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FACTORS INFLUENCING VOLUNTEERING AMONG THE ELDERLY IN THE CZECH REPUBLIC

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ABSTRACT

Using data from a convenience sample of 274 respondents, 55 years and older and living in the Czech Republic, the author carried out an exploratory research study to shed more light on volunteering among Czech senior citizens. Volunteering is currently promoted by the government of the Czech Republic, but as yet, remains an under-researched topic. The investigation of presumed low volunteer rates among Czech senior citizens was framed by two theories—social capital theory and socio-structural resources theory—and additionally by country specific factors that take into account geographical structure and historical development. The socio-structural resources were represented by variables related to age, relationship status, gender, education, income, employment status, health, religiosity, and free time. Social capital theory was represented by variables related to social trust, frequency of contacts with friends, neighbors, and family (informal social capital), and associational membership. Country specific variables were represented by levels of helping, size of hometown, years spent in current hometown, mobility mode, and volunteering literacy. Among all predictors, NGO membership, social trust, volunteering literacy, helping, age, and gender were found to be the best predictors of volunteering status. To quite a surprise, volunteers were not found to be healthier, wealthier, more trusting, or more educated then non-volunteers. Despite the fact that among all post-communist countries, the Czech Republic ranks the highest on both social trust and volunteering, social trust, contrary to the international research, seems to negatively influence person's likelihood of volunteering. At the same time,

contrary to the assumption that close-tied informal networks substitute for formal ones as a carry-over from the communism, helping was not found to be a substitute for volunteering. It was revealed that a higher level of helping was associated with a higher level of volunteering.

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CHAPTER ONE

INTRODUCTION

A vibrant civil society is a sign and an engine of well-established democracies. The

Czech Republic is a relatively young democracy and in this respect limps behind old

world democracies. There are many activities that can be labeled civic engagement, e.g.,

voting, petitioning, or volunteering. This research focuses on volunteering; more

specifically, it focuses on volunteering among senior citizens. Nowadays, the Czech

elderly and pre-elderly population are people who lived through a totalitarian past and

thus were banned from expressing their free will. In the most general sense, this research

aims to identify factors, drawn from social resources theories, that are conducive and not

conducive to volunteering. This discovery, in turn, can determine the next steps leading

toward higher volunteer participation of the Czech elderly. This introduction chapter

defines volunteering, presents volunteer rates, and introduces the Czech environment and

historical background of volunteering in the country.

Volunteering definitions

There are many definitions of volunteering. Cnaan, Handy, and Wadsworth (1996)

found four common elements in definitions of volunteering. Volunteering is (1) non-

obligatory thus a freely chosen activity by the volunteer, (2) carried out (among other

things) for the benefit of others, society or a specific organization, (3) unpaid even though

volunteer's travel expenses can be remunerated, and (4) most likely takes place in an

institutional context. There is no universal agreement on the fourth element. Wilson and Musick's (1997) definition adds that volunteering involves a collective action, meaning that one is more likely to carry out some voluntary work if other people around carry out some voluntary work as well. Additionally, there is an ethical relationship between volunteer and recipient, and volunteering can be formal or informal. The International Labour Organization (ILO) (2011) defines volunteering negatively, i.e., by what it is not. According to this definition, voluntary work is not paid, not compulsory, not obligatory, not free work done for household members, and the scope of it is not limited to a particular beneficiary.

Volunteering is a pro-social behavior, and it is associated with civil society and social capital. It is an indicator of civil society, which is, by definition of CIVICUS (World Alliance for Citizen Participation), an arena outside of the family, the state, and the market, which is created by an individual and collective action, organizations, and institutions to advance shared interests (Mati, Sylva, & Anderson, 2010). Dekker and Halman (2003) even state that civil society is often seen as the exclusive societal sphere of voluntary involvment. Thus, volunteering has a potential to serve as a vehicle that puts ideas into motion. In a broader sense, volunteering is one of the indicators of the social capital concept. Social capital refers to resources that are derived from relationships with other people and organizations (Okun & Michel, 2006). Putnam's (2000) definition states that social capital refers to social networks that provide the channels through which we recruit one another for good deeds. The theory of social capital, along with the operationalization and variables chosen as measures of social capital, will be further

described and developed in Chapters II (Literature Review) and III (Methodology). It is assumed that countries with a vibrant civil society fare better than those who suppress their civil society. On the same note, countries ranking high on social capital also rank high on democracy; thus, promoting social capital through volunteering, also promotes democracy (Putnam, 2000). In addition, for volunteering to occur, people also have to possess material and nonmaterial resources, social and structural resources. Volunteering, at the same time, has the potential to bring many advantages to those who pursue it. In the age group studied, the biggest advantages are connected to social, emotional, and physical health.

Cultural background

In former communist countries, the volunteering rate is still quite low although it is steadily increasing. However, the growth comes mostly from younger age cohorts. The elderly population, which is increasing both in numbers and life expectancy, on the other hand, are very rare among volunteers. In the concept of productive aging, volunteering seems to be a meaningful activity that could engage some of the elderly. In fact, volunteering was mentioned/outlined/introduced in a national strategy for healthy and productive aging in the Czech Republic for the first time in 2008 (Governmental Decree number 1 from 2008). However, the number of studies that can provide a picture of Czech civil society and volunteering among elders in particularly is very scarce. To the knowledge of the author, only a few studies were conducted on this topic in the Czech Republic. In the light of the limited research evidence, there is a need to better understand

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the factors that influence the presumed low rate of volunteering among the elderly in the Czech Republic.

Volunteering in numbers

Volunteering in the Czech Republic, as in other former communist countries, is low when compared to mature world democratic countries, and volunteering is even lower in the age group studied in this research. According to the *European Value Survey/ World Value Survey 1999-2002 (EVS/WVS 1999-2002)*, the highest rate of volunteering in democratic countries was found in the United States (66%), South Africa (59%), Philippines (57%) and Sweden (54%), whereas the lowest rates were found in Russia (7%) and in Central-Eastern European countries that used to be Soviet allies, such as Poland (12%) and Hungary (14%). Only the Czech Republic and Slovakia show deviation from this pattern with volunteer rates approaching those found in West European States (i.e., 30% and above) (Juknevičius & Savicka, 2003; Hodgkinson, 2003; Plagnol & Huppert, 2009). Similarly, a local study conducted by STEM (2004) on a representative sample of Czech population found a 32% rate of formal volunteers in the Czech Republic.

Volunteering in the age of interest is even lower, suggesting that despite the fact the Czech Republic is catching up with the rest of the world in overall volunteering, the elderly population is still underrepresented in the pool of volunteers. In a survey on the lives of temporary Czech senior citizens, Zich and Struhovský (2005) found that in a non-representative sample of over 500 respondents 47 to 93 years old, only 19% were active in public life. In this study 'active' was means that the respondents attended cultural

events of the Senior Club or were members of an interest association such as Beekeepers or Gardeners, and approximately 5% of these were volunteers. This number is very low when compared to Western European countries where the average level of volunteering among the elderly is between 9% and 14% (Erlinghagen & Hank, 2006), or approximately 24% reported by US Bureau of Stats (2012) for age group 65+. Vidovicová's (2005) analysis of a representative sample of Czech population age 60 years and above also supports low civic engagement among the elderly.

Volunteering pattern

As noted above, a high number of people volunteer in special interest organizations. The high participation in special interest organizations suggests a different pattern of civic engagement when compared to the United States. Hodgkinson (2003) and Salamon and Sokolowski (2001) notice that volunteering in countries differs by selected areas of activity. For example, countries of Anglo culture, such as Great Britain, Canada, and the United States, have much higher levels of volunteering, and the volunteering is focused on social welfare. The high level of volunteering stems from the historical legacy of a volunteer culture of addressing citizen needs and from a more limited welfare state. On the other hand, in Scandinavian countries and Netherlands where governments provide funding for most social welfare, the majority of voluntary work is done in recreational fields (e.g., hunting) or as an expressive volunteering related to civic issues and social movements. In Central-Eastern European countries that have recently finished transitions to democracy and have generous social welfare systems, a high proportion of volunteering is still found in areas of sports and recreation. This is the general pattern

seen in multinational comparisons (Salamon & Sokolowski, 2001). In the Czech Republic, approximately 40% of all volunteering takes place in sports and recreation, recreation being represented mainly by gardeners and fishermen (STEM, 2004). It is not a surprising discovery, given that public services, in which volunteering mostly takes place in liberal regimes, were purposefully provided by the state for almost half a century, and the only areas, in which people could voluntarily express and exercise their free will, was in leisure activities. It is assumed that whilst formal volunteering in the communist era was guided toward mandatory public actions, such as community litter picking, rather than toward altruistic deeds, people were close one another informally.

Sozanská (2007), the director of the National Volunteer Center, posits that volunteering done outside of an institutional context, such as care-giving for kin within a family network or non-kin, in a local context called voluntary civic assistance and informal volunteering, or helping (in this study), constitute a large portion of volunteering in the Czech Republic. Pichler and Wallace (2007) found higher informal social capital in former communist countries, explaining that whereas the informal capital in countries of Southern Europe was pro-family oriented, in former communist countries, it was more neighbor and community oriented. The preliminary results of Frič and Pospíšilová's (2009) study of civil society in the Czech Republic, titled *Patterns and Values of Volunteering in Czech and Norwegian Society*, for which a representative sample was gathered, showed that within the 38% of informal volunteers, three-quarters stated they provide civic assistance to their neighbors.

It seems that informal volunteering can reveal a very different picture about volunteering in a country; however, the vast majority of international research on volunteering considers only formal volunteering (e.g., Okun & Michel, 2006; Parkinson, Warburton, Sibbritt, & Byles, 2010; or Thoits & Hewitt, 2001), since it is easily quantifiable and defined. Complex volunteering, any activity freely done for benefit of others, is not frequently studied as the main and only focus because researchers very often analyze data from the well-known international surveys, such as World Value Survey or Eurobarometer that include few or no questions on informal volunteering. In addition, the debate whether helping should count as volunteering has not been resolved. There are a number of researchers who keep considering it volunteering (e.g., Wilson & Musick, 1997; Hank & Stuck, 2008; Choi, Burr, Mutchler, & Caro, 2007). Acknowledging the importance of informal social networks during communism and its potential carry-over to the present, informal volunteering is included in this research.

Benefits of volunteering

Besides the benefits volunteering brings to the community and society, making it more vibrant, it also brings personal benefits to those who carry it out. Retirement is often associated with losing social ties and higher levels of mostly undesired inactivity, which qualifies retired citizens as a vulnerable population. Volunteering presents an option for role-supplement to the elderly because voluntary work keeps people active and surrounded by people as if they were in paid employment. Activity in post-productive age is also a key component to *active* or *productive aging*, a concept first introduced in early 1980s by the father of gerontology, Robert Butler, at the Salzburg seminar and broadly

supported by the United Nations. Volunteering is believed to foster interpersonal trust, toleration, and empathy for others, and respect for the common good (Wilson & Musick, 2000). Volunteering as a productive activity has a positive effect on health (Thoits & Hewitt, 2001; Morrow-Howell, Hinterlong, Rozario, & Tang, 2003). It also has a positive effect on various dimensions of wellbeing, such as life-satisfaction (Morrow-Howell, Hinterlong, Rozario, & Tang, 2003), happiness, self-esteem, person's control over life, known as mastery belief (Thoits & Hewitt, 2001). Volunteering over time brings elderly volunteers higher perceived social support or social connections (Parkinson, Warburton, Sibbritt, & Byles, 2010). Morrow-Howell, Hong, and Tang (2009) found that half of the volunteers reported they were somewhat better off because of their volunteer experience, and 31% even reported they were a great deal better off because of their volunteer experience. Also van Willigen (2000) found that voluntary work was positively related to psychological well-being of the elderly volunteers; in this aspect, elder volunteers benefited more from their volunteering than did their younger counterparts. From longitudinal data analyses, Musick et al. (1999) found that volunteers had a lower mortality hazard than did non-volunteers, and the hazard was the lowest for moderate volunteers. At the same time, they found that mental health of older volunteers remained better when they volunteered.

