVP) questionnaire to help build an interview protocol. We focused on broad themes from the survey, such as reasons for volunteering and reasons for not volunteering more. The second was *Complementarity*, which was to enrich and broaden our interpretations. The CSGVP was limited to close-ended questions, thus we employed interviews to gain a deeper and more comprehensive understanding of volunteerism. We also aimed for *Expansion*—to extend the scope of inquiry and explore different phenomena that were not available in the survey (Greene, 2007). The CSGVP did not ask any questions about volunteer experiences, respondents’ perceptions of volunteerism, and strategies to improve volunteerism. Finally, we examined *Triangulation* by comparing our quantitative and qualitative findings; we sought convergence and corroboration. For example, through our interviews, we wanted to examine whether urban and rural youth mentioned similar motives for and barriers to volunteering, as in the CSGVP survey.

Quantitative Methodology

Data and participants. We used combined data from the 2007 and 2010 CSGVP, to increase the sample size.¹ Participants were youth aged 15-24, as per the standard definition of youth (United Nations, n.d.). The CSGVP is a national survey delivered by Statistics Canada and

aims to understand prosocial participation, volunteering, and donating among Canadians aged 15 and up. The CSGVP used a stratified, randomized design, and Random Digit Dialling. One person in the household was selected at random. In 2010, the response rate for the 10 provinces was 55.7% and in 2007 it was 54.4%. Territories were excluded because they were recruited with a different methodology. According to Statistics Canada's Statistical Area Classification, urban youth included those living in census metropolitan areas (CMA) and census agglomeration areas (CA). Statistics Canada (n.d.) defines a CMA as having a core of at least 50,000 residents, whereas a CA has a core of at least 10,000. Rural was defined as zones outside of CMAs and CAs (strong, moderate, and weak metropolitan influenced zones, and noninfluenced zones).

Table 1 displays differences in descriptive characteristics between urban and rural youth. Overall rural youth tended to be more involved in social activities (e.g., student government, youth groups), and a greater percentage worked full-time, lived 10 years or longer in their community, and were nonstudents. The analyses for skills acquisition and motives were based on a subsample (volunteers only), whose sociodemographic and demographic characteristics were similar to the full sample.

[Insert Table 1 here]

Variables.

Motives. We included the following reasons for volunteering: affected by the organization's cause, to network/meet others, because friends volunteer, for job opportunities, contribute to the community, religious obligations, to explore strengths, and to use skills and experiences (coded 1=yes; 0=no).

Barriers. All respondents (except those who volunteered 1500 hours or more per year) were asked either why they did not volunteer (nonvolunteers) or why they did not volunteer

more. We examined nine barriers to volunteering: nobody asked, didn't know how, cannot commit long-term, no time, no interest, financial costs, health problems, dissatisfied with a past experience, and prefer to give (coded 1 = yes; 0 = no).

Skills acquired. Volunteers were asked if they had acquired the following skills: fundraising; interpersonal (e.g., handled difficult situations with confidence, compassion); communication (e.g., public speaking); office or technical (e.g., first aid, coaching); and organization skills (e.g., managerial leadership). They were also asked whether they acquired knowledge in various topics (e.g., health, political issues).

Covariates. We controlled for several variables in all of our hierarchical regression analyses, including: age, gender, household income, employment status, language spoken at home, time resided in the community, parental volunteerism, student status, religious attendance, self-rated general health, whether they saw others they admired helping people, belonged to youth groups, part of sports teams, were active in student government, and survey year (see list in Table 1). It is well documented that individuals with a combination of these social, economic, and cultural resources tend to volunteer more (e.g., Forbes & Zampelli, 2014; Smith, 1994; Wilson, 2000; Wilson & Musick, 1997).

Formal volunteering. Formal volunteerism was a binary variable based on whether respondents did any activities without pay on behalf of a group or organization in the last 12 months before the survey (coded, 1=nonvolunteer; 0=volunteer). For formal volunteer hours, respondents were asked to indicate how many hours (within the last 12 months prior to the survey) they invested into volunteering on behalf of an organization(s).

Statistical Analyses

All analyses were conducted in Stata, version 14.0. Analyses were bootstrapped and weighted to reflect the Canadian population of youth aged 15-24. This study examines urban/rural differences in the following sections outlined below.

Chi-square analyses. First, we conducted a series of chi-square analyses to compare motivations for and barriers to formal volunteering. Additionally, we compared urban versus rural volunteers in skills acquired through volunteering.

Regression analyses.

Motives. Two hierarchical multiple linear regressions (urban/rural) were used to predict formal volunteer hours within the last year. The first block contained the covariates in Table 1 (and whether they approached the organization on their own, yes/no). The second block contained six motives to volunteer (contribute to the community and religious obligations were excluded due to small cell sizes).

Barriers. Four regressions were conducted. The first two logistic regressions (urban/rural) were used to determine which barriers predicted nonvolunteer status within the last year. Then, two hierarchical multiple linear regressions were conducted to determine which barriers predicted lower formal volunteer hours. For the linear regressions, the first block contained covariates and the second block contained the barriers. The barrier, 'dissatisfied in the past' was excluded in all regression analyses because of too few observations.

Number of motives and barriers. Previous studies found that volunteers reported multiple motives for volunteering (e.g., Clary et al., 1998; Kiviniemi, Synder, & Omoto, 2002) and that having many motivations was associated with greater volunteer commitment (Marta, Guglielmetti, & Pozzi, 2006). We sought to determine whether the number of motives and

barriers influenced volunteer hours. We summed eight motives and summed nine barriers (as in the chi-square analyses). The median for number of barriers was three, while the median for number of motives was five. Then, we created four categories based on median splits as described below: many motives/few barriers, few motives/many barriers, few motives and few barriers, and many motives and many barriers. Many motives were scores greater than five, while few motives were scores at the median (of five) or lower. Many barriers were scores greater than three, while few barriers were scores at the median (of three) or lower. Since one-way ANOVA is not supported by 'svy' options in Stata, we ran two separate regressions on urban/rural to examine differences in formal volunteer hours by number of barriers and motives groups. Post-hoc pairwise comparisons were then conducted using Scheffé adjustments.

Skills acquired. We conducted two poisson regressions (urban/rural) to predict number of skills acquired, which was derived by adding six possible skills. Poisson regression is a type of generalized linear model that is used when the outcome is based on count data and discrete number of events (e.g., Gardner, Mulvey, & Shaw, 1995; Long & Freese, 2014). In this case, our dependent variable was based on discrete units (i.e., 0, 1, 2 skills). First, exploratory factor analysis was conducted based on tetrachoric correlations for binary variables, to determine whether there were different skill categories. Based on one eigenvalue greater than 1 and the scree plot, a one-factor solution best fit the data. All items had greater than 0.40 loadings. The scale had moderate reliability ($\alpha=0.73$). The items were summed and the outcome ranged on a score of 0.0 to 6.0 skills.

Predictor variables. We included eleven 'formal' volunteer activities (e.g., fundraising, sitting on a committee board, coaching)², whether they volunteered as part of a group project (e.g., friends), if they volunteered with immediate family, and if they used the internet to engage

in volunteer duties. Six motivations for volunteering were included: to network, friends volunteered, for job opportunities, affected by the cause, to explore strengths, and to use skills and experiences. We derived a variable for volunteer hours: 1-18 hours, 19-60 hours, 61 to 160 hours, and 161 hours or more, to keep consistent with previous CSGVP reports. We also derived a variable on the number of organizations where youth volunteered (one, two, and three organizations or more).

Results

Quantitative Survey Findings

Chi-square results. Table 2 displays urban and rural differences in motivations for and barriers to volunteering, and skills acquired. Key regional differences in motives were that a greater percentage of urban youth volunteered to explore their strengths and to use their skills, while a greater percentage of rural youth reported volunteering for job opportunities, to network/meet others, and because they had friends who volunteered. For barriers, a greater percentage of urban youth reported lacking time and interest in volunteering. A greater percentage of rural youth reported financial costs and preferring to give money. For skills acquired, a greater percentage of urban youth mentioned acquiring interpersonal, communication, and organization skills. A greater percentage of rural youth acquired fundraising and office skills.

[Insert Table 2 here]

Regression results. The results for each regression (predicting nonvolunteer status and hours contributed) are presented in Table 3. Results for the regressions with motives and the regressions with barriers, are included in the same table.

Motives. Due to high skew and kurtosis, formal volunteer hours were transformed using

log odds. For the rural regression, the first block stage (covariates) contributed significantly to the model, $R^2 = 0.20$. Motivations explained additional variation in volunteer hours, $\Delta R^2 = 0.073$. The strongest motives that were associated with rural youth volunteering more hours were: wanting to use their skills, being affected by the cause, and to network. The motive ‘volunteering because friends volunteered’, was also associated with contributing more hours.

For the urban regression, the covariates contributed significantly to the model, $R^2 = 0.11$, and motives explained additional variance, $\Delta R^2 = 0.066$. If urban youth reported a desire to explore their strengths and to use their skills, they volunteered more hours. For urban youth, reporting volunteering because friends volunteered, was related to contributing fewer hours.

[Insert Table 3 here]

Barriers. The rural logistic model was significant, Wald $\chi^2(34) = 3,052.32$, $p < .001$. Preferring to give money and financial costs of volunteerism were strongly associated with being a nonvolunteer (OR = 3.60 and 2.74, respectively).

For the rural regression predicting volunteer hours, barriers explained additional variation in volunteer hours, $\Delta R^2 = 0.072$. Preferring to give was most strongly associated with contributing fewer hours ($B = -0.59$, $p < .001$). Surprisingly, reporting financial costs was associated with investing more hours.

The logistic model for urban youth had good fit; Wald $\chi^2(34) = 6,468.15$, $p < .001$. The strongest predictor of nonvolunteer status for urban youth was nobody asked them to volunteer (OR = 2.45, 95% CI [2.28, 2.62], $p < .001$). For urban youth, but not rural youth, lack of interest predicted nonvolunteer status (OR = 1.32, 95% CI [1.24, 1.41], $p < .001$).

For the regression predicting volunteer hours (for urban youth), barriers explained additional variation in volunteer hours, $\Delta R^2 = 0.064$. Preferring to donate was particularly

associated with contributing fewer hours ($B = -0.73, p < .001$). For urban and rural youth, reporting lack of time was not associated with volunteering fewer hours.

Number of motives and barriers. For the rural sample, there were differences in formal volunteer hours by the number of barriers/motives groups, $Wald(3) = 321.49, p < .001$. Post-hoc comparisons revealed that the greatest difference was between the few motives/many barriers group versus the many motives/few barriers group (difference score = $-1.12 [-1.36, -0.89]$, $p < .001$). The next largest difference was between the few motives and few barriers group versus the many motives/few barriers group (difference score = $-1.00 [-1.16, -0.84]$, $p < .001$).

Similar findings were demonstrated for the urban sample, $Wald(3) = 956.66, p < .001$. The greatest difference observed was between the few motives/many barriers group versus the many motives/few barriers group (difference score = $-1.12 [-1.22, -1.00]$, $p < .001$). All other pairwise comparisons followed the same patterns as the rural sample.

Skills acquired. Table 4 presents the poisson regression results and the marginal effects (dy/dx), which represent the count events of each independent variable. Based on the Wald Chi-square, the models had good fit. Rural and urban youth who volunteered to use their skills especially had a higher expected score on skills count (1.02 and 0.52 more skills, respectively). In both regions, volunteering more hours and volunteering in two organizations rather than one, was associated with gaining a higher number of skills.

Key differences by place of residence were that rural youth had a lower score on the skills count if they did coaching (-0.21), whereas comparable urban youth had a higher skill count (0.26). Volunteering in more independent activities (e.g., collecting goods) was related to a lower skill count but only for rural youth (0.38 fewer skills). Only urban youth had lower skills count if they volunteered in family projects (0.18 fewer skills).

[Insert Table 4 here]

Qualitative Methodology

Participants

We conducted interviews with 31 youth; this included 16 from an urban area (Ottawa) and 15 from rural areas (14 from Renfrew County and 1 from Almonte).³ Our rural sample came from eight of 17 municipalities in Renfrew County: Horton, Whitewater region, Killaloe, Calabogie, McNab/Braeside, Arnprior, Greater Madawaska township, and the town of Renfrew. Characteristics of Ottawa and Renfrew County are shown in Appendix A. The sample included 19 females and 12 males ($M_{\text{age}} = 19.87$, age range: 15-24). The rural sample included more younger youth (high school students), than the urban sample. A majority of the youth had lived for five years or longer in their current community ($n=25$); only six youth resided in their community for fewer than five years. Many of the youth were born in Canada ($n=23$) and eight were born outside Canada. All the youth born outside Canada were urban youth. Rural youth had lived longer in their communities than did urban youth. There was diversity in ethnicity and language (i.e., bilingual). The sample consisted of high school, undergraduate, and graduate students, and a few nonstudents. Most youth reported a higher to middle household income (\$60,000- \$100,000) with only two youth reporting low income (\$20,000 or lower). Twelve youth did not state their household income.

Procedure and Data Analysis

A list of key concepts and questions were drawn up in attempts to corroborate the findings from the CSGVP data and to expand on different phenomena. For example, an interview protocol was developed with questions and probes, which were guided by large themes from the CSGVP data, which included: reasons for and barriers to volunteering, and outcomes of

volunteering (Appendix B). We were also informed by a resource theory and ecological framework. For example, the ways in which youth learn about volunteering may reflect social resources (e.g., networks), and challenges they encounter may relate to economic resources (e.g., financial costs). These findings may differ by urban/rural residence.

Youth were recruited through distribution of posters in recreational centers, libraries, community centers, universities, and community partners. Each interview was conducted by a trained graduate student (first author) and lasted approximately 30 minutes. Participants were recruited on a first-come, first-served basis, and all interviews were audio taped. Participants were compensated with either a \$10 i-tunes gift card or \$10 Subway gift card. After each session, a summary form was completed by the first author (Appendix C). Data was collected between March and November 2015.

Interviews were transcribed verbatim. We followed guidelines and principles from Miles, Huberman, and Saldaña (2014), and general insights from Saldaña (2013)—for example, we used a mixture of coding methods (e.g., In Vivo, Descriptive), code mapping, and memos. After a coding scheme was established, all interviews were subsequently coded in QDA Miner version 4.0 software to assist with data management. Pattern coding—a second cycle coding method—was then conducted, which entailed collapsing similar codes and grouping them into larger categories and themes (Miles et al., 2014).

Following Miles et al. (2014), we used data matrices and conceptually-ordered displays to analyze the data and draw comparisons between different themes and variables. Initially we compared categories/themes within each interview and then conducted cross-case analyses by comparing across different interviews. Analytic memos were made throughout the process and were refined and updated as the study carried out.

Reliability and Quality

For data condensation, first cycle coding (open coding) was initially completed by the first author on a few transcripts, which went through a series of iterations and modifications. A second researcher then coded these same transcripts separately. Inter-rater reliability was not conducted because each researcher brought valid and unique perspectives. Instead, discrepancies were discussed with a senior colleague until consensus was reached and an initial set of codes were established. The topic of volunteerism was outside the second researcher's field of study, and this can be considered an outside perspective, which relates to Onwuegbuzi and Johnson's (2006) *legitimation* concept for validity. Quality was also ensured throughout by using analytic memos to link codes to larger themes and relate the findings back to the resources theory and to socio-ecological perspectives. We followed Greene's (2007) recommendations for warranting the quality of inferences in mixed methods research. For example, we included criteria and stances from different methodological traditions; we used data matrices (normally quantitative) for our qualitative analyses (Miles & Huberman, 1994; Miles et al., 2014). We incorporated both qualitative and quantitative findings in our interpretations, which increases the legitimacy of our study; mixed methods allowed us to draw on the strengths of each method and to prevent overlapping weaknesses (Onwuegbuzi & Johnson, 2006). Finally, participants were emailed their quotes with a description of the context in which their quotes would be used. This enhances quality and helps to prevent researcher bias, as participants themselves had the opportunity to agree or disagree with how their own words were integrated in the study. All respondents agreed to the usage of their quotes.

Qualitative Findings

A data display summarizing key themes is shown in Appendix D. Comparisons are

shown in Table 5. These results can be understood in a wider ecological model and resources framework. Throughout each theme, we discuss differences between urban and rural youth.

Table 6 tabulates similarities and divergences between urban and rural youth across key themes and sub-themes, based on code frequencies.

[Insert Table 5 and Table 6 here]

Nature of Volunteering: Roles and Activities

Youth volunteered on behalf of organizations, helped with informal activities, and at special events (e.g., more episodic volunteering). Some common activities included: fundraising, teaching, mentoring, coordinating or organizing events, assisting in healthcare settings, entertaining people, and instrumental activities (e.g., serving food). Interestingly, eight of the twelve males volunteered directly with vulnerable/marginalized groups (e.g., children, people with disabilities, the elderly). Youth in general had very interactive roles with the recipients: “I was just a volunteer there just to help out with kids getting used to hockey and just helping them out with it” (rural, 15, male); “and basically what I do there is I help a man who has a stroke regain control of his reading and writing abilities” (urban, 22, female). Only a few rural participants did not perceive informal volunteering to be a type of volunteering, whereas half of the urban youth expressed this opinion:

Ya I see volunteering as more structured. It's also—it's basically a non-paid job I guess... even though it may only be one event but it's still—like it's organized; you have a role in volunteering, where I guess the informal would just be helping someone out and it's not really organized so much it's more just you see someone in need and you're—you're assisting.” (urban, 20, male)

Urban youth tended to describe volunteering as involving organizations, whereas informal helping was doing “good deeds” and simply “helping out”. Some youth encountered difficulties trying to think of specific informal activities because it was not included in their schema of volunteering; they conceptualized it as doing everyday activities. When discussing informal volunteering, rural youth most commonly cited helping their neighbours (e.g., shoveling driveways, yard work).

Motivations for Volunteering

Youth mentioned both self-benefiting and more humanitarian motives for volunteering. More urban than rural youth mentioned career-oriented motives. Youth volunteered to gain practical experience in their field of study, to build their curriculum vitae, and to help with their jobs: “I also thought that oh it would probably help me in the future cause I wanted to pursue a career being a pediatrician so that's also beneficial” (urban, 19, female); “I think the only reason—the only way to get better at your job is to take the time and volunteer” (rural, 21, female). From a resource perspective, youth volunteered as one potential means to build human capital and help foster economic resources.

Fewer youth mentioned social motives for volunteering. When discussing social-oriented motives, urban youth tended to mention their place of residence:

I felt like I'm you know in this big—big jungle kind of thing, where I don't know what is it, where is it, so I thought meeting different people would give me you know their own experiences and it will help me understand the city and this country, like that ways.

(urban, 24, female)

Urban youth who moved to the city for postsecondary education particularly volunteered to meet people. Many participants were also motivated by their passions and interests. For

example, volunteer activities were tailored to personal hobbies and passions that they considered “fun” and enjoyable. Over 90% of participants mentioned the importance of values, which included a desire to help out and to be supportive of community service. This included giving back to the community and helping people close to them, such as neighbours and friends: “So it was kinda a thing where it was like it was taught to us that helping others is a good thing, so just kinda motivated you to want to help others type of thing” (urban, 19, female). When asked about motivations for informally volunteering, one participant responded, “just I like to see people happy, that's really it—just about it. Anywhere I can lend a hand is—I feel that that's a good thing to do” (rural, 16, male).

Participants alluded to the concept of helping others as being taught in society, thus they were driven to volunteer because they felt it was their responsibility. These remarks relate to Wilson and Musick’s (1997) conceptualization of cultural capital, which is that people volunteer because they feel helping others is important to society. Overall, urban and rural youth had a variety of motives to volunteer (e.g., social, career, cultural).

Volunteer Levers: The Role of Social Networks and Institutions

Many youth actively searched for volunteer opportunities but also discussed instances where they were approached by others or were encouraged to volunteer. Both urban and rural youth mentioned that knowing others who volunteer helped facilitate their own volunteering, whether this was through encouragement, being asked to volunteer, or volunteering in groups with others they know. One fifteen-year-old, rural male, explained the importance of his mom to informal volunteering: “I mean my mom really motivates me to do a lot of it. Like I don't really hear about it but then she says ‘oh you gotta do this’ and I'm like oh ok, I'll go do that.” Rural youth, compared to urban youth, discussed the significant role of their mom in volunteering.

Schools played a vital role in formal volunteering. Many participants initially volunteered for their high school community service hours and over half of the postsecondary youth discussed volunteering through campus: “They always have like a clubs’ fair at the beginning of the school year, and that’s kinda where I got to see where my interests lay” (urban, 22, female); “Cause most of them [volunteer opportunities] are promoted also through the high school” (rural, 19, female). Some youth also volunteered with family members and friends, though some mentioned that having friends who volunteered did not influence their own volunteering. Overall, being part of social and cultural groups or institutions seemed to increase the chances of being approached to volunteer.

Barriers and Challenges

Feeling constrained and restricted. Many youth mentioned personal constraints and/or constraints of the organizations. Time barriers were reported by almost all youth: “The time used is well managed, just it’s just finding the time can sometimes be difficult with a full work schedule and farming full-time, aside from working” (rural, 23, male). This included a general lack of time (i.e., other obligations) and being unable to commit long-term; hence, why some youth volunteered episodically. One participant challenged this common barrier: “I think there’s an illusion that you don’t have time... the amount of time you might waste on like your computer... if you would just you know cut that out of your day you could do volunteering” (urban, 24, male).

Some participants also remarked that organizations were rigid, such that they they did not have flexible schedules for youth and placed them in limited roles. A greater proportion of urban youth mentioned this barrier. For example, they wanted to take on more responsibilities and felt that their positions were tedious. Place of residence was another restriction that participants

discussed, especially rural youth. Some youth discussed limited opportunities to volunteer in small towns and having to branch out in different areas. One nineteen-year-old, rural male, remarked, “Ya I really don't know what they have around here, they don't have too much. Just because it's a small town and I guess looking more for business—business work, you know.”

Participants also commented on transportation as a barrier in rural areas: “It wouldn't be as big of a problem [transportation] in city centers with like public transit but around here I could definitely see it as a big problem” (rural, 23, female). There were, however, rural youth who did not share these same sentiments. One participant explained that youth need to be active in their volunteering efforts:

I live in a really small town, like there's only four thousand people in my town...for me there wasn't a ton of opportunity to volunteer per se. But at the same time the opportunity is there if you make it there....and I think if you look in the right places and you do put yourself out there and actually put time and effort into it, I think there are a ton of opportunities. (rural, 20, female)

Social and emotional barriers. Many participants described some of their volunteer experiences as “stressful”, “fast-paced”, “unorganized” and that they occasionally felt outside of their comfort zone. As one participant explained: “Most of the events themselves have been successful but there are some unpleasant parts about the successful; sometimes planning them can be extremely stressful and unpleasant” (rural, 23, male). Fewer youth reported feeling emotionally overwhelmed (e.g., with patients) and experienced role ambiguity. One participant discussed that not knowing people was a challenge to formally volunteer: “I guess going to volunteer somewhere where you don't know anyone...if like the organizers are not very welcoming and very detailed, it's kind of hard for me to kinda connect at first to volunteer”

(urban, 22, female). Youth rarely mentioned barriers to informal volunteering, though some urban youth remarked that they did not know their neighbours and preferred formal volunteering because it was more structured.

Other youth reported feeling uncomfortable in certain social situations, such as working with children or youth with disabilities, or volunteering in big crowds. Approximately one third of participants mentioned that there were times when they felt unappreciated by people they were directly helping or the organizations themselves: “They almost take it for granted—that like you're expendable, or that you can be replaced really easily; that they're doing you a favour by having you volunteer for them” (urban, 20, male). Some youth felt their input was not recognized and that organizations did not value their efforts.

Some youth also experienced conflict with people (e.g., organization staff, other volunteer members), such as poor teamwork skills, negative or “grumpy” attitudes of community members, and feeling burdened with responsibilities: “It got to a point where the last day I was like you know what I'm just not coming, you guys work at it yourself” (urban, 20, female). Interpersonal struggles were mentioned more by urban youth. Less commonly cited interpersonal challenges were language barriers or facing people in public, for example, in fundraising events.

Uncertainty: Questioning impact and lacking motivation. Many participants questioned whether their volunteering made an impact on others or themselves. While they recognized that their volunteering was important, some discussed that the activities were not drastic or life changing. This sentiment was mentioned by almost all urban youth (only two did not mention this), whereas roughly half the rural youth mentioned this: “I felt minor at times, I felt that like I don't know if I changed any of their perspectives or...helped them improve more” (urban, 24, male); “although it's funny cause I feel like I've grown more from actual jobs; maybe

because I was paid to do them and so I felt able to take on more and you know in terms of challenges and opportunities” (urban, 22, female). More urban than rural youth discussed lack of motivation as being a challenge to volunteer. This included not only personally lacking motivation but also that students’ lack of motivation could be a negative aspect of mandatory community service.

Promoting and Improving Volunteerism

Target youth effectively: Advertising and assisting. Several youth shared the belief that volunteer opportunities need to be better advertised. One common method they proposed was to advertise online (e.g., social media). This general consensus can be summed with one participant’s remark: “Online is definitely a very key part in hearing about it because the majority of the youth people—of the youth, spend their time on the internet and I mean that’s—that’s a very cliché thing to say but I mean it is true” (rural, 16, male). This included advertising on popular media and also having an easily accessible directory to search for opportunities.

While some youth mentioned having flyers and posters in schools and communities, some felt that advertising needs to be more effective. As one urban male explained: “University is just overloaded I find. They put too much out there and so most people ignore it just because it’s like watching commercials on T.V.” Some rural youth believed that advertising opportunities in newspapers was effective, whereas others did not share the same sentiments. As one participant discussed, “especially with people our age too like nobody reads newspaper, and that’s where they post it all” (rural, 23, female). Urban youth particularly thought there should be more assistance and guidance in finding volunteer opportunities—implementing programs for students, creating information sessions, and having schools play a larger role in gearing opportunities to students.

Many participants suggested targeting youth through social connections (e.g., in groups, friends) or that people need to talk about volunteering to spread awareness: “And just like word of mouth will—word of mouth works really good in like a small town like this” (rural, 19, female); “and then I think the best part with the youngsters right now would be you know attacking them in groups” (urban, 24, female). Participants also discussed how youth themselves need to be active in spreading awareness about opportunities to their friends.

More accommodating and flexible. Many youth discussed how organizations should be more accommodating, such as having more flexible hours, youth-oriented opportunities, and assisting with financial costs of volunteering: “I don't want people to have to pay to volunteer, so maybe having bus tickets available or something for students to get to these positions” (urban, 22, female); “I think just more like youth-orientated kinda so it's not just like all adults working there, there's a few other kids so you can feel like you're welcome kind of” (rural, 16, female). A few youth mentioned they were unable to volunteer because of age restrictions but felt they could assist in other areas rather than not being considered at all.

Many participants were also mindful that some youth may have unequal opportunities to volunteer because of limited resources. From a resource perspective, some youth discussed potential barriers for youth, beyond their own direct experiences: “Some people have to work for money and like people that are struggling with finances like they—I can see them just seeing volunteering as a waste of time” (urban, 24, male); “some people, especially if they're low income, maybe they can't afford to like drive there, or can't get there—they have no car” (rural, 23, female). These participants were aware that fewer resources can create barriers to volunteering, and thus organizations need to be more accommodating for youth from different socioeconomic status backgrounds.

Emphasize the value of volunteering. Approximately half of the participants felt that organizations need to better communicate the benefits of volunteering and that this may increase youths' willingness to volunteer. Youth especially felt that schools need to explain the value of mandatory community service. This relates to the cultural component of a resource perspective on volunteerism; youth may have less positive perceptions of volunteerism if they feel it lacks value or is not important to society. One urban male, aged 20, explained that we need to focus more on values in society at large and instill these values in youth:

I would say to focus on values. I think that values are—we slack on values in today's society... so if we say like you know: honesty, charity, and you know you help others. And we remind you that we—it's not forcing, it's more of you know getting you to understand the reason of this value.

Other youth discussed that volunteering can be enjoyable, fun, and valuable experiences, and that youth should be taught the value of volunteering at a young age. One participant felt that informal volunteering was more valuable than formal volunteering:

They're [informal activities] local, they're simpler to do, they're better learning experiences for simpler things in life that you're going to need, more than something you're never going to use again... like cutting the grass you're going to have your own yard someday, so you're going to want to cut the grass. (rural, 15, male)

Additionally, many youth mentioned that 40 hours of community service (to graduate high school) was productive because it “get's youth out” and allows them to participate in their communities. Some youth remarked that 40 hours was too little and should be increased. They suggested that schools and organizations encourage youth to volunteer in activities related to their passions.

Positive Volunteer Outcomes and Experiences

Almost all youth mentioned that the environment was very supportive and appreciative for at least one of the organizations where they volunteered. The most common ways organizations showed their appreciation was by thanking and complimenting youth. Some organizations also provided free dinners, gifts, and celebration nights to recognize their volunteers. Many youth described good relationships with other volunteers, staff, and recipients of volunteering, and an overall positive milieu: “So I really like the volunteering environment because like we're a group and in order to bring good service to the client, we have to like have a harmonious environment I guess” (urban, 19, female); “just the way they greet you every day when you come out, they're always happy to see people who are helping out” (rural, 18, male). Generally, participants mentioned that through their volunteering it opened their eyes to certain realities of life and the human condition (e.g., working in hospital settings, mental illnesses) and that they grew from their volunteering.

Linking volunteer outcomes to PYD. All of the urban participants mentioned acquiring some type of skill, whether it was interpersonal skills (e.g., assisting patients, teamwork) and technical skills (e.g., planning, budgeting), whereas rural youth discussed volunteering more generally as a learning experience. In fact, three rural males stated that they did not acquire any skills, though they felt they gained experiences through volunteering. Overall, participants’ learning experiences can be understood within a PYD framework, specifically Lerner’s (2005) Five C’s model. One important component that emerged from the interviews was competence, which includes having positive views about one’s actions (e.g., decision making, acquiring skills): “I learned a lot on how to like deal with people and like and how to like be more organized, be more efficient and like yah how to communicate” (urban, 18, female). Many

participants also believed they made a difference to people's lives through their volunteering.

Some youth displayed confidence (i.e., internal sense of self-worth and efficacy) through their discussions: "I bring a positive outlook on people's lives" (rural, 16, male); "I've always been pretty shy, especially when speaking in English cause I'm French...it's always been a challenge to gain confidence but I think it [volunteering] helped me a lot to approach people" (urban, 20, male). A relatively equal proportion of urban and rural youth reported changes in their moral character. For example, some youth became more empathic through their volunteering, which relates to the caring/compassion component of the Five C's model: "And also my empathy has grown a lot from that; I've learned to care about people more than I did like even a few months ago" (urban, 20, male).

Many youth also demonstrated character through their discussions (e.g., showing respect for societal and cultural norms, morality): "I think [one way I have grown] is a bit more responsible and like respectful of what the people do for us in the community" (rural, 16, female); "but I definitely like realize that putting my community first is better than just having money" (rural, 16, male). Some youth also talked about maturing through their volunteering and that it is important to help for future generations.

The most common component of the Five C's model that youth experienced through volunteering was connection. Youth met new people, learned about others in their community, and built trust and relationships with the recipients of volunteering: "Depending on what field of volunteering you go into you get a lot of contacts for things you want to do in the future" (rural, 18, male); "one thing I noticed is that the more you volunteer, the smaller the city seems...I think really meeting people and being part of much bigger nodes within a network was really exciting"

(urban, 22, female). This facet of PYD is directly linked to social resources; volunteering has the capacity to build relationships and expand social networks.

Discussion

This study contrasted the motivations, barriers, experiences, and outcomes of volunteering for rural and urban youth. These findings can be interpreted within a resource perspective whereby cultural, social, and economic resources can be linked to volunteer antecedents, experiences, and outcomes. Further, these findings differed by urban/rural residence, and thus an ecological perspective can enlighten our understanding of the volunteer process for Canadian youth. The quantitative portion of this study contributes to the literature on youth volunteerism because it is the first study to directly compare urban/rural youths' motives, barriers, and skills acquisition, through a large Canadian survey.

The qualitative findings add to the literature by demonstrating how youth may have unique experiences with volunteerism (e.g., perceptions, motives, barriers) depending on their area of residence. Differences in barriers to volunteering for urban/rural youth were not only contextual but may be embedded in the broader, sociocultural macrosystem. For example, urban youth may have wanted more assistance finding volunteer opportunities because in cities where networks are more diverse, information may flow more slowly to residents. Rural youth may have more cohesive networks and strong community values, and therefore helping others may be part of a lifestyle. The interviews (and survey results) further revealed that while urban and rural youth mentioned volunteer outcomes reflective of PYD, urban youth specifically discussed acquiring more skills (e.g., interpersonal). These findings are described in more detail below.

Motivations for Volunteering

Both urban and rural youths' reasons for volunteering can be related to resources. Many

youth were influenced by their social networks and some emulated their behaviours. Similarly, past research suggests that social networks (e.g., school, family, church) are key socializing agents that encourage and promote youth volunteering (e.g., Francis, 2011; Ottoni-Wilhelm, Estell, & Perdue, 2014; Raskoff & Sundeen, 1998; Sundeen & Raskoff, 2000).

Rural youth tend to be more influenced by others around them, such as friends and parents (Mekos & Elder, 1996). This may explain why rural youth, compared to urban youth, mentioned their mothers' impact on their volunteering. Parents are important influences in rural adolescent's lives, and family ties are often stronger in rural communities (Hofferth & Iceland, 1998). Rural organizations and community members should also approach parents as this may be passed onto youth through word of mouth. Some urban youth who were new to the city mentioned volunteering to network. One study found that people who moved frequently volunteered more hours than people who resided in the same community, and this could be one way for them to network (Clerkin, Paarlberg, Christensen, Nesbit, & Tschirhart, 2013).

Based on our survey findings and interviews, it appeared that urban youth were more strongly motivated by their educational goals and exploring their strengths. Rural youths' educational aspirations may be low because of their strong attachment (and commitment) to their family and community (e.g., Hektner, 1995). Petrin, Farmer, Meece, and Byun (2011) found that high-competent rural youth (those who were not "at-risk") were attached to their rural communities and lifestyles, and desired to either remain in or return to their home communities, after postsecondary school. In the present study, rural youth who volunteered because friends volunteered, contributed more hours. Rural youth may therefore volunteer to maintain relationships with community members. However, our survey findings revealed that more rural youth volunteered for job opportunities. Unemployment rates tend to be higher in rural areas

(Mayer, Morissette, & Dupuy, 2000), therefore rural youth may also volunteer as a stepping stone into the workforce.