Problem Statement

With the better economic standing of the Czech Republic, life expectancy has grown to the current 80.7 years for females and 74.7 years for males (Czech Statistical Office,

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2012). The Czech Statistical Office [ČSÚ] predicts that by 2050 more than 31% of Czech citizens will be older than 65 years (Rutařová & Slavík, n.d.), which will be an increase by one half from almost 20% of people sixty years and older counted in 2005. Despite the pending and inevitable increase of the retirement age, nowadays Czech senior citizens will presumably still enjoy many years of their life in retirement. Volunteering presents one of the options to remain useful and active and thus serve as a role supplement.

At the same time, Governmental Decree No. 8 from January 9, 2008, entitled *National Strategy for Preparation for Population Aging for 2008-2012*, was issued by the Ministry of Labor and Social Affairs of the Czech Republic. In Section 8, On Participation and Human Rights of the Elderly, for the first time formal volunteering is recognized as an opportunity for self-fulfillment, acquisition of social contacts, and an opportunity to start a "second career" of the elderly. The decree also appeals to local authorities, non-governmental organizations, educational institutions, and various Ministries to take steps supportive of civic engagement among the elderly (Ministerstvo práce a sociálních věcí, 2008). The first report on progress in implementation of the national plan from July 2010 provides only vague information about the implementation of volunteering, such as new programs aimed at helping the elders being accredited, and some elders volunteering (Zpráva o plnění Národního programu přípravy na stárnutí na období let 2008 až 2012, n.d.). Governmental recognition of volunteering and its appeals to state institutions to facilitate the growth of volunteer rate among the elderly is a big step forward; however, the author believes the stepping stone in reparation of the

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situation is in the identification of the factors that influence whether Czech senior citizens will volunteer or not.

Unfortunately, the research on volunteering in the Czech Republic is very scarce, and it is even scarcer on the elderly population. The majority of research on volunteering of the elderly was gathered either from international comparative surveys, such as General Social Survey, World Value Study/European Value Study (WVS/EVS), or Study on Health, Ageing, and Retirement in Europe (SHARE), that were not specifically focused on volunteering, provided rather descriptive information, or came from small qualitative research. In addition, many researchers analyzing data from these studies did not include or could not include informal volunteering, which seems to play an important role in the context of volunteering in the Czech Republic. As for the local research, to the knowledge of the author, during the last decade, only four Czech surveys employing either a probability sampling e.g., Frič, Deverová, Pajan & Šilhanová, or relatively high sample sizes, e.g., Zich & Struhovský, 2005, were conducted. The first survey that employed a probability sampling was the STEM survey in 2004, which primarily sought to identify the status of civil society. The second survey, Vidovicová's (2005), sought to identify activities in retirement. The third survey, Frič and Pospíšilová's (2009), sought to identify patterns of volunteering in the Czech Republic and Norway.

For the current research, the author proposes a more comprehensive research study that would shed some light on volunteering among the elderly by exploring the structural (contextual) factors that influence volunteering among the Czech elderly and encompass also factors that reflect the communist past and geographical population distribution.

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For more than four decades, in the Czech Republic, as well as in other post-communist countries, volunteering was devalued by the policy of the totalitarian state. As Sozanská (2007), the director of the National Volunteer Center Hestia, stated, the vast majority of social activities were based on the principle of social collectivism. Everyone was forced to volunteer and authentic voluntary associations could operate only in fields that would not have undermined totalitarian philosophy, such as in health care provision, sports, and leisure activities. Given the coercive nature of volunteering during the communist era, there is a presumption that low interest of Czech seniors in volunteering might be influenced by misunderstanding of the word *volunteering*, so it seemed important to include this term, despite the fact that in so called Western world its meaning is clear. Knowledge of the term volunteering was not the only variable to consider. One can hardly volunteer, if there were no volunteer opportunities nearby. Thus, the knowledge of local volunteer opportunities, was probably also influenced by size of residence (urban versus rural), and thus was included in control variables.

The present study employed a quantitative survey methodology to investigate the factors drawn from two resource theories, social capital and socio-structural resources. Despite the non-probability sampling, quite a high number of elderly and pre-elderly people was obtained.

Purpose of the Study

From the academic point of view, the primary purpose of this study was to test two sets of factors drawn from social capital and socio-structural resources theories to

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find, which set of factors explain the low volunteering among the Czech elderly better. At the same time, the goal was to discover the extent of informal volunteering, since many studies do not consider this aspect.

From the practical point of view, the purpose of this study was to discover why the Czech retirees and people in their preretirement age are scarce in the pool of formal volunteers.

Last, but not least, the purpose of this study was to establish cooperation between academia, represented by the student-researcher, and non-governmental organizations who are sending volunteers to serve wherever needed. Since people and organizations in the Czech Republic are not used to participating in research. This study was, in many cases, a new experience for them. The vision of the researcher is to conduct a more comprehensive research on volunteering and philanthropy in future.

Significance of the Study

Twenty-two years after the Velvet Revolution, the civil society in the Czech Republic is still being built, and thus there is a unique opportunity for scholars to conduct both cross-sectional and longitudinal research on this topic. The field of volunteering is still heavily under-researched. The information on volunteering of the elderly in the Czech Republic is just not present. Some optimistic estimates can be made from international comparative studies. Only four Czech studies are known by the author that reach at least national / country-wide importance, include a higher sample size and have a

rigorous research design. This research employed a sample of 274 respondents, 55 years and above, which is a statistically acceptable number.

In addition, given the necessity to include formal elderly volunteers in the sample and given the low formal participation of the Czech elderly in volunteering, for this research, elderly volunteers were purposefully oversampled. Answers from 95 current volunteers and 18 others who volunteered between years 1989-2011 were collected. This also increased the importance of this study.

Many studies on volunteering do not consider informal volunteering, since it is less quantifiable than formal volunteering, which was already emphasized earlier in this chapter (e.g., Okun & Michel, 2006; Musick & Wilson, 2003). Some social scientists assume that in former communist countries with low formal volunteer participation, there are more informal than formal volunteers (e.g., Pichler & Wallace, 2007), since volunteering used to take place in more private context, thus informally. Hence, some researchers negate this (e.g., Plagol & Hupert, 2010). Today's terminology also uses term *helping* for informal volunteering. Considering substitution of formal volunteering by informal volunteering or at least their complementarity, helping should be reflected in the research design of studies on volunteering in countries with former totalitarian regime, especially when older age cohorts are the target population. The author believes that the addition of helping allows for a more objective picture of volunteering in the Czech Republic.

Research questions

The review of current relevant literature on volunteering research and the above described situation of the Czech Republic led to the following questions:

- What factors promote volunteering among the elderly in the Czech Republic?

- Does informal volunteering substitute for formal volunteering among the Czech elderly as presumed?

Definitions of Terms

The following definitions are important in understanding and further interpretation of the study results:

Volunteering – organized but freely chosen, non-compulsory, and non-obligatory work done to benefit people outside of one's household, taking place under allspices of some non-governmental organization;

Helping – not organized freely chosen work done to benefits friends, neighbors and people outside of one's household;

Elderly – for the purpose of this research, people 55 years of age and older

Organization of the Study

The dissertation commences with an in-depth literature review on the two resources theories used as the framework for this research and the country specific variables drawn from the literature and knowledge of the civic and geographical

environment of the Czech Republic. Chapter II also presents in-depth description of the variables used to measure the two concepts used as the framework and their potential predictive power verified mostly in Western world research. Chapter III describes the research methodology. More specifically, it restates the research questions, research hypotheses, methods, delimitations, limitations, Institutional Review Board approval, results of an a-priori power analysis, study sample, methods of recruitment of the participants, methods of data collections, and instrumentation. Chapter IV presents the research results, including the data preparation, description of the sample, bivariate analyses between the dependent variable of interest, current volunteering status, and all independent variables, and the statistical analyses for each of the three main hypotheses. The last chapter, Chapter V, discusses the study findings, the limitations that should be considered when interpreting the findings, and implications for future research on volunteering and civil society in the Czech Republic. The very last part of this dissertation presents the appendices, which include the power analysis table and the data collection instruments.

CHAPTER TWO

LITERATURE REVIEW -- CONCEPTUAL FRAMEWORKS

This chapter presents an overview of the conceptual framework used in this research. Since there are several research networks broadly used in research of volunteering and civic participation by the elderly, this chapter commences with a brief introduction of these frameworks. It also briefly lists the most recent research approaches used in academic research on the topic. Later it introduces in detail both resources theories, i.e., the social capital and socio-structural resources, from which the factors tested were drawn. Last, it introduces the culture specific issues the author believed should be addressed by research on Czech volunteering among the elderly and pre-elderly population.

Volunteering is a topic that attracts many disciplines. Economists, for instance, are interested in economical value of volunteering, sociologists examine volunteering in context of social cohesion and social welfare, psychologists examine volunteering in context of pro-social behavior, and political scientists examine volunteering in context of democracy and citizenship (Hustinx, Cnaan & Handy, 2010). Naturally, all of them use different conceptual frameworks. The fact that volunteering fits in many conceptual frameworks; i.e., its versatility, is also the main problem with the conceptualization of volunteering (Wilson, 2000). It can be seen as a rather loose concept.

Wilson (2000), adopting House's (1981) outline on social support, to which volunteering also belongs, sees two predominant individual perspectives or approaches in sociological research of the topic. The first is the subjectivist approach, which treats the individual as the centre and context as a background, whereas the second, the behaviorist approach, assumes that person is influenced by the context. The first research framework is dominated by the role motivation in volunteer studies. The motivation to volunteering (e.g., Omoto & Snyder, 1995; Okun, Barr, & Herzog, 1998), the contribution of various types of motivation to volunteering (e.g., Clary, Snyder, Ridge, Copeland, Stukas, Haugen et al., 1998), and the motivation to volunteering by the elderly (e.g., Warburton & Dyer, 2004) have been broadly examined. The second framework is dominated by the resources research. In the second context, it is assumed that a person's decision to volunteer is based on a rational weighing of costs and benefits of volunteering and the ability to work as determined by resources (Wilson, 2000).

The resources theories, also chosen as a framework of this research, are currently the most prevalent focus in volunteerism research (e.g., Musick & Wilson, 1998; Warburton & Stirling, 2007; Choi & Chou, 2010). The first resource theory was the human capital approach (e.g., Gillepsie & King, 1995), which was later enhanced by the social resources approach and more recently replaced or at least enhanced by social capital (e.g., Wilson & Musick, 1998). Wilson and Music, also distinguish cultural capital, which they defined as norms of pro-social behavior, usually facilitated by religion.

Aside from the motivation and resources needed, volunteering was recently examined as the key component of productive activities in post-productive age (e.g., Hank & Erlinghagen, 2010; Morrow-Howell, Hinterlong, & Sherraden, 2001; Bass & Caro, 2001). Volunteering was also examined from the life-course perspective (e.g., van Willigen, 2000), in both cases aiming to explain the relationship of age and volunteering. Volunteering was also studied from cross-national perspective (e.g., Erlinghagen & Hank, 2006), trying to examine the differences in volunteering across the nations, and in the case of Pichler and Wallace (2007), among the regions of Europe. Last, volunteering has been examined from the cost/benefit perspective (Morrow-Howell, Hong, & Tang, 2009).

Given these examples, volunteering can be seen as a rather loose concept. It is also difficult to decide, which perspective is the most suitable in the case of the Czech Republic, due to the scarce body of research done there. The author decided to model this study after two resources approach studies, the study of American sociologists Wilson and Musick (1997) and the study of Australian sociologists Warburton and Stirling (2007).

Wilson and Musick (1997) in the article entitled *Who Cares* examined how different resources influence volunteering and caring differently. For their analysis, they considered the variables age, race, and gender as external factors. It means that these variables did not change as result of changes in other variables in their model; however, they made a difference to other variables in the model, so that their effect was indirect. In their analysis, they considered human capital variables (education, income, health status),

social capital variables (number of children in household, informal social interaction), and cultural capital (value of helping, religion) as endogenous factors and regressed them on measure of formal and informal volunteering. They found that volunteering promotes helping but helping does not promote volunteering. They also found that socioeconomic status influences volunteering but not helping and that religiosity, as a measure of cultural capital, promotes volunteering but not helping and that cultural norms influence helping and not so much volunteering. These results were valid for the US population.

Warburton and Stirling (2007) examined factors affecting rural and urban elderly in Australia. They also used both resources theories and used age cohort and locality to search for interaction effects. Social capital, in their study, was represented by organizational membership, religious affiliation, marital status, and migrant status. Socio-structural resources were represented by education, work status, income, gender, and health. It was found that neither theory sufficiently predicted volunteering among the Australian elderly; however, where one lives affected the probability of volunteering.

<u>Social Capital</u>

Social capital refers to networks of social connection (Putnam, 2000, p.116-117), and it has become one of the most popular exports from sociological theory into everyday language (Portes, 1998). The feature that distinguishes social capital from other forms of capital, such as human or economic capital, is the underlying social structure. Coleman (1988) defined social capital by its function as a variety of different entities with two

elements in common. First, there are some aspects of social structure and second, there is a facilitation of some action within the social structure.

In the broadest sense, social capital is defined as networks and opportunities to mobilize resources. The core idea of social capital theory is that social networks have value (Putnam, 2000, p. 18-19). Social networks exist not only because of the common goal of making some publicly desirable activity but also because there is certain level of coherence and trust in the group. Making good deeds at below market level value usually involves volunteering on the part of members of the social networks.

In the most narrow concept, social capital is viewed as a set of horizontal associations between people (Grooteart, 2001). As Putnam (2000) noted, social networks provide the channels through which we recruit one another for good deeds, and social networks foster norms of reciprocity that encourage attention to others' welfare. Social networks and associated norms that create social capital have an effect on the productivity of the community (Grooteart, 2001).

Social capital is not a single feature. It comes in different shapes and sizes (Putnam, 1999, p.21). Social capital can be demonstrated through various types of political or community participation, either a more single person or a group oriented action, formal or purely informal. Volunteering is just one component that fits under the term social capital. For some (e.g., Putnam), volunteering is the central measure of social capital. One of the reasons to this claim is that volunteering can be easily measured and usually is part of data reported by NGOs who employ volunteers.

The concept of social capital came into being in 1980 when first described by a French sociologist Pierre Bourdieu (e.g., 1980, 1986). In his research, Bourdieu searched for interpretation of reproduction of class behavior through cultural mechanisms, and he believed that social capital was in the heart of the analysis (Schuller, Baron, & Field, n.d.). Thanks to Coleman and his analyses of driving forces of social capital, it became well known (1988). Social capital became known to the general public after publication of Putnam's Bowling Alone (2000).

The benefits of social capital are several. First, it is a better and faster access to a broad array of information. The second direct benefit of social capital is seen in the influence or power that can be created within a group. The third direct benefit of social capital is solidarity and reciprocity. In a broad sense, social capital brings also positive side effects, such as increased personal safety. On an American population, it was discovered that the level of crime in the community goes hand-in-hand with social capital, the decline of the former one being accompanied with the growth of the latter one (e.g., Saegert & Winkel, 2004).

Putnam (2000) recognized two dimensions of social capital, bridging and bonding. The term bridging means making networks between individuals or organizations of different focus whereas bonding means making networks of similar focus. Putnam uses an allegory where bonding is seen as sociological superglue, whereas bridging is seen as a sociological WD-40. Both bridging and bonding are needed to create social capital. At the same time, social capital can take formal or informal faces. Informal social networks refer to interactions among family, friends, and others, whereas formal

group involvement refers to interaction with people outside of kin and family circles. The present study also distinguishes between formal and informal social capital. Most researchers are interested only in beneficial functions of social capital; however, it does not mean that social capital can only be a positive asset; people can also gather and act of a malevolent nature. Given that volunteering is a positive outcome of social capital, this study is also interested only in the beneficial function of social capital.

Variables broadly used to measure social capital

There are several variables broadly used to measure social capital. The World Values Survey 1994 used two measures of social capital: associations and trust (Paxton, 2002). Associations denoted the number and type of organizations one is voluntarily a member of; thus, it provided some insight into one's networks. Trust meant a generalized trust, or whether or not one believed that others could be trusted (Paxton, 2002). Beaudoin and Thorson (2004) distinguished social networks and social trust using two indices of each concept. They used association membership and neighborliness for social networks, and interpersonal and community trust for social trust. Graddy and Wang (2008) used five indices of social capital: bridging social networks, informal social networks, civic engagement, organized group activism, and social trust. In that survey, civic engagement referred to formal networks, and organized group activism referred to frequency of activity versus passivity of engagement. Wilson and Musick (1998), used four measures of social capital: informal social interaction, formal social interaction, number of friends, and network density. Informal social interaction referred to frequency of contacts with friends, formal social interaction was measured by frequency of group

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meetings attendance and religious services attendance. Network density sought to provide information whether the people marked as friends belong to one network.

For this study, the variables informal social capital (i.e., informal social interaction), associational membership as a demonstration of formal interaction, and social trust were chosen as the measures of social capital. These variables are further discussed below.

Informal social capital

The Wilson and Musick's basic premise regarding informal social capital is that people who socialize more with others have a higher chance of learning about volunteer opportunities and thus have a higher chance of getting involved with volunteering. Informal social capital variable, the assessment of one's informal network, in Graddy and Wang's analysis (2008), was measured by an index of five questions created based on number of times the respondent performed some activity. The activities graded were playing cards with others, visiting relatives, inviting friends over, socializing with co-workers in off duty time, and spending time with friends in public places during the past 12 months. In Wilson and Musick's (1997) analysis of the American Changing Lives survey, informal social capital was measured by an index created from two items, frequency of telephone contact of the respondents with friends, neighbors, or relatives during a typical week, and frequency of meetings with friends, relatives, or neighbors. The correlation between both formal and informal volunteering and informal social interaction found was low, Pearson's $r = .18$ and $r = .19$ respectively, but significant (Wilson & Musick, 1997). In another analysis performed by the same authors and on the

same data, correlation between range and amount of volunteering and informal social interaction among the elderly part of the sample was also found low, Pearson's r = .18 and r = .14. Given a rather general picture of one's time and the fit of volunteering is sought, only a few questions regarding social interaction are to be asked.

Social trust

From a sociological perspective, social trust, one's faith in other people and organizations, can also affect people's willingness to commit themselves to volunteering. According to Uslaner (2001), social trust is the most important determinant of volunteering. In addition, as Uslaner (2001) notices, the longitudinal research design straightened Putnam's virtuous circle of civic engagement and trust to a virtuous arrow running from trust to civic engagement, showing that trusters become joiners and not the other way around. Thus, a higher count of formal volunteers is expected to be found in society with higher social trust. Such is implied from studies comparing the social capital of former communist countries with Western societies (e.g., Badescu, 2003; Pichler & Wallace, 2007; Letki & Evans, 2005). The low social trust is anticipated, since in the Czech Republic, the society was highly fragmented and atomized, and there is still a carry-over demonstrated as lack of trust between individuals and as well as between government and individuals (Letki & Evans, 2005).

There are several classifications of trust. Uslaner (2001), for example, divides trust on particularized and generalized, whereas von Oorschot and Arts (2005) divide trust on institutional and interpersonal. Despite the different terms, particularized and interpersonal trust refer to trust in people and institutions one knows, whereas the

interpersonal trust refers to trust to unknown people and institutions. The latter classification of trust was chosen for this study.

Social trust in the Czech Republic is low. According to a CIVICUS report (2006), less than one-fifth of Czech citizens agreed with a statement that other people can be trusted, in comparison with two-fifths of Germans, and three-fifths of Norwegians. The 2007 OECD-30 data suggest that the generalized social trust in the Czech Republic is slightly higher than 30%. For comparison, in Netherlands, the generalized social trust is double the number found for the Czech Republic (Vodrážka, 2009). In addition, Letki and Evans's (2005) findings on social trust in Central Eastern European countries placed the level of social trust in the Czech Republic at the lowest of three categories constructed. In their survey, on the scale from 1 to 5, the Czech Republic scored 2.769 with a standard deviation of .593. It was the third lowest number in 11 countries sampled and the smallest standard deviation reported, suggesting that the level of trust was consistently low even across the sample of the Czech population. Badescu (2003) confirmed that social trust in post-communist countries (aggregate level) is low in comparison to West European countries. He found a polychoric correlation of .14 between social trust and volunteer association membership in the Czech Republic, which was used (and is often used) as a proxy measure for volunteering in post-communist countries.

For comparison, the overall correlation between trust and association membership found in WVS 1999 for Western nations was .39 (Badescu, 2003), and a similar correlation (.37) was reported by Delhey and Newton (2005) among all WVS countries.

Social scientists Beaudoin and Thorson (2004) found a moderate correlation (Pearson's r = .315) between volunteering and association membership, extending the premise about trusters becoming joiners to trusters becoming joiners and joiners becoming volunteers. Such findings suggest that level of social trust might be a significant factor in determining volunteer rate among Czech elderly. Low social trust could be explained as a remaining burden from the totalitarian regime when Czech society was infiltrated with secret agents and informers working for the communist government.

Surprisingly, low social trust seems to conflict with the prevailing belief that the state should maintain a paternalistic role and provide for the well-being of its citizens. It also seems to contradict the democratic values the Czech Republic has been pursuing since 1989. The commonly accepted causality of democracy being built on high social trust and civic participation, so called bottom-up approach to democracy building, does not seem to work for Central European countries (Letki & Evans, 2005).

Formal social interaction

Formal social interaction, as stated above, can be defined as contact with people outside of one's network. It is supposed that people who are engaged in formal social networks may learn about volunteering opportunities or become volunteers due to their participation in these networks. In Okun and Michel's (2006) research, variable organizational ties served as proxy for formal social interaction, and a moderate positive correlation (r = .37) was found between volunteering and organizational ties. The variable organizational ties was determined as an index summing up number of meetings the respondent had per month including unions or other professional groups, sports or social

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groups, and other not job-related groups. Warburton and Stirling (2007) used attendance over the past three months at a recreational or cultural group activity, a special interest group activity, and a church group activity. Such is important to distinguish "card-carrying" membership from the active membership, which supposedly promotes volunteering.

The General Social Survey (1972-1998) asked respondents to indicate whether they were members of one or more of nine organizations listed plus one other organization not listed. The answers were coded 1 if yes, and 0 if no, and based on answers to all types of organizations, an index with 10 equals maximum and 0 equals no associational membership was formed. The nine types of organizations were business civic groups like Kiwanis or Rotary, religious organizations, charity or volunteer organizations, ethnic and racial organizations, neighborhood associations, PTA or other school related groups, political clubs or organizations, social clubs (hobby organizations), or youth groups like scout or children's sport (Fleming, Thorson, & Peng, 2005). Janoski, Musick, and Wilson (1998) created an index of associational membership by summing up the membership in nine organization types and from frequency of meetings. A measure of formal social capital capturing number (and by coincidence also type) of organizations one is a member of, along with frequency of attendance of meetings to capture activity of engagement, seem to suit this current research the best. It seems sufficient for this present research to list the possible associational memberships and use the sum of these to measure formal social interaction. Phrases associational membership and NGO membership will be used interchangeably in this research.

Social Resources Theory, Socio-Structural Resources

Social resources refer more to characteristics of an individual. They are easily quantifiable and thus very often collected in social surveys. In some literature, they are called human capital. Social resources variables are income, level of education, and occupation. In general, more educated people and/or people with higher income tend to volunteer more often (e.g., Warburton & Stirling, 2007; Tang, 2006; Choi, 2003). More educated people most likely posses resources that allow them to do volunteer activity. Mustillo, Wilson, and Lynch (2004) found that in the pool of socio-structural variables, only the socioeconomic status variable increases volunteering over the life course. This finding by sociologists is in contrast to the assumption of economists that volunteering would be lower among more educated and affluent people due to the opportunity cost (e.g., Freeman, 1997).