Elements of cultural capital were also present in this study, especially the importance of values. Both urban and rural youth displayed a culture of benevolence; they wanted to help others and felt volunteering was a norm in society (Wilson & Musick, 1997). Many youth were intrinsically motivated by their passions which also relates to their value system. These results mapped onto some of the findings from MacNeela and Gannon's (2014) study on student motivations to volunteer: finding a social niche, making a difference, self-serving motives, and the desire to be productive. From the survey, we found that having many motives and fewer barriers to volunteerism was associated with contributing more hours. Youth who have multiple motives to volunteer may invest more hours to attain their goals. Studies showed that people reaped the most benefits when their volunteer activities fulfilled their initial motivations (Clary et al., 1998; Omoto & Snyder, 1995).

In summary, the survey findings suggested that rural youth, compared to urban youth, had more social-oriented motives for volunteering. Urban and rural youth both had desires to build individual assets, but the survey findings showed that urban youth wanted to build their skills, while more rural youth volunteered to seek employment opportunities.

Barriers and Challenges

The survey findings revealed that for rural youth, preferring to give money and financial barriers predicted nonvolunteer status, which seems paradoxical. Perhaps volunteer costs may be perceived to be greater than the amount that youth donate through charitable giving.

Volunteering and giving behaviour of rural youth should be examined in tandem to illuminate this finding.

In our interviews, rural youth particularly mentioned place of residence barriers. Since lack of transportation is a barrier to youth volunteering (Sundeen & Raskoff, 2000), this may be even more burdensome for rural youth. Distance may especially be an obstacle for rural youth who lack financial resources to volunteer because people with low income and education tend to be more vulnerable to exclusion in rural areas (Shucksmith & Philip, 2000). In the interviews, some youth discussed barriers beyond their own experiences. For example, urban and rural participants mentioned that low socioeconomic status youth may have unequal access to volunteer opportunities and may face greater barriers to volunteering. Further, some rural youth reported that distance was not an issue for them but they could see it being a burden for other rural youth.

In our interviews, barriers to volunteering for urban youth were more closely related to social barriers. Urban youth may be unaware of volunteer opportunities, whereas rural residents hear about volunteering through community members (Bruce et al., 1999). In one study, youth suggested that organizations provide information sessions, make presentations about volunteer opportunities, and clearly define roles (Social Planning and Research Council of British Columbia, 2005). In our interviews, more urban youth remarked on interpersonal struggles during their volunteering and wished for more assistance in finding places to volunteer. Rural youth may have encountered fewer interpersonal challenges because rural communities emphasize connectedness, uniformity, and personal ties (e.g., Burnell, 2003).

Our survey results revealed that lack of interest was a predictor of being a nonvolunteer, only for urban youth. Previous literature showed that approximately one third of youth found volunteering boring (Ellis, 2004), and that nonvolunteers lacked interest and motivation to volunteer (Hyde & Knowles, 2013). Our interviews tended to support this finding, especially for

urban youth, who particularly discussed that at times they felt their roles were minor and that they lacked motivation to volunteer. City dwellers may have less strong connections to civic life than rural residents, thus they are more likely to lack interest in volunteering (Sundeen et al., 2007). In this sense, individual cultural resources (e.g., importance of community values) may be interconnected with broader, macrosystems factors, such as the cultural values embedded in one's area of residence. Further, the impact of volunteering may be more visible in smaller towns compared to in larger cities.

Urban youth may benefit from receiving feedback on their volunteering because youth are more receptive to community engagement when their efforts are recognized as meaningful (Brennan, Barnett, & Baugh, 2007). In our interviews, youth mentioned that high schools should better explain the significance of mandatory community service. Warburton and Smith (2003) conducted focus groups with youth and found that mandatory service lead to negative attitudes about volunteering. Our interviews suggest that emphasizing the value of volunteering may encourage youth to volunteer and to be more accepting of mandatory community service.

Skills and Volunteer Outcomes

Findings from our interviews tended to support the survey results; urban youth reported acquiring more skills (e.g., interpersonal, technical) compared to their rural counterparts. The chi-square analyses revealed that rural youth (compared to urban youth) only acquired more fundraising and office skills. Further, the survey findings revealed that rural youth who volunteered in more routine activities (e.g., maintenance of buildings) gained fewer skills. These activities may only focus on specific, vocational skills, rather than a broad range of skills. Taken together, urban areas are more diverse which may allow youth to acquire a variety of skills (e.g., communication, technical) and interact with different people. Alternatively, some rural youth in

our interviews remarked that they volunteered in areas where they already had skills, so perhaps this is why they did not report ‘acquiring’ skills. More research is needed to explore this finding. While any type of volunteer activity is still important, the survey findings suggest that rural youth appeared to gain more skills in activities that involved more interaction and communication with others.

The survey results showed that volunteerism through the internet was related to reporting more skills. The internet may be conducive to skill acquisition for volunteers—easy access to a pool of knowledge and resources, rich dyadic interactions through exchange of information, and anonymity, which allows people to explore their communication and social skills more freely (Amichai-Hamburger, 2007). Youth who volunteered more hours acquired more skills, which has been found in other studies (e.g., Isham et al., 2006). However, youth who volunteered in at least three organizations did not have a higher expected skill count than youth who volunteered in only one organization. Our interviews revealed that occasionally youth felt overwhelmed in their volunteering or pressured with time constraints. Similarly, Simha et al. (2011) found that some students experienced time management stress and were worried that volunteering could become another routine in their life. Youth should be encouraged to achieve a balance between volunteering in activities that foster growth and development, while avoiding exhaustion.

Overall, our findings on volunteer outcomes reflect aspects of the Five C’s model of positive youth development. Volunteering can build social resources (e.g., networks), economic resources (e.g., soft and technical skills transferable to the workforce), and cultural resources (e.g., increased citizenship, deeper concern for the welfare of others).

Limitations and Future Directions

This study employed four criteria for using a mixed methods approach to understanding

differences in volunteer motives, barriers, and outcomes, between urban and rural youth. We developed an interview protocol based on the volunteer literature and themes from the CSGVP survey. We enriched these findings by broadening the topics (i.e., complementarity). The purpose of expansion seemed to be particularly useful. Through our interviews we learned in great depth the experiences of volunteers and how to improve youth volunteerism, which was relatively ignored in the CSGVP. The weakest criterion was perhaps triangulation because it was difficult to directly compare the results for each method as the survey was rather limited in scope. This was particularly evident for volunteer outcomes because the survey only asked about skills acquired, whereas in our interviews we explored perceptions of growth and individual capacity building more holistically. However, we did find convergence in certain areas. For example, both the qualitative and quantitative findings revealed that urban youth reported acquiring a greater range of skills through their volunteering.

Future quantitative surveys should consider volunteer satisfaction, relationship with the organization, and quality of the volunteer experience, and how this may differ between urban and rural youth. Similarly, we were limited to the barriers and motivations available in the survey, which were based on yes/no answers. Additionally, the CSGVP did not ask about motives, barriers, or skills related to informal volunteering. Our measure of formal volunteer hours may also not be entirely accurate, given that it may be difficult for participants to recall the number of hours they volunteered, in such a wide timespan (i.e., last 12 months). Through our interviews we learned that many youth did not keep track of their hours and did not recall how many hours they volunteered. Some participants mentioned different units of intensity rather than ‘hours’ (e.g., number of days per week, number of events etc.). Further, due to the nature of the data, only volunteers were asked about their motives for volunteering, thus non-volunteers were

excluded from the analyses, which may lead to a selection bias.

For our interviews, despite our sample being diverse in age, gender, and ethnicity, there were very few low intensity volunteers and nonvolunteers. Our findings reflect perspectives from youth who had a volunteer history, and these perspectives may be different for youth who do not volunteer. Further, our sample comprised mostly middle and upper class socioeconomic status groups. The urban sample mostly comprised university students. Youth from lower income households may have had different perspectives of volunteering, especially in terms of barriers. We also only sampled youth from one urban city and one rural area in Ontario, and thus future research should include locations from a range of different areas. Rural youth in very remote regions and with limited urban influence may have unique perspectives on volunteerism, specifically in terms of barriers and the resource availabilities in their communities. Additionally, our interviews were limited to youth, whereas future research should include organizations' perspectives on youth volunteerism. This type of study could allow researchers to compare and contrast the perspectives from youth and organizations, and whether their discussions complement each other. Qualitative studies with both urban and rural organizations may be insightful to gain a better understanding of recruitment strategies used by nonprofits, as well as their perceptions of volunteer barriers, and methods to improve volunteerism for youth.

Conclusion

Motivations for and barriers to volunteering differed between urban and rural youth. For example, contextual barriers were stronger for rural youth, while social barriers and interpersonal struggles were more common among urban youth. This research could be beneficial to nonprofits as some of these challenges seem amenable to change (e.g., asking youth to volunteer, carpooling). Implementing strategies to ameliorate these barriers as well as understanding

youths' motivations to volunteer is important because volunteerism can be a contributor of positive youth development, particularly helping youth develop in the Five C's of PYD. Urban and rural youth also differed in outcomes of volunteering. Both the survey and qualitative findings revealed that urban youth acquired more skills through volunteering. Future research should explore this finding more closely, as this may reflect the nature of voluntary organizations in rural versus urban areas. Lastly, urban and rural youth differed in their perspectives on volunteerism. Rural youth tended to incorporate informal volunteering in their philosophy of volunteerism, whereas urban youth perceived this to be a general helping behaviour. Regional differences should not be dismissed when studying methods to: attract youth volunteers, help youth overcome volunteer challenges, and ensure youth reap positive benefits from volunteerism. Volunteering can be viewed as a productive activity that leads to personal growth and fosters resource building in society at large.

References

- Amichai-Hamburger, Y. (2007). Potential and promise of online volunteering. *Computers in Human Behaviour*, 24, 544-562. doi:10.1016/j.chb.2007.02.004
- Andolina, M.W., Jenkins, K., Keeter, S., & Zukin, C. (2002). Searching for the meaning of youth civic engagement: Notes from the field. *Applied Developmental Science*, 6, 189-195. doi:10.1207/S1532480XADS0604_5
- Arches, J., & Fleming, J. (2006). Young people and social action: youth participation in the United Kingdom and the United States. *New Directions for Youth Development*, 111, 81-90. doi: 10.1002/yd.184
- Barker, R. (1968). *Ecological psychology*. Stanford, CA: Stanford University Press.
- Beggs, J.J., Haines, V.A., & Hurlbert, J.S. (1996). Revisiting the rural-urban contrast: Personal networks in nonmetropolitan and metropolitan settings. *Rural Sociology*, 61, 306-325.
- Billig, S.H., Root, S., & Jesse, D. (2005). The relationship between quality indicators of service-learning and student outcomes: Testing the professional wisdom. In S. Root, J. Callahan, & S.H. Billig (Eds.), *Advances in service learning research: Vol. 5. Improving service-learning practice: Research on models that enhance impacts* (pp. 97–115). Greenwich, CT: Information Age.
- Brennan, M.A., Barnett, R.V., & Baugh, E. (2007). Youth involvement in community development: Implications and possibilities for extension. *Journal of Extension*, 45, 203-213. Retrieved from <https://joe.org/joe/2007august/a3.php>
- Bronfenbrenner, U. (1979). *The Ecology of Human Development*. London: Harvard University Press.
- Bronfenbrenner, U. (1994). Ecological models of human development. In *International*

- encyclopedia of education* (pp. 37-42). Oxford, UK: Elsevier.
- Bronfenbrenner, U. (2000). Developmental science in the 21st century: Emerging questions, theoretical models, research designs and empirical findings. *Social Development*, 9(1), 115-125. doi: 10.1111/1467-9507.00114
- Bronfenbrenner, U., & Morris, P.A. (2006). The bio ecological model of human development. In W. Damon & R.M. Lerner (Eds.), *Handbook of child psychology, Vol. 1: Theoretical models of human development* (6th ed.) (pp. 793-828). New York, NY: John Wiley.
- Bruce, D., Jordan, P., & Halseth, G. (1999). *The role of voluntary organizations in rural Canada: Impacts and changing availability of operational and program funding*. Retrieved from http://www.unbc.ca/sites/default/files/assets/greg_halseth/nre_volunteer_report.pdf
- Bundick, M.J. (2011). Extracurricular activities, positive youth development, and the role of meaningfulness of engagement. *The Journal of Positive Psychology*, 6, 57-74. doi: 10.1080/17439760.2010.536775.
- Burnell, B.A. (2003). The 'real world' aspirations of work-bound rural students. *Journal of Research in Rural Education*, 18, 104–13. Retrieved from http://jrre.vmhost.psu.edu/wp-content/uploads/2014/02/18-2_1.pdf
- Carbonaro, W.J. (1998). A little help from my friends' parents: Intergenerational closure and educational outcomes. *Sociology of Education*, 71, 295-313. doi: 10.2307/2673172
- Carson, D.E. (1999). On defining and measuring volunteering in the United States and Abroad. *Law and Contemporary Problems*, 62, 67–71. Retrieved from <http://scholarship.law.duke.edu/cgi/viewcontent.cgi?article=1147&context=lcp>
- Catalano, R.F., Berglund, M.L., Ryan, J.A.M., Lonczak, H.S., & Hawkins, J.D. (2004). Positive

- youth development in the United States: research findings on evaluations of positive youth development programs. *Annals of the American Academy of Political and Social Science*, 591, 98–124. doi: 10.1177/0002716203260102
- Celio, C.I., Durlak, J., & Dymnicki, A. (2011). A meta-analysis of the impact of service-learning on students. *Journal of Experiential Education*, 34, 164-181. doi: 10.1177/105382591103400205
- Chacón, F., Pérez, T., Flores, J. & Vecina, M.L. (2011). Motives for volunteering: categorization of volunteers' motivations using open-ended questions. *Psychology in Spain*, 15, 48-56. Retrieved from <http://www.psychologyinspain.com/content/full/2011/15005.pdf>
- Chum, A., Carpenter, S., Farrell, E., Mook, L., Handy, F., Schugurensky, D., & Quarter, J. (2015). Does geographic context influence employability-motivated volunteering? The role of area-level material insecurity and urbanicity. *Canadian Geographer*, 59, 354-368. doi: 10.1111/cag.12167
- Clary, E.G., Snyder, M., Ridge, R.D., Copeland, J., Stukas, A.A., Haugen, J.,... Miene, P. (1998). Understanding and assessing the motivations of volunteers: A functional approach. *Journal of Personality and Social Psychology*, 74, 1516-1530. doi: 10.1037/0022-3514.74.6.1516
- Clerkin, R.M., Paarlberg, L.E., Christensen, R.K., Nesbit, R.A., & Tschirhart, M. (2013). Place, time, and philanthropy: Exploring geographic mobility and philanthropic engagement. *Public Administration Review*, 73, 97-106. doi: 10.1111/j.1540-6210.2012.02616.x
- Clerkin, R.M., Paynter, S.R., & Taylor, J.K. (2009). Public service motivation in undergraduate giving and volunteering decisions. *The American Review of Public Administration*, 39, 675-698. doi: 10.1177/0275074008327512

- Coleman, J.S. (1990). *Equality and achievement in Education*. Boulder: Westview.
- Creswell, J.W., Plano Clark, V.L., Gutmann, M.L., & Hanson, W.E. (2003). Advanced mixed methods research designs. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social and behavioral research* (pp. 209 –240). Thousand Oaks, CA: Sage.
- Crockett, L.J., Shanahan, M.J., & Jackson-Newsom, J. (2000). Rural youth: Ecological and life course perspectives. *Adolescent diversity in Ethnic, Economic, and Cultural Contexts: Advances in Adolescent Development*, 10, 43-74. doi: 10.4135/9781452225647.n3
- Duncan, S. C., Duncan, T. E., Strycker, L. A., & Chaumeton, N. R. (2002). Relations between youth antisocial and prosocial activities. *Journal of Behavioral Medicine*, 25, 425–438. doi:10.1023/A:1020466906928
- Edwards, M.E., Torgerson, M., & Sattem, J. (2009). Paradoxes of providing rural social services: The case of homeless youth. *Rural Sociology*, 74, 330-355. doi: 10.1526/003601109789037204
- Eisenberg, N., Morris, A., McDaniel, B., & Spinrad, T.L. (2009). Moral cognitions and prosocial responding in adolescence. In R.M. Lerner & L. Steinberg (Eds.) *Individual bases of adolescent development: Vol 1. Handbook of adolescent psychology* (3rd ed.; pp. 229–265). Hoboken, NJ, US: John Wiley & Sons Inc.
- Ellis, A. (2004). *Generation V: Young people speak out on volunteering*. From the Institute for Volunteering Research website: <http://www.ivr.org.uk/images/stories/Institute-of-Volunteering-Research/Migrated-Resources/Documents/G/IVR-September-2004-Generation-V-Young-People-speak-out-on-volunteering.pdf>
- Faid, P.T. (1987). *Urban and rural volunteers*. Ottawa: Department of the Secretary of State for the Voluntary Action Directorate, Multiculturalism and Citizenship Canada.

- Febbraro, A. (2001). *Encouraging volunteering among Ontario youth*. Retrieved from NSGVP website:http://www.imaginecanada.ca/sites/default/files/www/en/giving/rp_1997_ontario_youth_en.pdf
- Finkelstein, A.M. (2012). Dispositional correlates of informal volunteering. *Current research in Social Psychology*, 18, 60-69. doi:10.1.1.364.1040
- Finkelstein, A.M., & Brannick, T.M. (2007). Applying theories of institutional helping to informal volunteering: motives, role identity, and prosocial personality. *Social Behaviour and Personality: An International Journal*, 35, 101-114. doi: 10.2224/sbp.2007.35.1.101
- Forbes, K.F., & Zampelli, E.M. (2014). Volunteerism: The influences of social, religious, and human capital. *Nonprofit and Voluntary Sector Quarterly*, 43, 227-253. doi:10.1177/0899764012458542
- Francis, J.E. (2011). The functions and norms that drive university student volunteering. *International Journal of Nonprofit and Voluntary Sector Marketing*, 16, 1-12. doi: 10.1002/nvsm.390
- Friedland, L.A., & Morimoto, S. (2005). *The changing life world of young people: Risk, resume-padding and civic engagement* (Center for Information & Research on Civic Learning & Education [CIRCLE] No. 40). Retrieved from the CIRCLE website: <http://civicyouth.org/PopUps/WorkingPapers/WP40Friedland.pdf>
- Fritz, S., Karmazin, D., Barbuto Jr., J.E., & Burrow, S. (2003). Urban and rural 4-H adult volunteer leaders' preferred forms of recognition and motivation. *Journal of Extension*, 41. Retrieved from <http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1023&context=aglecfacpub>
- Froh, J.J, Kashdan, B.T., Yurkewicz, C., Fan, J., Allen, J., & Glowacki, J. (2010). The benefits

- of passion and absorption in activities: Engaged living in adolescents and its role in psychological well-being. *The Journal of Positive Psychology*, 5, 311-332. doi: 10.1080/17439760.2010.498
- Gage, R.L., & Thapa, B. (2012). Volunteer motivations and constraints among college students: Analysis of the volunteer function inventory and leisure constraints model. *Nonprofit and Voluntary Sector Quarterly*, 41, 405-430. doi: 10.1177/0899764011406738.
- Gardner, W., Mulvey, E.P., & Shaw, E.C. (1995). Regression analyses of counts and rates: Poisson, overdispersed Poisson, and negative binomial. *Psychological Bulletin*, 118, 392-405. doi:10.1037/0033-2909.118.3.392
- Gebbia, M.I., Maculaitis, M.C., & Camenzuli, C.A. (2012). The relationship between volunteer experience quality and adolescent bullying. *North American Journal of Psychology*, 14, 455-470.
- Greene, J.C. (2007). *Mixed methods in social inquiry*. San Francisco, CA: Jossey-Bass.
- Grönlund, H. (2011). *Volunteerism as a mirror of individuals and society: reflections from young adults in Finland* (Doctoral dissertation, University of Helsinki, Finland). Retrieved from <https://helda.helsinki.fi/bitstream/handle/10138/32919/voluntee.pdf?sequence=1>
- Gunderson, M., & Gomez, R. (2003). Volunteer activity and the demands of work and family. *Industrial Relations*, 58, 573-587. doi: 10.7202/007817ar
- Handy, F., Cnaan, R.A., Hustinx, L., Kang, C., Brudney, J.L., Haski-Leventhal, D., ... Zrinscak, S. (2010). A cross-cultural examination of student volunteering: Is it all about resume building? *Nonprofit and Voluntary Sector Quarterly*, 39, 498-523. doi:10.1177/0899764009344353.
- Hardré, P.L., Sullivan, D.W., & Crowson, H.M. (2009). Student characteristics and motivation

- in rural high schools. *Journal of Research in Rural Education*, 24, 1-19. Retrieved from <http://jrre.vmhost.psu.edu/wp-content/uploads/2014/02/24-16.pdf>
- Haski-Leventhal, D. (2009). Altruism and volunteerism: The perceptions of altruism in four disciplines and their impact on the study of volunteerism. *Journal for the Theory of Social Behaviour*, 59, 271-299. doi:10.1111/j.1468-5914.2009.00405.x
- Hektner, J.M. (1995). When moving up implies moving out: Rural adolescents' conflict in the transition to adulthood. *Journal of Research in Rural Education*, 11, 3-14. Retrieved from http://jrre.vmhost.psu.edu/wp-content/uploads/2014/02/11-1_3.pdf
- Hofferth, S., & Iceland, J. (1998). Social capital in rural and urban communities. *Rural Sociology*, 63, 574-598. doi: 10.1111/j.1549-0831.1998.tb00693.x
- Holdsworth, C. (2010). Why Volunteer? Understanding motivations for student volunteering. *British Journal of Educational Studies*, 58, 421- 437.
doi:10.1080/00071005.2010.527666
- Huebner, A.J., & Mancini, J.A. (2003). Shaping structured out-of-school time use among youth: The effects of self, family, and friend systems. *Journal of Youth Adolescent*, 32, 453-463.
doi: 10.1023/A:1025990419215
- Hutin, M. (2008). *Young people help out: Volunteering and giving among young people*. From the Institute for Volunteering Research website:
http://www.ivr.org.uk/images/stories/Institute-of-Volunteering-Research/Migrated-Resources/Documents/Y/young_people.pdf
- Hyde, M.K., & Knowles, S.R. (2013). What predicts Australian university students' intentions to volunteer their time for community service? *Australian Journal of Psychology*, 65, 135-145. doi: 10.1111/ajpy.12014

- Independent Sector. (2001). *Giving and volunteering in the United States: Findings from a national survey* (Item No. P251). Retrieved from <http://www.cpanda.org/pdfs/gv/GV01Report.pdf>
- Isham, J., Kolodinsky, J., & Kimberly, G. (2006). The effects of volunteering on social capital formation: evidence from a statewide survey. *Nonprofit and Voluntary Sector Quarterly*, 35, 367-383. doi: 10.1177/0899764006290838
- Jaffe, E., Sasson, U., Knobler, H., Aviel, E., & Goldberg, A. (2012). Volunteers and the risk of posttraumatic stress disorder. *Nonprofit Management and Leadership*, 22, 367-377. doi: 10.1002/nml.20059
- Jones, K.S. (2006). Giving and volunteering as distinct forms of civic engagement: The role of community integration and personal resources in formal helping. *Nonprofit and Voluntary Sector Quarterly*, 35, 249-266. doi: 10.1177/0899764006287464
- Kahn, L., Hewes, S., & Ali, R. (2009). *Taking the lead: Youth leadership in theory and practice* (ISBN:978-1-905551-09-5). Retrieved from The Young Foundation website: <http://youngfoundation.org/wp-content/uploads/2012/10/Taking-the-Lead-October-2009.pdf>
- Kamerade, D. (2013). *Volunteering during unemployment: more skills but where is the job?* Paper session presented at The Voluntary Sector and Volunteering Research Conference 2013. Retrieved from http://blogs.ncvo.org.uk/wp-content/uploads/guest/volunteering_during_unemployment_kamerade.pdf
- Katz, E., & Rosenberg, J. (2005). An economic theory of volunteering. *European Journal of Political Economy*, 21, 429-443.
- Kay, T., & Bradsbury, S. (2009). Youth sport volunteering: developing social capital? *Sport*

Education and Society, 14, 121-140. doi:10.1080/13573320802615288

Kilpatrick, S., Stirling, C., & Orpin, P. (2010). Skill development for volunteering in rural communities. *Journal of Vocational Education and Training*, 62, 195-207. doi: 10.1080/13636820.2010.486929

King, P.E., Dowling, E.M., Mueller, R.A., White, K., Schultz, W., Osborn, P,...& Scales, P.C. (2005). Thriving in adolescence: The voices of youth-serving practitioners, parents, and early and late adolescents. *Journal of Early Adolescence*, 25(1), 94-112. doi: 10.1177/0272431604272459

Kiviniemi, M.T., Snyder, M., & Omoto, A.M. (2002). Too many of a good thing? The effects of multiple motivations on stress, cost, fulfillment and satisfaction. *Personality and Social Psychology Bulletin*, 28, 732-743. Retrieved from <http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1011&context=psychfacpub>

Krause, N. (2006). Social relationships and health in late life. In R.H. Binstock & L.K. George (Eds.), *Handbook of aging and the social sciences* (pp. 181-200). San Diego, CA: Academic Press.

Lerner, R.M. (2002). *Concepts and theories of human development* (3rd ed.). Mahwah, NJ: Lawrence Erlbaum.

Lerner, R.M. (2006). Editor's introduction: Developmental science, developmental systems, and contemporary theories. In R.M. Lerner & W. Damon (Eds.), *Theoretical models of human development. Volume 1 of Handbook of Child Psychology* (6th ed.; pp. 1-17). doi:10.1002/9780470147658.chpsy0101

Lerner, R.M., Lerner, J.V., Almerigi, J.B, Theokas, C., Phelps, E., Gestsdottir, S,...& von Eye, A. (2005). Positive youth development, participation in community youth development

- programs, and community contributions of fifth grade adolescents: Findings from the first wave of the 4-H Study of Positive Youth Development. *Journal of Early Adolescence*, 25, 17-71. doi: 10.1177/0272431604272461
- Lichter, D.T., Shanahan, M.J., & Gardner, E.L. (2002). Helping others? The effects of childhood poverty and family instability on pro social behavior. *Youth and Society*, 34, 89-119. doi: 10.1177/0044118X02034001004
- Long, J.S., & Freese, J. (2014). *Regression model for categorical dependent variables using Stata* (3rd ed). College Station, TX: Stata Press.
- Low, N., Butt, S., Ellis Paine, A., & Davis Smith, J. (2007). *Helping out: A national survey of volunteering and charitable giving*. Retrieved from Institute for Volunteering Research website: http://www.ivr.org.uk/images/stories/Institute-of-Volunteering-Research/Migrated-Resources/Documents/H/OTS_Helping_Out.pdf
- Ludden, A.B. (2011). Engagement in school and community civic activities among rural adolescents. *Journal of Youth and Adolescence*, 40, 1254-1270. doi:10.1007/s10964-010-9536-3.
- MacNeela, G., & Gannon, N. (2014). Process and positive development: An interpretive phenomenological analysis of university student volunteering. *Journal of Adolescent Research*, 29, 407-436. doi: 10.1177/0743558413510968
- Marta, E., Guglielmetti, C., & Pozzi, M. (2006). Volunteerism during young adulthood: An Italian investigation into motivational patterns. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, 17, 221-232. doi:10.1007/s11266-006-9015-3
- Mayer, F., Morissette, R., & Dupuy, R. (2000). *Rural youth: Stayers, leavers and return migrants* (Analytical Studies Branch Research Paper Series No.152). Retrieved from

- Statistics Canada website: <http://www.statcan.gc.ca/pub/11f0019m/11f0019m2000152-eng.htm>
- McLellan, J.A., & Youniss, J. (2001). *Required service and the construction of youth identity*. Paper presented at the Meeting of the Society for Research in Child Development, Minneapolis.
- Mekos, D., & Elder, G.H. (1996, March). *Community ties and the development of competence in rural youth*. Paper presented at the biennial meeting of the Society for Research in Adolescence, Boston.
- Miles, B.M., & Huberman, A.M. (1994). *An expanded sourcebook, qualitative data analysis* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Miles, M.B., Huberman, A.M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Morsillo, J., & Prilleltensky, I. (2007). Social Action with youth: Interventions, evaluation and psychopolitical validity. *Journal of Community Psychology*, 35, 725-740. doi: 10.1002/jcop.20175
- Newton, B., Oakley, J., & Pollard, E. (2011). *Volunteering: supporting transitions*. Retrieved from the National Young Volunteers Service website: http://www.employabilityinscotland.com/media/122546/volunteering_-_supporting_transitions.pdf
- Niemi, R.G., Hepburn, M.A., & Chapman, C. (2000). Community service by high school students: A cure for civic ills? *Political Behavior*, 22(1), 45-69. doi: 10.1023/A:1006690417623
- Ockenden, N., & Stuart, J. (2014). *Review of evidence on the outcomes of youth volunteering*,

- social action, and leadership*. Retrieved from the Institute for Volunteering Research website: http://thirdsectorimpact.eu/site/assets/uploads/page/documents-for-researchers/TSI_impact-report_sports-leaders-literature-review-dec-2014.pdf
- Omoto, A.M., & Snyder, M. (1995). Sustained helping without obligation: Motivation, longevity of service, and perceived attitude change among AIDS volunteers. *Journal of Personality and Social Psychology*, 68, 671-686.
- Onwuegbuzie, A.J., & Johnson, R.B. (2006). The validity issue in mixed research. *Research in the Schools*, 13, 48-63. Retrieved from http://www.robertrenaud.ca/uploads/2/2/9/6/22962838/onwuegbuzie__johnson_2006.pdf
- Otoni-Wilhelm, M., Estell, D.B., & Perdue, N.H. (2014). Role-modeling and conversations about giving in the socialization of adolescent charitable giving and volunteering. *Journal of Adolescence*, 37, 53-66. doi: 10.1016/j.adolescence.2013.10.010
- Petrin, R.A., Farmer, T.W., Meece, J.L., & Byun, S-Y. (2011). Interpersonal competence configurations, attachment to community, and residential aspirations of rural youth. *Journal of Youth and Adolescence*, 40, 1091-1105. doi :10.1007/s10964-011-9690-2
- Qian, X.L., & Yarnal, C. (2010). Benefits of volunteering as campus tour guides: The rewards of serious leisure. *Leisure/Loisir*, 34, 127-144. doi: 10.1080/14927713.2010.481109
- Raskoff, S., & Sundeen, R.A. (1998). Youth socialization and civic participation: The role of secondary schools in promoting community service in southern California. *Nonprofit and Voluntary Sector Quarterly*, 27, 66–87. doi: 10.1177/0899764098271005
- Ritchey, J. (2006). Negotiating change: adult education and rural life in Pennsylvania. *Pennsylvania Association for Adult Continuing Education (PAACE) Journal of Lifelong Learning*. 15, 1–16. Retrieved from

<https://www.iup.edu/WorkArea/DownloadAsset.aspx?id=18495>

- Roker, D., Player, K., & Coleman, J. (1999). Young people's voluntary and campaigning activities as sources of political education. *Oxford Review of Education*, 25, 185-198. doi: 10.1080/030549899104206
- Roth, J.L., & Brooks-Gunn, J. (2003). What exactly is a youth development program? Answers from research and practice. *Applied Developmental Science*, 7, 94-111. doi: 10.1207/S1532480XADS0702_6
- Saldaña, J. (2013). *The coding manual for qualitative researchers* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Scales, P.C., & Leffert, N. (1999). *Developmental assets: A synthesis of the scientific research on adolescent development* (2nd ed.). Minneapolis, MN: Search Institute.
- Schmidt, J.A., Shumow, L. & Kackar, H. (2007). Adolescents' participation in service activities and its impact on academic, behavioral, and civic outcomes. *Journal of Youth and Adolescence*, 36, 127-140. doi: 10.1007/s10964-006-9119-5
- Schneider, B., & Borman, K. (1993, April). *Thinking about the future: Adolescents in a small town*. Paper presented at the annual meeting of the American Educational Research Association, Atlantic, GA.
- Schoggen, P. (1989). *Behavior settings*. Stanford, CA: Stanford University Press.
- Shandra, C.L. (2017). Disability and social participation: The case of formal and informal volunteering. *Social Science Research*, in press, doi: 10.1016/j.ssresearch.2017.02.006
- Sherrod, L.R., Flanagan, C., & Youniss, J. (2002). Dimensions of citizenship and opportunities for youth development: The what, why, when, where and who of citizenship development. *Applied Developmental Science*, 6, 264-272. doi:

10.1207/S1532480XADS0604_14

Shrestha, B., & Cihlar, C. (2004). *Volunteering in under-resourced rural communities: Final report*. Retrieved from Points of Light Foundation website: <http://www.handsonnetwork.or/files/resources/ruralcommunities.pdf>

Shucksmith, M., & Philip, L. (2000). Social exclusion and social support in rural Canada. In *Social Exclusion in Rural Areas: Literature Review and Conceptual Framework*. Edinburgh: The Scottish Executive Central Research Unit.

Simha, A., Topuzova, L.N., & Albert, J.F. (2011). V for volunteering-The journeys of undergraduate volunteers. *Journal of Academic Ethics*, 9, 107-126. doi: 10.1007/s10805-011-9136-1.