Erlinghagen and Hank (2006), reviewing a large number of surveys, focused on finding the factors that lead people to volunteering and found that a higher volunteer rate is associated with higher education, social status, and marital status. Choi (2003) not only noticed that socio-structural resources are relatively stable but also adds to the list of variables age, gender, race, and religious preferences. These characteristics, according to Herzog and Morgan (1993), define an individual's position in the social structure and prescribe his/her functions and roles in society and imply differential access to society's resources and opportunities (p. 123-124, cited by Choi, 2003). Wilson and Musick (1997) also included indicators of health status among human capital variables whereas they label religiosity as cultural capital. In this study, framed by two major blocks of factors, it

seems reasonable to follow Choi's (2003) classification and include religious preferences among socio-structural block.

The relationship between the socio-structural variables presented above and volunteering varies from almost non-existent, as in the case of the relationship between volunteering in old age and gender (Pearson's r = .03, non-significant) to a moderate strength relationship between volunteering and education (Pearson's r = .27) (Wilson & Musick, 1997). All the socio-structural variables considered for this research are presented below.

Variables used to measure socio-structural resources

Gender

As for the role of gender as a predictor of volunteering in old age, some studies suggest that elderly women are more likely to be volunteers than elderly men (e.g., Morrow-Howell, Hong & Tang, 2009). On the other hand, Gerstel and Gallagher (1994) found the opposite for formal volunteering, but found that women devote twice the time of males to kith and kin or non-kith and non-kin caregiving. Choi (2003) and Warburton and Stirling (2007) also found a non-significant relationship between volunteering and gender. In addition, Warburton and Stirling (2007) believe that gender in older adults is not a predictor of volunteering as older males and females are likely to have similar resources of time and income. Gender can be a predictor of volunteer roles people take, e.g., females more frequently prefer volunteering including person-to-person care rather than, for example, a preparation of a political campaign, but it is not goal of this research to discover gender patterns in volunteering. Thus, there is more support for the statement

that gender is not a good predictor of volunteering of the elderly. The data on gender will be collected only for descriptive purpose but will not be considered in the regression analysis.

Age

The research related to the relationship between age and volunteering in later life found the relationship to be linear and the directionality as expected; as people grow older, they volunteer less (e.g., Thoits & Hewitt, 2001). In the US, volunteering peaks in age group 35-44 years (31.8%) and gradually declines to 24% in age group 65 years and above (US Bureau of Statistics, 2012). A negative Pearson's correlation coefficient of .11 was found between volunteering and aging by Thoits and Hewitt (2001). Similarly, Wilson and Musick (1997) found a negative Pearson's correlation coefficient of .06 between volunteering and aging. However, in their other analysis of data of the elderly population, they found a non-significant negative Pearson's correlation coefficient of .04 between age and amount of volunteering, but a significant negative Pearson's correlation coefficient of .11 between volunteering and range of volunteer activities (Wilson & Musick, 1998). Most likely, the decrease in volunteering is caused by a lack of other resources needed for volunteering, such as health. In the United States, people who volunteer during their retirement are the most devoted volunteers, putting almost double the number of hours in volunteering, on average 96 hours per year. For comparison, the median for all age groups is 51 hours per year (Bureau of Labor Statistics, 2012). There are no data available for the Czech Republic; however, the same trend in relationship of age and volunteering is expected.

Health

Health, according to many researches, seems to be an important resource for volunteering. Celdran and Villar (2007) and Warburton and Stirling (2007) found that vast majority of volunteers in their research reported excellent or very good health as opposed to fair or poor health. Pearson's correlation coefficient for the relationship between volunteering and health ranged between .1 and .17 (Haski-Leventhal, 2009; Thoits & Hewitt, 2001; Wilson & Musick, 1997). Tang, Morrow-Howell, and Choi (2010) found that demands for other productive activity or commitments (e.g., employment, spouse care) and health decline were also the top reasons for quitting a volunteering program in more advanced age. Health is measured either as a single item or a scale formed from several items. The World Value Survey 1995, for example, asks one question about current overall health, whereas American's Changing Lives inquires about different kinds of impairments and physical limitations. Thoits and Hewitt (2001), analyzing the Americans' Changing Lives survey, created a simple scale for health from three questions, first inquiring about general satisfaction with one's health, second inquiring about currently perceived health rating, and third asking to assess one's extent of limitation of daily activities due to health. For this survey, a single question with five answer categories is found to be sufficient.

Relationship status

Relationship status is included in socio-structural variables, since it is believed that it influences first the density of one's networks and thus chances to learn about volunteer opportunities. Second, it influences the economic status of person, given that in

two-income families, people have more financial resources and can afford to "work" for free. Okun and Michel (2006) found that married participants volunteered more than non-married participants. However, non-married participants, in this case, were also participants living with someone as well as those widowed. Erlinghagen and Hank (2006) found some indication of a greater engagement among those people who lived with a partner as compared to those who lived alone. It seems that the relationship between volunteering and relationship status is rather questionable and weak. Musick, Wilson, and Bynum (2000) examined the relationship between volunteering and family status (i.e., marital status combined with number of children) and found almost nonexistent and nonsignificant correlations except for a negative .08 correlation between volunteering and being single with children. On the other hand, Musick and Wilson (2003) found a .27 Pearson's product moment correlation between being single and volunteering, which substantially changes both magnitude and directionality of this relationship. Jirovec (2005) noted that Herzog and Morgan (1993) found that when the education level was controlled in accessing this relationship, the relationship between marital status and volunteering became insignificant. This variable is included due to the logic that married people have access to more financial and social resources than single people.

Education

Education seems to be a very important predictor of volunteering, and there is an ample evidence for this. Erlinghagen and Hank (2006) found that more educated people volunteer more, and this bivariate analysis pattern was also repeated in multivariate comparisons. It might be also true that more educated people work in non-manual jobs

and are able to work past their retirement age. Similarly, Tang (2006) found that education was a significant factor in predicting volunteering. Warburton and Stirling (2007) found that people with a trade diploma were 1.06 more likely to volunteer than people without a trade diploma, thus with only primary education. People in age group 55-64 years with a trade diploma were 2.18 more likely to volunteer than people in age group 65-74 with only a primary education. Similarly, Plagnol and Huppert (2010) found that people with high school degree volunteer more often than people with lower than high school degree. Thoits and Hewitt (2001) found a Pearson's correlation coefficient of .19 between volunteering and education. Wilson and Musick (1997 and 1998) found a Pearson's correlation coefficient of .27 across the sample and .2 between amount of volunteering and education, and Pearson's correlation coefficient of .24 between range of volunteering and education in the group of elderly respondents. In Beaudoin and Thorson's research (2004), Pearson's product moment correlation found between volunteering and level of education achieved was .32 for people living in rural areas and .45 for people living in urban areas. Musick, Wilson and Bynum (2000), at the same time, notice that more educated people are far more often approached by recruiters, since there is a higher probability that they will agree to volunteer. Interestingly and contrary to findings of the authors cited above, in Petrová-Kafková's (2012) secondary analysis of the 2008 EVS data for subpopulation of the Czech elderly, education was not found a significant predictor of volunteering in this age group. However, given the general importance of education in assessing one's willingness to volunteer, it is included in current research.

Income

Income seems to be closely related to education, given that more educated people usually work in non-manual jobs with a higher salary than a manual job requiring a lower level of education. On the other hand, in the age group considered, income may not be an important factor predicting volunteering, given that the target population of this study comprises mostly of retirees who receive a retirement pension.

Beaudoin and Thorson (2004) found a very low correlation of .05 between income and volunteering for people living in rural areas, and the relationship was not significant for people living in urban areas. Similarly, Wilson and Musick (1998) found Pearson's product moment correlation of .18 between range of volunteering and income, and correlation of .1 between the amount of volunteering and income in the category of retired people. Income in this study was measured as a household income, not an individual income. In another study by Wilson and Musick (1997), a Pearson's product moment correlation of .2 was found between volunteering and family income, and even higher correlation, Pearson's r = .24, was found by Thoits and Hewitt (2001). Family or household income, as opposed to individual income, seems to be a more reliable parameter, given that people living in a household usually share financial resources. In the context of this survey, variable income may show high missing data due to the natural unwillingness of the Czechs to reveal their level of income, despite the fact that the survey is anonymous. For example, a 20% non-response rate to the level of household income question, acquired by CATI surveying technique, was reported in the 50+

Aktivně [50+ Actively] research summary, inquiring about various areas of life of the Czechs 50 years and older (Bočková, Hastrmanová, Havrdová & Vojtková, 2010).

Free Time

Role overload assumes a negative relationship between full time occupation and volunteer work; however, Markham and Bonjean (1996) did not find a full support for this theory, concluding that full time employed women volunteer at similar rates as part-time and unemployed women; they just put in fewer volunteer hours. In addition, Wilson (2000), citing other researchers, stated the negative relationship between work and volunteer hours is complicated first by the fact that the unemployed and homemakers do not follow this pattern, and second, the curve depicting hours worked rises with the hours volunteered to a certain point.

The population of interest considered in this research is mostly retired, given that in general Czechs retire earlier than Americans. Some scientists argue that retirement is an ideal time to start volunteering since more free time becomes available; however, this assertion is not supported. For instance, Erlinghagen (2010) strictly denies this retirement effect, i.e., that the newly acquired time in retirement would be used for volunteering. In addition, Rosenberg and Letrero's (2006) longitudinal data analysis revealed a cohort effect in volunteering, meaning that people who volunteered in their middle age, tended to keep volunteering even in their retirement age. A similar observation was also made by Mutchler, Burr, & Caro (2003). Regarding the cohort effect, Rosenberg and Letrero (2006) found that volunteering rates across the life course peak at approximately 34% among people 35 to 44 years old, decline by three percent among those 45 to 54 years

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old, decline by another four percent in age cohort 55 to 64 years and fall to 23% among age cohort 65 years and older (Rosenberg & Letrero, 2006). In addition, Choi (2003) found that part-time employed elderly volunteer in more cases than elderly who do not work or work full time. Therefore, it is assumed that people who had volunteered prior their retirement would most likely be volunteering in retirement, if they had other resources, such as health, sufficient income, and time. Conversely, it is expected that people who did not volunteer in their productive age would most likely not volunteer during retirement.

Besides these two effects, it might be true that elderly, no matter if they volunteer in their active/productive life or want to volunteer in retirement, might not have time to do so. Choi, Burr, Mutchler, and Caro's analysis (2007) confirmed that people caring for their spouses are less likely to volunteer due to time strain. In the Czech Republic, the elderly are very often engaged in babysitting grandchildren or spouse care and both activities may significantly shorten their free time. In the Czech Republic, there is a tradition of inter-generational help (Kuchařová, Rabušic, and Ehrenbergerová, 2002). Despite the fact that in the post WW2 period, the Czech family, in general, transformed from a three generation cohabitation to a single generation living, approximately 50% of respondents 65 years and older live within 30 minutes distance from at least one of their children. As Kuchařová, Rabušic, and Ehrenbergerová (2002) continue, the older generation's support toward the younger generation is expected and almost taken for granted till the members of the older generation are too old. Converselaly, children are expected to help their aging parents with tasks they can no longer do themselves. In

Kuchařová, Rabušic, and Ehrenbergerová's (2002) research, 32% of respondents 60+ reported taking care of grandchildren whenever needed, 30% reported babysitting sometimes, and 38% of respondents reported babysitting rarely or never.

As for the spouse care, no statistics were available for the Czech population; however, there was research conducted on expectations in old age. Vidovicová & Rabušic (2003) found that nine in ten respondents belived that their spouse should take a full care of them in case they became dependent and the same percentage of respondents stated they expect less complicated medical care to be performed by their spouse. Despite the fact this was an opinion assessment rather than clinical experience, it demonstrated that care expectation is high in the Czech society; thus, it makes a sense to investigate the free time of seniors, given that caring for family members may significantly shorten their free time and prevent them from volunteering.