Smith, D.H. (1994). Determinants of voluntary association participation and volunteering: A literature review. *Nonprofit and Voluntary Sector Quarterly*, 23, 243–263. doi: 10.1177/089976409402300305

Social Planning and Research Council of British Columbia. (2005). *What motivates low-income volunteers: A Report on Low-Income Volunteers in Vancouver and Prince George, British Columbia* (ISBN# 1–55401–155–8). Retrieved from http://tamarackcommunity.ca/downloads/vc/ABB_Motivates_LowIn_Vol.pdf

Statistics Canada (n.d). *CMA and CA: Detailed definition*. Retrieved from Statistics Canada website: <http://www.statcan.gc.ca/pub/92-195-x/2011001/geo/cma-rmr/def-eng.htm>

Sundeen, R.A., & Raskoff, S.A. (2000). Ports of entry and obstacles: Teenagers' access to volunteer activities. *Nonprofit Management and Leadership*, 11, 179-197. doi: 10.1002/nml.11204

Sundeen, R.A., Raskoff, S.A., & Garcia, M.C. (2007). Differences in perceived barriers to

- volunteering to formal organizations. *Nonprofit Management & Leadership*, 17, 279-300
doi: 10.1002/nml.150
- Taylor, P., Nicols, G., Holmes, K., James, M., Gratton, C., Garrett, R., Kokolakis, T.,...&
King, L. (2003). *Sports Volunteering in England 2002: A report for Sport England*.
Retrieved from [https://www.sportengland.org/media/3617/valuing-volunteering-in-sport-
in-england-final-report.pdf](https://www.sportengland.org/media/3617/valuing-volunteering-in-sport-in-england-final-report.pdf)
- Taylor, T.P., & Pancer, S.M. (2007). Community service experiences and commitment to
volunteering. *Journal of Applied Social Psychology*, 37, 320-345. doi: 10.1111/j.0021-
9029.2007.00162.x
- Tessier, S., Minh-Nguyet, N., & Gagnon, K. (2006). *Youth volunteerism: Research report*
(ISBN# 1-55401-263-5). Retrieved from Imagine Canada website:
[http://www.imaginecanada.ca/sites/default/files/www/en/library/kdc-
cdc/laval_youthstudy_report.pdf](http://www.imaginecanada.ca/sites/default/files/www/en/library/kdc-cdc/laval_youthstudy_report.pdf)
- Torgerson, M., & Edwards, M.E. (2012). Demographic determinants of perceived barriers to
community involvement: Examining rural/urban differences. *Nonprofit and Voluntary
Sector Quarterly*, 42, 371-390. doi: 10.1177/0899764012440181
- United Nations (n.d). *Definition of youth*. *Department of Economic and Social Affairs*. Retrieved
from <http://www.un.org/esa/socdev/documents/youth/fact-sheets/youth-definition.pdf>
- Veludo-de-Oliveira, T., Pallister, J.G. & Foxall, G.R. (2013). *Voluntas*, 24, 1180-1198
doi:10.1007/s11266-012-9317-6
- Vogelgesang, L.J., & Astin, A.W. (2000). Comparing the effects of community service and
service-learning. *Michigan Journal of Community Service Learning*, 7, 25-34. Retrieved
from <http://hdl.handle.net/2027/spo.3239521.0007.103>

- Warburton, J., & Smith, J. (2003). Out of the generosity of your heart: are we creating active citizens through compulsory volunteer programmes for your people in Australia? *Social Policy Administration*, 37 772-786. doi:10.1046/j.1467-9515.2003.00371.x
- Williams, C.C. (2002). Harnessing voluntary work: A fourth sector approach. *Policy Studies*, 23, 247-260. doi: 10.1080/0144287022000046019
- Wilson, J. & Musick, M. (1997). Who cares? Toward an integrated theory of volunteer work. *American Sociological Review*, 62, 694-713. doi: 10.2307/2657355.
- Wilson, J. (2000). Volunteering. *Annual Review of Sociology*, 26, 215-240. doi: 10.1146/annurev.soc.26.1.215
- Wuthnow, R. (1998). *Loose connections: Joining together in America's fragmented communities*. Cambridge: Harvard University Press.

Endnotes

¹Permission was received to access the CSGVP master files, which were available at the Carleton Ottawa Outaouais Local Research Data Centre (COOL-RDC). This thesis was part of a larger project funded by Employment and Social Development Canada (ESDC).

²Certain activities were excluded from the poisson regression analyses because of small cell sizes: (1) First aid, fire-fighting, search and rescue; (2) Canvassing; (3) Bookkeeping, office work, library work; and (4) Other activities.

³We did not have equal number of rural and urban participants because one rural participant's data was not used due to insufficient data. However, during our analysis when we found that no new themes emerged and that our data was saturated, we decided not to recruit any more rural participants.

Table 1

Comparing Sociodemographic and Resource Characteristics by Place of Residence

Variable	Urban (n=2,255)		Rural (n=637)	
	%	95% CI	%	95% CI
Male (Female ^b)	50.2	[49.9, 50.6]	54.5	[53.2, 55.7]***
Age	M=19.3	SD=2.9	M=18.8	SD=2.9***
English (Other language ^b)	71.1	[70.6, 71.7]	70.6	[69.5, 71.7]
Household income				
Less than \$20,000	9.3	[8.9, 9.7]	10.5	[9.8, 11.3]*
\$20,000 to less than \$40,000	14.8	[14.4, 15.2]	15.2	[14.3, 16.1]
\$40,000 to less than \$60,000	16.7	[16.2, 17.1]	16.9	[16.0, 17.8]
\$60,000 to less than \$100,000	25.3	[24.7, 25.9]	25.7	[24.5, 26.9]
\$100,000 or more ^b	34.0	[33.3, 34.6]	31.6	[30.4, 32.8]*
Fair/poor health	6.5	[6.2, 6.8]	6.3	[5.8, 6.9]
Good health	21.0	[20.5, 21.5]	25.0	[24.0, 26.0]***
Very good health	36.8	[36.2, 37.4]	34.9	[33.7, 36.1]*
Excellent health ^b	35.7	[35.1, 36.4]	33.8	[32.6, 35.0]*
Full-time work	24.5	[24.0, 25.1]	30.8	[29.6, 32.1]***
Part-time work	31.5	[30.9, 32.1]	30.4	[29.2, 31.6]
Not working ^b	44.0	[43.3, 44.6]	38.7	[37.5, 40.0]***
High school student	31.7	[31.2, 32.3]	38.7	[37.4, 39.9]***
Postsecondary student	40.5	[39.9, 41.2]	22.0	[20.9, 23.0]***
Nonstudent ^b	27.7	[27.2, 28.3]	39.4	[38.0, 40.7]***
Time in community				
10 years or more	62.7	[62.1, 63.4]	76.2	[75.2, 77.3]***
3 to less than 10 years	21.8	[21.2, 22.4]	14.8	[13.8, 15.8]***
Less than 3 years ^b	15.5	[15.0, 16.0]	9.0	[8.4, 9.6]***
Part of sports teams (No ^b)	65.5	[64.3, 68.2]	68.1	[67.0, 69.2]***
Belong to youth groups (No ^b)	43.4	[42.8, 44.1]	48.3	[47.1, 49.6]***
Student government (No ^b)	18.9	[18.4, 19.4]	24.3	[23.2, 25.5]***
Admired person helps (No ^b)	58.1	[57.5, 58.7]	57.9	[56.6, 59.2]
Parents volunteer				
Yes	46.0	[45.4, 46.7]	52.1	[50.9, 53.4]***
No ^b	51.0	[50.4, 51.7]	44.5	[43.2, 45.8]***
Missing	2.9	[2.6, 3.2]	3.3	[2.9, 3.7]
Religious attendance				
Monthly/weekly	23.8	[23.3, 24.4]	20.9	[20.0, 21.7]***
1-4 times year	21.3	[20.8, 21.9]	29.8	[28.5, 31.1]***
Not at all	20.8	[20.2, 21.3]	22.6	[21.5, 23.8]*
Not religious ^b	34.0	[33.4, 34.7]	26.7	[25.6, 27.8]***
Survey year 2010 (2007 ^b)	48.9	[48.5, 49.3]	50.3	[49.1, 51.4]
Volunteer	57.4	[56.8, 58.1]	65.7	[64.3, 67.1]***

Note. %=proportion of the weighted sample included in the logistic analyses; CI=confidence interval. ^bReference category for subsequent analyses. For dichotomous variables, proportions were based on the category that was coded 1. *p<.05. ***p<.001.

Table 2

Comparing Urban and Rural Youths' Volunteer Motives, Barriers, and Skills Acquired

Variable	Rural		Urban		χ^2
	%	95% CI	%	95% CI	
Motivations					
Affected by cause	45.2	[43.7, 46.8]	45.2	[44.5, 46.0]	0.00
Network	54.6	[53.0, 56.3]	53.0	[50.2, 51.8]	15.18***
Job opportunities	58.5	[57.1, 59.8]	56.5	[55.7, 57.2]	7.10*
Explore strengths	62.2	[60.9, 63.6]	65.9	[65.2, 66.6]	24.01***
Use skills/experiences	78.4	[77.2, 79.5]	80.9	[80.3, 81.5]	14.53***
Friends volunteer	58.7	[57.2, 60.1]	56.6	[56.0, 57.4]	6.45*
Religious obligations	14.8	[13.7, 15.9]	16.6	[16.0, 17.2]	7.80*
Contribute to community	90.0	[89.3, 90.8]	91.4	[91.0, 91.8]	9.69*
Barriers					
Prefer to give	25.3	[24.3, 26.3]	22.7	[22.1, 23.2]	20.23***
Nobody asked	52.6	[51.3, 53.9]	51.2	[50.6, 51.9]	3.06
Didn't know how	35.3	[34.0, 36.6]	34.4	[33.8, 35.1]	1.32
Financial costs	14.9	[14.0, 15.9]	12.7	[12.3, 13.1]	16.00***
No time	66.9	[65.7, 68.2]	76.1	[75.6, 76.6]	169.19***
No interest	23.8	[22.8, 24.9]	25.7	[25.1, 26.2]	9.83*
Can't commit long-term	48.4	[47.2, 49.7]	49.8	[49.2, 50.5]	3.79
Physically unable	9.1	[8.4, 9.7]	8.3	[7.9, 8.7]	4.00*
Dissatisfied in the past	10.0	[9.3, 10.8]	9.4	[9.0, 9.8]	1.85
Skills Acquired					
Fundraising	51.7	[50.2, 53.1]	46.6	[45.9, 47.4]	36.96***
Office	41.4	[39.9, 42.8]	39.2	[38.4, 39.9]	7.13*
Organization	54.2	[52.7, 55.7]	62.0	[61.3, 62.8]	82.32***
Knowledge	38.7	[37.2, 40.1]	41.2	[40.5, 42.0]	10.20*
Communication	58.9	[57.5, 60.3]	64.3	[63.6, 65.0]	46.52***
Interpersonal	71.9	[70.5, 73.3]	80.0	[79.4, 80.5]	113.94***

Note. These results are weighted based on bootstrap and survey weights. %= proportion who answered 'yes' to each variable. CI=confidence interval.

* $p < .05$. *** $p < .001$.

Table 3

Comparing the Impact of Barriers and Motivations on Volunteer Proclivity and Hours Contributed for Urban and Rural Youth

	Formal Volunteer Yes/No				Formal Volunteer Hours			
	Urban (n=2,209)		Rural (n=625)		Urban (n=1,544)		Rural (n=451)	
	OR(SE)	95% CI	OR(SE)	95% CI	Coeff. (SE)	95% CI	Coeff. (SE)	95% CI
Barriers								
Prefer to give	1.85(.06)***	[1.73, 1.98]	3.60(.26)***	[3.12, 4.15]	-0.73(.03)***	[-0.79, -0.68]	-0.59(.06)***	[-0.70, -0.48]
Nobody asked	2.45(.08)***	[2.28, 2.62]	2.18(.15)***	[1.89, 2.50]	-0.21(.02)***	[-0.25, -0.16]	-0.38(.04)***	[-0.46, -0.30]
Didn't know how	1.26(.04)***	[1.17, 1.35]	2.00(.14)***	[1.75, 2.29]	-0.17(.02)***	[-0.22, -0.13]	-0.26(.04)***	[-0.35, -0.18]
Financial costs	1.00(.04)	[0.92, 1.09]	2.74(.29)***	[2.23, 3.36]	0.56(.04)***	[0.49, 0.64]	0.32(.08)***	[0.16, 0.48]
No time	0.96(.04)	[0.89, 1.04]	0.74(.06)***	[0.64, 0.87]	0.01(.03)	[-0.04, 0.06]	0.29(.04)***	[0.20, 0.37]
No interest	1.32(.04)***	[1.24, 1.41]	1.12(.08)	[0.97, 1.28]	-0.21(.03)***	[-0.26, -0.16]	-0.31(.05)***	[-0.40, -0.21]
Can't commit long-term	0.90(.03)***	[0.84, 0.96]	0.81(.06)*	[0.69, 0.93]	-0.11(.02)***	[-0.16, -0.07]	-0.30(.03)***	[-0.35, -0.22]
Health problems	0.68(.04)***	[0.60, 0.76]	0.51(.05)***	[0.42, 0.63]	0.21(.03)***	[0.15, 0.27]	0.07(.07)	[-0.07, 0.21]
Constant	0.10(.02)***	[0.07, 0.15]	0.57(.22)***	[0.27, 1.22]	2.16(.14)***	[1.88, 2.43]	3.73(.24)***	[3.25, 4.20]
Pseudo R ²	0.21		0.28		-		-	
Adjusted R ²	-		-		0.17		0.28	
Wald χ^2 (block 1)	-		-		2,425.73***		2,931.32***	
Wald χ^2 (block 2)	-		-		1,585.76***		489.89***	
Motivations								
Network	-		-		0.20(.02)***	[0.15, 0.25]	0.28(.04)***	[0.19, 0.36]
Job opportunities	-		-		0.22(.03)***	[0.17, 0.27]	0.26(.04)***	[0.18, 0.34]
Explore strengths	-		-		0.30(.02)***	[0.25, 0.34]	-0.00(.05)	[-0.10, 0.10]
Use skills/experiences	-		-		0.58(.03)***	[0.51, 0.64]	0.78(.05)***	[0.68, 0.87]
Friends volunteer	-		-		-0.08(.02)***	[-0.12, -0.04]	0.22(.04)***	[0.13, 0.30]
Affected by cause	-		-		0.18(.02)***	[0.13, 0.22]	0.28(.04)***	[0.19, 0.36]
Constant	-		-		0.83(.14)***	[0.56, 1.10]	1.74(.25)***	[1.24, 2.23]
Adjusted R ²	-		-		0.18		0.28	
Wald χ^2 (block 1)	-		-		2,211.58***		2,719.23***	
Wald χ^2 (block 2)	-		-		1,263.64***		662.90***	

Note. OR=odds ratio; SE=standard error bootstrapped; CI= confidence interval; Coeff.= coefficient. The reference category was 'no' for all variables. Results are adjusted for all other variables in the table as well as covariates (block 1) in Table 1.

*p<.05. ***p<.001.

Table 4

Number of Skills Acquired Through Formal Volunteering by Rural and Urban Residence

Variable	Rural (n=465)			Urban (n=1,608)		
	Coeff.	95% CI	Count Events (dy/dx)	Coeff.	95% CI	Count Events (dy/dx)
Fundraising	0.27***	[0.25, 0.30]	0.88	0.16***	[0.15, 0.18]	0.55
Committee member	0.00	[-0.03, 0.03]	0.01	0.04***	[0.02, 0.05]	0.12
Teach/educate	0.12***	[0.10, 0.15]	0.40	0.03***	[0.02, 0.04]	0.09
Organize/supervise events	0.10***	[0.08, 0.13]	0.33	0.10***	[0.08, 0.11]	0.33
Coach/referee	-0.07***	[-0.09, -0.04]	-0.21	0.08***	[0.06, 0.09]	0.26
Counsel/Advise	0.07***	[0.05, 0.09]	0.23	0.03***	[0.02, 0.04]	0.10
Healthcare/Companionship	0.12***	[0.10, 0.14]	0.38	0.08***	[0.06, 0.09]	0.26
Collect/serve goods	-0.12***	[-0.14, -0.10]	-0.38	0.07***	[0.06, 0.08]	0.23
Maintain/repair buildings	-0.05***	[-0.08, -0.02]	-0.17	0.01	[-0.00, 0.03]	0.03
Volunteer driving	0.01	[0.02, 0.04]	0.03	0.01	[-0.01, 0.03]	0.02
Environment/Conservation	0.09***	[0.06, 0.11]	0.28	0.10***	[0.09, 0.12]	0.34
Family project	0.01	[-0.01, 0.04]	0.04	-0.05***	[-0.07, -0.04]	-0.18
Group project-others	0.06***	[0.03, 0.09]	0.19	0.09***	[0.08, 0.11]	0.31
Internet volunteering	0.04***	[0.01, 0.07]	0.12	0.09***	[0.08, 0.11]	0.31
Motivations						
Network	-0.01	[-0.03, 0.02]	-0.02	0.02*	[0.01, 0.03]	0.07
Friends volunteer	0.03*	[0.00, 0.05]	0.08	-0.03***	[-0.04, -0.02]	-0.10
Affected by cause	0.09***	[0.07, 0.12]	0.30	0.09***	[0.08, 0.10]	0.29
Job opportunities	0.12***	[0.17, 0.23]	0.64	0.15***	[0.14, 0.17]	0.51
Use skills/experiences	0.32***	[0.28, 0.36]	1.02	0.15***	[0.13, 0.18]	0.52
Explore strengths	0.21***	[0.18, 0.24]	0.68	0.17***	[0.15, 0.19]	0.56
Volunteer hours						
161 or more hours	0.26***	[0.22, 0.30]	0.83	0.18***	[0.15, 0.20]	0.58
61-160 hours	0.16***	[0.12, 0.20]	0.52	0.13***	[0.11, 0.15]	0.53
19-60 hours	0.08***	[0.04, 0.11]	0.24	0.06***	[0.04, 0.08]	0.21
1-18 hours ^b	1.00		1.00			
Volunteer breadth						
3 or more organizations	-0.01	[-0.05, 0.03]	-0.03	-0.01	[-0.02, 0.01]	-0.02
2 organizations	0.16***	[0.13, 0.19]	0.52	0.04***	[0.03, 0.06]	0.14
1 organization ^b	1.00			1.00		
Constant	0.15***	[0.10, 0.20]		0.43***	[0.40, 0.46]	
Wald Chi-square	5,236.57***		11,361.02***			

Note. CI=confidence interval; ^b=reference group. Higher coefficient values indicate higher expected skill count. The count events column is the predicted number of events based on the marginal average effects. All variables were adjusted for the other variables listed in the table. *p<.05. ***p<.001.

Table 5

Summary Comparing the Quantitative and Qualitative Findings Between Urban and Rural Youth

	Quantitative Results	Qualitative Results
Motivations to Volunteer	<ul style="list-style-type: none"> -More rural youth volunteered because friends volunteered, to network, and for job opportunities. -More urban youth volunteered to use skills and to explore their strengths. -Rural youth who volunteered because their friends volunteered, contributed more hours, while comparable urban youth contributed fewer hours. 	<ul style="list-style-type: none"> -More rural youth mentioned the important role of their mother in volunteering. -More urban youth mentioned career motives. -Urban and rural youth volunteered for passionate reasons. -Youth felt it was their responsibility to volunteer.
Volunteer Barriers/Challenges	<ul style="list-style-type: none"> -The strongest predictor of nonvolunteer status for rural youth was preferring to donate; for urban youth, it was not being asked. -Only for rural youth, financial costs predicted nonvolunteer status, while for urban youth, lack of interest predicted nonvolunteer status. 	<ul style="list-style-type: none"> -Rural youth mentioned contextual barriers (e.g., transportation, limited opportunities). -More urban youth mentioned social barriers (e.g., interpersonal challenges). -Urban youth reported lack of motivation and questioned the significance of their impact.
Volunteer Outcomes	<ul style="list-style-type: none"> -Rural and urban youth acquired the most skills from fundraising. -Rural youth gained the fewest skills from coaching, delivering goods, and maintenance/repair. -Urban youth gained the fewest skills in family project volunteering. -Urban youth reported a greater number of skills (e.g., interpersonal, communication). -Volunteering more hours was associated with acquiring more skills, for urban and rural youth. 	<ul style="list-style-type: none"> -More urban, than rural youth, reported acquiring interpersonal and technical skills -Outcomes for youth in general were related to indicators of positive youth development (e.g., confidence, competence, connections, empathy).

Note. These comparisons were only based on topics that were covered in both the quantitative and qualitative analyses.

Table 6

Comparing and Contrasting Qualitative Findings by Urban Versus Rural Place of Residence

	Urban (n=16)	Rural (n=15)	Total (N=31)
Motives/levers to volunteer			
Career-oriented motives (e.g., help build C.V)	8	5	13
Social-oriented motives (e.g., to meet people)	3	3	6
Affected by the cause (e.g., health awareness, religious events)	8	5	13
Interests/Passions (e.g., activities they find enjoyable)	12	12	24
Mother played a role in volunteering	4	8	12
Barriers/challenges to volunteering			
Interpersonal struggles (e.g., poor teamwork skills, frustrated with different personalities)	11	7	18
Context restrictions (e.g., traveling, lack of opportunities)	6	12	18
Time constraints (e.g., other obligations, school)	13	12	25
Lack of appreciation (e.g., not recognized or valued)	6	4	10
Feeling uncomfortable (e.g., big crowds)	6	5	11
Organizations are rigid (e.g., limited flexibility in roles)	12	6	18
Unsure about significance (e.g., felt minor, standing around)	14	9	23
Improving youth volunteerism			
More accommodating/flexible (e.g., more choices)	6	6	12
Assist with finding opportunities (e.g., resources/outlets)	16	8	24
Promote through social connections (e.g., ask youth to volunteer)	10	7	17
Emphasize value of volunteering (e.g., teach at young age)	7	6	13
Advertise more effectively (e.g., social media)	15	14	29
Volunteer outcomes			
Interpersonal skills (e.g., public speaking, communicating with others)	16	9	25
Technical skills (e.g., fundraising, administrative duties, organizing)	10	4	14
Acquired general knowledge (e.g., “learning experience”, “opened eyes” to different realities of life)	16	14	30
Change in moral character (e.g., respect for community, empathy)	9	10	19

Note. Tabulations were based on a combination of text and code retrieval functions in QDA Miner software. The context of each code and/or text segment was analyzed for each tally.

Appendix A

Geographic, Economic, and Sociodemographic Characteristics of the Urban/Rural Study Settings

Variable	Urban Setting ^a	Rural Setting ^b
	Ottawa (CMA)	Renfrew County
Population size (#)	1,215,735	98,565
Land area (square km)	6,287.03	7,440.81
Average age	39.1	42.3
Immigrant population	235,335 (19.4%)	5,065 (5.1%)
Total visible minority	234,010 (19.2%)	1,970 (2.0%)
Religious affiliation	962,940 (79.2%)	79,290 (80.4%)
Nonofficial languages spoken ^c	295,195 (24.3%)	5,175 (5.3%)
Educational attainment ^d		
No certificate, diploma or degree	151,945 (15.1%)	17,735 (21.4%)
High school diploma or equivalent	233,695 (23.3%)	25,730 (31.1%)
College or other degree/diploma ^e	302,690 (30.1%)	29,010 (35.1%)
University certificate, diploma or degree ^f	316,675 (31.5%)	10,255 (12.4%)
In the labour force ^g	700,690 (69.7%)	51,785 (62.6%)
Unemployment rate (%)	6.6	7.8
Occupied dwellings—major repairs needed	31,660 (6.3%)	3,465 (8.3%)
Total number of households by tenure		
Owner	338,730 (67.9%)	32,425 (77.6%)
Renter	160,060 (32.1%)	9,320 (22.3%)
Median household total income—after tax (\$)		
One person-private households	36,080	26,894
Two-or-more-persons private households	80,341	65,070
Low-income status—after tax (aged 18-64)	11.6%	11.6%

Note. Data source ^a Statistics Canada (2013). *Gatineau, CMA, Ontario (Code 505)* (table). *National Household Survey (NHS) Profile*. 2011 National Household Survey. Statistics Canada (Catalogue no. 99-004-XWE). Ottawa.

^b Statistics Canada (2013). Renfrew, CTY, Ontario (Code 3547) (table). *National Household Survey (NHS) Profile*. 2011 National Household Survey. Statistics Canada (Catalogue no. 99-004-XWE). Ottawa.

CMA=Census metropolitan area. ^c Official languages are English and French. ^d Total population aged 15 and over. ^e Includes apprenticeship, college, CEGEP or other non-university certificate, and university certificate below bachelor level. ^f At bachelor level or above. ^g Total population aged 15 and over.

Appendix B

SEMI-STRUCTURED INTERVIEW PROTOCOL

Hello my name is Sean and I am a PhD student from the University of Ottawa. My main area of research is about youth volunteering in Canada. I will be asking you some questions about volunteering and your answers will be kept strictly confidential and used only for statistical purposes. Participation in this survey is voluntary and you do not have to answer questions that you feel uncomfortable with. There are no right and wrong answers but I encourage you to give as detailed responses as possible.

First, I will go through the consent form to make sure that you are comfortable with everything and answer any questions you may have. There is also a short questionnaire for you to fill out before the interview. [Go through consent]

[Administer the short questionnaire and thank them once it is completed].

Now, are you ready to get started?

I can start off by telling you a little about myself. My name is Sean, I'm in a PhD program in Psychology and my interest is in volunteerism. I enjoy watching movies, playing squash, and working out. In the future, I would like to continue doing research in community psychology.

1. **Can you tell me a little about yourself?** (Probes below)
 - a. What kinds of activities do you like?
 - b. What are you interested in doing in the future?

2. **In the past year, can you tell me about some things you did to help others in your community?** (Probe below)
 - a. This can include things you do on your own or with others (e.g., shoveling somebody's drive way, mowing the lawn, driving people around, helping with tutoring).
 - b. Do you help out with activities at your school?
 - c. Can you describe what you do? What were/are your responsibilities?

Don't directly ask them if they volunteered until they give a response. Then need to ask:

3. **In the past year, did you volunteer for an organization?**
 - a. Examples- Big Brothers & Sisters, hospitals, nonprofits.

If they say 'NO' to volunteering for an organization:

GO TO NONVOLUNTEER SECTION

If they answer YES

4. **Where did you volunteer? (name of the organization, an event, etc.)**

5. How often did/do you volunteer? (Probes below)

- a. How many hours did you volunteer? (e.g., weekly, in a day, depending on the activity)
- b. Was it during a specific time? (e.g., day of the week, only summer etc.). What was the schedule like?

6. Why did you decide to volunteer? (Probes below)

- a. Did somebody approach you or did you do this on your own? Who approached you? How did they ask you to volunteer? Do you know others who help out? (e.g., friends, family). Does this influence you?
- b. Any personal reasons? (e.g., to gain skills, for job opportunities). What kind of skills?
- c. Any other reasons?

7. Can you describe your experience(s) with volunteering?**a) Which of these was the best experience for you?**

Probes: What made this such a good experience? What were some things that you did? Can you tell me more?

b) Have you ever had a less successful or not so good experience?

Probes: What made this not so good? What did you not like about it? Can you tell me more?

8. Do you feel you have grown from this [these] experience(s) in anyway? (Probes below)

- a. This could be something you learned, a feeling you got, new networks you made etc.
- b. Has this volunteering changed you in anyway? (e.g., your attitudes, social or political views etc.).
- c. Did you develop any skills? What kind?

9. Do you think the activity you did was valuable?

- a. Was this task important? If yes, why do you think it was important? If no, why do you think it was not that important?
- b. Do you believe this task you did was helpful to others (and the broader society)? If yes, why do you think so? How was it helpful?

10. Did you feel appreciated by the organization you volunteered for? (Probes below)

- a. Do you think it was important for the organization that you were there? How did they show their appreciation?

- b. Were your opinions important to those you were volunteering for? If yes, can you tell me why? If no, can you explain more?
- c. Did they listen to your feedback? If you had suggestions or opinions about certain topics were they willing to listen to you?
- d. Did you feel like you were valued (e.g., did they know your name)? Did you feel you mattered?

11. Did you feel you made a difference to the people you directly helped? (Probes below)

- a. Was it considered meaningful? What was it about your volunteering that was meaningful?

12. Did you face any challenges in volunteering? (Probes below)

- a. Lack of time? Lack of opportunities? Getting there?
- b. Do you feel there are enough places in your community to volunteer (e.g., sport centres, recreational centers)?

13. Based on everything you told me here, what could be done to get young people more involved in their community? (Probes below)

- a. What would you like to see in volunteering for young people?
- b. Would you like any kind of recognition? Should volunteers be given anything for helping?

14. How would you like to learn about volunteer opportunities in your area? (Probes below)

- a. Newspaper, radio, posters in school, from teachers, online portal, Facebook?
- b. Why would you prefer these methods?

MANDATORY SERVICE

So this is a bit of a different section now. As you probably know, high school students are expected to complete forty hours of community service in order to graduate. Some people believe mandatory volunteering is important for high school students, while others believe it may not be so good.

15. In your experience do you think mandatory community service is a good thing or not so good thing? (Probes below)

- a. What is positive about it?
- b. What are some of the downsides? Why?
- c. What are some ways it can be improved? Should it be more structured? If so, how?

INFORMAL VOLUNTEERING

So far, we have focused on what is considered formal volunteering, which is volunteering on behalf of organizations. There is also informal volunteering, which includes helping people who live outside of your household—such as neighbours or friends—with activities such as yard work.

- 16. In the past year have you done any informal types of volunteering?** (Probes below)
- a. For example, babysitting, mowing the lawn, shovelling the driveway.

If 'YES'

- 17. What types of activities did you do? Can you tell me more?** (Probes below)
- a. Who did you help? How often did you do this?
- 18. What were some of your reasons for doing this/these activity(ies)?** (Probes below)
- a. Social reasons? To gain skills? Etc.

- 19. Do you consider this type of helping to be volunteering? Can you explain?**

If 'NO' [did not informally volunteer]

- 20. Okay. Well that is not uncommon. What were some of your reasons for not doing these types of activities?** (Probes below)
- a. Were you too busy? You don't know anybody? Etc.

Ask participants if there is anything they would like to add before concluding the interview. Conclude interview, thank interviewee for time and participation and give honorarium.

FOR NONVOLUNTEERS (FORMAL)

"Well this is not uncommon"

- 4. Were there any reasons why you did not volunteer?** (Probes below)
- a. Did you not have enough time, were you not interested?
 - b. Were there any other reasons? Finding places to volunteer? Getting there? Long-term commitment issues?
- 5. Do you feel you have lots of opportunities to volunteer?** (Probes below)
- a. Is volunteer work accessible to you? Do you know of many places to volunteer?
- 6. Do you know of others who volunteer? This can include family members, friends, and neighbours.** (Probes below)

If they answer **yes**

- a. What do they do? Where do they volunteer?
- b. Does this influence you? Why or why not?

If they answer **no**

- a. Do you know their reasons for not volunteering? (Probes: Too busy? No interest?). Have they ever volunteered before?
- 7. Do you think it's important for young people to volunteer?** (Probes below)
- a. If yes, how so? Can you explain? What are some things youth can get from volunteering?
 - b. If no, why not? Can you explain (e.g., why is it not so important).
- 8. Do you think volunteering is always positive?** (Probes below)
- a. Why? Can you tell me more? What about volunteering makes it positive? Are all volunteer activities positive?
 - b. Why not? Can you tell me more? Are there some things that are not positive about volunteering?
- 9. Are there other ways to help out in society?** (Probes below)
- a. Donating? Helping family? How are these activities helpful?
- 10. What could organizations do to get young people more involved in their community?** (Probes below).
- a. Better advertising? More opportunities for youth?
 - b. What would you like to see in volunteering for young people? More enjoyable activities?
 - c. Should volunteering be more accessible? How do you think these different options would influence volunteering? Can you explain why you think it would make young people more involved?

MANDATORY SERVICE

So, this is a bit of a different section now. As you probably know, high school students are expected to complete forty hours of community service in order to graduate. Some people believe mandatory volunteering is important for high school students while others believe it may not be so good.

- 11. In your experience do you think mandatory community service is a good thing or not so good thing?** (Probes below)

- a. What is positive about it?
- b. What are some of the downsides?
- c. What are some ways it can be improved?

INFORMAL VOLUNTEERING

So far, we have focused on what is considered formal volunteering, which is volunteering on behalf of organizations. There is also informal volunteering, which includes helping people who live outside of your household—such as neighbours or friends—with activities such as yard work.

- 21. In the past year have you done any informal types of volunteering?** (Probes below)
- b. For example, babysitting, mowing the lawn, shovelling the driveway.

If 'YES'

- 22. What types of activities did you do? Can you tell me more?** (Probes below)
- b. Who did you help? How often did you do this?
- 23. What were some of your reasons for doing this/these activity(ies)?** (Probes below)
- b. Social reasons? To gain skills? Etc.

- 24. Do you consider this type of helping to be volunteering? Can you explain?**

If 'NO' [did not informally volunteer]

- 25. Okay. Well that is not uncommon. What were some of your reasons for not doing these types of activities?** (Probes below)
- b. Were you too busy? You don't know anybody? Etc.

Ask participants if there is anything they would like to add before concluding the interview. Conclude interview, thank interviewee for time and participation and give honorarium.

Appendix C**Interview Summary Form**

Participant #:

City:

Date of Interview:

Interview completed by:

Recording:

Other notes:

Date Form Completed:

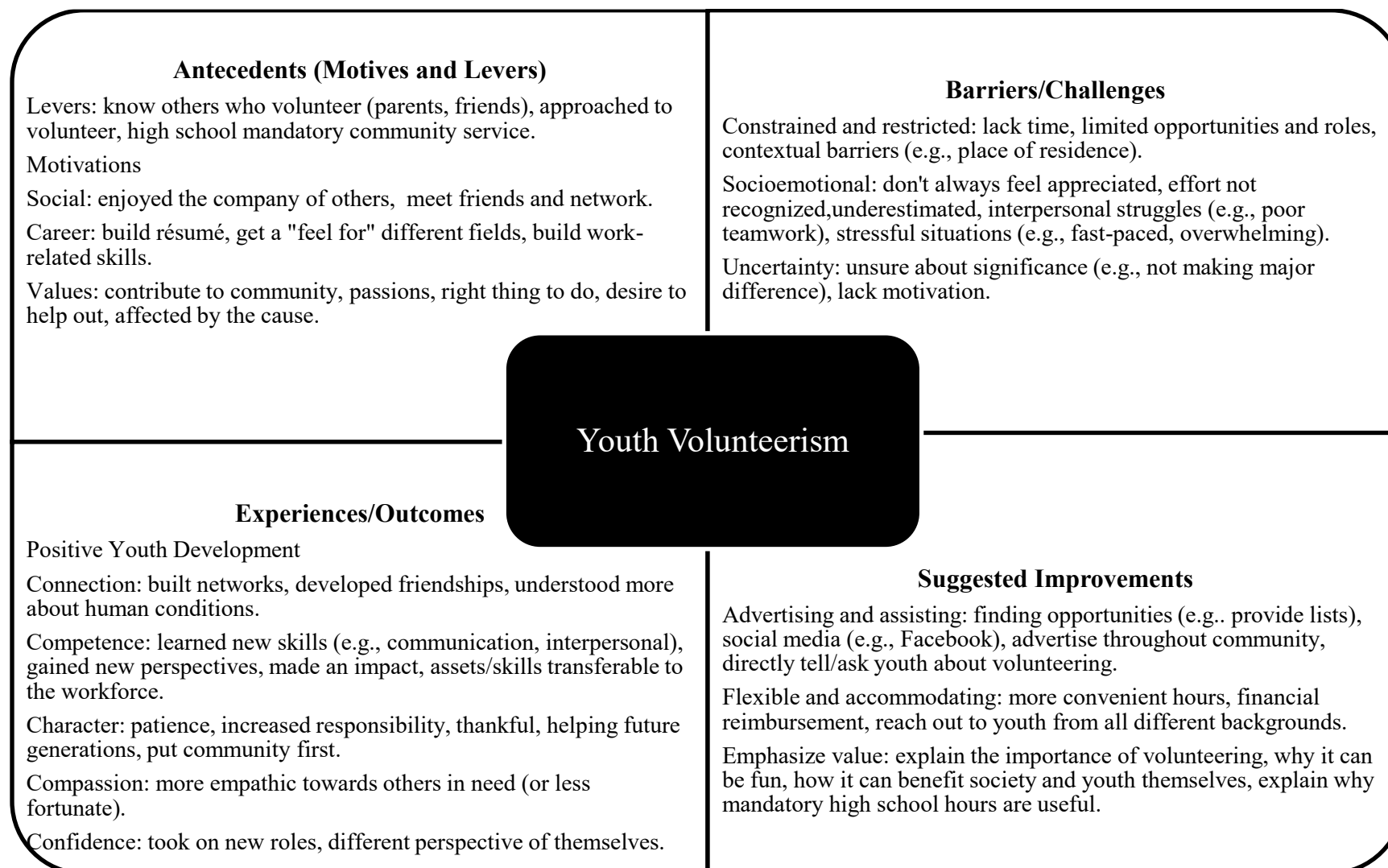
- 1. What were the main issues or themes that struck you during this interview?**

- 2. Summarize the information you got (or failed to get) from the interview.**

- 3. What else struck you as salient, interesting, illuminating or important about this contact?**

- 4. What are new issues or questions that could be pursued in other interviews?**

Appendix D



Note. Summary of key themes from youth interviews.

Running Head: NEIGHBOURHOOD PERCEPTIONS AND VOLUNTEERISM

Chapter 4: Study 3

Physical and Social Perceptions of the Neighbourhood and Youth Volunteerism

Sean Pearce and Elizabeth Kristjansson

University of Ottawa

Abstract

This study (N=300), employed online data from a sample of undergraduate students and traced the various pathways through which their neighbourhood perceptions (e.g., cohesion, satisfaction with amenities) impacted on their formal and informal volunteering. Path analyses revealed that neighbourhood cohesion directly predicted formal and informal volunteer frequency; as well, it mediated the relationship between satisfaction with neighbourhood amenities and informal volunteerism. Additionally, neighbourhood factors (e.g., aesthetics) were related to perceived barriers to formal volunteering (e.g., negative perceptions about organizations). Results also revealed that youth could be partitioned into different groups based on type (informal/formal) and intensity, and that certain neighbourhood predictors differentiated these clusters.

Neighbourhood cohesion was especially important to high informal volunteer clusters.

Neighbourhood characteristics may be important drivers of youth volunteerism. Stakeholders, organizations, and individuals, should consider the impact of the broader environmental context on shaping youths' helping behaviour, and the importance of community resources as levers to volunteering.

Keywords: volunteering, youth, neighbourhoods, informal volunteering, cohesion, neighbourhood satisfaction, cluster analysis

Physical and Social Perceptions of the Neighbourhood and Youth Volunteerism

Subjective appraisals of one's neighbourhood may be linked to an array of outcomes and behaviours, beyond what Geographic Information Systems or other objective measures can tell us (e.g., Plybon, Edwards, Butler, Belgrave, & Allison, 2006; Wen, Hawkley, & Cacioppo, 2006). For example, neighbourhood perceptual measures have been related to youth mental health, as well as to academic outcomes (e.g., Eamon & Mulder, 2005; Forehand & Jones, 2003; Plybon et al., 2006). In this paper, we examine the relationship between subjective perceptions of neighbourhood and youths' helping behaviours, specifically volunteerism. According to Bronfenbrenner (1979), individuals are nested within broader ecological systems, and these different contexts impact on human development. Since neighbourhoods can be part of an individual's identity, the image and perceptions of the neighbourhood may be crucial to how one interacts within their local living space (Forrest & Kearns, 2001).

Musick and Wilson (2008) posited that volunteering is a local occupation, therefore neighbourhood attributes may impact on the degree to which residents give their time freely to organizations and help others in their neighbourhood. Some urban sociologists would argue that the spatial and social composition of cities make them less conducive to social cohesion than in rural-agrarian societies; given the cosmopolitan nature of cities, networks may be more diverse (Hofferth & Iceland, 1998). It would seem that urban youth who share similar values and beliefs with other community members (i.e., stronger cohesion) may have a higher propinquity to engage in volunteerism because homophilic bonds nurture connections (e.g., see review by McPherson, Smith-Lovin, & Cook, 2001). Social networks, in turn, foster volunteerism (e.g., Wilson & Musick, 1997). Additionally, people who feel more satisfied with their neighbourhood in terms of the accessibility of resources and amenities, may be more invested in contributing to their neighbourhood. According to Leventhal and Brooks-Gunn (2000), the availability of

organizational resources (e.g., recreation centers, museums) can influence adolescent outcomes, such as reducing problem behaviours (e.g., Sampson, Raudenbusch, & Earls, 1997). It seems reasonable to hypothesize that community resources may also influence adolescent helping behaviour, because these amenities may offer more opportunities for community involvement. Yet, despite the abundance of literature on neighbourhoods and youth outcomes, more research is needed on how the neighbourhood environment relates to youth volunteerism.

Defining Neighbourhood Characteristics: A Brief Overview

Neighbourhood cohesion can be defined as feelings of connectedness and mutual support between people in a community and the cooperative manner in which they interact (e.g., Buckner, 1988; Obasaju, Palin, Jacobs, Anderson, & Kaslow, 2009; Sampson et al., 1997). Cohesion is concomitant with liberal values of inclusion, freedom, tolerance, and equity (Stanley, 2003); and encompasses ideas such as trust, norms of reciprocity, shared values, and the strength of associations that tie people together (e.g., Bruhn, 2009; Chan, To, & Chan, 2006; Maxwell, 1996; Sampson, 1997). Dempsey (2008) described key tenets of social cohesion: social networks, active participation, trust and reciprocity, safety, attraction to the neighbourhood, and sense of community.

The origins of sense of community trace back to Sarason (1974) who posited that feelings of kinship, shared values, and reduced feelings of loneliness, comprise the essence of this construct. Sense of community is composed of many elements, such as feeling a sense of belonging and caring for one another, and the belief that community needs will be met through the commitment to other group members (McMillan & Chavis, 1986). Cohesive groups have strong feelings of belongingness, “we-ness” and work in harmony to attain a common goal (e.g., Buckner, 1988; Hartman, 1981). From these definitions, it is clear that sense of community has

an emotional component, such that people are interconnected with others in their communities (Bess, Fisher, Sonn, & Bishop, 2002). These conceptualizations of cohesion have many overlapping elements. Social cohesion is a broad term which has been described as the ‘glue’ or bonds that hold people together. Neighbourhood cohesion is more focused on attributes of one’s local living space. In this paper, neighbourhood cohesion and social cohesion are used interchangeably as they are not clearly distinct in the literature.

The Link Between Cohesion, Neighbourhood Satisfaction, and Neighbourhood Problems

Recently there has been a prolific emergence of research on the impact of neighbourhoods on cohesion and satisfaction. Several physical properties of the neighbourhood, including shops, cafés, trees, greenspace, and aesthetics, have been linked to residential satisfaction (e.g., Andersen, 2008; Braubach, 2007; da Luz Reis & Lay, 2010; Potter & Cantarero, 2006; Young, Russel, & Powers, 2004), while perceptions of high crime and low safety have been related to reduced neighbourhood satisfaction (e.g., Grillo, Teixeira, & Wilson, 2010; James, Carswell, & Sweaney 2009; Livingston, Bailey, & Kearns, 2008; Parkes, Kearns, & Atkinson, 2002). Physical disorder may foster negative feelings toward one’s neighbourhood (e.g., Harris, 2001; Sampson & Raudenbush, 1999; Woldoff, 2002), whereas cleanliness of the environment has been related to higher neighbourhood satisfaction (e.g., Adriaanse, 2007; Aiello, Ardone, & Scopelliti, 2010; Basolo & Strong, 2002; Grzeskowiak, Sirgy, Lee, & Clairborne, 2006; Parkes et al., 2002).

Community satisfaction has been related to cohesion and enhanced sense of belonging (e.g., Austin & Baba, 1990; Grzeskowiak, Sirgy, & Widgery, 2003; Hand, Law, Hanna, Elliot, & McColl, 2012). In turn, neighbourhood cohesion has been linked to higher community participation, while neighbourhood problems are often related to lower participation (e.g.,

Bowling & Stafford, 2007; Chapman & Lombard, 2006; Glass & Balfour, 2003). King (2008) found that positive characteristics of the built environment (e.g., walkable sidewalks, minimal litter) were associated with higher participation in community activities, but this was mediated by social cohesion. Neighbourhoods with more facilities may be more cohesive because they offer more opportunities to socialize (Völker, Flap, & Lindenberg, 2007). Overall, higher neighbourhood social capital in the form of community resources, should foster greater participation among residents.

Perceptions of neighbourhood safety also impact on community participation (e.g., Freedman, Grafova, Schoeni, & Rogowski, 2008; Glass & Balfour, 2003; Hovbrandt, Stahl, Iwarsson, Horstmann, & Carlsson, 2007; James et al., 2009). Living in deprived and disordered neighbourhoods (e.g., crime, graffiti) may erode social cohesion because of reduced social exchanges in the neighbourhood (e.g., Clarke, Ailshire, Nieuwenhuijsen, & de Kleijn-de Vrankrijker, 2011; Letki, 2008), and may evoke fear in people (e.g., Lorenc et al., 2012; Sampson, Morenoff, & Gannon-Rowley, 2002). According to Wilson and Kelling's (1982) "Broken Windows" theory, dilapidated or unclean neighbourhoods may signal disorder, which can lead to the depletion of social interactions in the neighbourhood, due to feeling unsafe. People who perceive their neighbourhood to be physically unappealing and unsafe will prefer to remain indoors, which prevents them from building connections and meeting people.

Neighbourhood Perceptions and Volunteerism

Formal volunteering is unpaid help on behalf of organizations (e.g., Carson, 1999; Parboteeah, Cullen, & Lim, 2004; Smith, 1998), whereas informal volunteering is volunteering on one's own or directly helping neighbours and friends (e.g., Finkelstein & Brannick, 2007; Lee & Brudney, 2012; Smith, 1998; Voydanoff, 2001). Neighbourhood perceptions may be

differentially related to these two types of volunteering. Cohesion may be crucial to informal volunteering because it is tied more closely with directly helping people in the local neighbourhood. Cohesion may also be related to formal volunteering because members who have stronger feelings of belonging and we-ness may desire to build their communities through participation in local organizations.

A stronger sense of community has been related to greater participation in voluntary associations and organizations (e.g., Brodsky, O'Campo, & Aronson, 1999; Obst, Smith, & Zinkiewicz, 2002; Okun & Michel, 2006; Prezza, Amici, Roberti, & Tedeschi, 2001). For adults, sense of community has been related to proclivity to formally volunteer, social relationships, and feelings of empowerment (e.g., Lorion & Newbrough, 1996; McMillan & Chavis, 1986). Studies have reported that people with stronger sense of community and who felt more secure in their neighbourhoods were more likely to help others, vote, and volunteer (e.g., Schweitzer, 1996). In another study, older adults from Quebec, Canada, were more likely to volunteer if they were satisfied with their dwelling and had strong neighbourhood belonging (Richard, Gauvin, Gosselin, & LaForest, 2008). Further, residents who perceived greater accessibility to neighbourhood resources (e.g., restaurants, shops) and greater walkability had higher social participation (e.g., attended cultural events; Richard et al., 2008). Despite these findings, this study did not clearly define volunteering (i.e., whether it was limited to organizations). More research is necessary to determine whether there are different neighbourhood predictors for formal versus informal volunteerism.

Neighbourliness and availability of volunteer opportunities are also predictors of volunteering. Ahn, Phillips, Smith, and Ory (2011) found that older adults who were very satisfied with their community interactions (e.g., with neighbours, friends) were more likely to

formally and informally volunteer. Studies also showed that people were more involved in formal activities if they perceived greater volunteer opportunities in their neighbourhood and had frequent contact with neighbours (Buffel et al., 2013); if they felt connected, safe, and lived in neighbourhoods with more amenities (Dury et al., 2014); and if they had better quality activities in their neighbourhood, such as transportation (Bowling & Stafford, 2007). Interestingly, Dury et al. (2014) found residents who were less satisfied with their neighbourhood were more likely to volunteer, which suggests that these residents wanted to improve their neighbourhood. While neighbourhood satisfaction is related to cohesion and community participation, low satisfaction may also be an impetus for activism (Locke, Sampson, & Shepherd, 2001). People may volunteer to sustain the quality of their neighbourhoods or they may also volunteer to help strengthen local capacities and aid in community progress.

Neighbourhood Perceptions and Youth Volunteering

Little is known about the pathways between neighbourhood perceptions and youth volunteerism. Some research supports the idea that neighbourhood social capital (e.g., community trust) is related to youths' civic engagement (Lenzi et al., 2012). Kegler et al. (2005) examined adolescents' sense of community, and perceived neighbourhood and city concerns (e.g., job availability, safety), in relation to volunteerism—although it was not specified whether this was formal or informal. They found that community involvement was related to neighbourhood safety for African Americans and to sense of community for Native Americans. However, their measure of volunteering was binary (present versus absent), and therefore research is needed to understand how these variables relate to volunteer intensity. Strong community identity should encourage people to strive for collective action and solve community problems together. Indeed, Hellman, Hoppes, and Ellison (2006) found that students' sense of

community connectedness predicted intentions to participate in community service.

Duke, Borowsky, and Pettingell (2012) found that parental perceptions of neighbourhood social capital and resource availability (e.g., recreational centers, walking paths) predicted youths' proclivity to formally volunteer and was associated with higher volunteer frequency. There was no relationship between physical disorder (e.g., litter, vandalism) and youth volunteering. However, neighbourhood perceptions were only based on parents' responses. Further, the ubiquity of litter in streets and parks have been related to weakened productive relationships among residents (e.g., Sampson et al., 1997). Residents who feel they live in disordered neighbourhoods may have weaker cohesion and thus may be disinvested in constructive community activities.

Volunteer barriers may also be related to place characteristics. Some common barriers to youth formal volunteering include, age limitations, and lack of time, interest, and knowledge about opportunities (Sundeen & Raskoff, 2000). Many volunteer obstacles in the literature tend to focus on internal characteristics of the self (e.g., lack of skills), whereas fewer have examined place or organization characteristics. Barriers such as transportation or not knowing about opportunities (e.g., Ellis, 2004; Sundeen & Raskoff, 2000) may reflect broader, contextual obstacles. While some studies have examined a range of youth barriers to volunteering (e.g., Gage & Thapa, 2012; Sundeen & Raskoff, 2000), there is a need to explore these relationships with neighbourhood perceptions.

Other Measures of Social Capital and Volunteerism

Many other elements of social capital are related to volunteerism. Studies have found that people who spent frequent time with friends and family, and who were part of associations and civic memberships, devoted more time to volunteering (e.g., Jones, 2006; Smith, 1994; Wilson &

Musick, 1997). Further, people who belonged to voluntary groups relied heavily on social networks within the community (McPherson, Popielarz, & Drobnic, 1992). Spending more time with other people nurtures social interactions, building community ties, which are, in turn, related to volunteering (e.g., Smith, 1994; Wilson, 2000; Wilson & Musick, 1998). People who live longer in their community may have a stronger sense of place identity and more social networks, which makes them more driven to collective action and welfare (e.g., Fluery-Bahi, Felonneau, & Marchand, 2008; Macleod et al., 1996; Young et al., 2004). Religious attendance is also related to community integration because it connects people to their community (e.g., Park & Smith, 2000; Wilson & Janoski, 1995).

Despite the wealth of literature on social capital and volunteerism, studies have not examined the relative contribution of neighbourhood cohesion, neighbourhood satisfaction, and neighbourhood problems to youths' volunteering intensities; nor have they examined the potential interrelationships between these variables. This paper examines the different pathways through which youth perceptions of their neighbourhood may relate to formal and informal volunteer intensity. Additionally, we consider whether place characteristics relate to youth barriers to formal volunteering. Our models examined perceptions of neighbourhood problems (e.g., litter) and neighbourhood satisfaction (e.g., with facilities, streets) as precursors to neighbourhood cohesion. Theoretically, feeling safe in an aesthetically pleasing neighbourhood with more facilities to socialize would seem to foster cohesion.

Hypotheses

Hypothesis 1: Lower perceived neighbourhood problems and higher neighbourhood satisfaction will be related to higher neighbourhood cohesion. These neighbourhood attributes, as well as cohesion, will be related to higher formal and informal volunteer intensity.

Hypothesis 2: Higher perceived neighbourhood problems, lower neighbourhood satisfaction, and lower neighbourhood cohesion will be related to higher perceived barriers to formal volunteering. This, in turn, will be related to lower formal volunteer intensity.

Method

Participants

This study comprised a sample of undergraduate students from the University of Ottawa (N=306). Participants must have lived in the same neighbourhood for at least one year, so that they were familiar with the neighbourhood in which they were currently living (and to ensure that if they volunteered within the last year, that this was in the same area). Participants completed online questionnaires from Fluid Survey and received course credits for their participation.¹

Participants were aged 17-24 (M=19.36, SD=1.55). Seventy-eight percent (78%) of the sample were female (22% were male). A large proportion of students were in the highest household income category of \$100,000 or more (32%), and 77% had worked within the past 12 months. Over one third identified as a visible minority (37%), and many had lived ten years or longer in their current community (42%).

Measures

Neighbourhood cohesion. We used Buckner's (1988) Neighbourhood Cohesion Instrument. According to Buckner (1988), this unidimensional scale can be understood as one large cohesion scale consisting of three dimensions: neighbourliness, neighbourhood attraction, and sense of community. This 18-item scale has very high test-retest reliability ($\alpha=0.95$) and internal consistency ($\alpha=0.95$). It was also able to discriminate among three disparate neighbourhoods (Buckner, 1988). All items are presented on a 5-point scale. For ease of

interpretation we reversed the scale (1=*strongly disagree* to 5=*strongly agree*).

We conducted exploratory factor analysis to determine whether a one-factor solution held in our sample. Quartimax rotation was used as this is the suggested method when a one-factor solution is expected (Gorsuch, 1983). The scree plot suggested that one factor be retained, as well as the cumulative variance of 96%. Further, a one-factor solution is assumed if the ratio of the first eigenvalue to the second eigenvalue is greater than 3:1 (Gorsuch, 1983). In our analysis, this criterion was supported (6.63 versus 1.46). The scale had high reliability ($\alpha=0.91$).

Neighbourhood problems. We used a questionnaire from Ellaway, Macintyre, and Kearns (2001) to investigate participants' perceptions of the presence of neighbourhood problems. This 12-item scale was based on a Likert rating (1=*not at all a problem*, 2=*minor problem*, 3=*major problem*). The scale was reversed for statistical purposes. We modified items that did not seem to reflect Ottawa (e.g., Presence of needles/syringes replaced with "Presence of cigarette butts or beer bottles"). We conducted Principal Component Analysis (PCA) with Varimax rotation, which revealed three eigenvalues greater than 1 and 56% variance explained. However, the scree plot suggested only two factors, and this solution was more interpretable. Thus, we conducted PCA with a 2-fixed factor. We eliminated one item that did not contribute to a relevant factor structure: "Nuisance from dogs." The two factors (outlined below), explained 51% of the variance. Each scale was summed and averaged to yield final scores.

Environmental Problems. This scale comprised seven items (e.g., "Vandalism", "Presence of cigarettes butts or beer bottles", "Smells/fumes"; $\alpha=0.84$).

Safety Problems. This scale comprised five items, for example, "Disturbance from children or youngsters", "Uneven or dangerous pavements" ($\alpha=0.70$). The item "Lack of safe places for children to play" had a cross loading with 'Environmental problems', but loaded

higher on the ‘Safety problems’ factor. The item “Burglaries” had a higher loading on ‘Environmental problems’ but was approaching the 0.40 cut-off for ‘Safety problems’. We included it in the latter subscale based on theoretical grounds.

[Insert Table 1 here]

Neighbourhood satisfaction. We adapted a questionnaire from the European Commission (2013) as we were not aware of any validated scale applicable to a Canadian context. Participants were asked to rate their level of satisfaction with 12 different neighbourhood features (1=*not at all satisfied* to 4=*very satisfied*). We conducted PCA with Varimax rotation. Two eigenvalues were greater than 1 with a total explained variance of 50%.

Satisfaction with Neighbourhood Amenities. This subscale consisted of seven items (e.g., “Availability of public spaces such as markets and pedestrian areas”, “Availability of libraries or cultural centers”; $\alpha=0.80$). One item with a cross loading (“Availability of good quality, affordable food”) was included in this subscale as it was considered an amenity.

Satisfaction with Neighbourhood Attractiveness. This factor consisted of five items (e.g., “The state of the streets”, “The state of buildings”; $\alpha=0.78$).

[Insert Table 2 here]

Barriers to volunteering. As a framework, we adapted a questionnaire from Cheang and Braun (2001) on senior barriers to formal volunteerism. These researchers addressed participants in terms of incentives to volunteer, such as “*I would start or do more volunteer work if*”, whereas we rephrased the question by asking respondents the degree to which they perceived each item to be a barrier to formal volunteering (1=*very much* to 5=*not at all*).

We initially conducted PCA with Varimax rotation and found that some items did not contribute to a simple factor structure (e.g., “There are financial costs with volunteering”,

“Nobody asked”), thus these items were dropped. Then, we conducted PCA with Varimax rotation and found that a three-factor solution best fit the data. These factors accounted for 50% of the variance explained. The scale comprised 20 items.

Time Constraints. This factor consisted of five items and was related to time barriers (e.g., “I am too busy with other interests and hobbies”, “I cannot commit long-term”; $\alpha=0.74$). One item had a cross loading (“Volunteer hours are not convenient”), but we included it in this factor on theoretical grounds.

Insecurities. This factor had four items (e.g., “I feel I do not have the skills to do a good job”, “I don’t feel confident to volunteer”; $\alpha=0.74$).

Attitudes Toward External Factors. The third subscale consisted of 11 items related to perceptions toward factors outside the self, such as organizations (e.g., “I don’t think volunteer organizations would appreciate or recognize my work”, “There are no volunteer opportunities offered by a group or organization that I belong to”; $\alpha=0.88$).

[Insert Table 3 here]

Formal and informal volunteering. These items were adopted from the Canada Survey of Giving, Volunteering and Participating (CSGVP). Formal volunteering frequency was assessed on a Likert scale based on how often participants volunteered without pay on behalf of an organization within the last 12 months (1=*not at all* to 6=*daily or almost daily*). For informal volunteering, participants were asked the following question: In the past month how often did you help relatives, neighbours, friends, or community members (who live outside your home) with activities that were not on behalf of an organization? This was assessed on a 4-point Likert scale (1=*did not informally volunteer* to 4=*daily or almost daily*) and was based on how often participants volunteered within the past month (rather than past 12 months). Informal activities

may be less structured and less time-consuming, and thus a shorter time frame would ensure that it would be more accurate for participants to remember these activities.

Statistical Analysis

After our factor analysis revealed two factors for neighbourhood satisfaction, we considered satisfaction with neighbourhood amenities and satisfaction with neighbourhood attractiveness in different models. The direction of our hypotheses remained the same except that we tested these two forms of neighbourhood satisfaction separately. Theoretically, these factors appear to be distinct; neighbourhood amenities may be more strongly associated with neighbourhood cohesion because of greater opportunities for social interactions.

Model 1. All variables, including satisfaction with neighbourhood amenities, directly predicted neighbourhood cohesion, and also informal and formal volunteer outcomes.

Model 2. All variables, including satisfaction with neighbourhood attractiveness, directly predicted neighbourhood cohesion, and also informal and formal volunteer outcomes.

Figure 1 outlines an example of one of our proposed models (Model 1).

[Insert Figure 1 here]

We conducted path analyses in Stata version 14.0 to estimate model parameters using correlation matrices for standardized coefficients. All variables in the models were manifest (i.e., observed) variables. The following indices of model fit were assessed: Root mean square error of approximation (RMSEA), Likelihood-ratio χ^2 goodness-of-fit test, relative χ^2 index (χ^2/df), Comparative fit index (CFI), Tucker-Lewis Index (TLI), and the standard root mean squared residual (SMRM; see Hooper, Coughlan, & Mullen, 2008 for guidelines). Briefly, a RMSEA of 0.05 is considered moderate to some researchers (e.g., MacCallum, Browne, & Sugawara, 1996), and to others, any value below 0.08 is reasonable (e.g., Browne & Cudeck, 1992; Kline, 2005). A

relative chi-square of less than five is considered adequate (Schumacker & Lomax, 2004; Wheaton, Muthen, Alwin, & Summers, 1977) or one where the degrees of freedom is close to the chi-square value (e.g., Thacker, Fields, & Tetrick, 1989). Some researchers suggested that the TLI and CFI should be greater than 0.95 and the SMRM less than 0.08 (see review by Hu & Bentler, 1999).

To test possible mediation within different parts of the paths, bootstrapping was used to obtain precise standard errors and bias-corrected confidence intervals (MacKinnon, Lockwood, & Williams, 2004; Preacher & Hayes, 2008). This method is powerful for obtaining accurate confidence intervals for indirect effects (e.g., Briggs, 2006; Williams & MacKinnon, 2008), and it has higher power, greater ability to prevent type 1 error, and is more useful for smaller samples (MacKinnon et al., 2004; Preacher & Hayes 2004, 2008). Bootstrapping methods have been shown to be more accurate than methods that “assume symmetry and normality of the sampling distribution of the indirect effect” (Preacher & Hayes, 2008, p. 884). An effect was considered significant if it lacked zero in its confidence interval.²

Investigating Volunteer Clusters

We conducted k-means cluster analysis to determine whether participants would cluster into different groups based on their formal versus informal volunteer intensity. Somebody who volunteers frequently on behalf of organizations may not necessarily be engaged in informal types of helping, or vice versa. These two types of volunteering have different characteristics; formal volunteering requires more resources (e.g., income, education), whereas informal volunteering is more accessible to everyone (Mitani, 2013; Wilson & Musick, 1997).

If volunteers can be grouped into different clusters, we believe that different predictors would differentiate these clusters. Informal volunteering may involve direct interactions with

people in the local neighbourhood (e.g., Finkelstein & Brannick, 2007), and thus, high informal volunteers may especially be influenced by neighbourhood perceptions, compared to high formal volunteers. Informal volunteerism may naturally entail ongoing interactions within a spatially bound, geographical vicinity, where sense of cohesion may play a pivotal role. Given the dearth of studies on volunteer clusters, these analyses were more exploratory.

Results

Demographics and Sociodemographics

This sample scored moderately high on neighbourhood cohesion (1=low cohesion to 5=stronger cohesion; $M=2.99$, $SD=0.70$). Youth scored moderately high on satisfaction with neighbourhood amenities ($M=3.15$, $SD=0.54$) and satisfaction with neighbourhood attractiveness ($M=3.24$, $SD=0.53$). Youth also felt that neighbourhood environment problems were low ($M=2.56$, $SD=0.44$), as were safety problems ($M=2.64$, $SD=0.37$). External barriers were perceived as moderate obstacles to formal volunteering ($M=3.73$, $SD=0.66$).

Age was not related to informal ($r=0.07$, $p >.05$) or formal volunteering ($r= -0.05$, $p >.05$). There was no gender difference in informal volunteering, $t(302)=0.40$, $p >.05$, or formal volunteering $t(302) = -1.26$, $p >.05$. There was no difference between visible minorities and Caucasian youth in either formal $t(303) = -0.06$, $p >.05$, and informal volunteering $t(305) = -0.76$, $p >.05$. One-way ANOVA revealed no difference between religious attendance groups (no attendance, 1-4 times a year, monthly, weekly) in their informal volunteering $F(3, 302) = 1.25$, $p >.05$, and their formal volunteering $F(3, 300) = 2.07$, $p >.05$. Residents' economic conditions may impact on their cohesion and neighbourhood satisfaction. However, in this sample there was no difference between household income groups (less than \$20,000; \$20,000-\$39,999; \$40,000-\$59,999; \$60,000-\$99,999; \$100,000 or more; and not stated) in neighbourhood cohesion, $F(5,$

300) = 1.18, $p > .05$. Further, neighbourhood satisfaction with amenities did not differ by income group, $F(5, 300) = 0.74$, $p < .05$, nor did satisfaction with neighbourhood attractiveness, $F(5, 300) = 1.92$, $p < .05$. Therefore, we did not use any of these variables as covariates in our path models.

Path Models

Relationships between neighbourhood perceptions and volunteer intensities.

Model 1: Satisfaction with neighbourhood amenities. We found that Model 1 was identified as the number of parameters did not exceed the number of observations (Kline, 2005). After running the model, we found that the parameter estimates were null for direct paths from safety and environment problems to formal volunteering ($z = -1.58$ and 0.20 , respectively) and to informal volunteering ($z = -1.24$ and -1.04 , respectively). To consider more parsimonious models, we eliminated direct pathways (i.e., constrained the paths to zero) from neighbourhood problems to volunteer outcomes (Model 3).

This revised model (Model 3) demonstrated better fit than Model 1 for most of the indices (e.g., RMSEA=0.04; CFI=0.96; SRMR=0.03). This difference in model fit was significant (LR $\chi^2=5.11$, $df=4$, $p > .05$). The difference in Bayesian Information Criterion (BIC) between the two models also suggested that Model 3 was the better fit ($BIC_i=4,722.72$; $BIC_{min}=4,705.01$; $\Delta BIC=17.71$). A lower BIC reflects better fit and a difference greater than 10 in criterion values constitutes a very strong difference (Kass & Raftery, 1995).

Figure 2 shows the pathways leading to informal and formal volunteer frequency for Model 3. Lower perceived neighbourhood safety problems were positively related to satisfaction with neighbourhood amenities ($\beta=0.33$, $p < .05$), while lower perceived environment problems directly predicted neighbourhood cohesion ($\beta=0.19$, $p < .05$). Hypothesis 1 was not fully

supported because only neighbourhood cohesion subsequently predicted higher informal and formal volunteer intensity ($\beta=0.17$ and 0.14 , respectively). Satisfaction with neighbourhood amenities only had a direct path to informal volunteering ($\beta=0.14$, $p < .05$). Neighbourhood cohesion also partially mediated the path from satisfaction with amenities to informal volunteering ($\beta=0.05$, $SE=0.02$ CI [0.02 , 0.08]).

[Insert Figure 2 here]

Model 2: Satisfaction with neighbourhood attractiveness. Model 2 had decent fit, but similar to our first model, there was no direct paths from perceived neighbourhood problems to informal and formal volunteering, thus we removed these paths to consider a more parsimonious model (Model 4). This revised model had better fit (e.g., $RMSEA=0.03$; $CFI=0.99$; $SRMR=0.03$), and this improvement was significant ($LR \chi^2=3.01$, $df=4$, $p > .05$). The difference in BIC was also considered very strong ($BIC_i=4,662.78$; $BIC_{min}=4,642.98$; $\Delta BIC=19.80$). Comparison of fit indices across all of our models (i.e., original and revised) is shown in Table 4.

[Insert Table 4 here]

In Model 4, neighbourhood safety and environment problems directly impacted on satisfaction with neighbourhood attractiveness ($\beta=0.19$ and 0.32 , respectively) but did not contribute directly to neighbourhood cohesion. Neighbourhood attractiveness had no direct relationship to informal or formal volunteering. All other pathways leading to volunteer outcomes were similar to the model that considered satisfaction with neighbourhood amenities (i.e., Model 3).

[Insert Figure 3 here]

The direct, indirect, and total effects for the two parsimonious models predicting formal and informal volunteer intensity are provided in Table 5.

[Insert Table 5 here]

Relationship between neighbourhood perceptions and volunteer barriers.

We focused on the barriers subscale, *attitudes toward external factors*, to determine whether there were any relationships between these barriers and different neighbourhood perceptions. Our models followed the same pattern as our previous analyses; one model considered satisfaction with neighbourhood amenities (Model 1), and another considered satisfaction with neighbourhood attractiveness (Model 2). We eliminated direct paths from neighbourhood problems to perceived barriers. We also constrained the path from time resided in the community to neighbourhood cohesion as there was no relationship in our previous models.

Model 1 had good fit (RMSEA=0.01; CFI=1.00; SRMR=0.02) and explained 16% of the variance. Higher satisfaction with neighbourhood amenities was associated with lower perceived external barriers ($\beta=0.22$, $p < .05$). In turn, lower perceived external barriers predicted higher formal volunteering intensity ($\beta=0.30$, $p < .001$). Once barriers were taken into account, neighbourhood cohesion only had a marginal direct impact on formal volunteering ($\beta=0.11$, $p=0.06$). Figure 4 traces the paths of each variable.

Model 2 had good fit (RMSEA=0.03; CFI=0.98; SRMR=0.02) and explained 13% of the variance. Higher neighbourhood cohesion and higher satisfaction with neighbourhood attractiveness were associated with lower perceived external barriers ($\beta=0.12$ and 0.13 , respectively). Neighbourhood cohesion partially mediated the relationship between satisfaction with neighbourhood attractiveness and perceived barriers ($\beta=0.03$, $SE=0.02$ CI [0.00, 0.08]). The path diagram is illustrated in Figure 5. Overall, hypothesis 2 was partially supported; higher neighbourhood cohesion (in one model) and both measures of neighbourhood satisfaction were related to lower perceived barriers to formal volunteering.

[Insert Figure 4 and Figure 5 here]

Results for Volunteer Clusters

We conducted k-means cluster analysis to determine whether there were distinct groups based on volunteer type (informal/formal) and level of intensity. We tested different standardization strategies suggested in the literature: z-score transformation and division by the range (e.g., Milligan & Cooper, 1988; Steinley, 2004; Tanioka & Yadohisa, 2012). The results suggested that division by the range was more effective, as has been shown in other simulation studies (Milligan & Cooper, 1988). Some studies reported that z-transformation strategies were inferior to other standardization techniques (e.g., Milligan & Cooper, 1988; Steinley, 2004). Standardizing by division by the range produced four groups with similar frequencies, whereas z-transformation produced three groups.

To evaluate the optimal number of clusters, we applied the Caliński-Harabasz pseudo F, which is one validity measure of nonhierarchical cluster analysis. The larger pseudo F index value for the range division (394.21) versus the z-transformation (279.61), suggested a better solution; the clusters were more distinct (Caliński & Harabasz, 1974). From here we tested different k values (3, 4, 5, and 6) using the Caliński-Harabasz index, and found four clusters remained to be the best solution. For further validation, we randomly split the dataset in half (n=153) and conducted k-means clustering on this subsample with k=4 groups. The same groups were retained.

Experts have also recommended using two-stage processes for k-means clustering. For example, they have suggested that investigators initially conduct hierarchical analysis (rather than nonhierarchical) to further validate the optimal number of clusters (Short, Ketchen, Palmer & Hult, 2007). We used Ward's method, which aims to minimize the within-cluster variance or

error sum of squares (Ward, 1963). We applied the Duda–Hart stopping rule and found that the largest $Je(2)/Je(1)$ value of 0.604 and the lowest pseudo- T -squared value of 87.52 corresponded to four groups, which supported four groups as being the optimal number of clusters (Duda, Hart, & Stork, 2001; Milligan & Cooper, 1985). Finally, a two-way scatterplot revealed that four groups was the best solution as the clusters appeared to be distinct (Appendix A).

Euclidean distance was used as the (dis)similarity measure, unique observations were set at random as starting centers, and the number of iterations in the clustering algorithms was set to 10,000 as per the default in Stata (Makles, 2012). The four volunteer clusters included: unengaged (low formal and low informal, $N=65$), stalwarts (high formal and high informal, $N=78$), structure-oriented (high formal but low informal, $N=76$), and informal helpers (high informal but low formal, $N=85$). These clusters are presented in Table 6.