Religiosity

Research, conducted with the so called Western world population, has proved quite a strong and positive relationship between religiosity and volunteering, suggesting that religious people volunteer more than non-religious people (e.g., Wilson & Musick, 1997; Thoits & Hewitt, 2001; Okun & Michel, 2006). This trend was also seen in countries with high religiosity, such as the United States of America. In Wilson & Musick's (1997) analysis of ACL data, the Pearson's product moment correlation between church attendance and volunteering was .28 and a similar strength correlation (Pearson's $r = .27$) was found by Thoits & Hewitt (2001) in their analysis of the SHARE data. However, religiosity, in a vast majority of studies including the two studies cited

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here, was assessed by frequency of church attendance, which may not be the most accurate measure of religiosity, but it is the one frequently used as a proxy. As Lam (2002) noted, religiosity is a much more complex construct, which has, aside from the participatory dimension, also other dimensions such as private or affiliation. For instance, when religiosity was measured by importance of religion in one's life, rather than by frequency of mass attendance, the correlation dropped to .08 (Musick, Wilson, & Bynum, 2000).

Aside from the strength of particular dimensions of religiosity and their relationship to volunteering, it seems that in the Western world, churches provide an institutional channel to volunteering (Wilson & Musick, 1997). These researchers suppose that religious people volunteer more because they have a better chance to learn about volunteer opportunities than people who do not go to church (Wilson & Musick, 1997). In the Western world, church-goers volunteer more for religious non-governmental organizations than non-religious people, which is an expected finding (Ruiter & de Graaf, 2006). However, religiosity (measured by church attendance) also has a spillover effect on non-faith based non-governmental organizations, i.e., religious people also volunteer more often for secular NGOs (Ruiter & de Graaf, 2006; Taniguchi & Thomas, 2011).

Wilson and Musick (1997) found that people who volunteer attend church more often than people who help (Pearson's $r = .06$), which suggests that church-goers volunteer officially since they have more opportunities to learn about volunteering. When looking at the relationship between denomination and volunteering, from all the Christian

religions, it seems that Protestants volunteer the most (Ruiter & de Graaf, 2006; Lam, 2002).

The Czech Republic, on the other hand, is one of the most secular countries in the world with only approximately 20% of the population claiming to be religious on an optional question of the 2011 Census poll (Czech Statistical Office, CENSUS 2011-Preliminary results). The three major churches represented in the Czech Republic are the Roman Catholic Church (Římskokatolická církev), which takes the highest share, the Evangelic Church of Czech Brethren (Českobratrská církev evangelická), and the Hussite Church (Církev československá husitská).

In this analysis, religious preferences are included into the socio-structural block of variables, rather than in a separate block as in Wilson and Musick's (1997) and Musick, Wilson, and Bynum's (2000) studies, in order to keep a reasonable number of blocks to be entered into the regression analysis. It seems that the relationship between volunteering and religiosity status is quite strong.

Country Specific Variables

Data on volunteerism are routinely collected by many international surveys. However, as Badescu (2003) points out, volunteering might be reflected differently in countries with previous experience of undemocratic regime, which is the case of the Czech Republic. For this reason, it seems reasonable to add country-specific variables to decrease the bias coming from the application of Western world research framework. These variables are informal volunteering (helping), knowledge of the term volunteering,

knowledge of volunteer opportunities, summarized into volunteering literacy index, and mode of transportation.

Helping

It was mentioned earlier that opinions on formal volunteering and informal volunteering differ. For some people and researchers, both are different faces of the same construct, but for other people, these are two distinctive constructs and very often only formal volunteering is considered. In this research, the author distinguishes between formal volunteering (labeled volunteering) and informal volunteering (labeled helping) for two main reasons, one of them is the different nature of helping and volunteering, and second one is the Communist past.

The differences between volunteering and helping are best described by Wilson and Musick (1997). According to these authors, volunteering is typically carried out in the context of organizations. Helping, on the contrary, is typically carried out in the context of neighbors and kin. Helping is also more private and not organized. In addition, there is a different driving force behind helping. Helping is, most likely, more influenced by obligation whereas volunteering is more likely a matter of choice. At the same time, helping is more casual.

The second reason, and probably even the stronger reason for distinguishing these two constructs, is the historical background that should be considered while conducting research in the Czech Republic. Prior the Velvet Revolution in 1989, the number and scope of nongovernmental organizations and thus also the number of volunteer opportunities was limited by government. As Frič, Deverová, Pajan, and Šilhánová

(1998) described, soon after the communist's take over in 1948, leaders of then existing nongovernmental organizations were imprisoned or even sent to work camps and the majority of the organizations were dissolved. At that time, many organizations were faith based and charities. The only approved and state supervised organizations and associations existing during the 40 years of communism were either apolitical by nature, (e.g., Bee Keepers, Philatelists, Fishermen), or serving the communist propaganda (e.g., the League of Czechoslovak-Soviet Friendship). Salamon and Sokolowski (2001) also concluded that voluntary associations in so called Eastern Europe served mainly as venues for expression of occupational interests and leisure time activities. Thus, there is an assumption that in environments where people are not able to express their free will and determination by participation in organizations, they are prone to helping one another in their more intimate networks, such as helping to relatives and neighbors. It is also believed that a significant amount of helping would be found in the sample more than 20 years past the liberating revolution, since the population of interest had experienced communism.

In countries that did not undergo a transition from communism to democracy, however, it was not found that helping would serve as a supplement for volunteering or vice versa (Gallagher, 1994; Plagnol & Hupert, 2010). To the contrary, a positive Pearson's product moment correlation of .34 to .38 (depending on the area cluster) was found between these two variables (Plagnol & Hupert, 2010). Burr et al. (2005), examining Americans' Changing Lives data, found that the probability was 10.9 % higher for a caregiver (helper) to be a volunteer than for a non-caregiver and that

caregivers even contributed 9.33 hours of volunteering annually more than non-caregivers. Furthermore, Wilson and Musick (1997) found that volunteering predicted helping, but helping did not predict volunteering. This experience from Western world may not hold true for the Czech Republic; however, it is equally likely that it would.

The elderly population does differ in scope and frequency of helping population when compared to younger cohorts. First, Gallagher (1994) found that a high number of elderly provide help to family, friends, and strangers. Second, she confirmed an expected supposition that older a person grows, the more narrow the circle of people served is. On the other hand, the elderly devoted more hours to helping than the younger cohort, even when employment status was controlled.

Helping is usually measured by several questions combined in one index. Henriksen (2006) asked people whether they provided assistance to people outside of their own household on a regular basis. Assistance was described as practical, such as gardening, shopping, or laundry, and economical support. In Wilson and Musick's (1997) research on American's Changing Lives data, informal volunteering was sought by asking about the number of hours one spent helping others during the past year. In *God in the Netherlands* survey, helping was comprised of helping neighbors and informal care of the elderly and the disabled (de Hart, 2001). In this study, it seems more reasonable to include a general question.

Volunteering literacy

In the conceptualization of this proposed research, knowledge of volunteering is viewed as an independent category or factor, given that volunteering for the population of

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interest might have had a different meaning. Apart from being imperceptible to formal volunteering, elderly people living in rural areas, which is also the case of the Czech Republic given the geographic structure by age, might not have any chance to get involved, due to scarcity of non-governmental organizations, in which formal volunteering takes place in vast majority of cases.

The general assumption of at least the semi-voluntary or involuntary nature of volunteering during the communism era (e.g., Salamon & Sokolowski, 2001) sets a foundation for this control factor. However, such an assumption is not uniformly supported by findings from 12 semi-structured interviews with current formal volunteers in the age group 47 and above on the perception of volunteering prior to 1989 and later (Pospíšilová, 2011). Given the scarcity of research in this area, her unique qualitative study discovered that the perception of involuntary nature of volunteering during communism depended heavily on the interperetation of the interviewee's perception of the former regime. Some interviewees strictly denied an involuntary character of volunteering, some admitted it, and some of them did not perceive any difference in the nature of volunteering prior to 1989 and after. Though all these subjects of the study were able to define volunteering in modern terms and modern history of the Czech Republic, it is possible that non-volunteers have a different understanding of the term even 22 years after the revolution.

Knowledge of volunteering is closely connected with the knowledge of volunteer opportunities, since volunteering, in modern era, takes place in NGOs. Tošner (Hestia) distinguishes between old types of NGOs (leisure, mostly sport and hobby associations)

existing during communism and new types of NGOs (social services oriented either secular or faith-based, environmnetal, and human rights oriented). The latter group is in modern history associated with volunteering (Pospíšilová, 2011); thus, inquiring about the knowledge of organizations where one could formally volunteer brings additional information on knowledge of what volunteering is.

Mobility mode

The Czech Republic is a country with a dense public transportation system that was built during the communism when car ownership was a luxury. Still today, among the elderly, there are a few who drive a car. Given that some people live in villages where buses or/and trains go only a few times per day, these people may be restricted from volunteering. No ownership of car is a communist legacy rather than a lack of financial means.

Years in community

The variable years is community is included as a control variable, given that those who have spent more years in their community are more attached to it and have a larger network of contacts, so they can learn about volunteer opportunities more easily than newcomers. This variable is included despite the fact that Beaudoin and Thorson (2004) found a non-significant and almost nonexistent relationship between volunteering and years in community in American sample, and similar conclusion was reached by Josen (2006) who analyzed the Survey on Giving and Volunteering in the United States data. It is believed that people who are new to their community have not found time to search for volunteer opportunities.

Opportunities to volunteer

At the same time, in rural areas, they may not be any opportunities to formally volunteer, as also Badescu (2003) notices in his critique of international surveys not taking in account local environment or context. Haski-Leventhal (2009) also notices that geographical accessibility of volunteering might be a barrier to volunteering. Vidovicová (2005), analyzing Life in Old Age 2002 survey data, found a negative Pearson's correlation coefficient of .12 between volunteering and size of residence. Parkinson, Warburton, Sibbritt, and Byles (2010) on the Australian sample found the opposite that people living in rural areas are 1.3 more likely to volunteer than people living in rural areas. Despite the fact there are no empirical data other than that the network of civic associations as the major type of NGOs are quite evenly dispersed across the 13 regions of the Czech Repulic (Hyánek & Rosenmayer, n.d.), it is expected that the density of organizations people could volunteer for is very low in rural areas. Thus, in the data analysis, it should be controlled for this initial difference in access to volunteer opportunities by holding the difference between access to volunteer opportunities by people living in urban and rural areas constant. The access to volunteer opportunities will be operationalized as size of hometown.

CHAPTER THREE

METHODOLOGY

This chapter describes how this study was conducted. It restates the research

questions and hypotheses in the context of the Czech Republic; it addresses limitations,

delimitations, power analysis, sample determination and participant recruitment process,

Institutional Review Board approval, instrumentation, pilot testing, and data analysis.

The goal of this study is to find a combination of factors generated from resources

theories that best explain the presumed low likelihood of volunteering in the Czech

population 55 years and older. The resources theories used as a framework for this

research were socio-structural resources theory and social capital. This approach to

volunteering research is not new. For example, Wilson and Musick (1997) on the

Americans' Changing Lives Survey [ACL] panel data explored the relationship between

volunteering and social, human, and cultural capital. Cultural capital in their study was

defined as the religiosity of respondents. The relationship between volunteering and

socio-structural resources was also explored by Choi (2003). The relationship between

volunteering and both socio-structural and social capital variables was also explored by

Warburton and Stirling (2007) on an Australian population (General Social Survey data).

Despite the fact that the test of social capital and socio-structural resources variables

explaining volunteering in an elderly Australian population was rather inconclusive, the

co-investigator conducted a similar study in the Czech Republic. Despite many

similarities, this current study differs from previous studies in certain ways. This study also considers so-called informal volunteering, in this research labeled "helping" (which is not typically included in multinational studies of civic engagement), and knowledge of volunteering and volunteer opportunities, labeled "volunteering literacy." These last two variables were conceptualized as a separate group of the country specific factors. Informal volunteering was added for two reasons. First, there is a presumption that informal volunteering served as a substitute for formal volunteering during communism, and second, is that informal volunteering is rarely measured in surveys commonly analyzed by researchers with professional interests in civic engagement. The variable knowledge of the volunteering is included due to the different meanings of volunteering in the past. For example, a negative connotation, as a heritage of quite recent history, may prevent people from volunteering. Last, but not least, size of place of residence is included. Overall, it is believed that social capital variables have a higher predictive power than other concepts used, although volunteering literacy is also expected to take a share in predicting volunteering, due to past experiences with forced volunteering. However, the highest ability to predict volunteering among the Czech elderly is expected to be achieved by a combination of variables from all three constructs.