[Insert Table 6 here]

Differentiating Clusters: Multinomial Logistic Regression

We then conducted a multinomial logistic regression to determine predictors of the four groups (reference category was the unengaged cluster). Multinomial logistic regression is an extension of logistic regression, but differs in the nature of the dependent variable: there are more than two levels (e.g., Tabachnick & Fidell, 2001). In our case, the outcome variable consisted of four clusters. The categorization of each variable and results are presented in Table 7. Predictors included, length of community residence, knowing others who volunteer, and belonging to social groups. The same neighbourhood perception variables were used as in the path analyses. Additionally, we asked participants whether they believed that more volunteers were needed in their community (1=*strongly disagree* to 5=*strongly agree*).

After running the model, we found that safety and environmental problems were not

significantly related to any of the clusters, thus we removed them and found that the new model performed much better (new model BIC=963.04; old model BIC=931.55; Δ BIC=31.50). The assumption of Independence of Irrelevant Alternatives (IIA) was met (both Hausman-McFadden, 1984 and Small-Hsiao tests, 1985).

The model was significant, LR $\chi^2(27) = 66.04$, $p < .001$. The relative risk of being a structure-oriented volunteer over an unengaged volunteer was especially higher for youth enrolled in school *and* extracurricular groups, compared to youth in no groups (RR= 2.53, 95% CI [0.99, 6.43], $p < .05$). A one-unit increase in perceiving that more volunteers are needed in the community was related to a higher relative risk in the structure-oriented group, relative to the unengaged group (RR=1.46, 95% CI [1.01, 2.13], $p < .05$).

The risk that a student belonged to the informal helper group over the unengaged volunteer group was 1.80 times greater (increase about 80%) with each one-unit increase in neighbourhood cohesion, and 2.08 times greater for each one-unit increase in satisfaction with neighbourhood amenities.

Higher perceived neighbourhood cohesion and satisfaction with neighbourhood amenities predicted membership in the stalwart group relative to the unengaged group (RR=2.29 and 2.84, respectively). The risk that a student belonged to the stalwart group rather than the unengaged group was 1.86 times greater with each one-unit increase in perceiving that more volunteers are needed in the community. Overall, neighbourhood perceptions (cohesion, satisfaction with amenities) were particularly important for any cluster combination that involved high intensity informal volunteers.

[Insert Table 7 here]

Discussion

The present study traced the various pathways through which neighbourhood perceptions related to youth formal and informal volunteerism. In this sample of youth, positive perceptions of neighbourhood attributes translated into greater community engagement. Neighbourhood cohesion was especially related to informal volunteering (i.e., helping neighbours, relatives, or friends directly). This type of helping may lead to the formation of close interactions with people in the neighbourhood. We also found that youth could be grouped into different clusters based on their informal and formal volunteer frequencies, and that different characteristics were associated with these clusters. This underscores the importance of studying informal and formal volunteerism as distinct streams of prosocial behaviour. For example, neighbourhood factors may be particularly important to high informal volunteer clusters.

Pathways to Youth Volunteerism: The Importance of Neighbourhood Cohesion

Neighbourhood cohesion may play a key role in shaping youths' philanthropic behaviour. Neighbourhoods that are more cohesive can cultivate social exchanges and companionship, which promotes participation in the community (e.g., Bromell & Cagney, 2014; Echeverría, Diez-Roux, Shea, Borrell, & Jackson, 2008; Forrest & Kearns, 2001). People who feel a stronger sense of belonging to their neighbourhood may work together to maintain these feelings of solidarity. Conversely, weaker cohesion can deplete social interactions (Forrest & Kearns, 2001) and decrease community participation (e.g., Latham & Clarke, 2016).

Cohesion may be greatly influenced by neighbourhood satisfaction. People who perceive greater accessibility to and availability of social resources (e.g., recreational centers) may develop stronger feelings of cohesion because these amenities act as conduits to socializing (Völker et al., 2007). Similarly, positive perceptions of the built environment (e.g., aesthetics)

have been linked to place attachment and social cohesion (e.g., Arnberger & Eder, 2012; de Vries, van Dillen, Groenewegen, & Spreeuwenberg 2013; Lewicka, 2011; Litt, Schmiege, Hale, Buchenau, & Sancar, 2015). People who are more satisfied with their neighbourhood and who feel a sense of place may be more committed to informal and formal community activities (e.g., Dallago, Perkins, Santinello, Boyce, Molcho, & Morgan, 2009; Manzo & Perkins, 2006).

We found that perceived safety problems were not related to cohesion. This is inconsistent with the literature. For example, Hand et al. (2012) found that perceptions of safety indirectly predicted community participation through social cohesion. In our sample, safety problems may not have been severe enough to influence feelings of cohesion. Many past studies were also performed in U.S. cities, where safety issues are much worse than in Canada. For example, the murder rate per million people is 16.23 in Canada versus 42.01 in the U.S (NationMaster, 2014). These objective measures of safety also tend to match perceived perceptions. One study revealed that a majority of Canadians felt that indicators of social disorder (e.g., graffiti, noise) were not a major problem in their neighbourhoods (Brennan, 2011). Further, Ottawa specifically may be safer than many other regions in Canada. According to Statistics Canada (2015), the crime rate in Ottawa—which was based on criminal code incidents—was only 3,329 (per 100,000), which is below the national rate of 5,198. Other measures may be more important to Canadian youths' cohesion, such as the values and culture of their neighbourhood.

We also found that perceived neighbourhood problems were not directly related to volunteering. Safety problems indirectly impacted on informal volunteering through satisfaction with neighbourhood amenities. In contrast, earlier studies found that physical and social properties of the neighbourhood that signal disorder (e.g., cracked sidewalks, crime), limited

social participation (e.g., Browning, Cagney & Boettner, 2016; Latham & Clarke, 2016). However, the bulk of this literature was specific to older adults. Environmental and safety problems may be more salient to older adults' volunteering—they may feel more vulnerable to crime, rely more on neighbourhood resources, and face greater mobility challenges (Oswald & Wahl, 2005). Neighbourhood problems may be less of a deterrent to youth volunteerism. Volunteering may be more easily accessible to youth than older adults (e.g., walkability issues), and therefore youth may engage in volunteering, despite negative perceptions of environmental or safety conditions.

We found that satisfaction with neighbourhood amenities (Model 3) but not aesthetics (Model 4) directly predicted informal volunteering. Access to amenities and transit stops has been linked to increased interactions with neighbours, which may encompass informal helping (Child, Scoffman, Kaczynski, Forthofer, Wilcox, & Baruth, 2016). Whether students perceive their neighbourhood as less attractive or not (e.g., litter, state of buildings) may not be critical to their informal helping because this measure may be more superficial than satisfaction with neighbourhood resources/amenities. Another explanation may be that youth who perceive their neighbourhoods to be less attractive may actually be volunteering to improve their neighbourhood (e.g., picking up litter). Dury et al. (2014) found that residents who were less satisfied with their neighbourhood volunteered more. Neighbourhood unattractiveness is more amenable to change compared to lack of neighbourhood amenities.

Neighbourhood Perceptions and Perceived Barriers to Volunteerism

Youth who have higher dissatisfaction with neighbourhood amenities may generalize these feelings toward voluntary organizations. Previous studies identified volunteer challenges, including: incongruities between volunteers' philosophies and those of the organization (Pantea,

2012); feeling incapable of making a difference (e.g., Kulik, 2007); and tensions between volunteers and organizations, arising out of feelings of injustice and disparate work ethic (e.g., Kreutzer & Jäger, 2010; Pantea, 2012). We build on these findings by suggesting that these types of barriers may be influenced by perceptions of the broader, contextual environment. Youth who reported weaker neighbourhood cohesion may have also felt disconnected from organizations in their area of residence.

Youth may also internalize poor neighbourhood aesthetics as a barrier to volunteerism; they may have weaker local identity and feel negatively toward organizations if they perceive their environment to be unappealing. When youth are asked about external barriers to volunteering they may readily form mental representations about their environmental surrounding, including amenities and aesthetics. Once youth form these negative impressions, they may subsequently become disengaged from voluntary associations.

Understanding Volunteer Clusters

Youth were clustered based on volunteer type and intensity. Belonging to social groups (e.g., extracurricular activities) predicted membership in the structure-oriented cluster (i.e., high formal/low informal cluster). Youth who are involved in formal activities and secondary associations (e.g., sports, student government) tend to be more engaged in formal volunteering (e.g., McLellan & Youniss, 2003; Wilson & Musick, 1997; Zaff, Moore, Papillo, & Williams, 2003). We found that having both friends *and* parents who volunteer did not predict any clusters. We may have found greater differences if we compared ‘neither friends nor parents volunteer’ versus both volunteer, but we could not examine this because many participants knew at least somebody who volunteered.

Perceiving that more volunteers were needed in the community was related to the

stalwarts and the structure-oriented group. When youth are asked about ‘volunteering’ they may schematize concepts related to formal volunteering. For example, urban youth who informally volunteer frequently may view this type of helping as merely doing good deeds (Pearce, Kristjansson, Lemyre, & Takacs, manuscript in preparation). Handy and colleagues (2001) found that scenarios which most people perceived as volunteering, seemed to reflect formal rather than informal volunteerism (e.g., helping the homeless, Big Brothers and Big Sisters programs). The findings from the present study also suggest that youth who perceived that more volunteers were needed in their community, were more invested in volunteerism, possibly to transform or restore aspects of their community.

Neighbourhood perceptions were more important to clusters that included high informal volunteers (stalwarts and informal helpers). Informal volunteering usually involves acquaintances to whom people may be attached (Stürmer, Siem, Snyder, & Kropp, 2006; Wilhelm & Bekkers, 2010). Formal volunteering involves an organization mediating the relationship between the recipient and volunteer, and thus the volunteer may feel less attached to the out-group (Stürmer et al., 2006). Cohesion may be more important to informal volunteering because this involves direct contact with the recipients. Additionally, formal volunteering involves a particular place and time, whereas people can carry out informal activities in “familiar areas freely” (Mitani, 2013, p. 1026). Youth who perceive strong neighbourhood cohesion may preserve this cohesion by helping neighbours and friends. Volunteering directly with recipients in a less structured environment may nurture bonds between community members.

Satisfaction with neighbourhood amenities was also important to high informal volunteer clusters. Social infrastructure and amenities can prevent social isolation, promote social contact, and attract people to interact in their community, if within walkable distance (e.g., Klinenberg,

2002; Litman, 2003). Neighbourhood amenities are conducive to social exchanges and act as social resources, which lay fertile grounds for cohesion and social interactions to form, thus encouraging shared community participation. These neighbourhood resources may especially be important for youth who are more vulnerable to exclusion in urban centres (e.g., new to the area, lack social connections).

Limitations and Future Directions

To our knowledge, this is the first study to examine how neighbourhood perceptions influenced formal and informal volunteer frequency among a sample of Canadian youth. There are limitations to our study that need to be addressed. First, our analyses were based on cross-sectional data. Path analyses cannot infer causality but rather only examine theoretical relationships. We investigated how neighbourhood factors such as cohesion may predict volunteerism, whereas these relationships are often bidirectional. Studies have shown that volunteering led to stronger feelings of cohesion, sense of belonging, and community attachment (e.g., Boeck, Makadia, Johnson, Cadogan, Salim, & Cushing, 2009; Crook, Weir, Willms, & Egdorf, 2006; Dassopoulos & Monnat, 2011; Guo, 2014). We did not include bidirectional relationships in our models as this would have made them nonrecursive. Further, some constructs may be better represented as predictors versus outcomes (e.g., neighbourhood problems). Future studies should employ longitudinal designs to gain a clearer understanding about the direction of causation. Multilevel modeling techniques may be beneficial to more directly test Bronfenbrenner's socio-ecological theory and explore how factors at the neighbourhood-level impact on volunteerism. For example, neighbourhoods with higher levels of cohesion may have higher volunteer rates, which could open the possibility of neighbourhood-level interventions to promote social cohesion at large. Further, studies should also consider objective measures of the

neighbourhood (e.g., census tract) and their relationship to youth volunteerism. For example, neighbourhood income, ethnic heterogeneity, and residential instability may influence youths' helping behaviour. We only used perceptual measures and therefore did not control for objective measures of neighbourhood disadvantage, which may also be linked to cohesion and volunteerism.

This study only examined neighbourhood perceptions in one Canadian city and may not be generalizable to other areas and cities. Future studies should examine whether these findings are maintained, especially in more economically/socially deprived neighbourhoods where the results may be even stronger. Additionally, future studies should consider differences in cohesion and informal and formal volunteering, in both urban and rural neighbourhoods. In some studies, rural Canadians reported stronger sense of belonging to their community than nonrural Canadians (e.g., Kitchen, Williams, & Chowhan, 2012; Looker, 2014); and had higher levels of trust, safety, community connections, and participation in local affairs (Onyx & Bullen, 2000). Strong sense of belonging in rural areas fosters solidarity and cohesion (e.g., Caldwell & Boyd, 2009), which may especially be linked to helping behaviour.

Conclusion

This study contributes to the literature by suggesting that perceptions of the broader, neighbourhood environment are important to youth volunteerism in one Canadian city. Youth who scored higher on neighbourhood cohesion and satisfaction with amenities were more engaged in volunteerism, especially informal volunteering. Youth with lower cohesion and satisfaction with their neighbourhood (both amenities and aesthetics) experienced more external volunteer barriers. When youth were portioned into different volunteer clusters based on informal/formal intensity, neighbourhood cohesion was particularly important to groups that

included high informal volunteers. Strategies to recruit young volunteers should consider different methods to foster cohesion in the larger environment because high sense of belonging and community may increase youths' proclivity to contribute to a common collective.

References

- Adriaanse, C.C.M. (2007). Measuring residential satisfaction: A residential environmental satisfaction scale (RESS). *Journal of Housing and the Built Environment*, 22, 287-304. doi:10.1007/s10901-007-9082-9
- Ahn, S., Phillips, K.L., Smith, M.L., & Ory, M.G. (2011). Correlates of volunteering among aging Texans: The roles of health indicators, spirituality, and social engagement. *Maturitas*, 69, 257-262. doi:10.1016/j.maturitas.2011.04.002
- Aiello, A., Ardone, R.G., & Scopelliti, M. (2010). Neighbourhood planning improvement: Physical attributes, cognitive and affective evaluation and activities in two neighbourhoods in Rome. *Evaluation and Program Planning*, 33, 264-275. doi: 10.1016/j.evalprogplan.2009.10.004
- Andersen, H.S. (2008). Why do residents want to leave deprived neighbourhoods? The importance of residents' subjective evaluations of their neighbourhood and its reputation. *Journal of Housing and the Built Environment*, 23(1), 79-101. doi: 10.1007/s10901-008-9109-x
- Arnberger, A., Eder, R. (2012). The influence of green space on community attachment of urban and suburban residents. *Urban Forestry & Urban Greening*, 11 (1), 41-49. doi: 10.1016/j.ufug.2011.11.003
- Austin, D.M., & Baba, Y. (1990). Social determinants of neighborhood attachment. *Sociological Spectrum*, 10, 59-78. doi: 10.1080/02732173.1990.9981912
- Basolo, V., & Strong, D. (2002). Understanding the neighborhood: From residents' perceptions and needs to action. *Housing Policy Debate*, 13, 83-105. doi: 10.1080/10511482.2002.9521436

- Bess, K.D., Fisher, A.T., Sonn, C.C., & Bishop, B. J. (2002). Psychological sense of community: Theory, research, and application. In A.T. Fisher & C.C. Sonn (Eds.), *Psychological sense of community: Research applications, and implications* (pp. 3–22). New York: Kluwer Academic/Plenum Publishers.
- Boeck, T., Makadia, N., Johnson, C., Cadogan, N., Salim, H., & Cushing, J. (2009). *The impact of volunteering on social capital and community cohesion*. Retrieved from <http://www.dmu.ac.uk/documents/health-and-life-sciences-documents/centre-for-social-action/research/project-reaction-final-report.pdf>
- Bowling, A., & Stafford, M. (2007). How do objective and subjective assessments of neighbourhood influence social and physical functioning in older age? Findings from a British survey of ageing. *Social Science & Medicine*, 64, 2533-2549. doi: 10.1016/j.socscimed.2007.03.009
- Braubach, M. (2007). Residential conditions and their impact on residential environment satisfaction and health: Results of the WHO large analysis and review of European housing and health status (LARES) study. *International Journal of Environment and Pollution*, 30, 384-403. doi:10.1504/IJEP.2007.014817
- Brennan, S. (2011). *Canadians' perceptions of personal safety and crime, 2009*. *Juristat article* (Statistics Canada Catalogue no. 85-002-x). Retrieved from Statistics Canada website: <http://www.statcan.gc.ca/pub/85-002-x/2011001/article/11577-eng.htm#a7>
- Briggs, N. (2006). *Estimation of the standard error and confidence interval of the indirect effect in multiple mediator models* (Doctoral dissertation, The Ohio State University). Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.1004.6088&rep=rep1&type=pdf>
- Brodsky, A.E., O' Campo, P.J., & Aronson, R.E. (1999). PSOC in community context: Multi-

- level correlates of a measure of psychological sense of community in low-income, urban neighborhoods. *Journal of Community Psychology*, 27, 659-679. doi: 10.1002/(SICI)1520-6629(199911)27:6<659::AID-JCOP3>3.0.CO;2-#
- Bromell, L., & Cagney, K.A. (2014). Companionship in the neighborhood context: Older adults' living arrangements and perceptions of social cohesion. *Research on Aging*, 36, 228-243. doi:10.1177/0164027512475096
- Bronfenbrenner, U. (1979). *The ecology of human development*. London: Harvard University Press.
- Browne, M.W., & Cudeck, R. (1992). Alternative ways of assessing model fit. *Sociological Methods & Research*, 21, 230-258. doi:10.1177/0049124192021002005
- Browning, C.R., Cagney, K.A., & Boettner, B. (2016). Neighborhood, place, and the life course. In M.J. Shanahan, J.T. Mortimer, & M. J. Kirkpatrick (Eds.), *Handbook of the life course* (pp.597-620). Chicago: Springer International Publishing.
- Bruhn, J. (2009). The concept of social cohesion. In J. Bruhn, *The Group Effect* (pp. 31-48). Springer US. doi: 10.1007/978-1-4419-0364-8_2
- Buckner, J.C. (1988). The development of an instrument to measure neighbourhood cohesion. *American Journal of Community Psychology*, 16, 771-791. doi: 10.1007/BF00930892
- Buffel, T., De Donder, L., Phillipson, C., Dury, S., De Witte, N., & Verté, D. (2013). Social participation among older adults living in medium-sized cities in Flanders, Belgium: The role of neighborhood perceptions. *Health Promotion International*, 29, 655-668. doi:10.1093/heapro/dat009
- Caldwell, R., & Boyd, C. P. (2009). Coping and resilience in farming families affected by drought. *Rural and Remote Health Research, Education, Practice & Policy*, 9:1088.

- Retrieved from http://www.rrh.org.au/publishedarticles/article_print_1088.pdf
- Caliński, T., & J. Harabasz. (1974). A dendrite method for cluster analysis. *Communications in Statistics*, 3(1), 1–27. doi: 10.1080/03610927408827101
- Carson, E.D. (1999). On defining and measuring volunteering in the United States and abroad. *Law and Contemporary Problems*, 64, 67-71. Retrieved from <http://scholarship.law.duke.edu/cgi/viewcontent.cgi?article=1147&context=lcp>
- Chan, J., To, H.P., & Chan E. (2006). Reconsidering social cohesion: developing a definition and analytical framework for empirical research. *Social Indicators Research*, 75, 273-302. doi: 10.1007/s11205-005-2118-1
- Chapman, D.W, & Lombard, J.R. (2006). Determinants of neighborhood satisfaction in fee-based gated and nongated communities. *Urban Affairs Review*, 41, 769-799. doi: 10.1177/107808740628716
- Cheang, M., & Braun, K. (2001). *Senior volunteers as assets: A statewide survey*. 11, Hawaii: Center on Aging, Office of Public Health Studies, School of Medicine, University of Hawaii.
- Child, S.T., Schoffman, D.E., Kaczynski, A.T., Forthofer, M., Wilcox, S., & Baruth, M. (2016). Neighbourhood attributes associated with the social environment. *American Journal of Health Promotion*, 30, 634-637. doi:10.4278/ajhp.140307-ARB-99
- Clarke, P.J., Ailshire, J.A., Nieuwenhuijsen, E.R., & de Kleijn-de Vrankrijker, M.W. (2011). Participation among adults with disability: The role of the urban environment. *Social Science & Medicine*, 72, 1674-1684. doi: 10.1016/j.socscimed.2011.03.025
- Crook, J., Weir, R., Willms, D., & Egdorf, T. (2006). Experiences and benefits of volunteering in a community AIDS organization. *The Journal of the Association of Nurses in AIDS care*,

17, 39-45. doi:10.1016/j.jana.2006.05.002

Dallago, L., Perkins, D., Santinello, M., Boyce, W.T., Molcho, M., & Morgan, A. (2009).

Adolescent place attachment, social capital, and perceived safety: a comparison of 13 countries. *American Journal of Community Psychology*, 44, 148–160. doi: 10.1007/s10464-009-9250-z

Da Luz Reis, A.T., & Lay, M.C.D (2010). Internal and external aesthetics of housing estates.

Environment and Behavior, 42, 271-294. doi: 10.1177/0013916509334134

Dassopoulos, A., & Monnat, S.M. (2011). Do perceptions of social cohesion, social support, and

social control mediate the effects of local community participation on neighbourhood satisfaction? *Environment and Behaviour*, 43, 546-565. doi:10.1177/0013916510366821

Dempsey, N. (2008). Does quality of the built environment affect social cohesion? *Urban Design*

and Planning, 161, 105-114. doi:10.1680/udap.2008.161.3.105

De Vries, S., van, Dillen, S.M.E., Groenewegen, P.P., & Spreeuwenberg, P. (2013). Streetscape

greenery and health: stress, social cohesion and physical activity as mediators. *Social Science & Medicine*, 94, 26-33. doi: 10.1016/j.socscimed.2013.06.030

Duda, R.O., Hart, P.E., & Stork, D.G. (2001). *Pattern classification* (2nd Ed). Retrieved from

<http://cns-classes.bu.edu/cn550/Readings/duda-etal-00.pdf>

Duke, N.N., Borowsky, I.W., & Pettingell, S.L (2012). Adult perceptions of neighbourhood:

Links to youth engagement. *Youth & Society*, 44, 408-430.

doi:10.1177/0044118X11402852

Dury, S., Willems, J., De Witte, N., De Donder, L., Buffel, T., & Verte, D. (2014). Municipality

and neighbourhood influences on volunteering in later life. *Journal of Applied*

Gerontology, 35, 601-626. doi: 10.1177/0733464814533818

- Eamon, M.K., & Mulder, C. (2005). Predicting antisocial behavior among Latino young adolescents: An ecological systems analysis. *American Journal of Orthopsychiatry*, 75(1), 117-127. doi: 10.1037/0002-9432.75.1.117
- Echeverría, S., Diez-Roux, A.V., Shea, S., Borrell, L.N., & Jackson, S. (2008). Associations of neighborhood problems and neighborhood social cohesion with mental health and health behaviors: The Multi-Ethnic Study of Atherosclerosis. *Health & Place*, 14, 853-865. doi:10.1016/j.healthplace.2008.01.004
- Ellaway A., Macintyre S., & Kearns A. (2001). Perceptions of place and health in socially contrasting neighbourhoods. *Urban Studies*, 38, 2299-2316. doi: 10.1080/00420980120087171
- Ellis, A. (2004). *Generation V: Young people speak out on volunteering*. Retrieved from Institute for Volunteering Research website: <http://www.ivr.org.uk/images/stories/Institute-of-Volunteering-Research/Migrated-Resources/Documents/G/IVR-September-2004-Generation-V-Young-People-speak-out-on-volunteering.pdf>
- European Commission (2013). *Quality of life in cities: Perception survey in 79 European cities* (Flash Eurobarometer 366, Doi: 10.2776/79403). Retrieved from http://ec.europa.eu/regional_policy/sources/docgener/studies/pdf/urban/survey2013_en.pdf
- Finkelstein, A.M., & Brannick, T.M. (2007). Applying theories of institutional helping to informal volunteering: motives, role identity, and prosocial personality. *Social Behaviour and Personality: An International Journal*, 35, 101-114. doi: 10.2224/sbp.2007.35.1.101
- Fluery-Bahi, G., Felonneau, M., & Marchand, D. (2008). Processes of place identification and residential satisfaction. *Environment and Behavior*, 40, 669-682. doi:

10.1177/0013916507307461

- Forehand, R., & Jones, D.J. (2003). Neighbourhood violence and coparent conflict: Interactive influence on child psychosocial adjustment. *Journal of Abnormal Child Psychology*, 31, 591-604. doi:10.1023/A:1026206122470
- Forrest, R., & Kearns, A. (2001). Social cohesion, social capital, and the neighbourhood. *Urban Studies*, 38, 2125-2143. doi: 10.1080/00420980120087081
- Freedman, V.A., Grafova, I.B., Schoeni, R.F., Rogowski, J., (2008). Neighborhoods and disability in later life. *Social Science & Medicine*, 66, 2253–2267. doi: 10.1016/j.socscimed.2008.01.013
- Gage, L.R., & Thapa, B. (2012). Volunteer motivations and constraints among college students: Analysis of the volunteer function inventory and leisure constraints model. *Nonprofit and Voluntary Sector Quarterly*, 41, 405-430. doi: 10.1177/0899764011406738.
- Glass, T.A., & Balfour, J.L. (2003). Neighbourhoods, aging, and functional limitations. In I. Kawachi & L.F. Berkman (Eds.), *Neighbourhoods and Health* (pp. 3013-334). doi:10.1093/acprof:oso/9780195138382.001.0001
- Gorsuch, R. L. (1983). *Factor analysis* (2nd ed). Hillsdale, NJ: Lawrence Erlbaum.
- Grillo, M.C, Teixeira, M.A, & Wilson, D.C (2010). Residential satisfaction and civic engagement: Understanding the causes of community participation. *Social Indicators Research*, 97, 451-466. doi: 10.1007/s11205-009-9511-0
- Grzeskowiak, S., Sirgy, M., Lee, D., & Clairborne, C.B (2006). Housing well-being: Developing and validating a measure. *Social Indicators Research*, 79, 503-541 doi: 10.1007/s11205-005-5667-4
- Grzeskowiak, S., Sirgy, M., & Widgery, R. (2003). Residents' satisfaction with

- community services: Predictors and outcomes. *The Journal of Regional Analysis and Policy*, 33, 1-36. Retrieved from <http://ageconsearch.umn.edu/bitstream/132251/2/03-2-1.pdf>
- Guo, S. (2014). Immigrants as active citizens: Exploring the volunteering experience of Chinese immigrants in Vancouver. *Globalisation, Societies and Education*, 12, 51–70. doi: 10.1080/14767724.2013.858527
- Hand, C., Law, M., Hanna, S., Elliot, S., & McColl, M.A. (2012). Neighbourhood influences on participation in activities among older adults with chronic health conditions. *Health & Place*, 18, 869-876. doi: 10.1016/j.healthplace.2012.03.004
- Handy, F., Cnaan, R.A., Brudney, J.L., Ascoli, U., Meijs, L.C., & Ranade, S. (2000). Public perception of “who is a volunteer”: An examination of the net-cost approach from a cross-cultural perspective. *Voluntas*, 11, 45-65. doi: 10.1023/A:1008903032393
- Harris, D.R. (2001). Why are whites and blacks averse to black neighbors? *Social Science Research*, 30, 100–116. doi: 10.1006/ssre.2000.0695
- Hartman, J.J. (1981). Group cohesion and the regulation of self-esteem. In H. Kellerman (Ed.), *Group Cohesion: Theoretical and clinical perspectives* (pp. 255-267). New York, NY: Grune & Stratton.
- Hausman, J.A., & McFadden, D. (1984). Specification tests for the multinomial logit model. *Econometrica*, 52, 1219-1240. doi:00129682(198409)52:5<1219:STFTML>2.0.CO;2-V
- Hellman, C.M., Hoppes, S., & Ellison, G.C. (2006). Factors associated with college student intent to engage in community service. *The Journal of Psychology*, 140(1), 29-39. doi: 10.3200/JRLP.140.1.29-39

- Hooper, D., Coughlan, J., & Mullen, M. (2008). Structural Equation Modelling: Guidelines for determining model fit. *Electronic Journal of Business Research Methods*, 6(1), 53-60. Retrieved from <http://arrow.dit.ie/cgi/viewcontent.cgi?article=1001&context=buschmanart>
- Hovbrandt, P., Stahl, A., Iwarsson, S., Horstmann, V., Carlsson, G., (2007). Very old people's use of the pedestrian environment: functional limitations, frequency of activity and environmental demands. *European Journal of Ageing*, 4, 201–211. doi: 10.1007/s10433-007-0064-2
- Hu, L.T, & Bentler, P.M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6 (1), 1-55. doi:10.1080/10705519909540118
- James, R.N., Carswell, A.T, & Sweaney, A.L (2009). Sources of discontent: Residential satisfaction of tenants from an internet ratings site. *Environment and Behavior*, 41(1), 43-59. doi: 10.1177/0013916507310031
- Jones, K. (2006). Giving and volunteering as distinct forms of civic engagement: the role of community integration and personal resources informal helping. *Nonprofit and Voluntary Sector Quarterly*, 35, 249-266. doi: 10.1177/0899764006287464
- Kass, R., & Raftery, A. (1995). Bayes factors. *Journal of the American Statistical Association*, 90, 773–795. Retrieved from <https://www.stat.washington.edu/raftery/Research/PDF/kass1995.pdf>
- Kegler, M.C., Oman, R.F., Vesley, S.K., McLeroy, K.R., Aspy, C.B., Rodine, S., & Marshall, L. (2005). Relationships among youth assets and neighborhood and community resources. *Health Education & Behavior*, 32, 380-397. doi: 10.1177/1090198104272334

- King, D. (2008). Neighborhood and individual factors in activity in older adults: Results from the neighborhood and senior health study. *Journal of Aging & Physical Activity* 16, 144–170. doi: 10.1123/japa.16.2.144
- Kitchen, P., Williams, A., & Chowhan, J. (2012). Sense of community belonging and health in Canada: A regional analysis. *Social Indicators Research*, 1(1), 103-126. doi: 10.1007/s11205-011-9830-9
- Kline, R.B. (2005). *Principles and practice of structural equation modeling* (2nd ed.). New York, NY: The Guilford Press.
- Klinenberg, E. (2002). *Heat wave, a social autopsy of disaster in Chicago*. Chicago, IL: The University of Chicago Press.
- Kreutzer, K., & Jäger U. (2010). Volunteering versus managerialism: Conflict over organizational identity in voluntary associations. *Nonprofit and Voluntary Sector Quarterly*, 40, 634-661. doi:10.1177/0899764010369386
- Kulik, L. (2007). Explaining responses to volunteering: An ecological model. *Nonprofit and Voluntary Sector Quarterly*, 36, 239–255. doi: 10.1177/0899764006295994
- Latham, K., & Clarke, P.J. (2016). Neighborhood disorder, perceived social cohesion, and social participation among older Americans: Findings from the National Health & Aging Trends Study. *Journal of Aging and Health*. doi: 10.1177/089826431666593
- Lee, Y., & Brudney, J.L. (2012). Participation in formal and informal volunteering: Implications for volunteer recruitment. *Nonprofit Management and Leadership*, 23, 159-180. doi: 10.1002/nml.21060
- Lenzi, M., Vieno, A., Perkins, D.D., Santinello, M., Elgar, J.F., Morgan, A., & Mazzardis, S. (2012). Family Affluence, School and Neighborhood Contexts and Adolescents' Civic

- Engagement: A Cross-National Study. *American Journal of Community Psychology*, 50, 197-210. doi: 10.1007/s10464-012-9489-7
- Letki, N. (2008). Does diversity erode social cohesion? Social capital and race in British neighbourhoods. *Political Studies*, 56(1), 99–126. doi: 10.1111/j.14679248.2007.00692.x
- Lewicka, M. (2011). Place attachment: how far have we come in the last 40 years? *Journal of Environmental Psychology*, 31, 207-230. doi: 10.1016/j.jenvp.2010.10.001
- Litman, T. (2003, January). *Economic value of walkability*. Paper presented at the Transportation Research Board, 82nd Annual Meeting, Washington.
- Litt, J.S., Schmiede, S.J., Hale, J.W., Buchenau, M., & Sancar, F. (2015). Exploring ecological, emotional and social levers of self-rated health for urban gardeners and non-gardeners: A path analysis. *Social Science & Medicine*, 144, 1-8. doi: 10.1016/j.socscimed.2015.09.004
- Livingston, M., Bailey, N. & Kearns, A. (2008). *People's attachment to place: The influence of neighbourhood deprivation*. Retrieved from the Joseph Rowntree Foundation website: <https://www.jrf.org.uk/sites/default/files/jrf/migrated/files/2200-neighbourhoods-attachment-deprivation.pdf>
- Locke, M., Sampson, A., & Shepherd, J. (2001). Bowling alone: Community leaders in East London. *Voluntary Action*, 3, 87-109.
- Looker, E.D. (2014). Supportive communities and a sense of belonging in rural and non-rural communities in Canada. *The Journal of Rural and Community Development*, 9, 163-180. Retrieved from <http://journals.brandonu.ca/jrcd/article/view/1185/273>
- Lorenc, T., Clayton, S., Neary, D., Whitehead, M., Petticrew, M., Thomson, H.... & Renton, A. (2012). Crime, fear of crime, environment, and mental health and wellbeing: Mapping

- review of theories and causal pathways. *Health & Place*, 18, 757-765.
doi:10.1016/j.healthplace.2012.04.001
- Lorion, R.P., & Newbrough, J.R. (1996). Psychological sense of community. The pursuit of a field's dream. *Journal of Community Psychology*, 24, 311-326.
- Lu, M. (1999). Do people move when they say they will? Inconsistencies in individual migration behavior. *Population and Environment*, 20, 467-488. doi: 10.1023/A:1023365119874
- MacCallum, R.C., Browne, M.W., & Sugawara, H.M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological Methods*, 1, 130-149.
doi: 10.1037//1082-989X.1.2.130
- MacKinnon, D.P., Lockwood, C.M., & Williams, J. (2004). Confidence limits for the indirect effect: Distribution of the product and resampling methods. *Multivariate Behavioral Research*, 39(1), 99-128. doi: 10.1207/s15327906mbr3901_4
- Macleod, J., Daily, K., Guo, Z., Eveland, W.P., Jr., Bayer, J., Yang, S.,...& Wang, H. (1996). Community integration, local media use, and democratic processes. *Communication Research*, 23, 179-209. doi: 10.1177/009365096023002002
- Makles, A. (2012). Stata tip 110: How to get the optimal k-means cluster solution. *Stata Journal*, 12, 347-351. Retrieved from:
<https://www.stata.com/manuals14/mvclusterkmeansandkmedians.pdf>
- Manzo L.C., & Perkins, D. D. (2006). Finding common ground: the importance of place attachment to community participation and planning. *Journal of Planning Literature*, 20, 335-350. doi: 10.1177/0885412205286160
- Maxwell, J. (1996). *Social dimensions of economic growth*. Retrieved from Eric John Hanson Memorial Lecture Series, volume VIII website:

http://www.cprn.org/documents/28965_en.pdf

McLellan, J.A., & Youniss, J. (2003). Two systems of youth service: determinants of voluntary and required youth community service. *Journal of Youth and Adolescence*, 32, 47-58.

doi: 10.1023/A:1021032407300

McMillan, D., & Chavis, D. (1986). Sense of community: A definition and theory. *Journal of Community Psychology*, 14, 6-23. doi: 10.1002/1520-6629(198601)14:1<6::AID-

JCOP2290140103>3.0.CO;2-I

McPherson, J. M., Popielarz, P., & Drobnic, S. (1992). Social networks and organizational dynamics. *American Sociological Review*, 57, 153-170.

McPherson, M., Smith-Lovin, L., & Cook, J.M. (2001). Birds of a feather: Homophily in social networks. *Annual Review of Sociology*, 27, 415-444. doi:10.1146/annurev.soc.27.1.415

Milligan, G.W., & Cooper, M.C. (1985). An examination of procedures for determining the number of clusters in a dataset. *Psychometrika*, 50, 159-179. doi:10.1007/BF02294245

Milligan, G.W., & Cooper, M.C. (1988). A study of standardization of variables in cluster analysis. *Journal of Classification*, 5, 181-204. doi:10.1007/BF01897163

Mitani, H. (2013). Influences of resources and subjective dispositions on formal and informal volunteering. *Voluntas*, 25, 1022-1040. doi: 10.1007/s11266-013-9384-3

Musick, M.A., & Wilson, J. (2007). *Volunteers: A social profile*. Bloomington: Indiana University Press.

NationMaster (2014). Country vs. Country: Canada and United States compared: Crime > violence crime stats. Retrieved from <http://www.nationmaster.com/country-info/compare/Canada/United-States/Crime/Violent-crime>

Obasaju, M.A., Palin, F.L., Jacobs, C., Anderson, P., & Kaslow, N.J. (2009). Won't you be my

- neighbor? Using an ecological approach to examine the impact of community on revictimization. *Journal of Interpersonal Violence*, 24, 38–53. doi: 10.1177/0886260508314933
- Obst, P., Smith, S.G., & Zinkiewicz, L. (2002). An exploration of sense of community, part 3: Dimensions and predictors of psychological sense of community in geographical communities. *Journal of Community Psychology*, 30, 119-133. doi:10.1002/jcop.1054
- Okun, A. M., & Michel, J. (2006). Sense of community and being a volunteer among the young-old. *Journal of Applied Gerontology*, 25, 173-188. doi: 10.1177/0733464806286710
- Onyx, J., & Bullen, P. (2000). Measuring social capital in five communities. *The journal of Applied Behavioral Sciences*, 36, 23-42. doi: 10.1177/0021886300361002
- Oswald F., & Wahl H-W (2005). Dimensions of the meaning of home in later life. In G.D. Rowles & H. Chaudhury (Eds.), *Home and Identity in late life. International Perspectives* (pp. 21-45). New York, NY: Springer.
- Pantea, M. (2012). Young people in cross-national volunteering: Perceptions of unfairness. *Journal of Personal and Social Relationships*, 30, 564-581. doi: 10.1177/0265407512462682
- Parboteeah, K.P., Cullen, J.B., & Lim, L. (2004). Formal volunteering: a cross-national test. *Journal of World Business*, 39, 431-441. doi: 10.1016/j.jwb.2004.08.007
- Park, J.Z., & Smith, C. (2000). To whom much has been given...: Religious capital and community voluntarism among churchgoing protestants. *Journal for the Scientific Study of Religion*, 39, 272-286. doi:10.1111/0021-8294.00023
- Parkes, A., Kearns, A., & Atkinson, R. (2002). What makes people dissatisfied with their neighbourhoods? *Urban Studies*, 39, 2413-243. doi:10.1080/0042098022000027031

- Pearce, S., Kristjansson, E., Lemyre, & Takacs, T. Understanding volunteer motivations, barriers, and experiences of urban and rural youth: A mixed methods analysis. Manuscript in preparation.
- Plybon L.E, Edwards L., Butler D., Belgrave, F.Z, Allison, K.W. (2006). Examining the link between neighborhood cohesion and school outcomes: The role of support coping among African American adolescent girls. *Journal of Black Psychology*, 29, 393–407. doi: 10.1177/0095798403256892
- Potter, J., & Cantarero, R. (2006). How does increasing population and diversity affect resident satisfaction? A small community case study. *Environment and Behaviour*, 38, 605-625. doi: 10.1177/0013916505284797
- Preacher, K.J., & Hayes, A.F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers*, 36, 717-731. doi:10.3758/BF03206553
- Preacher, K.J., & Hayes, A.F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40, 879-891. doi: 10.3758/BRM.40.3.879
- Prezza, M., Amici, M., Roberti, T., & Tedeschi, G. (2001). Sense of community referred to the whole town: Its relations with neighboring, loneliness, life satisfaction, and area of residence. *Journal of Community Psychology*, 29, 29-52. doi: 10.1002/1520-6629(200101)29:1<29::AID-JCOP3>3.0.CO;2-C
- Richard, L., Gauvin, L., Gosselin, C., & LaForest, S. (2008). Staying connected: neighbourhood correlates of social participation among older adults living in an urban environment in Montreal, Quebec. *Health Promotion International*, 24, 46-57. doi:

10.1093/heapro/dan039.

- Sampson, R.J. (1997). The embeddedness of child and adolescent development: A community-level perspective on urban violence. In J. McCord (Ed.), *Violence and childhood in the inner city* (pp. 31-77). Cambridge, England: Cambridge University Press.
- Sampson, R.J., Morenoff, J.D., & Gannon-Rowley, T. (2002). Assessing 'neighbourhood effects': Social processes and new directions in research. *Annual Review of Sociology*, 28, 443–478. doi: 10.1146/annurev.soc.28.110601.141114
- Sampson, R.J., & Raudenbush, S.W. (1999). Systematic social observation of public spaces: a new look at disorder in urban neighbourhoods. *American Journal of Sociology*, 105, 603–651. doi: 10.1086/210356
- Sampson, R.J., Raudenbush, S.W., & Earls, F. (1997). Neighborhoods and violent crime: A multilevel study of collective efficacy. *Science*, 277, 918–924. doi: 10.1126/science.277.5328.918
- Sampson, R.J. & Wilson, W.J. (1995). Toward a theory of race, crime, and urban inequality. In J. Hagan & R.D. Peterson (Eds.), *Crime and inequality* (pp. 37-54). Stanford, CA: Stanford University Press.
- Sarason, S. B. (1974). *The psychological sense of community: Prospects for a community psychology*. San Francisco: Jossey Bass.
- Schumacker, R.E., & Lomax, R.G. (2004). *A beginner's guide to structural equation modeling, Second edition*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Schweitzer, J. (1996). *A description of the 'Sense of Community in Lansing Neighbourhoods' Project*. Paper presented at the Defining Community, Reinforcing Society conference, University of Michigan.

- Short, J.C., Ketchen, D.J., Palmer, T.B., & Hult, G.T.M. (2007). Firm, strategic group, and industry influences on performance. *Strategic Management Journal*, 28, 147-167. doi: 10.1002/smj.574
- Small, K.A., & Hsiao, C. (1985). Multinomial logit specification tests. *International Economic Review*, 26, 619-627.
- Smith, D.H. (1994). Determinants of voluntary association participation and volunteering: A literature review. *Nonprofit and Voluntary Sector Quarterly*, 23, 243–263. doi: 10.1177/089976409402300305
- Smith, D.J. (1998). *The 1997 National Survey of Volunteering*. England, London: The National Centre for Volunteering.
- Stanley, D. (2003). What do we know about social cohesion: The research perspective of the federal government's social cohesion research network. *Canadian Journal of Sociology*, 28, 5-17. doi: 10.2307/3341872
- Statistics Canada (2015). *Police-reported crime severity index and crime rate, by census metropolitan area* (table 3; CANSIM tables 252-0051 and 252-0052). Retrieved from Statistics Canada website: <http://www.statcan.gc.ca/daily-quotidien/160720/t003a-eng.htm>
- Steinley, D. (2004). Standardizing variables in k-means clustering. In D. Banks, F.McMorris, P. Arabie, & W. Gaul (Eds.), *Classification, clustering, and data mining applications* (pp. 53-60). Chicago, IL: Springer Berlin Heidelberg.
- Stürmer, S., Siem, B., Snyder, M., & Kropp, A. (2006). Empathy-motivated helping: The moderating role of group membership. *Personality and Social Psychology Bulletin*, 32, 943–956. doi: 10.1177/0146167206287363

- Sundeen, A.R., & Raskoff, A.S. (2000). Ports of entry and obstacles: Teenagers' access to volunteer activities. *Nonprofit Management and Leadership*, 11, 179-197. doi: 10.1002/nml.11204
- Tabachnick, B.G., & Fidell, L.S. (2001). *Using multivariate statistics* (4th ed.). Needham Heights, MA: Allyn and Bacon.
- Tanioka, K., & Yadohisa, H. (2012). Effect of data standardization on the result of k-means clustering. In W. Gaul, A. Geyer-Schulz, L. Schmidt-Thieme, & J. Kunze (Eds.), *Challenges at the Interface of Data Analysis, Computer Science, and Optimization* (pp.59-67). doi: 10.1007/978-3-642-24466-7_7
- Thacker, J.W., Fields, M.W., & Tetrick, L.E. (1989). The factor structure of union commitment: An application of confirmatory factor analysis. *Journal of Applied Psychology*, 74, 228-232. doi: 10.1037/0021-9010.74.2.228
- Völker, B., Flap, H., & Lindenberg, S. (2007). When are neighbourhoods communities? Community in Dutch neighbourhoods. *European Sociological Review*, 23(1), 99-114. doi:10.1093/esr/jcl022
- Voydanoff, P. (2001). Conceptualizing community in the context of work and family. *Community, Work, & Family*, 4, 133-156. doi:10.1080/713658928
- Ward, J.H., Jr. (1963). Hierarchical grouping to optimize an objective function. *Journal of the American Statistical Association*, 58, 236-244. doi: 10.1080/01621459.1963.10500845
- Wen M, Hawkey L.C, Cacioppa J.T. (2006). Objective and perceived neighborhood environment, individual SES and psychosocial factors, and self-rated health: An analysis of older adults in Cook County, Illinois. *Social Science & Medicine*, 63, 2575-2590. doi: 10.1016/j.socscimed.2006.06.025

- Wheaton, B., Muthen, B., Alwin, D.F., & Summers, G. (1977). Assessing reliability and stability in panel models. *Sociological Methodology*, 8 (1), 84-136. Retrieved from https://www.statmodel.com/bmuthen/articles/Article_001.pdf
- Wilhelm, M.O., & Bekkers, B.R. (2010). Helping behavior, dispositional empathic concern, and the principle of care. *Social Psychology Quarterly*, 73(1), 11–32.
- Williams, J., & MacKinnon, D.P. (2008). Resampling and distribution of the product methods for testing indirect effects in complex models. *Structural Equation Modeling*, 15, 23-51. doi: 10.1080/10705510701758166
- Wilson, J. (2000). Volunteering. *Annual Review of Sociology*, 26, 215-240. doi: 10.1146/annurev.soc.26.1.215
- Wilson, J., & Janoski, T. (1995). The contribution of religion to volunteer work. *Sociology of Religion*, 56, 137-152. doi:10.2307/3711760
- Wilson, J.Q., & Kelling, G.L. (1982). Broken windows: The police and neighbourhood safety. *Atlantis Monthly*, 249, 29-38.
- Wilson, J., & Musick, M.A. (1997). Who cares? Toward an integrated theory of volunteer work. *American Sociological Review*, 62, 694-713. doi: 10.2307/2657355
- Wilson, J. & Musick, M.A (1998). The contribution of social resources to volunteering. *Social Science Quarterly*, 79, 799-814.
- Woldoff, R.A. (2002). The effects of local stressors on neighborhood attachment. *Social Forces*, 81, 87–116. doi: 10.1353/sof.2002.0065
- Young, A.F., Russell, A., & Powers, J.R. (2004). The sense of belonging to a neighbourhood: can it be measured and is it related to health and well being in older women? *Social Science & Medicine* 59, 2627–2637. doi: 10.1016/j.socscimed.2004.05.00

Zaff, J.F., Moore, K.A., Papillo, A.R., & Williams, S. (2003). Implications of extracurricular activity participation during adolescence on positive outcomes. *Journal of Adolescent Research*, 18, 599-630. doi: 10.1177/074355840325477

Endnotes

¹ The practice of offering course credit for psychology research participation is widespread among North American universities.

² The effect size of our mediations was based on the standardized regression coefficients which has been used in several studies; the proportion mediated is unstable with sample sizes less than 500 (MacKinnn, Fairchild, Yoon, & Ryu, 2007). Further, R^2 effect size measures are not applicable to models that estimate parameters with maximum-likelihood (Fairchild, MacKinnon, Taborga, & Taylor, 2009).

Table 1

Factor Loadings for Principal Component Analysis with Varimax Rotation of Perceived Neighbourhood Problems

Items	Environment Problems	Safety Problems
Vandalism	.76	.11
Litter and rubbish	.73	.14
Presence of beggars or shady characters	.77	.08
Speeding traffic	.48	.10
Reputation of neighbourhood	.64	.31
Smells/fumes	.66	.25
Cigarette butts or beer bottles	.77	.18
Burglaries	.59	.38*
Lack of safe places for children to play	.47	.58
Disturbance by children or youngsters	.27	.42
Uneven or dangerous pavements	.28	.63
Lack of recreational facilities	.02	.84

Note. Factor loadings >.40 are in boldface. *This item had a factor loading <.40 on the safety problems subscale but was included in this factor based on theoretical reasoning.

Table 2

Factor Loadings for Principal Component Analysis with Varimax Rotation of Neighbourhood Satisfaction Items

Items	Neighbourhood Amenities	Neighbourhood Attractiveness
Public transit (e.g., buses)	.59	.18
Availability of libraries or cultural centers	.67	.11
Availability of retail shops	.72	.14
Schools and other educational facilities	.77	.08
Availability of sports facilities such as recreational centers or gyms	.68	.17
Availability of public spaces such as markets and pedestrian areas	.59	.29
Availability of good quality, affordable food	.43	.50
Availability of green spaces (e.g., parks)	.18	.57
The state of buildings	.21	.74
Cleanliness (e.g., does it lack vandalism, litter)	-0.05	.80
The state of sidewalks, trails, and walking paths	.26	.71
The state of the streets	.15	.71

Note. Factor loadings >.40 are in boldface.

Table 3

Factor Loadings for Principal Component Analysis with Varimax Rotation of Barriers to Volunteer Items

Items	Time Constraints	Attitudes Toward External Factors	Insecurities
I don't think I will meet interesting people or make friends	.09	.29	.61
I don't feel confident to volunteer	.10	.24	.75
I don't know anybody else who volunteers	.01	.24	.61
I feel I do not have the skills to do a good job	.08	.19	.77
I am too busy with other interests and hobbies	.75	.01	.13
I am too busy with family and other obligations	.79	.09	.04
I am too busy with work	.73	.05	.02
I cannot commit to long-term volunteering	.57	.28	.09
Volunteer hours are not convenient	.53	.44	.06
There are no volunteer opportunities offered by a group or organization that I belong to	.06	.49	.35
I am not personally affected by the cause of volunteer organizations	.08	.62	.28
I cannot find an organization where I believe in their philosophy or mission	-.03	.68	.20
I don't feel my volunteer opportunities would be meaningful or make a difference in people's lives	.20	.56	.39
I don't think volunteer organizations would appreciate or recognize my work	.13	.58	.36
I was not satisfied with past volunteer experiences	.14	.68	.22
The tasks asked by volunteer organizations are unclear and not specific	.18	.64	.33
I am not sure if the volunteer environment will be pleasant or safe	.06	.60	.34
I feel the agency would not properly train me to do the work	.11	.60	.38
There is not enough information about volunteer opportunities	.08	.55	.10
Volunteer applications are too complex to fill out	.23	.56	.07

Note. Factor loadings >.40 are in boldface.

Table 4

Comparing Indices Across Each Proposed Model Leading to Volunteering Intensity Outcomes and Perceived Barriers

	Likelihood-Ratio-Test	Relative χ^2 Index	RMSEA [90% CI]	CFI	TLI	SRMR
Volunteer Intensity (N=300)						
Model 1 (amenities)	$\chi^2(2) = 4.16, p = .12$	2.08	0.06[0.00, 0.14]	0.97	0.74	0.02
Model 2 (attractiveness)	$\chi^2(2) = 4.70, p = .10$	2.35	0.07[0.00, 0.15]	0.98	0.79	0.02
Model 3 (amenities revised)	$\chi^2(6) = 9.26, p = .16$	1.54	0.04[0.00, 0.09]	0.96	0.87	0.03
Model 4 (attractiveness revised)	$\chi^2(6) = 7.72, p = .26$	1.29	0.03[0.00, 0.08]	0.99	0.95	0.03
Perceived Barriers (N=290)						
Model 1	$\chi^2(5) = 5.23, p = .39$	1.05	0.01[0.00, 0.08]	1.00	0.99	0.02
Model 2	$\chi^2(5) = 6.56, p = .26$	1.31	0.03[0.00, 0.09]	0.98	0.93	0.02

Note. RMSEA=Root mean square error of approximation; CI=confidence interval around the RMSEA; CFI=Comparative fit index; TLI=Tucker Lewis Index; SRMR=Standardized root mean square residual. Model 3 had better fit than Model 1. Model 4 had better fit than Model 2.

Table 5

Standardized Indirect, Direct, and Total Effects Predicting Formal and Informal Volunteer Intensity for Parsimonious Models

	Formal Volunteering				Informal Volunteering			
	Indirect Cohesion	Indirect Amenities / Attractiveness	Direct	Total	Indirect Cohesion	Indirect Amenities / Attractiveness	Direct	Total
Model 3								
Time in community	-0.00(.01)	-	0.13(.06)*	0.13(.06)*	-0.00(.01)	-	-0.03(.06)	-0.03(.06)
Neighbourhood Cohesion	-	-	0.14(.05)*	0.14(.05)*	-	-	0.17(.05)***	0.17(.05)***
Satisfaction amenities	0.04(.02)*	-	0.02(.06)	0.06(.06)	0.05(.02)*	-	0.14(.05)*	0.19(.07)***
Environment problems	0.03(.01)*	-0.00(.01)	-	0.02(.02)	0.03(.02)*	-0.02(.01)	-	0.02(.02)
Safety problems	-0.01(.01)	0.01(.02)	-	-0.00(.03)	-0.01(.02)	0.05(.02)*	-	0.03(.03)
Model 4								
Time in community	-0.00(.01)	-	0.13(.06)*	0.13(.06)*	-0.00(.01)	-	-0.03(.05)	-0.03(.05)
Neighbourhood Cohesion	-	-	0.15(.07)***	0.15(.07)***	-	-	0.21(.06)***	0.21(.06)***
Satisfaction attractiveness	0.04(.02)*	-	-0.04(.06)	0.00(.05)	.06(.02)*	-	-0.00(.06)	0.05(.06)
Environment problems	0.01(.01)	-0.01(.020)	-	-0.00(.02)	0.01(.02)	-0.00(.02)	-	0.01(.03)
Safety problems	-0.01(.02)	-0.01(.013)	-	-0.01(.02)	-0.01(.02)	-0.00(.01)	-	-0.01(.02)

Note. Model 3 included satisfaction with neighbourhood amenities and Model 4 included satisfaction with neighbourhood attractiveness. Indirect effects were based on bias-corrected 95% confidence intervals (CI); results were significant if the CI lacked zero.

*p<.05. ***p<.001.

Table 6

Clusters Based on K-means Analysis

Cluster	Informal Volunteering	Formal Volunteering
Structure-oriented (N=76)	0.49	0.85
Informal Helpers (N=85)	1.10	0.40
Stalwarts (N=78)	1.08	0.97
Unengaged (N=65)	0.44	0.23

Note. Variables were standardized by division by the range. For this analysis k random observations were chosen as starting centers for the k groups.

Table 7

Predictors of Different Volunteer Clusters Based on Formal/Informal Volunteer Intensity (N=299)

Variable	Structure-Oriented		Informal Helpers		Stalwarts	
	RR(SE)	95% CI	RR(SE)	95% CI	RR(SE)	95% CI
Time in community						
10 years or more	1.19(.50)	[0.52, 2.73]	0.72(.29)	[0.33, 1.58]	1.54(.67)	[0.65, 3.63]
3 years to less than 10	2.53(1.24)	[0.97, 6.59]	1.47(.69)	[0.59, 3.67]	3.47(1.77)*	[1.28, 9.42]
Less than 3 years ^b						
Social groups						
School OR extracurricular	2.31(.97)*	[1.01, 5.27]	0.79(.31)	[0.37, 1.70]	0.79(.33)	[0.35, 1.79]
School AND extracurricular	2.53(1.20)*	[0.99, 6.43]	0.78(.36)	[0.32, 1.91]	0.74(.36)	[0.28, 1.94]
No groups ^b						
Know people that volunteer						
Parents AND friends	0.64(.30)	[0.25, 1.59]	1.37(.58)	[0.60, 3.13]	1.20(0.53)	[0.50, 2.85]
Either one or none ^b						
Neighbourhood cohesion	1.37(.38)	[0.80, 2.35]	1.80(.49)*	[1.06, 3.07]	2.29(.65)**	[1.31, 3.99]
Satisfaction amenities	1.13(.42)	[0.55, 2.33]	2.08(.75)*	[1.03, 4.23]	2.84(1.14)**	[1.29, 6.24]
Satisfaction attractiveness	1.55(.61)	[0.72, 3.34]	0.89(.34)	[0.42, 1.89]	0.64(.26)	[0.28, 1.43]
More volunteers needed	1.46(.28)*	[1.01, 2.13]	1.01(.19)	[0.71, 1.45]	1.86(.37)**	[1.26, 2.76]
Pseudo R ²	0.08					
Log likelihood	-380.27					

Note. The reference category was the unengaged volunteer group. RR=relative risk; SE=standard error; CI=confidence interval;

^b=reference group.

*p<.05. **p<.01.

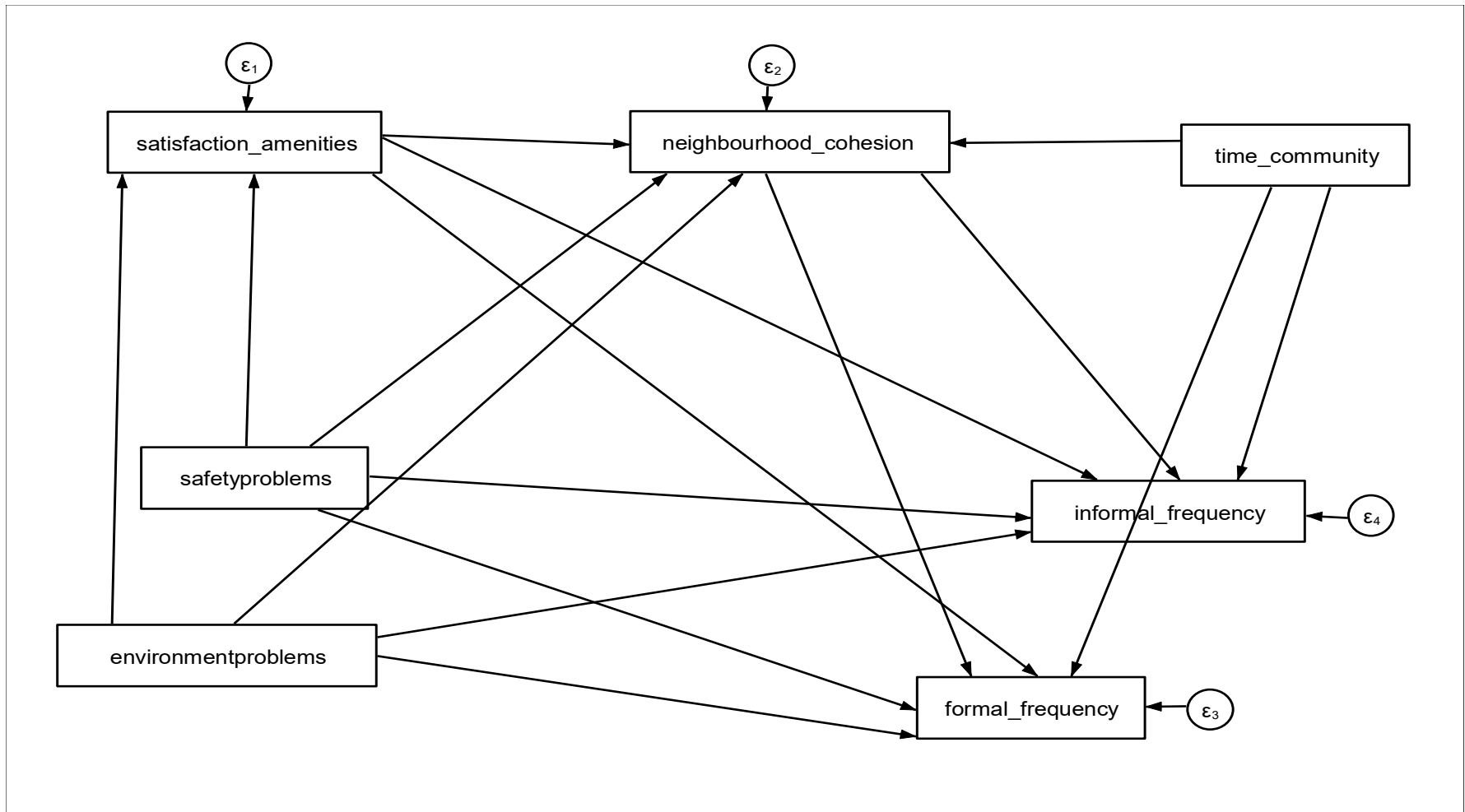


Figure 1. Conceptual outline of our full proposed model. All neighbourhood perceptions have direct paths to volunteer outcomes. We expected the valence for all relationships to be positive: lower perceived neighbourhood problems, higher satisfaction with amenities, and longer community residence will relate to higher neighbourhood cohesion and greater informal and formal volunteer frequency.

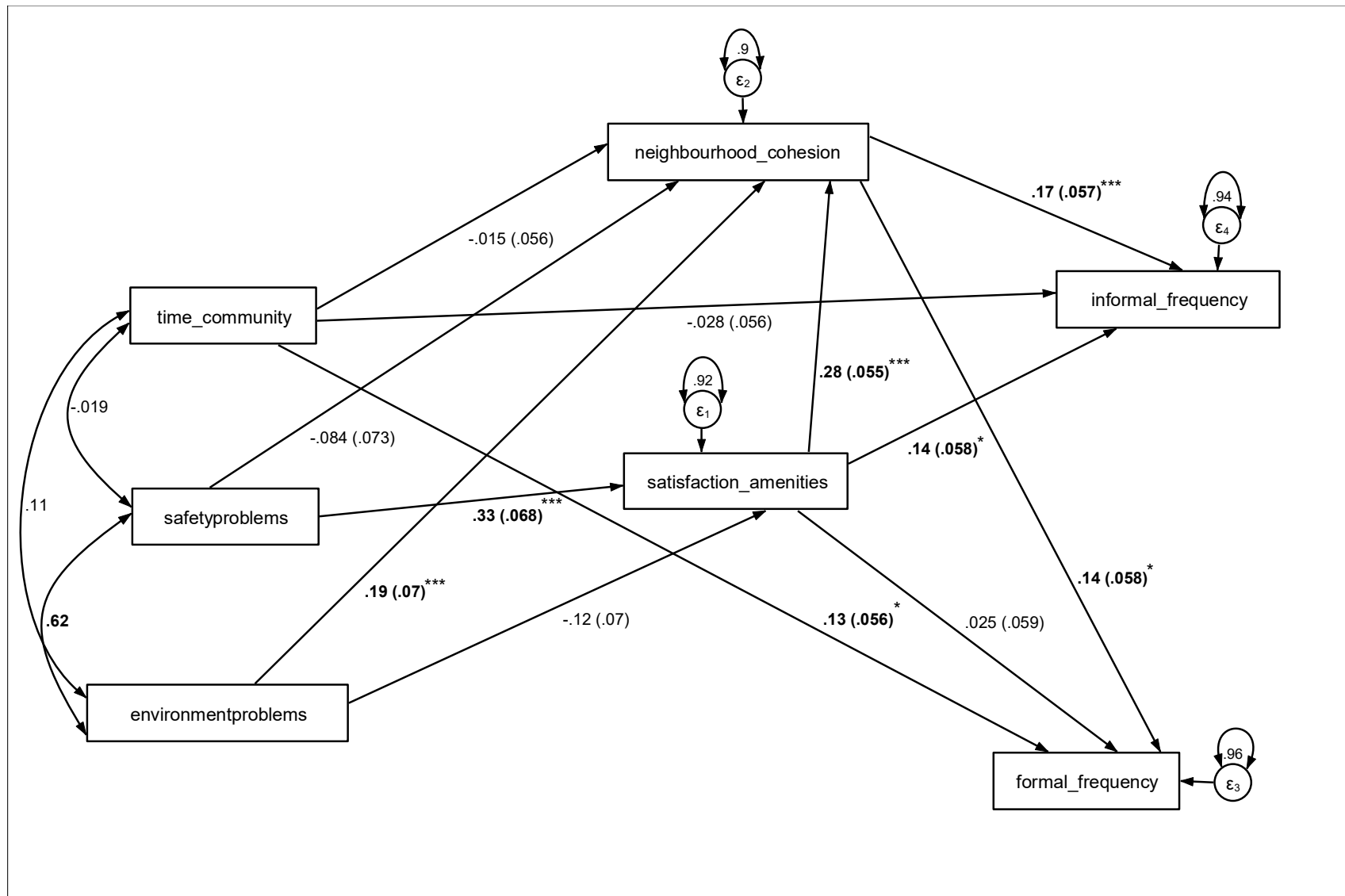


Figure 2. Path diagram tracing neighbourhood perceptions to volunteering intensity outcomes. Satisfaction with neighbourhood amenities included in this model. Parameters are followed by standard errors. * $p < .05$. *** $p < .001$.

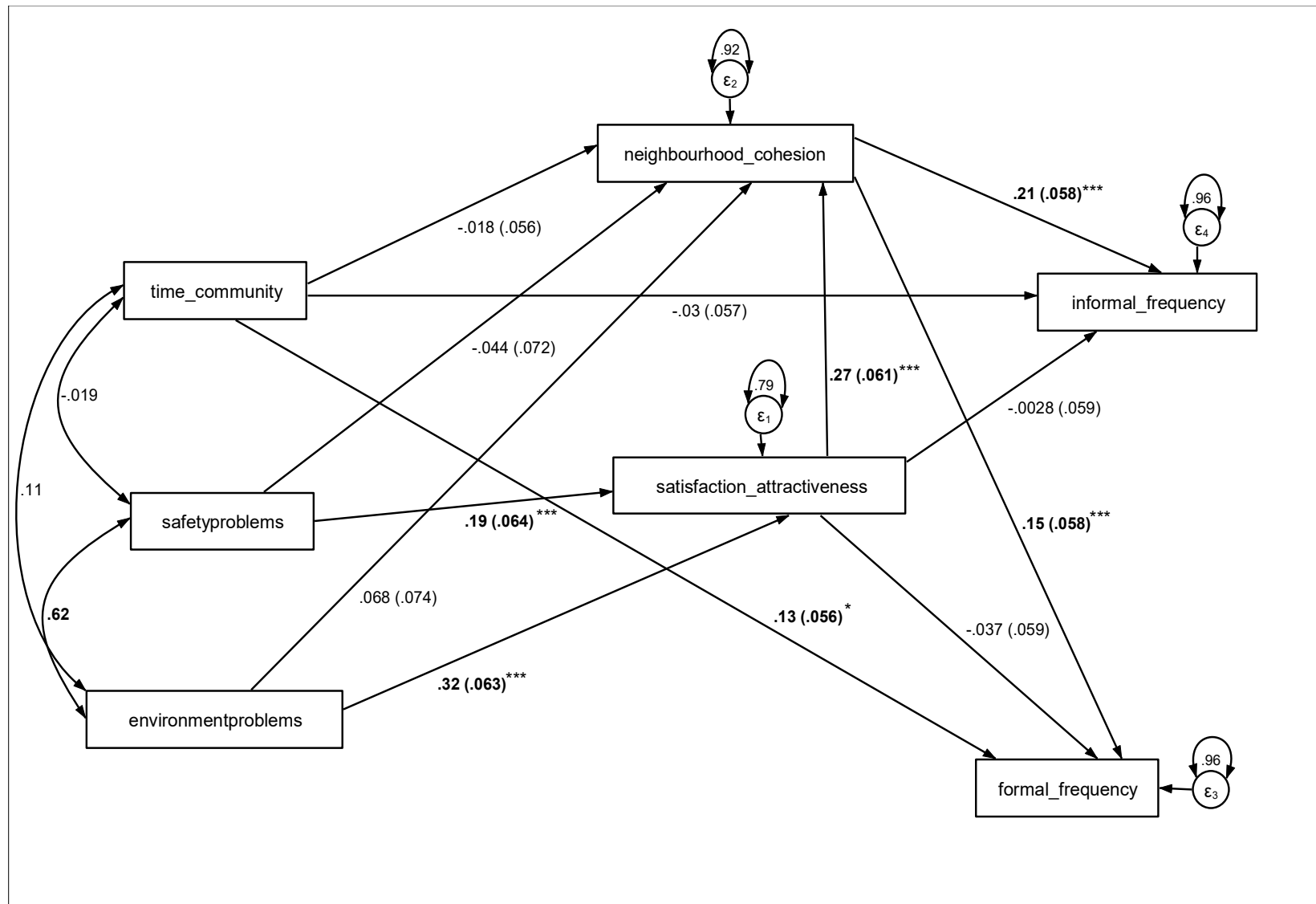


Figure 3. Path diagram tracing neighbourhood perceptions to volunteering intensity outcomes. Satisfaction with neighbourhood attractiveness included in this model. Parameters are followed by standard errors. *p<.05. ***p<.001.