The following hypotheses arose from a consideration of the theoretical frameworks.

Research Questions

- What factors promote volunteering among the elderly in the Czech Republic?

Hypothesis 1: Factors associated with social capital theory (i.e., social trust, associational membership, and informal social interaction) better explain low volunteering rate in the Czech Republic than factors associated with socio-structural resources (i.e., age, relationship status, perceived health, income, education, religiosity, employment, free time) and culture specific variables, volunteering literacy (i.e., knowledge of the term volunteering and knowledge of volunteer opportunities), and helping.

Hypothesis 2: A combination of factors from among the social capital variables, socio-structural variables, and culture specific variables, predicts formal volunteering by the Czech elderly better than just social capital variables.

- Does informal volunteering substitute for formal volunteering among the Czech elderly?

Hypothesis 3: In the Czech Republic, informal volunteering is more likely than formal volunteering.

Methods

This study implemented a non-experimental descriptive design to predict the relationship between independent factors drawn from socio-structural and social capital resources and volunteering status among Czech elderly and pre-elderly populations. This research was inspired by Wilson and Musick's (1997) and Warburton and Stirling's (2007) research. Quantitative research allows researchers to draw on a higher number of participants and collect data in a shorter period of time than would a qualitative approach.

In addition, it is the easiest way to test all the variables already indentified by previous research as influencing one's likelihood of becoming a formal volunteer.

Delimitations

This study is limited to Czech pre-retirement and retirement age populations that live in the territory of the Czech Republic at the time and prior to the time of sampling.

Power Analysis

A statistical power analysis was conducted to determine the minimum sample size to provide reliable results. A power analysis table may be found in Appendix A. Two effect sizes per independent variable were obtained, if previous research for such relationships existed. If there was no previous research, the effect was estimated based on the literature. Next, Cohen's deltas were computed, using the ES Calculator software (Faul, Erdfelder, Buchner & Lang, 2009), and these were next entered to G*Power 3.1.5.1(downloaded from http://www.macupdate.com/app/mac/24037/g*power) to generate effect sizes with the .8 power and .05 significance, which is a standard in social sciences. Specifically, point biserial correlation coefficients were entered in the Correlation and Mean Effect Size Conversion table to order Cohen's delta for each variable. In the next step, the G*Power Means from Constant (one sample test) option was chosen. The sample size was based on the highest number obtained, i.e., 277 respondents, to detect a relationship between volunteering status and one of the independent variables of interest. If the sample sizes obtained were averaged, only

approximately 82 respondents would have been needed. The .05 level was found adequate given that this study is not considered critical and studies on volunteering cited in Chapter 1 and 2 were all conducted with a .05 significance level.

The sample consisted of 274 Czechs aged 55 years and older. Forty-one percent of them either are volunteers or were volunteers sometime between 1989 and 2011. Participants ranged from 55 years to 84 years. The average age of respondents in the sample was 65.74 (SD = 7.7) years and the median was 65 years. The majority (55.5%) of respondents were married. Approximately one quarter (23.9%) of respondents were divorced and 11% were widowed. More than two thirds (70.8%) of respondents were retired. More then one third of the sample (36.3%) were high school educated, more than one fifth (21.5%) were college educated, and 18.1% had an apprenticeship certificate. Almost one half (45.1%) lived in cities with 50,000 and more inhabitants and almost one quarter (24.5%) of respondents lived in villages with less than 2,000 inhabitants. From these respondents, almost one half of the sample (47.6%) had lived in their hometown for their entire life, and approximately the same percentage (48.7%) of respondents had lived there for more than five years.

Participant Recruitment

The IRB approval, No. IRB2011-303, was received October 18,2011. The data collection started immediately after the approval and ended March 31, 2012, when 303 questionnaires were inserted in the database.

The target population was sampled by convenience, particularly by a snowball sampling technique. The research participants were given a questionnaire with 41 numbered questions, three of the questions included specifying questions. The sample of Czech citizens 55 years of age and older was drawn from the general population. The sample selection criteria were age, literacy, willingness to fill out the questionnaire, and Czech nationality or residency. The total number of participants needed for this research, if drawn by a probability sampling technique, was 200, and the ideal ratio of formal volunteers to non-volunteers was set to 1:1. The total sample size acquired was 274, with 1:3 ratio of current volunteers to non-volunteers. Given the necessity to include both formal volunteers and non-volunteers in the sample and oversample the former, three volunteer centers and one non-governmental organization employing mostly elderly volunteers were approached and agreed to participate in this research. The volunteer centers were a community Volunteer Center RADKA in Kadaň (town with 20,000 inhabitants, located in North-West of the Czech Republic), the Volunteer Center of the Adventist Development Relief Agency [ADRA] in Ostrava (city with 300,000 inhabitants, located in North-East of the country), and the Volunteer Center ADRA Frýdek-Místek (town with 60,000 inhabitants, located also in North-East of the country). The ADRA Frýdek-Místek is a regional/county/district center; thus, local chapters in Český Těšín, Havířov, and Třinec (towns with 20 to 80,000 inhabitants in North-East) were also sampled.

<center>Procedure</center>

In this research, several scenarios of sampling were applied. The questionnaire for the presumed population of non-volunteers, also called the general public, was primarily distributed to people the co-investigator knew through her family and formal networks. Either a paper copy or an email invitation to a web-based survey, which was also set up to guarantee anonymity, was sent to this group. In addition, the Senior Citizen Association (traditional civic association for the elderly in the Czech Republic) in Frýdek-Místek agreed to participate. The first group of people were handed the survey packets with either a stamped or blank envelope, depending on their place of residence. The research packets included an invitation/instruction letter, the questionnaire, and the blank or stamped return envelope. The vast majority of the general public were contacted by the co-investigator and returned their questionnaires sealed in blank envelopes. Given the limits in computer literacy, computer access, and Internet of people in this age group, only a small group of potential respondents (approximately 20) were e-mailed an invitation to the web-based survey. The web-based survey was identical to the paper and pencil survey, was also anonymous. The co-investigator had no control over the response rate.

The sampling of formal volunteers used a different approach, given confidentiality laws that the volunteer centers and other non-governmental organizations in the Czech Republic must follow. Accordingly, the co-investigator could not know the names and contact addresses of formal volunteers in order to contact them and ask them for participation. Therefore, the coordinators of volunteers at the participating centers

were instructed to pass the survey packets with stamped return envelopes to their volunteers during their regular semi-formal group meetings of volunteers, coordinator of volunteers, and an external supervisor. The volunteer centers, and more specifically the coordinators of volunteers, had no control over the response rate of the participant volunteers. Indeed, the response rate from this method of packet distribution was approximately 35% and would have been 5% higher if volunteers younger than 55 years had not answered and returned the questionnaire. Since in this method of sampling the formal volunteers did not generate a sufficient number of respondents, the co-investigator took part in a Christmas party of the Senior Servis Ostrava, an NGO gathering elderly volunteers to visit mostly home-bound elders, and handed out and collected an additional 12 questionnaires. The co-investigator obtained Senior Servis's approval for attending its Christmas party for the purpose of conducting research.

Given the limited budget for this research and necessity to pay postage for questionnaires gathered from formal volunteers, the participants were only offered a reader friendly summary of results for their participation. Respondents were informed about an expected time for the research summary release in an invitation/instruction letter, which accompanied the questionnaire or was sent to e-mail addresses of potential participants. In addition, an information website, www.misinadisertace.webnode.com, was set up for this research and the web address was also indicated in the invitation/instruction letter. The summary will be posted there in January 2013. Due to a presumed low computer literacy and ownership in the target population, participants could also choose to leave their mail addresses, if they wished to receive the reader

friendly research results. Participating non-governmental organizations will be delivered the reader friendly summaries as well with a recognition of their participation in this research. These research summaries will be mailed free of charge also in January 2013.

<div align="center">Instrumentation</div>

A 41-item survey (44 questions respectively) was constructed. Despite the predicted small yield from this sampling method, this survey was also set up in Kinesis, a secure web-based interface for creating and publishing web-based surveys. Survey items were primarily built using questions and scales used by other social researchers inquiring about volunteering and civic engagement of the elderly. However, some items, reflecting civic engagement in the Czech Republic, were constructed for the purpose of the present study. Survey items measured 21 independent variables including income, education, size of residence and number of years spent there, social trust, and informal and formal social interaction. Indices were created from selected variables, including a volunteering literacy index. A copy of the survey in English, as well as in Czech, which was the language of the present study, are included in Appendices B and C. An in-depth description of the items included in the study is presented next.

<div align="center">Socio-Structural Variables</div>

The socio-structural variables consisted of 12 demographic questions. These questions inquired about gender, marital status, age, education, employment status, size

of recent place of residence, number of years spent in place of residence, number of people in one's household, religiosity, church attendance, income, and perceived health.

Single item measures were applied to age, marital status, gender, education, employment, size of place of residence, number of years spent in place of residence. Age was set up as continuous variable, the rest as categorical.

The standard response categories to question inquiring about one's highest educational attainment were expanded to reflect the Czech situation. For example, in the past, it was possible to achieve high school education without having the A level, locally called 'maturita', passed. At the same time, a degree similar to Bachelor's, called a Diploma Specialist (Abbreviation Dis. after person's last name) awarded by schools that do not have the status of colleges and universities, was included. These two categories were included not to confuse the respondents and eliminate the missing data on this variable.

The employment question reflected the local context, i.e., different types of pensions as well as one type of work contract for a temporary job that may not exceed 150 hrs per year per specific job task done for the same employer.

Information regarding the size of hometown and number of years lived there were sought by simple questions. These variables help to assess whether a respondent's environment provides volunteer opportunities.

The level of religiosity was assessed by three questions, the first inquired about perceived religiosity status, the second inquired about Church belonging, and the last inquired about frequency of service attendance beyond major church and life events, and

it was measured as a continuous variable. The first question does not imply belonging to any church and may detect that some people perceive themselves religious or spiritual without being formally showing any devotion to their religion, such as belonging to church and service attendance). The list of answer categories to church belonging was constructed in accordance with the official Czech statistics (Czech Statistical Office, 2007). According to the 2001 Census, the three most prevalent churches in the Czech Republic are the Roman Catholic Church (Římskokatolická círvek), the Evangelic Church of Czech Brethren (Českobratrská církev evangelická), and the Hussite Church (Církev československá husitská); other churches form only some 1 or 2 percent in the overall country religiosity.

Since revealing an income is considered a very personal question and might generate a low response rate, a question asking about household income, with pre-defined categories, was used. In addition, answer categories 'do not know' or 'do not want to answer' were added.

A question inquiring about one's health was modeled after the 1995 World Value Survey as a single question with five answer categories since it was found sufficient for this study. There were five answer categories ranging from very good to very bad. The "do not know" category was omitted.

Social Capital Variables

Single items questions and two scales were adopted for social capital variables from previous research.

The Organizational (Generalized) Trust

The organizational (generalized) trust scale was adopted from the World Value Survey questionnaire, as used by von Oorschot and Arts (2005). This scale measures one's trust to organizations found in democratic societies, such as Parliament, courts, and police. This scale consists of six items with an alpha reliability of .8. The questions were answered on a Likert-type scale, ranging from great deal to not at all. The response option 'do not know' and 'not available', found in the original scale, were excluded in the present study, given that people tend to choose such categories, if they do not consider it important or do not want to think about the question. In addition, words 'in general' were included to assure that people would not rate current situation, for example their satisfaction with current government but they would rate the institution since its establishment in late 1989.

The Interpersonal Trust Scale

The interpersonal trust scale was adopted from Letki and Evans (2005). This scale measures one's trust in other people. It contains five items with Cronbach's alpha of .54 that load on two factors. The scale questions were answered on a Likert-type scale, ranging from strongly agree to strongly disagree. Such low alpha score is not unusual for balanced scales, the authors argue. In the current research, the 'do not know' category, which, in Letki and Evan's analysis, was converted to the mid-point, was omitted and respondents were suggested to choose an answer. The organizational trust scale and interpersonal trust scale were next converted to *z-scores* and combined to obtain a social

trust variable. The adequacy of this step was confirmed by a factor analysis presented in

Chapter IV- Results.

Helping

The level of informal volunteering (help) was sought by inquiring about

respondents' amount of time provided free of charge to neighbors, friends, and strangers

within the last three months. Several categories of time to choose from were offered. The

pilot testing of this questionnaire indicated a necessity to explain what helping means;

thus, some examples of helping were provided prior to asking the question.

Informal Social Capital

Informal social capital questions were adopted from the Americans' Changing

Lives Survey (Wilson & Musick,1997). The two questions inquiring about weekly

frequency of telephone contact and face-to-face meetings with friends, neighbors, and

relatives were modified in terms of content and response options. The phrase 'talking on

the phone' was expanded to 'chatting with or talking on the telephone,' since in the

Czech Republic, the cost of telecommunication services is much higher in comparison to

the rates in the United States and telephone contact is not a preferable way of socializing

in this target group. However, people meet by coincidence in local grocery stores, in front

of their apartment buildings and houses. The ACL Survey provided answer categories;

the current study left empty space for respondents to indicate the approximate number of

contacts made with defined groups of people per week.

Associational Membership

This item is commonly measured as number of organizations and associations one is a member of, and as Pichler and Wallace (2009) said, it is the most commonly used measure of social capital. The associational membership question was constructed similar to the 2000 WVS/EVS questionnaire; however, the list of possible memberships was adjusted to the local situation. The 2000 survey categories were expanded by country specific organizations (e.g., types of hobby and leisure time organizations), since in general, it is easier for respondents to recall all their memberships as they see them listed as options. A significant limitation of the 2000 WVS/EVS survey that the respondents' memberships of the same type would be counted only once (Curtis, Baer, & Grabb, 2001) was decreased by providing an option 'other/s, please specify' and also by a long list of mostly leisure time associations found in the Czech Republic.

Variables inquiring about the population of volunteers in the Czech Republic

Several variables brought data on Czech volunteers. First, it was the number of association memberships was asked as a simple question (mentioned in the paragraph above). To distinguish between active and passive membership, a question asking the number of meetings a member attended in the past six months, was asked. Other items were created for this study. Due to the fact that people are more likely to start doing an activity if they are well informed about it, a simple question of *How do you learn about volunteer opportunities in your town?* with a list of possible ways people can learn these opportunities was created. Respondents were asked to check all that apply. To assess the

extent of a professional management of volunteers, yes/no questions were created

inquiring about volunteer training (prior to the start of volunteering job), supervision of

long-term volunteers, and recognition of volunteers' contribution by the non-

governmental organization. Last, a volunteering literacy index was computed from three

questions constructed for the survey. The first question asked respondents to provide a

definition of volunteering, the second question asked whether volunteering was paid or

not, and the third question asked respondents to provide an example (names) of some

non-governmental organizations. The first question was rated a 'one' if the definition was

correct and zero when there was no answer, incorrect, or derogatory answer. The rating

of this question was based upon the co-investigator's judgment. A second question was

rated "one" when answer was correct and zero when missing or incorrect. The third

question was rated one when at least one non-governmental organization was stated and

zero when none was provided.

The dependent variable

Volunteering status

Volunteering was measured by several questions. The first question inquired

about current volunteer status and included a specifying question about the nature of that

volunteering (formal v. informal). To broaden the pool of volunteers in the sample, a

second question on volunteering inquired about respondent's past volunteering. The past

was defined as a period of time between the late 1989 (the Velvet Revolution) and the

end of year 2011. In both cases of volunteering, the number of volunteer hours per month

was asked to assess the extent of person's volunteering. For the purpose of subsidiary correlation analyses, a composite variable of current and past volunteer hours was created. However, primarily, volunteering status variable was used as a dependent variable.

<center>Pilot Testing</center>

The survey instrument was pilot tested prior to the data collection by five participants in the target group. Pilot testing took the form of one-on-one interviews and a focus group. The questionnaire was checked for clarity of the survey items and time needed for completing it. Changes to the questionnaire were made according to the participants' feedback. First, it was necessary to describe volunteering by an example and to define helping. Second, it was necessary to expand the education categories. Third, it was necessary to expand the list of non-governmental organizations to which a person might be a member. Fourth, it was necessary to add the words 'in general' to organizational social trust to make people think in a broad sense, instead of focusing on current political issues. Last, in the informal social capital question inquiring about telephone contact with family, friends, and neighbors, the wording 'chatting and calling' was used since calling is not so typical mode of communication among the elderly due to a high cost of telecommunication services in the Czech Republic. The table listing distribution of all the categorical variables used in logistic regression models is presented on page 71.

Data Analysis

The survey instrument gathered data on 17 independent variables related to volunteering. SPSS 18.0 was used to analyze the data. A variety of techniques were used to analyze the data. First, the data were cleaned. Cases with more than 25% of missing data as well as those not fitting the age criteria were deleted from the database. Next, composite variables were created and the factor structure of the social trust composite variable was confirmed. Missing values on key variables that were the base for composite variables (such as informal social interaction questions), were computed using linear trend imputation.

Second, descriptive statistics were used to acquire the sample structure and assure that no out of range values were present. Factor analysis was run to assure the two social trust scales, each measuring a different face of social trust, were a robust measure of social trust in the Czech population.

Third, the strength of the relationship between each independent variable/predictor and volunteering status was assessed. Cross-tabulations were run to assess the strength and direction of relationship between isolated predictors and volunteering status.

Since reliance on bivariate analyses would not have provided the complete picture of factors influencing volunteering in the Czech Republic, multivariate tests were run. Specifically, binomial logistic regression analyses were run to assess the impact of the independent variables on the dependent variable, volunteer status. To test whether these

variables predicted volunteering, they were entered as simultaneous predictors and the volunteer status was entered as the dependent variable.

Last, to assess whether helping substitutes for volunteering in the population of interest, analysis of variance was used. The visual summary of hypotheses tested is presented below in Table 3.1.

Table 3.1 Hypotheses and Approach to Confirm or Reject Them

Hypothesis	Statistical Method Used
H1: Social capital better predicts volunteering among people 55+ in the Czech Rep. than other constructs used.	Logistic regression
H2: A combination of social capital and socio-structural resources variables predicts volunteering the best.	Logistic regression
H3: In the Czech Republic, helping substitutes for volunteering.	ANOVA with post-hoc comparisons

CHAPTER IV

RESULTS

The primary purpose of this study was to examine the factors that predict

volunteering among elderly Czechs. This chapter presents the results of the study. The

first section presents in detail the steps taken to clean and sort the data prior to the

analyses. Next, descriptive statistics of the sample and the bivariate analyses between

volunteering status and all explanatory variables are presented. Finally, tests taken to

confirm or reject the research hypotheses, are described.

Data Preparation

Data preparation included missing data determination and selection of an

appropriate method for handling missing data. The original data set contained 303

respondents. After review, 29 respondents were deleted from the dataset due to (1) lower

than required or no specified age, (2) a missing value on the dependent variable, or (3)

ahigh proportion of missing data, leaving 274 respondents for the data analysis. Among

those who were deleted due to age were mainly volunteers who were passed the survey

packet by volunteer-center coordinators for reasons explained in Chapter III, subchapter

Participant Recruitment, and respondents of the web-based survey. Respondents deleted

due to a high proportion of missing data were either web-based survey drop-outs or

respondents who (probably unintentionally) skipped an entire page or two of the

questionnaire, leaving less than 75% of data for the analyses. The web-based participants were informed that their access to the survey was, by default, a one-time access, so those who dropped for various reasons during the process of completing the questionnaire were not allowed to log back in and complete or even retake the survey.

The respondents with at least 75% of completed data on the independent variables of interest and with data on the dependent variable were retained in the database. Next, the data were checked for out of range values and corrected according to the questionnaire entries. The remaining data were checked for potential patterns of missing values. The frequencies were run to obtain the number of missing cases per variable. The percentage of missing values on socio-structural variables, i.e., gender, marital status, education, employment status, size of hometown, number of years lived in current hometown, religiosity, church belonging, health, income, free time (babysitting, spouse care), and mobility mode varied from .4% in the case of gender to 5.1% in case of mobility mode. A low (in general less than 5%) percentage of missing data suggested there was no need to examine these missing values further for any patterns. The percentage of missing values on social capital variables, i.e., talking to relatives, neighbors, and friends, meeting relatives, neighbors, and friends, interpersonal social trust scale questions, organizational social trust scale questions, NGO membership and activity varied from .7% in case of interpersonal social trust questions to 5.5% in case of activity in NGO meetings where one was a member. Percentage of missing values on the variables pertaining to volunteering in the Czech Republic, i.e., current volunteering, volunteering sometimes during the recent history of democratic Czech Republic (1989,

respectively 1990 to 2011), number of hours volunteered per month, as well as number of hours helped per month, interest in volunteering, volunteering literacy (being able to define volunteering and name some non-governmental organization), interest in volunteering, ways the respondent learned about volunteering opportunities, varied from 2.9% in case of learning about volunteer opportunities to 21.2% in cases of listing some non-governmental organizations. It appears that questions requiring a written answer, instead of choosing an answer from a list of answers, generated high non-response rates. Thus, it is assumed that high percentage of missing data on these variables is attributed to design of the instrument.

Overall, more than 8% of cases from the original dataset were deleted, the rest were retained in the database and the missing data, when they needed for the composite variables, was computed using the linear trend at point technique, which is based on ordinary least square regression and uses the trend among valid values to predict the missing ones.

The data were next examined for skewness. To improve symmetry of the distribution of the six continuous variables composing an informal social capital index, these variables were first winsorized. Square root transformation was applied to one of these variables showing a skewed distribution even after winsorizing. Discrete data were collapsed to avoid small cell counts, and those resulting in more than two categories were further dummy-coded for the logistic regression analyses.

In the next step, composite variables were computed. *The informal social capital index* was computed as the mean of the six frequencies of social contact questions. *The*

social trust scale was computed based on eight out of eleven social trust questions examined by factor analysis (results presented below) to have a sufficient internal consistency and explaining almost 61% of the variance in the dependent variable while encompassing both dimensions of social trust. The original scale items had a very few missing values (max. 1.5%), and a linear trend technique was used to compute the missing values. *The volunteering literacy index* was created from the three dichotomous knowledge of volunteering questions by summing the values. A higher number of this index indicated a better knowledge of volunteering. The 20% non-response rate on definition of volunteering and knowledge of non-governmental organizations implies that volunteering literacy may not be the best variable since the missing data were recoded to 'no knowledge.' In a next step, the composite variables were turned into categorical variables and dummy coded.

<u>Description of the Sample</u>

The sample consisted of 274 Czechs in age group 55 years and above. The average age of the research participants in the sample was 65.74 (SD = 7.7). The median age was 65 years. Approximately 35% of the sample were current volunteers, both formal and informal, and the vast majority volunteered in one non-governmental organization. Given the two sampling methods tested, the average age of respondents filling the paper questionnaire was 65.98 (SD = 7.86), the average age of respondents filling the web-based questionnaire was 62.3 (SD = 4.38); however, the difference was not statistically significant, $F(2, 271) = 1.78$, $p = .171$. There were 70% females and 30% males in the

sample. The majority of sample (55.5%) were married, 23.9% were widowed, 11% were

divorced, 4.4% were single, and 1.1% lived with spouse. The individuals living with

somebody comprised 56.6% of the sample. The majority of sample (66.4%) were retired,

23.7% were employed full time, 2.2% employed part time, 3.2% were self-employed,

2.2% unemployed, and 2.2% were taking occasional jobs while in retirement. Thus, when

collapsed, 29.2% of respondents were in workforce. More than one third of the sample

(36.3%) had completed high school degree, more than one fifth (21.9%) had completed

college degree, and almost one fifth (18.1%) completed apprenticeship certificate.