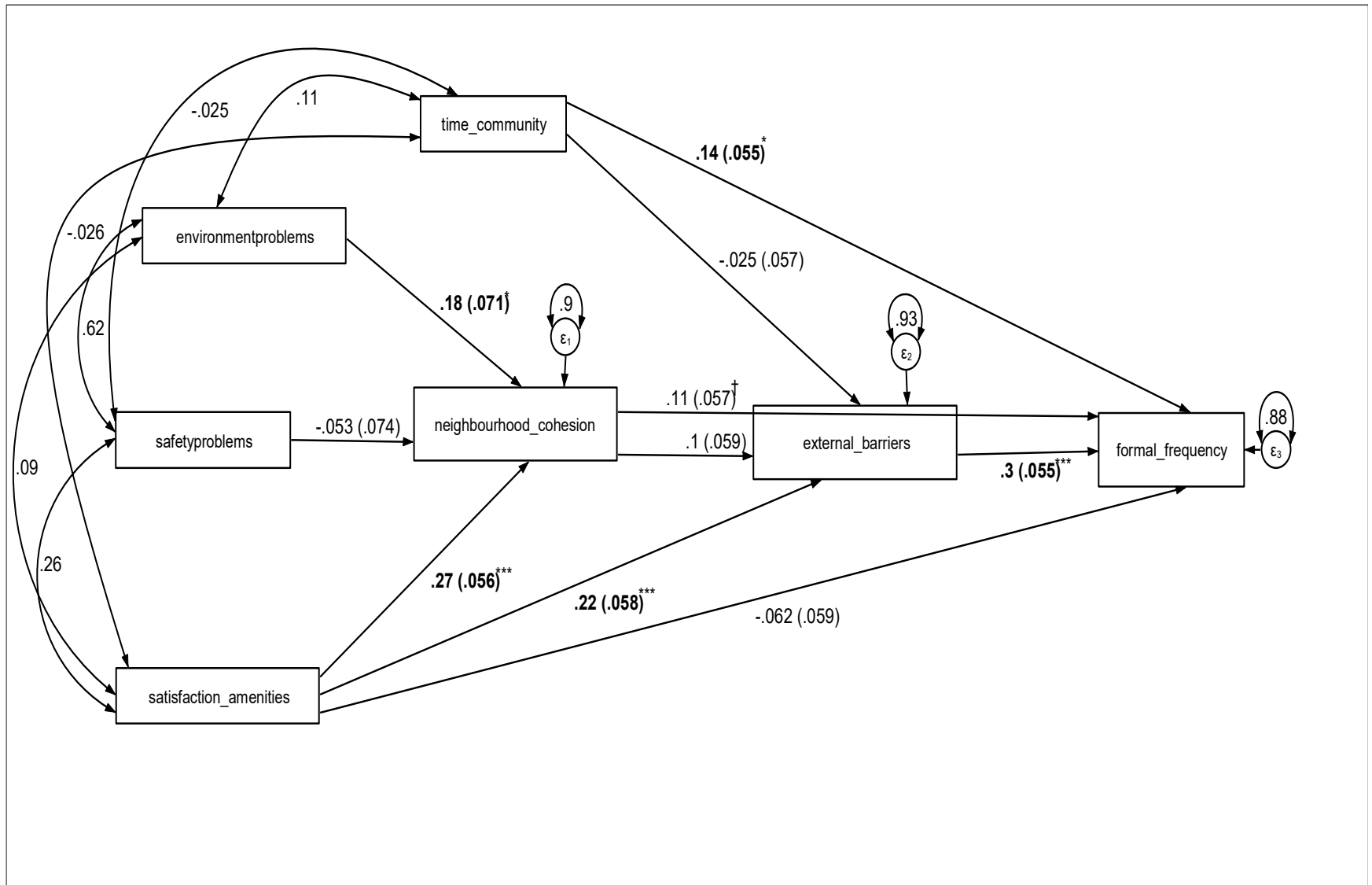


Figure 4. Path diagram tracing relationships between neighbourhood perceptions and perceived barriers to formal volunteering. Satisfaction with neighbourhood amenities included in this model. † .10 > p > .05. * p < .05. *** p < .001.

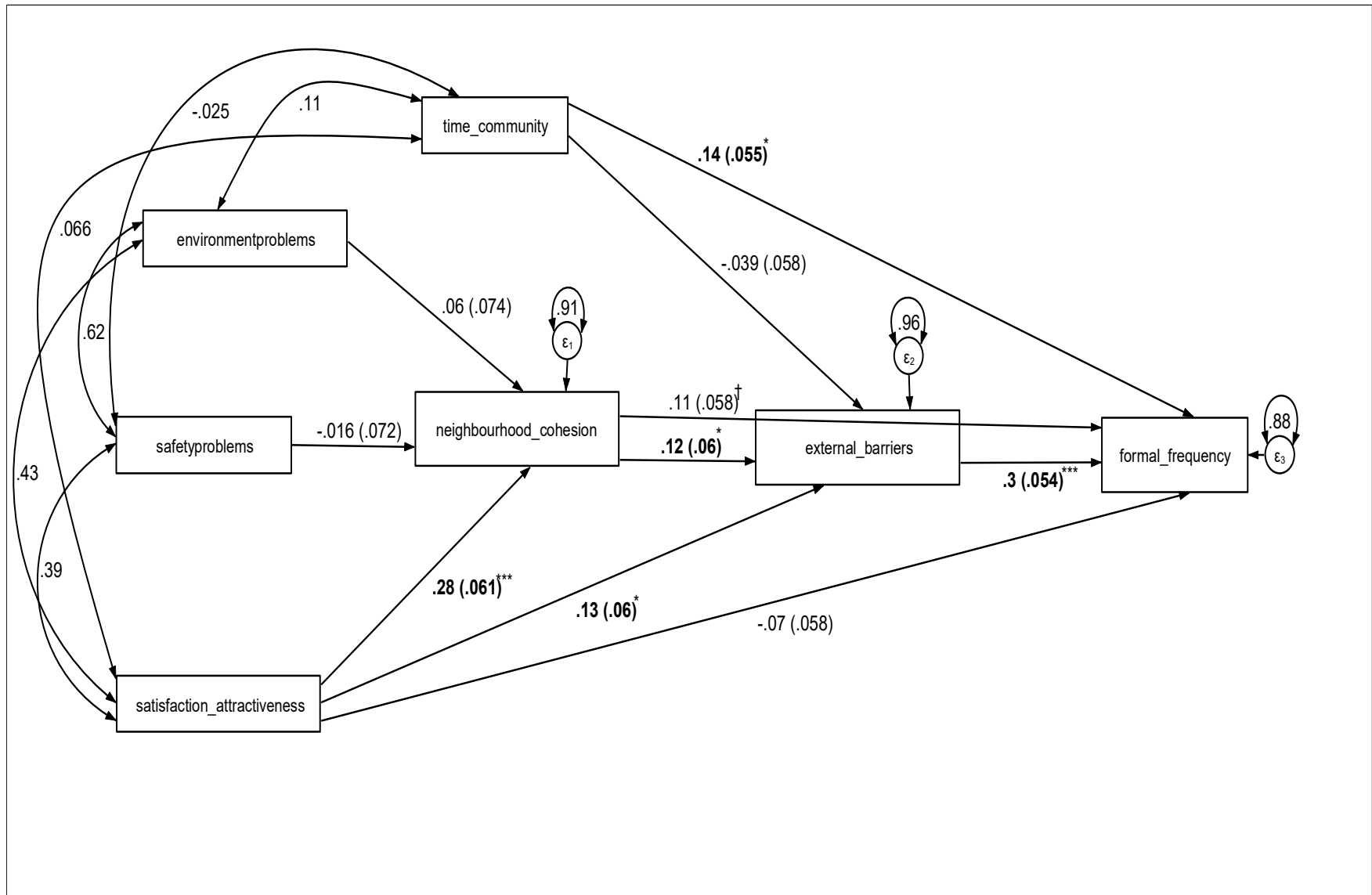
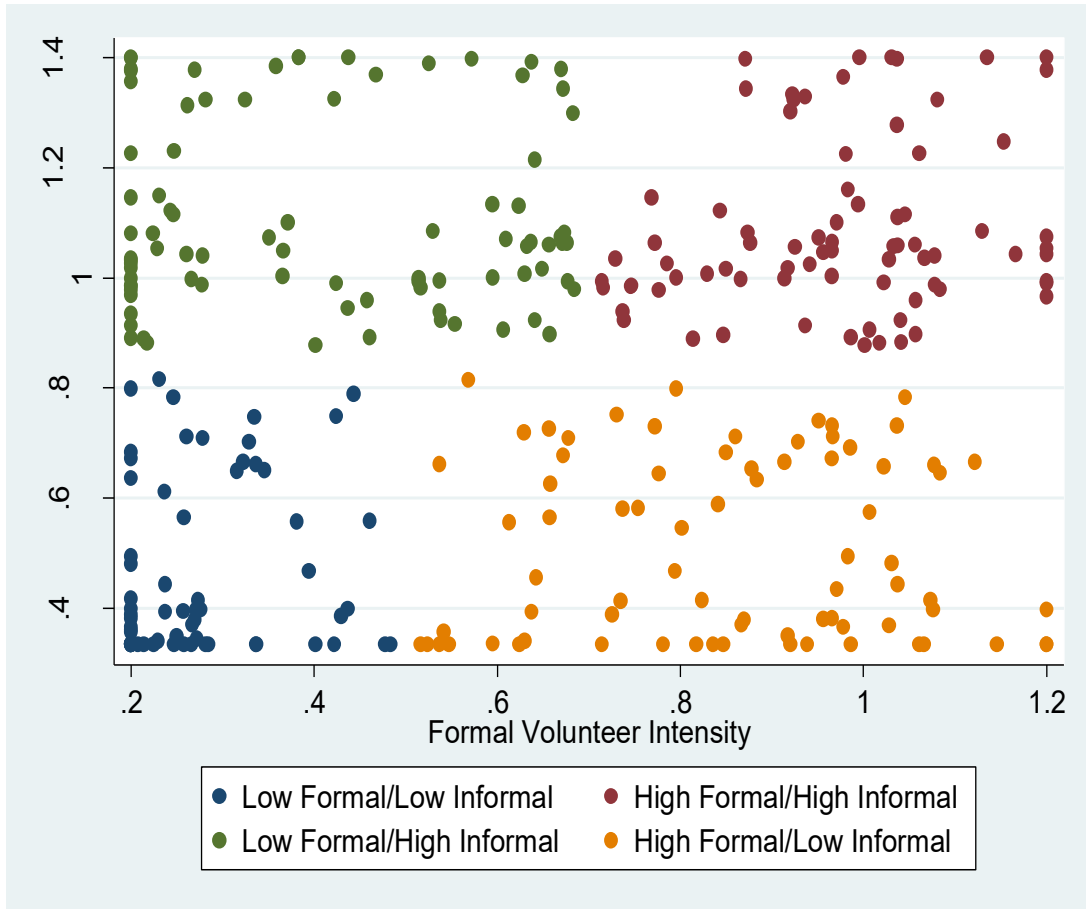


Figure 5. Path diagram tracing relationships between neighbourhood perceptions and perceived barriers to formal volunteering. Satisfaction with neighbourhood attractiveness included in this model. † .10>p>.05. *p<.05. ***p<.001.

Appendix A



Note. Scatterplot graph displaying volunteer clusters. The jitter option in Stata was used to add random spherical noise to the data; this is recommended to avoid data plotting on top of each other (Stata Manual (n.d.) *graph two-way scatter*. Retrieved from <http://www.stata.com/manuals13/g-2graphtwowayscatter.pdf>)

Chapter 5: General Discussion

Volunteerism can build local capacities and is a significant expression of community engagement for youth. Volunteering blankets a range of roles and activities, from assisting organizations with social issues, to direct interactions with the recipients (e.g., MacNeela & Gannon, 2014; Moore & Halle, 2001; Sherrod, Torney-Purta, & Flanagan, 2010; Wilson, 2012). Youth can benefit from volunteerism because it can contribute to indicators of positive youth development (e.g., Feldman & Matjasko, 2005; Gardner et al., 2008; Mahoney et al., 2005; Roth & Brooks-Gunn, 2003; Zaff, et al., 2003). Considerable research has corroborated that certain resources are determinants of volunteerism (e.g., Selbee, 2004; Wilson, 2000; Wilson & Musick, 1997), but this dissertation is the first research, to our knowledge, that considered several facets of economic, social, and cultural resources in relation to youth volunteerism. These resources were not only important levers to volunteering but were also related to volunteer motivations, barriers, and outcomes. Further, this thesis illustrated that different resources have different impacts on volunteerism, depending on type (informal/formal) and place characteristics. Understanding youth volunteerism from a socio-ecological perspective widened our lens on the many interactive and complex layers involved in philanthropic behaviour. We suggest that a hybrid framework of various ecological and resource components may be useful when navigating perspectives of youth volunteerism across the different geographies of Canada.

Brief Summary of Objectives and Findings

This dissertation sought to understand the interconnected relationships between resources, place characteristics, and youth volunteerism. Study 1 used secondary data from a national Canadian survey to examine whether urban/rural residency moderated relationships between particular resources and formal and informal volunteer outcomes. Overall, youth with

more social and cultural resources tended to have higher odds of formal volunteering, invested more formal volunteer hours, and also informally volunteered at greater intensities. Specifically, rural youth who had more social resources (versus rural youth who lacked these resources), tended to be more engaged in volunteerism. There were, however, some differences depending on the type of volunteering and intensity of volunteering (e.g., formal proclivity versus formal hours contributed), which are discussed later in this chapter. The largest gap between youth who lacked resources versus youth who had resources, by region, appeared to be in formal volunteer proclivity.

Study 2 was a mixed methods study and focused on the differences between urban/rural youth in their volunteer motivations, barriers, and outcomes. Data came from the combined 2007/2010 CSGVP for our quantitative analyses, and semi-structured interviews were conducted with youth from two different regions (urban/rural) for the qualitative portion. The survey findings suggested that financial barriers were more common among rural youth, while time constraints were more common among urban youth. In terms of motives, some key urban/rural differences were that rural youth dedicated more hours to formal volunteering if their friends volunteered, whereas urban youth invested more hours if they reported being motivated to explore their strengths. In our interviews, rural youth mentioned more contextual barriers (e.g., lack of opportunities), whereas urban youth mentioned interpersonal challenges (e.g., teamwork issues). Both urban and rural youth elaborated on outcomes that could be related to the Five C's of positive youth development: confidence, connection, character, caring, and competence. However, urban youth reported skills that they acquired through their volunteering, whereas fewer rural youth discussed skills attainment.

Study 3 explored the relevance of place to youth volunteerism at a more local level: the

neighbourhood. Data was collected from a sample of undergraduate students in Ottawa. We investigated the interrelationships between different neighbourhood perceptions (e.g., satisfaction with amenities, cohesion) and volunteering intensity, through a series of path analyses. Compared to other neighbourhood characteristics, neighbourhood cohesion was most strongly associated with formal and informal volunteering intensity. Better neighbourhood perceptions were also related to weaker perceived barriers to volunteering, which in turn predicted higher formal volunteer frequency. Finally, we found evidence for different configurations of volunteers based on volunteer type (informal/formal) and intensity (high/low). These clusters were differentiated based on certain resource (e.g., belonging to social groups) and neighbourhood characteristics (e.g., cohesion).

The Importance of Resources to Youth Volunteerism

Volunteerism can be perceived as a form of community engagement that both requires and fosters resources. One pattern among our studies was that social resources (e.g., belonged to social groups, longer community residence) were key ingredients in youths' propensity to formally volunteer. This has been found in several studies (e.g., Putnam, 2000; Sundeen & Raskoff, 2000; Wilson, 2000; Wilson & Musick, 1997). Personal relationships help foster positive youth outcomes because parents, friends, and authority figures are key agents in the transmission and mobilization of resources to youth (e.g., Coleman, 1988; Stanton-Salazar, 1997). These social resources can subsequently provide avenues for youth to become involved in their communities. Youth who have fewer social resources may lack the connections to volunteer. Social networks are especially important in adolescence and young adulthood because youth are trying to acquire information through their networks (Carstensen, 1995). A meta-analysis revealed that global, personal, and friendship networks increased during adolescence but

decreased in later adulthood, and this may be impacted by age-related events (e.g., puberty, divorce; Wrzus, Hänel, Wagner, & Neyer, 2013).

Cultural resources were also important. Study 1 revealed that youth who attended religious services more frequently were more likely to formally and informally volunteer, compared to nonreligious youth. This relationship has been consistently found in the literature, especially for formal volunteering (e.g., Beyerlein & Hipp, 2006; Gibson, 2008; Grimm et al., 2005; McLellan & Youniss, 2003; Pancer, Brown, Hendersen, & Ellis-Hale, 2007; Ruitter & De Graaf, 2006; van Tienen et al., 2011; Wilson & Musick 1997, 1998; Zaff et al., 2003). Youth who are part of religious organizations may have more connections to become involved in their communities because church attendance can be perceived as a social gathering. Further, certain religious doctrine may emphasize the importance of community values, which may foster prosocial attitudes in youth.

Study 2 revealed that youth were motivated to give back to their community because they felt it was the right thing to do, which reflects Wilson and Musick's (1997) culture of benevolence. For many Canadian youth, volunteerism is part of a cultural norm (it is also mandatory to graduate high school), and thus youths' perceptions of volunteerism reflected cultural values. People who invest in cultural capital (e.g., cultural organizations, arts) often foster social cohesion and contribute more to their communities (Jeannotte, 2003). We found that being part of social/cultural groups (e.g., church, sports) was associated with higher formal volunteer proclivity, and with informally volunteering at higher intensities.

There is room for optimism that volunteerism may be accessible to youth from lower socioeconomic status backgrounds; what appeared to be more important was social/cultural resources. We found that there was no consistent association between household income and

volunteer outcomes (Study 1 and Study 3). This challenges the extensive literature on the importance of income to formal volunteering (e.g., Andolina et al., 2003; Bauer, Bredtman, & Schmidt, 2012; Brown & Zhang, 2013; Choi & DiNitto, 2012; Penner, 2002; Rotolo & Wilson, 2012; Smith, 1994; Sundeen & Raskoff, 2000; Wilson, 2000; Wilson & Musick, 1998; Yao, 2015). Having social resources may have buffered the negative effects of low household income on volunteering. In Study 1, we found that working part-time or full-time was related to formal volunteer proclivity. Work may build social connections and provide hands-on experience for youth, and it may be these factors (as opposed to income itself), that more strongly contribute to formal volunteerism. Further, informal volunteering was not related to household income or full-time employment (although the latter only in rural areas), which suggests that these resources are less important to informal helping. Other studies have shown that in deprived regions, people still place high priority on informal types of helping (e.g., Williams, 2003; Woolvin & Harper, 2015). Dominant statuses (i.e., higher SES) may be less important to informal helping because this type of volunteering requires fewer qualifications and credentials.

Findings from Study 1 highlight the importance of examining the unique relationships between resources and formal volunteer proclivity, formal volunteer hours, and informal volunteer intensity. Regardless of urban/rural context, high school students were more likely to formally volunteer but dedicated fewer formal volunteer hours. While school can be considered an asset in a child's social ecology (e.g., Lerner, 2002), it also requires time commitments. Time is considered a resource itself (Wilson & Musick, 1997), and therefore certain resources may be levers to volunteer but may not relate to intensity. This could be useful for organizations trying to attract long-term volunteers. For example, a nonstudent may have fewer resources (e.g., connections) to initially hear about opportunities, but once they do, they may have more free

time to devote to an organization.

Regardless of urban/rural residence, youth in our interviews (Study 2) discussed positive aspects of their volunteering. These included: growing from their volunteering, acquiring knowledge about various topics, building networks and connections, and obtaining skills. These findings are consistent with other qualitative studies on youth volunteerism (e.g., Kay & Bradsbury, 2009; MacNeela & Gannon, 2014). These findings not only reflect positive youth development but can also be framed within a resource theory. Youth gained skills that could help cultivate human capital (e.g., build their résumé), social capital (e.g., networking), and cultural capital (e.g., enhanced morality and citizenship). We also build onto previous literature by learning about youths' motives and perceptions related to informal volunteering. It appeared that social contacts bolstered informal helping (e.g., knowing neighbours, being asked by parents), and that youths' motivations reflected cultural and social elements (e.g., help others in need, maintain relationships).

In Study 3, we found that better perceptions of neighbourhood resources (e.g., availability of amenities) and stronger neighbourhood cohesion were related to higher informal volunteer intensity. In other studies, positive perceptions of accessibility to amenities were related to higher social participation (e.g., Bowling & Stafford, 2007; Hovbrandt, Fridlund, & Carlson, 2007; Richard, Gauvin, Gosselin, & Laforest, 2009). Conversely, lack of access to neighbourhood resources and amenities is a reflection of lower social capital; neighbourhoods that lack transportation and resources (e.g., community centers, social services) have been linked to social exclusion (e.g., Friedrichs, Galster, & Musterd, 2003; Therrien & Desrosiers, 2010). Dissatisfaction with neighbourhood resources subverts social cohesion, which in turn hinders community engagement (e.g., Freiler, 2004; Hou & Chen, 2003; Séguin & Divay, 2002).

Neighbourhoods that are favourable to social contact may strengthen collaboration and bonds between community members, which may spur greater concern for community engagement.

Neighbourhood problems seem to reflect indicators of lower human capital (e.g., dilapidated buildings, litter), whereas cohesion and neighbourhood amenities reflect social capital. In Study 3 we found that perceived problems were not associated with volunteer outcomes. In fact, in all three studies of this dissertation, we found that youth were more influenced by elements of social capital than human/economic resources. Overall, it may not only be individual-level resources that are important to volunteering but also perceptions of cohesion and resources in the built environment that impact on youth philanthropy.

Incorporating Place Effects Within a Resources Model

To our knowledge, no research has integrated characteristics of place within a resources model to understand youth volunteerism. Socio-ecological frameworks (e.g., Bronfenbrenner, 1979, 1994) provided a lens for understanding the importance of context in youth volunteerism. One critique in the literature is that Bronfenbrenner's theory is misrepresented or not correctly tested because of all the revisions to this theory (Tudge, Gray, & Hogan, 1997). Our aim was not to specifically test this socio-ecological model but rather to understand volunteerism holistically by considering aspects of place and the importance of person-context interrelations. For example, in Study 1, we found that many of our moderation analyses were significant, which suggests that resources may have differential impacts on volunteer outcomes by urban/rural residence. We may construe that elements embedded in the macrosystem may impact volunteerism differently according to residential typologies.

Sociocultural resources and the role of place in volunteerism. Many of our findings speak to the social nature of rural communities. In Study 1, we found that rural youth who had

certain social resources (e.g., belonged to youth groups, parents volunteered) were particularly more likely to formally volunteer, and contributed more hours, than rural youth who lacked these resources. Social networks, community cohesion, and strong relationships, exemplify rural areas (e.g., Crockett et al., 2000; Mekos & Elder, 1996; Theodori & Theodori, 2014); thus, youth with greater social resources may have had more connections or assets to volunteer. Rural residents, compared to urban residents, are more likely to know neighbours (Fischer, 1982, 1984; Turcotte, 2005) and to trust their neighbours (Turcotte, 2005). These social connections may be strong levers to rural youths' formal and informal volunteerism. On the other hand, rural youth with fewer connections may encounter more difficulties learning about volunteer opportunities or integrating into their communities. Being an outsider in rural areas may be more challenging because communities are more cohesive and homogenous, perhaps making them more impenetrable (Fischer, 1995). Similar findings emerged for urban youth but the effects were not as strong. Belonging to youth groups and living in the community for at least three years was particularly important to rural youths' informal helping. Rural youth who are more connected with other community members may have higher attachment to place and be more inclined to contribute to a common collective.

Study 1 also showed that rural high school students were especially more likely to volunteer than nonstudents, and one explanation is that schools are significant social hubs in rural areas (e.g., Bauch, 2001; Theobald & Nachtigal, 1995). On the other hand, many urban youth participants remarked that schools need to be more active in volunteer efforts. These findings may be a reflection of broader macrosystem influences; the school is a repository of rural culture and plays a fundamental role in community affairs and identity (e.g., Harmon & Schafft, 2009; Lamers, 1994; Lyson, 2002; Miller, 1995). Schools are social and cultural

institutions embedded in the fabric of rural societies and imbue many facets of residents' lives.

The climate of rural communities is often characterized as closely knit and cohesive (e.g., Crockett et al., 2000; Fellegi, 1996; Theodori & Theodori, 2014), which may explain why in Study 2 rural youth reported volunteering to network and cited fewer interpersonal challenges. In accordance with behaviour setting theory (e.g., Barker, 1968; Schoggen, 1989), these findings may reflect the emphasis of social unity and behaviours in rural areas—strong norms of reciprocity and dense networks (Phillips & McLeroy, 2004). Since urban areas have more people than roles this may create more competition among members. Perhaps this is why in Study 2, more urban youth than rural youth discussed career-oriented motives, and reported volunteering to explore their strengths. Further, in our interviews, rural youth tended to discuss both informal and formal types of helping, whereas urban youth perceived informal volunteering as merely helping out and did not view it as a type of volunteering. Urban youth may conceptualize volunteerism in more professionalized dialogues.

Barriers to volunteering may also be linked to place characteristics. Rural youth mentioned more contextual barriers to volunteerism (e.g., transportation, lack of opportunities) than did urban youth. This may reflect structures at the macrosystem level. For example, there is lack of funding for voluntary services in rural places (Fairbairn & Gustafson, 2008). In turn, this might denote fewer available opportunities for rural youth, which could be especially challenging for youth who already lack the connections and information to volunteer. In rural areas, there may be greater inequalities in the accessibility of volunteer opportunities for youth who have resources, versus youth who lack these resources. Conversely, urban youth reported social barriers, such as 'nobody asked them to volunteer'. This may be linked to the diverse and more loosely knit structure of urban areas. Finding connections to volunteer may be more

difficult in cities than in smaller towns.

It is important to note that Study 1 demonstrated that urban youth in general (those who had certain resources and those who lacked resources) appeared to contribute more formal volunteer hours than rural youth. While certain social resources may initially plug rural youth into their communities, these youth do not invest as many hours as their urban counterparts. This could reflect the broader context of rural areas (e.g., distance to travel to organizations), as well as the nature of rural voluntary organizations (e.g., hours of operation, limited opportunities). Further research is needed to understand possible explanations for these differences.

In Study 3, we found that neighbourhood cohesion and satisfaction with amenities were related to informal volunteer frequency, for one urban region (Ottawa). The neighbourhood environment is important because the presence of resources (e.g., community centers, libraries) can provide more opportunities for youth to meet other people, thus mobilizing community involvement (Theokas & Lerner, 2006). Rootedness in one's neighbourhood may be especially important to informal volunteering because this type of helping involves direct interactions with others, whom volunteers may be acquainted with. Interestingly, in this specific sample (Study 3), religious attendance was not related to volunteer intensity. This demonstrates the importance of place effects on volunteerism because neighbourhood cohesion and satisfaction with amenities were stronger drivers of volunteerism than were sociodemographics, at least in Ottawa.

Sociodemographic differences in urban/rural volunteering. In Study 1 we found that urban youth whose language at home was non-English were less likely to formally volunteer but informally volunteered at higher intensities. In other studies, ethnic minorities (e.g., Carson, 1999; Wang, 2011) and Francophones (Reed & Selbee, 2001) were found to invest more time into helping friends, neighbours, and family, as opposed to volunteering on behalf of

organizations. Jang, Wang, and Yoshioka (2016) found that for Korean Americans, language difficulty was related to reduced formal volunteering but not to reduced informal volunteering. Given the diversity of urban cities, non-English speaking youth may encounter fewer barriers to informal volunteering in their communities. These youth could be engaged with ethnic-oriented groups, where they share cultural values and feel a sense of familiarity and thus participate in reciprocal helping behaviour (Lee & Moon, 2011). In rural areas, we found that English-speakers were more engaged in formal volunteerism than youth who spoke different languages at home. However, we found no difference between these two groups in informal volunteer intensity. Youth in larger cities, who speak languages other than English, may particularly affiliate with people who share similar cultural/social values, in order to build cohesion and bonds. This type of helping may be more readily accessible.

Study 1 revealed that rural males were less likely to formally volunteer and that they particularly invested less time informally volunteering, than did rural females. In general, males are less likely to volunteer than females (e.g., see review by Einolf, 2011; Rooney, Steinberg, & Schervish, 2004; Wilson & Musick, 1997). In fact, a number of studies have found that women compared to men, perceived services to others as more important (e.g., Themudo, 2009), and scored higher on empathic concern and caring (e.g., Eisenberg & Fabes, 1998; Skoe, Cumberland, Eisenberf, Hansen, & Perry, 2002). Rural societies often preserve traditional gender roles (e.g., Buck, 1996), because it is part of the rural culture for women to engage in caregiving activities. Although in contemporary societies these gender orientations may be less pronounced, there was no difference found between urban males and urban females in their formal volunteer proclivity or their informal volunteering intensity. While it is difficult to pinpoint the reasons for the observed urban/rural differences, these findings do not appear to be merely artefacts of the

data nor coincidental. We propose that in rural areas, volunteerism (particularly informal) may especially be perceived as a stronger gender role for females.

Findings from our interviews (Study 2) add a layer of complexity to gender differences in volunteering, because rural males also volunteered in domains that may be conceptualized as traditional, female dominated roles, such as helping children and the elderly. However, these roles were often embedded in what may be perceived as ‘masculine’ sectors, such as sports and recreation, and fire fighting activities. Rural males may engage in activities that preserve their gender social identities (e.g., Brandth & Haugen, 2000; Bye, 2009). To better understand why volunteer rates are lower for rural males, it may be useful to examine volunteerism in specific activities rather than overall volunteer rates.

Implications for Research and Practice

Many of these findings reinforced the importance of context-person interactions (e.g., Bronfenbrenner & Morris, 2006) and the reciprocal transactions between individual-level factors and different ecological systems, to explain youth volunteer behaviour. Wilson and Musick (1997) posited that three forms of capital (human, social, and cultural) were necessary to volunteer. Much of their support came from demographic and sociodemographic variables (e.g., educational attainment, income, religiosity). This framework could be extended to consider how neighbourhood perceptions (e.g., cohesion) and place of residence (urban/rural) are interwoven between individual, microsystem, and macrosystem level factors. Although the integrated resources theory organizes the extant literature by synthesizing many perspectives on volunteerism (i.e., social capital theories, dominant status models) it also has its limitations. First, the model does not make any predictions about which resources are most important to volunteerism. We found across our studies that social resources seemed to be the most important,

and therefore the theory can be adjusted to explain the relative importance of different resource measures and potential explanations for these differences. Additionally, there is no clear boundary of what is and what is not a resource. Wilson and Musick (1997) discussed resources broadly as anything that “smooths the path to voluntarism”, though they do mention that resources are things that are acquired. With this definition, almost anything can be defined as a resource. This theory can be improved by considering clearer boundaries and criteria for defining resources. We found that the theory could be falsifiable in some respects. For example, Wilson and Musick (1997) posited that income, one indicator of human capital, is related to volunteerism. We found in all our studies that youth with higher household incomes did not have higher volunteer proclivity, nor was income related to informal volunteer intensity. This demonstrates that other resources (e.g., social, cultural) may be more important to youth volunteerism, at least in a Canadian context.

This dissertation also supports the necessity of examining the impact of resources on different types of volunteerism. Youth who may traditionally be perceived as lacking certain resources may be more active in informal volunteering, which may be overlooked. For example, we found that for rural youth, employment status was not important to informal volunteering. Social contacts and personal income (acquired through work) may be important assets to formal volunteerism, whereas informal volunteering requires less qualifications (Finkelstein & Brannick, 2007).

Findings from our cluster analyses have methodological implications. We were able to show through our ipsative approach that youth may be engaged in different streams of volunteerism, depending on personal characteristics. Much of the literature has dichotomized volunteers versus nonvolunteers, whereas we found that youth may have a blend of informal and

formal volunteer typologies. Similarly, Woolvin and Harper (2015) found that deprived residents in urban regions could be classified as informal and formal volunteers, and not just one or the other, and that these volunteer conglomerations were not static but rather fluid. Researchers should therefore consider that volunteers may have unique profiles depending on the type of volunteerism and intensity.

In terms of practice, these results suggest that recruitment strategies to revitalize youth volunteerism should be tailored to area of residence and that one-size-fits-all approaches may not be effective for all youth. Place-based initiatives may need to connect with other public policies for amendments. Below we outline some of our main findings and order them in terms of practicality (e.g., the degree to which we perceive them to be most amenable to change).

(1) Rural and urban youth had different levers to volunteerism, thus recruitment approaches should be tailored to place of residence so that youth are targeted effectively. In Study 2, we learned that over half the rural youth heard about volunteering through their mother, thus organizations should approach not only youth themselves but family members as well. On the other hand, urban youth particularly volunteered to gain skills and contributed more hours if they mentioned this motive. Nonprofits in city centers should craft opportunities for youth that are more skill-oriented. Further, urban youth who volunteered in family projects gained fewer skills, and those who volunteered because their friends did, contributed fewer hours. Urban organizations that are looking for committed volunteers may benefit by emphasizing skills acquisition rather than the social nature of volunteer activities.

(2) Organizations need to effectively address barriers to volunteering for a range of different youth. We found that in the CSGVP survey, financial barriers were more common among rural youth, so perhaps reimbursement options may ameliorate these challenges. Urban youth reported

that nobody asked them to volunteer, so organizations (and individuals) may benefit by simply asking youth if they are available to lend a helping hand. Overall, our qualitative findings suggested that urban and rural youth had similar recommendations to improve volunteerism: increased awareness and accommodation, utilize social media, and emphasize the value of volunteering. Previous literature found similar strategies for youth recruitment: flexibility (e.g., short and long-term opportunities), ease of access (e.g., clarify expectations), and to provide experience (e.g., employment skills), variety, and fun (Lukka, 2000).

(3) One challenge is to reduce the gap in volunteer rate between youth with fewer resources (e.g., don't belong to groups, unemployed) and youth with more resources, so that volunteering is more accessible to the former group. It is important to note that while the volunteer rate is high for Canadian youth, the number of formal volunteer hours contributed is lower than many other age groups (Vézina & Crompton, 2012). Furthermore, many of the youth who do volunteer have higher indicators of capital. Finding approaches to foster cohesion at large may be beneficial to youth volunteerism, because indicators of social capital appeared to be key nuggets associated with greater volunteer intensities. Implementing local activities and social gatherings (e.g., sports, BBQs, 'meet and greet') may help youth become acquainted with others in their neighbourhood and build connections, which could eventually open channels to both formal and informal volunteering.

Limitations

There were several limitations in this dissertation that need to be addressed. One major limitation with secondary data is that we were constrained by the variables available in the survey. The CSGVP did not ask questions on personality traits, orientations, or identity types, which have been related to volunteerism (e.g., Crocetti, Jahromi, & Meeus, 2012; Elshaug &

Metzer, 2001; Handy & Cnaan, 2007; Kanacri, Rosa, & Di Giunta, 2012; Marta & Pozzi, 2008; Okun, Pugliese, & Rook, 2007; van Goethem, van Hoof, van Aken, Raaijmakers, Boom, & Orobio de Castro, 2012). Certain identities and personality configurations can be conceptualized as indicators of cultural resources, so this may be important to explore in future studies. Further, the survey only asked about religious attendance but did not have information on religious values, the importance of spirituality, or artistic expression. We also could not examine the number of social networks in the community and the availability of voluntary organizations, in relation to perceived barriers and volunteer outcomes.

Due to secondary data restrictions, we could not consider factors related to the organization. For example, we did not examine relationships with staff and other volunteers, how strongly one's values aligned with the organization's philosophy or cause, and the level of satisfaction with the organization. Other factors that should be studied include, nonprofit management practices and governance, and how this may differ in urban versus rural areas. The CSGVP had no information on the size of organizations, the type of training and support, the number of volunteers, and the types of recognition, which are factors that may impact on volunteerism (e.g., Cuskelly, Hoye, & Auld, 2006; Hager & Brudney, 2004; Rehnborg, Fallon, & Hinerfeld, 2002; Stirling, Kilpatrick, & Orpin, 2011). These variables may be especially important predictors of volunteer hours and commitment. Poor volunteer management (e.g., unclear roles) can lead to the cessation of volunteer efforts (e.g., Grossman & Furano, 2002; UPS Foundation, 1998). However, the thrust of our research was to examine resources and the interconnectedness within geographical spheres (e.g., regions, neighbourhoods), rather than the organizational context.

Another limitation is that we dichotomized urban/rural due to restricted sample size,

whereas rural areas in Canada can be separated into different zones (see overview by du Plessis, Beshiri, Bollman, & Clemenson, 2001). Studies that have larger youth samples should examine the relationship between volunteerism and rurality on a gradient. For example, areas that are closer to urban centers (i.e., strong metropolitan influenced zones) may share similar cultural and social characteristics with urban centers, than would weak metropolitan influenced zones.

Additionally, we categorized youth as aged 15-24, which is consistent with previous reports and definitions (e.g., Vézina & Crompton, 2012; World Health Organization [WHO], 2015). However, the literature often compartmentalizes youth into different categories based on developmental trajectories, transitional processes, and psychosocial benchmarks (see discussion by Curtis, 2015). Arnett (2000) posited that emerging adulthood (aged 18-25) is distinct from adolescence and young adulthood because of the demographic diversity among this group. Although researchers deconstruct youth into different categories, there is no consensus on the chronological definition for these specific groups. According to the World Health Organization (2015), adolescents are aged 10-19 while “youth” are aged 15-24. This definition is problematic because adolescence overlaps with “youth.” Several researchers have divided adolescence into sub-stages: early, middle, and late adolescence (e.g., Elliot & Feldman, 1990; Neinstein, Gordon, Katzman, Rosen, & Woods 2009; Steinberg, 2002). Despite these definitional inconsistencies, it is clear that experts consider that there are distinct developmental periods within this period of youth. Thus, putting all youth under one large umbrella may obscure nuanced differences in volunteer behaviour between different age groups.

Future Research

Future studies should build on some of the findings from this dissertation. In Study 1, we found that parental volunteering was associated with formal volunteer proclivity, especially for

rural youth, but we could only hypothesize potential explanations. Future research should probe deeper into this finding. For example, do parents provide more connections and opportunities for their children to volunteer? Do parents pass on civic orientations? Do these potential explanations differ for urban/rural youth? Similarly, rural youth who belonged to youth groups were especially more likely to formally volunteer, contributed more hours, and had higher informal volunteer intensities. Future research should investigate the groups that youth belong to (and the activities they do) and how this may foster prosocial orientations to volunteer.

Some researchers also propose that youth generations are becoming increasingly individualistic and narcissistic (Twenge, 2006). Future studies should explore whether generational context affects youth volunteerism, especially in terms of motives for volunteering. We found in Study 1 that high school students were more engaged in formal types of volunteering, perhaps because this type of volunteering offers more external rewards (Finkelstein, 2012). Additionally, independent versus interdependent self-construals may influence volunteerism differently depending on urban/rural residency. Rural youth may have interdependent self-construals, whereby they identify more with their social group than do urban youth. Since studies have shown that social cohesion is higher in rural places (Burnell, 2003; Theodori & Theodori, 2014), rural residents may volunteer to contribute to a common good or maintain relationships.

We found in Study 1 that rural youth whose language spoken at home was non-English were especially less likely to formally volunteer and also contributed fewer hours. We speculated that this may reflect the lower linguistic diversity in rural areas, as well as cultural tensions among Francophones, such as their distrust in formal organizations (Reed & Selbee, 2001). This latter point supports the necessity of using socio-ecological perspectives to understand the impact

of the broader society on volunteerism. However, these explanations do not fully explain why this was particular only to rural areas. Qualitative interviews with samples of rural Francophones and youth who speak languages other than English, may illuminate these findings.

Study 2 demonstrated some differences in number of skills acquired between urban and rural youth, but the underlying mechanisms for these differences were not very clear. For example, we found that rural youth who delivered goods and maintained buildings acquired fewer skills, whereas this was not found for comparable urban youth. Future studies should elucidate these findings by investigating specific volunteer activities and the skills acquired from each of these activities for urban and rural youth. Our analyses revealed that one strong predictor of nonvolunteer status for youth more generally (although stronger for rural youth) was preferring to donate money. Future research should examine giving patterns of nonvolunteers, such as where they donate, how often, and the dollar amount. There may be underlying reasons as to why some youth prefer to donate, other than the obvious suspect of less time commitment. Results from Study 2 showed that while lack of time was mentioned as a common barrier among youth, this did not translate into nonvolunteer status or contributing fewer hours.

Study 3 revealed that neighbourhood cohesion was important to Ottawa youths' volunteerism. Future studies should compare how neighbourhood characteristics (e.g., cohesion, satisfaction) relate to volunteer outcomes for urban and rural youth. The studies in this dissertation were also focused at the individual-level. Future research should use multilevel modeling techniques to examine neighbourhood measures (e.g., cohesion) and potential differences in volunteer rates. Studies should also include other neighbourhood measures, such as: proportion low-income, objective measures on the number of available amenities, aggregated measures of collective-efficacy, and residential instability.

There is substantial research on neighbourhood characteristics and youth health outcomes (see reviews by de Vet, de Ridder, & de Wit, 2011; Ingoldsby & Shaw, 2002; Karriker-Jaffe, 2011; Safron, Cislak, Gaspar, & Luszczynska 2011; Vos, Posthumus, Bonsel, Steegers, & Denktas, 2014), and yet the literature on neighbourhood and youth volunteering is scarce. Some studies have examined contextual-level influences on volunteerism, such as state-level ethnic heterogeneity (e.g., Rotolo & Wilson, 2012); immigrant concentration (Tong, 2010); area-level material insecurity (e.g., proportion unemployed, proportion of homes requiring major repair; Chum et al., 2015); and neighbourhood deprivation and residential instability (Bennett, n.d.). However, not all of these studies were limited to youth and most were not performed in a Canadian context. Neighbourhood factors are important to explore, given the public discourse that volunteerism is strongly associated with positive youth development, which essentially is linked to health and well-being. This could shed light on which neighbourhood attributes are most conducive to community engagement and whether interventions are necessary at the neighbourhood level to promote youth volunteerism.

Finally, future studies should also consider different measures of volunteerism. There is much debate in the literature on what even constitutes volunteerism, for example: service learning programs, mandatory community service, missionary helping, overseas volunteering, and community volunteering. Future research could examine how resources may be uniquely related to different measures and conceptualizations of volunteerism.

Conclusion

Despite the fact that volunteerism is a common form of social engagement for youth, some youth may have limited access or lack the means to become involved in their communities. This dissertation confirmed previous research and theories which posited that several different

resources are important to volunteering and that volunteering can be perceived as a productive activity that requires certain qualifications (Wilson & Musick, 1997). In general, youth with more social connections (e.g., belonged to youth groups), attended religious services, worked, and had parents who volunteered, were more likely to formally volunteer. However, we found that these same resources had different effects on hours contributed and informal volunteering, which underpins the importance of examining volunteer proclivity, type, and intensity.

The findings also extend the geographies of volunteerism literature by suggesting that place may play an important role in volunteerism, including motivations, barriers, outcomes, and volunteering intensity. Rural and urban youth differed in their motivations and barriers to volunteer. Additionally, different sociodemographic and resource characteristics had different impacts on volunteer outcomes, by urban/rural residency. Although these results were not remarkably strong, it does illustrate that larger macrosystem elements (e.g., cultures of different regions) may impact on youth volunteerism. Lastly, perceptions of one's local neighbourhood were also related to volunteerism, which demonstrates that volunteerism is influenced by many spheres. More research is needed to delve into these findings and further explore the interacting forces between persons and context. This research has the potential to foster positive youth development and build the volunteer sector across diverse neighbourhoods and regions in Canada.

References

- Andolina, M.W., Jenkins, K., Zukin, C., & Keeter, S. (2003). Habits from home, lessons from school: Influences on youth civic engagement. *PS: Political Science & Politics*, 36, 275-280. doi: 10.1017/S104909650300221X
- Arnett, J.J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55, 469-480. doi: 10.1037/0003-066X.55.5.469
- Barker, R. (1968). *Ecological psychology*. Stanford, CA: Stanford University Press.
- Bauch, P. (2001). School-community partnerships in rural schools: Leadership, renewal, and a sense of place. *Peabody Journal of Education*, 76, 204-221. doi: 10.1207/S15327930pje7602_9
- Bauer, T., Bredtman, J., & Schmidt, C. (2012). Time vs. money: The supply of voluntary labor and charitable donations in Europe. *European Journal of Political Economy*, 32, 80-94. doi: 10.1016/j.ejpoleco.2013.06.006
- Bennett, M.R. (n.d). *Volunteering and giving in England: A multilevel study of 313 neighborhoods*. Retrieved from: https://www.sp2.upenn.edu/wp-content/uploads/2014/07/socialimpactfellows_Bennett.pdf
- Beyerlein, K., & Hipp, J.R. (2006). From pews to participation: the effect of congregational activity and context on bridging civic engagement. *Social Problems*, 53, 97-117. doi: 10.1525/sp.2006.53.1.97
- Bowling, A., & Stafford, M. (2007). How do objective and subjective assessments of neighbourhood influence social and physical functioning in older age? Findings from a British survey of ageing. *Social Science & Medicine*, 64, 2533-2549. doi: 10.1016/j.socscimed.2007.03.009

- Brandth, B., & Haugen, M., (2000). From lumberjack to business manager: masculinity in the Norwegian forestry press. *Journal of Rural Studies*, 16, 343–355. doi:10.1016/S0743-0167(00)00002-4
- Bronfenbrenner, U. (1979). *The ecology of human development*. London: Harvard University Press.
- Bronfenbrenner, U. (1994). Ecological models of human development. In *International Encyclopedia of Education, Vol. 3* (2nd ed.; pp. 1643-1647). Oxford: Elsevier. Retrieved from <http://www.psy.cmu.edu/~siegler/35bronfebrenner94.pdf>
- Bronfenbrenner, U., & Morris, P.A. (2006). The bio ecological model of human development. In W. Damon & R.M. Lerner (Eds.), *Handbook of child psychology, Vol. 1: Theoretical models of human development* (6th ed., pp. 793-828). New York: John Wiley.
- Brown, E., & Zhang, Y. (2013). Is volunteer labor part of household production? Evidence from married couples. *Review of Economics of the Household*, 11, 341-369. doi: 10.1007/s11150-011-9138-1
- Buck, P.D (1996). Sacrificing human rights on the altar of “morality.” White desperation, far right explanation, and punitive social welfare reform. *Urban Anthropology*, 25, 195-210.
- Bye, L.M. (2009). ‘How to be a rural man’: Young men’s performances and negotiations of rural masculinities. *Journal of Rural Studies*, 25, 278-288. doi:10.1016/j.jrurstud.2009.03.002
- Carson, D.E. (1999). On defining and measuring volunteering in the United States and Abroad. *Law and Contemporary Problems*, 62, 67–71. Retrieved from <http://scholarship.law.duke.edu/cgi/viewcontent.cgi?article=1147&context=lcp>
- Carstensen, L.L. (1995). Evidence for a life-span theory of socioemotional selectivity. *Current Directions in Psychological Science*, 4, 151–156. doi:10.1111/1467-8721.ep11512261

- Choi, G.N., & DiNitto, M.D. (2012). Predictors of time volunteering, religious giving, and secular giving: Implications for nonprofit organizations. *Journal of Sociology and Social Welfare*, 39, 93-120. Retrieved from http://www.wmich.edu/hhs/newsletters_journals/jssw_institutional/institutional_subscribers/39.2.Choi.pdf
- Chum, A., Carpenter, S., Farrell, E., Mook, L., Handy, F., Schugurensky, D., & Quarter, J. (2015). Does geographic context influence employability-motivated volunteering? The role of area-level material insecurity and urbanicity. *Canadian Geographer*, 59, 354-368. doi: 10.1111/cag.12167
- Coleman, J.S. (1988). Social capital in the creation of human capital. *The American Journal of Sociology*, 94, 95-120. doi=10.1.1.208.1462
- Crocetti, E., Jahromi, P., & Meeus, W. (2012). Identity and civic engagement in adolescence. *Journal of Adolescence*, 35, 521-532. doi: 10.1016/j.adolescence.2011.08.003
- Crockett, L.J., Shanahan, M.J., & Jackson-Newsom, J. (2000). Rural youth: Ecological and life course perspectives. *Adolescent diversity in Ethnic, Economic, and Cultural Contexts: Advances in Adolescent Development*, 10, 43-74. doi: 10.4135/9781452225647.n3
- Curtis, A.C. (2015). Defining adolescence. *Journal of Adolescent and Family Health*, 7. Retrieved from <http://scholar.utc.edu/jafh/vol7/iss2/2>
- Cuskelly, G., Hoye, R., & Auld, C. (2006). *Working with volunteers in sport: Theory and practice*. Routledge, Taylor & Francis Group: London and New York.
- De Vet, E., de Ridder, D.T.D., & de Wit, J.B.F. (2011). Environmental correlates of physical activity and dietary behaviours among young people: a systematic review of reviews. *Obesity Reviews*, 12, 130-142. doi: 10.1111/j.1467-789X.2010.00784.x

- Du Plessis, V., Beshiri, R., Bollman, R.D., & Clemenson, H. (2001). *Definitions of rural* (Rural and Small Town Canada Analysis Bulletin No.3). Retrieved from <http://www.statcan.gc.ca/pub/21-006-x/21-006-x2001003-eng.pdf>
- Einolf, C.J. (2011). Gender differences in the correlates of volunteering and charitable giving. *Nonprofit and Voluntary Sector Quarterly*, 40, 1092-1112. doi: 10.1177/0899764010385949
- Eisenberg, N., & Fabes, R.A. (1998). Prosocial development. In W. Damon (Ed.), *Handbook of child psychology: Volume 3. Social, emotional, and personality development* (5th ed.), pp. 779-862). New York: Wiley.
- Elliott, G.R., & Feldman, S.S. (1990). Capturing the adolescent experience. In S.S. Feldman & G.R. Elliot (Eds.), *At the threshold: The developing adolescent* (pp. 1-13). Cambridge: Harvard University Press.
- Elshaug, C., & Metzger, J. (2001). Personality attributes of volunteers and paid workers engaged in similar occupational tasks. *The Journal of Social Psychology*, 141, 752-763. doi: 10.1080/00224540109600586
- Fairbairn, J., & Gustafson, L. (2008). *Beyond freefall: Halting rural poverty* (Final report of the Standing Senate Committee on Agriculture and Forestry, 39th Parliament—2nd session). Retrieved from the Parliamentary Internet website: <https://sencanada.ca/content/sen/committee/392/agri/rep/rep09jun08-e.pdf>
- Feldman, A., & Matjasko, J.L. (2005). The role of school-based extracurricular activities in adolescent development: A comprehensive review and future directions. *Review of Educational Research*, 75, 159 –210. doi: 10.3102/00346543075002159

- Fellegi, I.P. (1996). *Understanding rural Canada: Structures and trends* (Catalogue No. 21F0016XIE). Ottawa, ON: Statistics Canada.
- Finkelstein, A.M. (2012). Dispositional correlates of informal volunteering. *Current research in Social Psychology*, 18, 60-69. doi:10.1.1.364.1040
- Finkelstein, A.M., & Brannick, T.M. (2007). Applying theories of institutional helping to informal volunteering: motives, role identity, and prosocial personality. *Social Behaviour and Personality: An International Journal*, 35, 101-114. doi: 10.2224/sbp.2007.35.1.101
- Fischer, C.S. (1982). *To dwell among friends: Personal networks in town and city*. Chicago, IL: The University of Chicago Press.
- Fischer, C.S. (1984). *The urban experience* (2nd ed.). San Diego, CA: Harcourt Brace Jovonovich.
- Fischer, C. (1995). The subcultural theory of urbanism: A twentieth-year assessment. *American Journal of Sociology*, 101, 543-577. doi: 10.1086/230753
- Freiler, C. (2004). *Why strong neighbourhoods matter: Implications for policy and practice*. Retrieved from <http://3cities.neighbourhoodchange.ca/files/2011/05/2004-Toronto-Strong-Nhoods-TF-Why-strong-neighbourhoods-matter.pdf>
- Friedrichs, J., Galster, G., & Musterd, S. (2003). Neighbourhood effects on social opportunities: The European and American research and policy context. *Housing Studies*, 18, 797-806. doi: 10.1080/0267303032000156291
- Gardner, M., Roth, J., & Brooks-Gunn, J. (2008). Adolescents' participation in organized activities and developmental success 2 and 8 years after high school: do sponsorship, duration, and intensity matter? *Developmental Psychology*, 44, 814-830. doi: 10.1037/0012-1649.44.3.814

- Gibson, T. (2008). Religion and civic engagement among America's youth. *The Social Science Journal*, 45, 504-514. doi:10.1016/j.soscij.2008.07.007.
- Grimm, R. Jr., Dietz, N., Spring, K., Arey, K., & Foster-Bey, J. (2005). *Building active citizens: The role of social institutions in teen volunteering* (Youth Helping America Series, Brief 1). Retrieved from the Corporation for National & Community Service website: https://www.nationalservice.gov/pdf/05_1130_LSA_YHA_study.pdf
- Grossman, J.B., & Furano, K. (2002). Making the most of volunteers. *Law and Contemporary Problems*, 62, 199-218 : Retrieved from <http://scholarship.law.duke.edu/cgi/viewcontent.cgi?article=1153&context=lcp>
- Hager, M.A., & Brudney, J.L. (2004). *Volunteer management practices and retention of volunteers* (Volunteer Management Capacity Study Series, #2). Retrieved from The Urban Institute website: https://www.nationalservice.gov/pdf/Management_Brief.pdf
- Handy, F., & Cnaan, A.R. (2007). The role of social anxiety in volunteering. *Nonprofit Management and Leadership*, 18, 41-58. doi: 10.1002/nml.170
- Harmon, H.L., & Schafft, K. (2009). Rural School leadership for collaborative community development. *The Rural Educator*, 30, 4-9. Retrieved from <http://files.eric.ed.gov/fulltext/EJ869309.pdf>
- Hodge, G.D., & Qadeer, M.A. (1983). *Towns & villages in Canada. The importance of being unimportant*. Canada: The Butterworth Group of Companies.
- Hou, F., & Chen, J. (2003). Neighbourhood low-income, income inequality and health in Toronto. *Health Reports*, 14, 21-34.
- Hovbrandt, P., Fridlund, B., & Carlsson, G. (2007). Very old people's experience of occupational performance outside the home: Possibilities and limitations. *Scandinavian Journal of*

- Occupational Therapy*, 14, 77-85. doi: 10.1080/11038120600773013
- Ingoldsby, M.E., & Shaw, S.D. (2002). Neighborhood contextual factors and early-starting antisocial pathways. *Clinical Child and Family Psychology Review*, 5, 21-55. doi: 10.1023/A:1014521724498
- Jang, H.S., Wang, L., & Yoshioka, C.F. (2016). The impact of acculturation on informal and formal volunteering of Korean Americans in the United States. *Journal of Public and Nonprofit Affairs*, 2(1), 31-47. doi:10.20899/jpna.2.1.31-47
- Jeannotte, M.S. (2003). Singing alone? The contribute of cultural capital to social cohesion and sustainable communities. *The International Journal of Cultural Policy*, 9(1), 35-49. doi: 10.1080/1028663032000089507
- Kanacri, B.P., Rosa, V., & Di Giunta, L. (2012). The mediational role of values in linking personality traits to civic engagement in Italian youth. *Journal of Prevention & Intervention in the Community*, 40(1), 8-21. doi: 10.1080/10852352.2012.633064
- Karriker-Jaffe, J.K. (2011). Areas of disadvantage: a systematic review of effects of area-level socioeconomic status on substance use outcomes. *Drug Alcohol Review*, 30, 84-95. doi:10.1111/j.1465-3362.2010.00191.x
- Kay, T., & Bradsbury, S. (2009). Youth sport volunteering: developing social capital? *Sport Education and Society*, 14, 121-140. doi:10.1080/13573320802615288
- Kitchen, P., Williams, A., & Chowhan, J. (2012). Sense of community belonging and health in Canada: a regional analysis. *Social Indicators Research*, 107, 103-126. doi: 10.1007/s11205-011-9830-9
- Lamers, C. (1994). Volunteers: Rural versus urban. *The Journal of Volunteer Resources Management*, 3.4. Retrieved from http://www.cjvrm.org/past/Canadian_Journal_1994-

4.pdf

Lee, Y.J., & Moon, S.G. (2011). Mainstream and ethnic volunteering by Korean immigrants in the United States. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, 22, 811-830. doi:10.1007/s11266-010-9176-y

Lerner, R.M. (2002). *Concepts and theories of human development* (3rd ed.). Mahwah, NJ: Lawrence Erlbaum Associates.

Lukka, P. (2000). Youth volunteering: An overview of UK research, programmes and initiatives. The Institute for Volunteering Research.

Lyson, T. (2002). What does a school mean to a community? Assessing the social and economic benefits of schools to rural villages in New York. *Journal of Research in Rural Education*, 17, 131–137. Retrieved from http://jrre.vmhost.psu.edu/wp-content/uploads/2014/02/17-3_1.pdf

MacNeela, G., & Gannon, N. (2014). Process and positive development: An interpretive phenomenological analysis of university student volunteering. *Journal of Adolescent Research*, 29, 407-436. doi: 10.1177/0743558413510968

Mahoney, J.L., Larson, R.W., Eccles, J.S., & Lord, H. (2005). *Organized activities as contexts of development: Extracurricular activities, after-school and community programs*. Mahwah, NJ: Erlbaum.

Marta, E., & Pozzi, M. (2008). Young people and volunteerism: A model of sustained volunteerism during the transition to adulthood. *Journal of Adult Development*, 15, 35-46. doi:10.1007/s10804-007-9033-4.

McLellan, J.A., & Youniss, J. (2003). Two systems of youth service: determinants of voluntary and required youth community service. *Journal of Youth and Adolescence*, 32, 47-58.

doi: 10.1023/A:1021032407300

- Mekos, D., & Elder, G.H. (1996, March). *Community ties and the development of competence in rural youth*. Paper presented at the biennial meeting of the Society for Research in Adolescence, Boston.
- Miller, B.A. (1995). The role of rural schools in community development: Policy issues and implications. *Journal of Research in Rural Education*, 11, 163-172. Retrieved from http://jrre.vmhost.psu.edu/wp-content/uploads/2014/02/11-3_3.pdf
- Moore, K.A., & Halle, T.G. (2001). Preventing problems vs. promoting the positive: What do we want for our children? *Advances in Life Course Research*, 6, 141-170. doi: 10.1016/S1040-2608(01)80009-5
- Neinstein, L.S., Gordon, C.M., Katzman, D.K., Rosen, D.S., & Woods, E.R. (2009). *Handbook of adolescent healthcare*. Philadelphia, PA: Lippincott, Williams & Wilkins.
- Okun, M.A., Pugliese, J., & Rook, K.S. (2007). Unpacking the relation between extraversion and volunteering in later life: The role of social capital. *Personality and Individual Differences*, 42, 1467-1477. doi: 10.1016/j.paid.2006.10.020
- Pancer, S.M., Brown, S.D., Henderson, A., & Ellis-Hale, K. (2007). *The impact of high school mandatory community service programs on subsequent volunteering and civic engagement* (ISBN# 1-55401-296-1). Retrieved from Imagine Canada website: http://sourceosbl.ca/sites/default/files/resources/files/WLU_MandatoryVolunteering_Feb07_2007.pdf
- Penner, L.A. (2002). Dispositional and organizational influences on sustained volunteerism: An interactionist perspective. *Journal of Social Issues*, 58, 447-467. doi: 10.1111/1540-4560.00270

- Phillips, C.D., & McLeroy, K.R. (2004). Health in rural America: Remembering the importance of place. Editorial. *American Journal of Public Health*, 94, 1661-1663. doi: 10.2105/AJPH.94.10.1661
- Putnam, R.D. (2000). *Bowling Alone: The Collapse and Revival of American Community*. New York, NY: Simon and Schuster Paperbacks.
- Reed, P.B., & Selbee, L.K. (2000). *Formal and informal volunteering and giving: Regional and community patterns in Canada*. Retrieved from the Nonprofit Sector Knowledge Base Project website: <http://www3.carleton.ca/casr/Formal.pdf>
- Rehnborg, S.J., Fallon, C.K., & Hinerfeld, B.J. (2002). *Investing in volunteerism: The impact of service initiatives in selected Texas state agencies*. Austin, TX: LBJ School of Public Affairs.
- Richard, L., Gauvin, L., Gosselin, C., & LaForest, S. (2008). Staying connected: neighbourhood correlates of social participation among older adults living in an urban environment in Montreal, Quebec. *Health Promotion International*, 24, 46-57. doi: 10.1093/heapro/dan039.
- Rooney, P., Steinberg, K.S., & Schervish, P.G. (2004). Methodology is destiny: The effect of survey prompts on reported levels of giving and volunteering. *Nonprofit and Voluntary Sector Quarterly*, 33, 628-654. doi: 10.1177/0899764004269312
- Roth, J.L., & Brooks-Gunn, J. (2003). What exactly is a youth development program? Answers from research and practice. *Applied Developmental Science*, 7, 94-111. doi: 10.1207/S1532480XADS0702_6
- Rotolo, T., & Wilson, J. (2012). State-level differences in volunteerism research in the United States. *Nonprofit and Voluntary Sector Quarterly*, 41, 452-473. doi:

10.1177/0899764011412383

Ruiter, S., & de Graaf, N.D. (2006). National context, religiosity and volunteering: Results from 53 countries. *American Sociological Review*, 71, 191–210. doi:

10.1177/000312240607100202

Safron, M., Cislak, A., Gaspar, T., & Luszczynska, A. (2011). Micro-environmental characteristics related to body weight, diet, and physical activity of children and adolescents: a systematic umbrella review. *International Journal of Environmental Health Research*, 21, 317-330. doi:10.1080/09603123.2011.552713

Schoggen, P. (1989). *Behavior settings*. Stanford, CA: Stanford University Press.

Séguin, A.M., & Divay, G. (2002). *Urban poverty: Fostering sustainable and supportive communities* (Discussion paper F|27). Retrieved from Canadian Policy Research Networks website: http://www.cprn.org/documents/17371_en.pdf

Selbee, K.L. (2004). *Volunteering in Canada: An application of social resources theory to the likelihood of being a volunteer, and to the determination of volunteer effort* (Doctoral thesis, Carleton University, Ottawa, Canada). Retrieved from <http://www3.carleton.ca/casr/Dissert.pdf>

Sherrod, L.R., Torney-Purta, J., & Flanagan, C.A. (2010). Introduction: Research on the development of citizenship: A field comes of age. In L.R. Sherrod, J. Torney-Purta, & C.A. Flanagan (Eds.), *Handbook of research on civic engagement in youth* (pp. 1-22). Hoboken, NJ: John Wiley.

Skoe, E.E.A., Cumberland, A., Eisenberf, N., Hansen, K., & Perry, J. (2002). The influences of sex and gender-role identity on moral cognition and prosocial personality traits. *Sex Roles*, 46, 295-309. doi: 10.1023/A:1020224512888

- Smith, D.H. (1994). Determinants of voluntary association participation and volunteering: A literature review. *Nonprofit and Voluntary Sector Quarterly*, 23, 243–263.
doi: 10.1177/089976409402300305
- Stanton-Salazar, R.D. (1997). A social capital framework for understanding the socialization of racial minority children and youths. *Harvard Education Review*, 67, 1-40.
doi: 10.17763/haer.67.1.140676g74018u73k
- Steinberg, L. (2002). *Adolescence* (6th ed.). Boston, MA: McGraw Hill.
- Stirling, C., Kilpatrick, S., & Orpin, P. (2011). A psychological contract perspective to the link between non-profit organizations' management practices and volunteer sustainability. *Human Resource Development International*, 14, 321-336.
doi:10.1080/13678868.2011.585066
- Sundeen, R.A., & Raskoff, S.A. (2000). Ports of entry and obstacles: Teenagers' access to volunteer activities. *Nonprofit Management and Leadership*, 11, 179-197. doi: 10.1002/nml.11204
- Themudo, N.S. (2009). Gender and the nonprofit sector. *Nonprofit and Voluntary Sector Quarterly*, 38, 663-683. doi: 10.1177/08997640093333957
- Theobald, P., & Nachtigal, P. (1995). Culture, community, and the promise of rural education. *Phi Delta Kapan*, 7, 132-135. Retrieved from ERIC database. (ED388464)
- Theodori, A.E., & Theodori, G.L. (2014). Perceptions of community and place and the migration intentions of at-risk youth in rural areas. *Journal of Rural Social Sciences*, 29, 103-121. Retrieved from <http://www.ag.auburn.edu/auxiliary/srsa/pages/Articles/JRSS%202014%2029/1/JRSS%202014%2029%201%20103-121.pdf>
- Theokas, C., & Lerner, R.M. (2006). Observed ecological assets in families, schools, and

- neighborhoods: Conceptualization, measurement, and relations with positive and negative developmental outcomes. *Applied Developmental Science*, 10, 61-74. doi: 10.1207/s1532480xads1002_2
- Therrien, F., & Desrosiers, J. (2010). Participation of metropolitan, urban and rural community-dwelling older adults. *Archives of Gerontology and Geriatrics*, 51, 52–56. doi: 10.1016/j.archger.2009.11.017
- Tong, Y. (2010). Foreign-born concentration and acculturation to volunteering among immigrant youth. *Social Forces*, 89(1), 117-143. doi: 10.1353/sof.2010.0048
- Tudge, J.R.H., Gray, J., & Hogan, D.M. (1997). Ecological perspectives in human development: A comparison of Gibson and Bronfenbrenner. In J. Tudge, M. Shanahan, & J. Valsiner (Eds.), *Comparisons in human development: Understanding time and context* (pp. 72-105). New York, NY: Cambridge University Press.
- Turcotte, M. (2005). *Social engagement and civic participation: are rural and small town populations really at an advantage?* (No.21-006-XIE). Retrieved from Statistics Canada website: <http://publications.gc.ca/Collection/Statcan/21-006-X/21-006-XIE2005004.pdf>
- Twenge, M.J. (2006). *Generation me: Why today's young Americans are more confident, assertive, entitled—and more miserable than ever before*. Simon and Schuster.
- UPS Foundation. (2002). *A guide to investing in volunteer resources management: Improve your philanthropic portfolio*. Retrieved from <http://www.community.ups.com>
- Van Goethem, A.J.A., van Hoof, A., van Aken, M.A.G., Raaijmakers, Q.A.W., Boom, J., & Orobio de Castro, B. (2012). The role of adolescents' morality and identity in volunteering. Age and gender differences in a process model. *Journal of Adolescence*, 35, 509-520. doi: 10.1016/j.adolescence.2011.08.012

- Van Tienen, M., Scheepers, P., Reitsma, J., & Schilderman, H. (2011). The role of religiosity for formal and informal volunteering in the Netherlands. *International Journal of Voluntary and Nonprofit Organizations*, 22, 365-389. doi:10.1007/s11266-010-9160-6
- Vézina, M., & Crompton, S. (2012). *Volunteering in Canada* (No.11-008-x). Retrieved from Statistics Canada website: <http://www.statcan.gc.ca/pub/11-008-x/2012001/article/11638-eng.pdf>
- Vos, A.A., Posthumus, G.A., Bonsel, J.G., Steegers, A.P.E., & Denktas, S. (2014). Deprived neighbourhoods and adverse perinatal outcome: a systematic review and meta-analysis. *Acta Obstetrica et Gynecologica Scandinavica*, 93, 727-740. doi: 10.1111/aogs.12430
- Wang, L. (2011). Understanding how philanthropy and nonprofit activities manifest in minority communities in the United States. In K.A. Agard (Ed.), *Leadership in nonprofit organizations: A reference handbook* (pp. 258-266). Thousand Oaks, CA: Sage Publication. doi:10.4135/9781412979320.n30
- Williams, C.C (2003). Developing voluntary activity: Some policy issues arising from the 2001 Home Office citizenship survey. *Social Policy and Society* 2, 285-294. doi: 10.1017/S1474746403001416
- Wilson, J. (2000). Volunteering. *Annual Review of Sociology*, 26, 215-240. doi: 10.1146/annurev.soc.26.1.215
- Wilson, J. (2012). *Volunteerism research: a review essay. Nonprofit and Voluntary Sector Quarterly*, 41, 176–212. doi: 10.1177/0899764011434558
- Wilson, J., & Musick, M.A (1997). Who cares? Toward an integrated theory of volunteer work. *American Sociological Review*, 62, 694-713. doi: 10.2307/2657355.
- Wilson, J., & Musick, M.A. (1998). The contribution of social resources to volunteering. *Social*

Science Quarterly, 79, 799-814.

Woolvin, M., & Harper, H. (2015). *Volunteering 'below the radar'? Informal volunteering in*

urban Scotland: Research summary. Retrieved from Volunteer Scotland website:

http://www.volunteerscotland.net/media/624210/mw_phd_summary_30_07_15.pdf

World Health Organization (2015). *Adolescent health*. Retrieved from World Health

Organization website: http://www.who.int/topics/adolescent_health/en

Wrzus, C., Hänel, M., Wagner, J., & Neyer, F.J. (2013). Social network changes and life events

across the life span: A meta-analysis. *Psychological Bulletin*, 139(1), 53-80. doi:

10.1037/a002860

Yao, K. (2015). *Who gives? The determinants of charitable giving, volunteering, and their*

relationship (Doctoral dissertation, The Wharton School). Retrieved from

http://repository.upenn.edu/cgi/viewcontent.cgi?article=1129&context=wharton_research_scholars

Zaff, J.F., Moore, K.A., Papillo, A.R., & Williams, S. (2003). Implications of extracurricular

activity participation during adolescence on positive outcomes. *Journal of Adolescent*

Research, 18, 599-630. doi: 10.1177/074355840325477