Almost one half (45%) of the sample resided in towns with more than 50,000

inhabitants, which might be, given the size of the Czech Republic, density of urban areas

and its population, considered cities. Approximately 10% of the sample resided in towns

with more than 20,000 and less than 50,000 inhabitants. Approximately 9% of

respondents resided in towns with more than 10,000 and less than 20,000 inhabitants, and

11.4% of respondents resided in even smaller towns. A quarter of respondents (24%)

resided in rural areas, in this survey defined as villages with less than 2,000 inhabitants.

Approximately half of respondents (47.6%) have spent their entire life in their current

place of residence, and 49.1% of respondents have resided there for more then 5 years,

most likely even majority of their life, as some respondents, not satisfied with the gap

between the category 'more than five years' and 'entire life', wrote in. Just 3.3% of

respondents have resided in their place of residence for less than 1 year. Approximately

one fifth of respondents (22.8%) reported monthly household income below $500,

approximately one fifth (21.4%) reported monthly household income between $5000 and

$750, approximately one third reported monthly household income below $1,000, and slightly more than one quarter (26.5%) reported monthly income higher than $1,000. Concerning income, 21.5% percent of respondents did not provide an answer. Nearly two thirds (63.8%) of respondents lived in a multiple person household; therefore, a single person household comprised 36.2% of the sample. Concerning the self-perception of one's health status, slightly more than 'one half' of the sample (55.2%) reported good or very good health and one third (33 %) of the sample reported not good but also not bad health.

Association membership and activity

In the sample, 43.5% of respondents were not members of any NGO, 35.5% were members of one NGO, 13.4% were members of two NGOs and 7.6% were members of three or four NGOs. However, among the members, 16.2% stated they never attend meetings of their NGO(s), 35.1% of members attend meetings just once per 6 months, 11.5% of members twice per 6 months, and 34.5% members attend meetings three and more time per 6 months.

Management of volunteers

Besides the payment of insurance for volunteers in the state-accredited volunteer programs, volunteer centers, or NGOs that have volunteers, are responsible for their management. In the sample, 81% of current or past volunteers indicated they were trained, 63% attended regular volunteer supervisions but 13% indicated there were no supervisions in their organization. The remaining approximately 24% of volunteers indicated they did not attend supervisions. In the sample, 76.8% of current or past

volunteers indicated their voluntary service was appreciated by their sending organization.

Learning about volunteer opportunities

A simple count of options indicated the number of ways respondents learn about volunteering. In the sample, approximately one third (31.1%) of respondents stated they do not learn about volunteer opportunities at all, almost a half (46.6%) of respondents indicated one way, 14.2% of respondents indicated two ways, and 6.6% of respondents indicated three or four ways they learn about volunteer opportunities. Most frequently, people learn about volunteer opportunities from media (35.4%) and friends (25.2%). On the other hand, the least frequently they learn about volunteer opportunities at work (.8%).

In the volunteer – non-volunteer comparisons, volunteers, in general, were able to provide more ways they learn about volunteering than non-volunteers. For this comparison, those who volunteered sometimes between 1989 and 2010, were considered volunteers. Specifically, 58.6% of volunteers indicated one way, 23.4% indicated two ways, and 11.7% indicated three or four ways they learn about volunteer opportunities. In case of non-volunteers, 50.3% indicated no way, 38.1% indicated one way, 8.4% indicated two ways, and 3.2% indicated three ways they learn about volunteer opportunities. As expected, besides media and friends, volunteers also learn about new volunteer opportunities through theirs NGO(s) or their church.

Table 4.1 Summary Statistics of Variables Used in the Regression Models

Variable			
Independent Variable			
Volunteer	N=274		
Volunteer (V)	95 (34.7%)		
non-volunteer (NV)	179 (65.3%)		
Dependent Variables	Total %	V	NV
Age (N=274)			
55-64 years	47.8	44 (46.3%)	87 (48.6%)
65-74	37.6	46 (48.4%)	57 (31.8%)
75+	14.6	5 (5.3%)	35 (19.6%)
relationship status (N=274)			
living alone	43.4	51 (53.7%)	67 (37.9%)
living with someone	56.6	44 (46.3%)	110 (62.1%)
Gender (N=274)			
Male	30.4	20 (21.3%)	63 (35.2%)
Female	69.6	74 (78.7%)	116 (64.8%)
Education (N=270)			
apprenticeship or lower	27.0	25(26.6%)	48(27.3%)
high school or higher	73.0	69(73.4%)	128(72.7%)
household income (N=215)			
<$500 per month	22.8	22 (29.7%)	27 (19.1%)
<$750 per month	21.4	20 (27.0%)	26 (18.4%)
<$1000 per month	29.3	20 (27.0%)	43 (30.5%)
>$1000 per month	26.5	12 (16.2%)	45 (31.9%)
employment status (N=274)			
Employed	29.2	18 (18.9%)	62 (34.6%)
Retired	70.8	77 (81.1%)	117 (65.4%)
Health (N=270)			
good or very good	55.2	55(59.1%)	94 (53.1%)
not poor not good	33.0	31(33.3%)	58 (32.8%)
poor or very poor	11.9	7(7.5%)	25 (14.1%)
Religiosity (N=267)			
Religious	43.1	61 (67.0%)	91 (51.7%)
non-religious	56.9	30 (33.0%)	85 (48.3%)
free time (N=265)			
Enough	35.1	59 (65.6%)	113 (64.8%)
not enough	64.9	31 (34.4%)	62 (35.2%)

Table 4.1 continued

Dependent Variables	Total %	V	NV
associational membership (N=262)			
None	43.5	78 (83.9%)	70 (41.4%)
one or more	56.5	15 (16.1%)	99 (58.6%)
social trust (N=274)			
Low	32.8	40 (42.1%)	50 (27.9%)
Moderate	39.4	40 (42.1%)	68 (38.0%)
High	27.7	15 (15.8%)	61 (34.1%)
informal social capital (N=266)			
Low	33.5	29 (31.5%)	60 (34.5%)
Moderate	33.1	33 (35.9%)	55 (31.6%)
High	33.5	30 (32.6%)	59 (33.9%)
years in home town (N=271)			
< 5 years	3.3	2 (2.2%)	7 (3.9%)
> 5 years	96.7	91 (97.8%)	171 (96.1%)
size of home town (N=273)			
< 50.000 inhabitants	54.9	52 (55.3%)	98 (54.7%)
> 50.000 inhabitants	45.1	42 (44.7%)	81 (45.3%)
Helping (N=253)			
none or low	45.8	20 (23.3%)	96 (57.5%)
Moderate	37.2	45 (52.3%)	49 (29.3%)
High	17.0	21 (24.4%)	22 (13.2%)
mobility mode (N=260)			
being driven	21.9	13 (13.1%)	44 (26.2%)
public transport or car	78.1	79 (85.9%)	124 (73.8%)
volunteering literacy (N=274)			
now or low	24.1	8 (8.4%)	58 (32.4%)
Moderate	38.0	32 (33.7%)	72 (40.2%)
High	38.0	55 (57.9%)	49 (27.4%)

<u>Factor Analysis for Social Trust Scales</u>

Prior to the regression analysis, both social trust scales used in this survey to create a single measure of social trust were checked for consistency of their components to make sure they really measured two facets of social trust. In the preparation of items 26 through 30 for the factor analysis, the items 28–30 were reverse coded (as in Letki &

Evans, 2005) to achieve the same directionality of all five interpersonal trust questions and of all 11 items indicating social trust respectively. As noted earlier in Chapter III - Instrumentation, the 'do not know' category in interpersonal social trust items was omitted, so the values ranged from strongly agree to strongly disagree, which probably increased the internal consistency of the scale, given that alpha reliability acquired for this scale was .64 as opposed to .54 found by Letki and Evans (2005), and, at the same time, there were almost no missing data on these items.

A principal component analysis extraction method with direct oblimin rotation with Kaiser normalization was used. Two factors, explaining 66.75% of the variance, were extracted from the interpersonal trust scales questions. The first factor consists of two items and seems to reflect person's positive trust of strangers. The remaining three items form a second factor, which seems to reflect person's rather negative trust of strangers. Table 4.2 presents the two factors extracted, the factor loading of items, and communalities. The numbers, as displayed in communalities column, indicate that the proportion of variance of each item explained by the factor is high, which is desirable.

Table 4.2 Factor Loadings, Communalities, and Explained Variance for Interpersonal Social Trust Items

Item #	Item	Negative interpersonal trust	Positive interpersonal trust	Communalities
26	It is human nature to co-operate with other people.		.67	.70
27	Most people can be trusted.		.71	.71
28	If someone is in serious trouble, no one else cares about it.	.77		.68
29	If you are not always on your guard other people will take advantage of you.	.72		.61
30	A person co-operates with other people only when he or she sees it is in his or her own interest.	.75		.64
Explained variance %		**42.63**	**24.13**	

Note: The factor table omits loadings below .5

The organizational trust scale factor analysis revealed a high internal consistency of the six items (items 31–36), with Cronbach's alpha .85 (the table not presented here). In the next step, the items from both scales were analyzed together. The factor analysis revealed a three-factor solution based on all 11 items. The three factors explained 62.18% of variance and had an internal consistency of .77. Given that the primary purpose of the factor analysis was to indicate factorial validity of the composite measure of interpersonal and organizational trust (i.e., social trust) and not to choose the scale with the highest reliability, the factor analysis was rerun without items 28–30 that demonstrated low to almost non-existent correlations with organizational trust scale items. Direct oblimin rotation was used, given the underlying constructs were perceived as being related

(Tabachnik & Fidell, 2007). The factor analysis results for the eight items are presented in Table 4.2. As expected, the first underlying factor relates to person's positive trust of others, whereas the second underlying factor relates to person's trust of institutions found in democratic societies. The two-factor solution explained 60.74% of variance, which is not a major drop from the three-factor 11- items solution and revealed an internal consistency of .82. Thus, deleting three items from the scale increased the internal consistency of the scale by .05. The remaining eight items were used to create a social trust composite variable. Thank to this adjustment, the variable showed almost no skew.

Table 4.3 Factor Loadings, Communalities, and Explained Variances for Overall Social Trust Items

Item #	Item	Organizational/ Institutional trust	Positive trust to people	Communalities
26	It is human nature to co-operate with other people.		.72	.70
27	Most people can be trusted.		.68	.68
31	How big is your confidence in the police?	.74		.55
32	How big is your confidence in the social security system?	.72		.52
33	How big is your confidence in the health care system?	.69		.50
34	How big is your confidence in parliament?	.78		.64
35	How big is your confidence in the civil service?	.79		.65
36	How big is your confidence in the justice system?	.72		.64
	Explained variance %	**45.97**	**14.77**	

Note: The factor table omits loadings below .5.

Next, strength and directionality of relationships between volunteering and independent variables, which would later be used in regression analyses, were examined.

<center>Bivariate Results for Socio-Structural Variables</center>

Due to the discrete (categorical) nature of the dependent variable and all independent variables in the group of socio-structural variables, cross-tabulation was used as a statistical method for assessment of the bivariate relationship between volunteering status and all variables of interest.

Volunteering status and age

The bivariate analyses revealed that people in age groups 55--64 and 65--74 years were more likely to volunteer than those age 75 and older. Of those who volunteered, approximately 46% were 65 – 74, 48% were 55 – 64, and approximately 5% were 75 and older. Within age categories, 47% of those 65 – 74 volunteered, 34% of those 55 – 64 while only 12.5% of those 75 and older did so. The differences were significant, $\chi 2(2, N = 274) = 13.29$, $p = .001$.

Volunteering status and relationship status

The people who lived alone were more likely to volunteer than were people who lived with somebody, although the difference was marginal. Of those who volunteered, approximately 57% lived alone and approximately 43% lived with somebody. Within relationship status categories, 43% of those living alone volunteered, as opposed to approximately 29% of those living with somebody. The differences were significant, $\chi 2(1, N = 272) = 6.31$, $p = .012$. When a third dimension, age, was entered into this

bivariate relationship, the data revealed that of those who volunteered and lived alone, 61.4% were 55 to 64 years old, $\chi2(1, N = 131) = 14.02$, p = .001. Among those 55 to 64 years old who lived alone, approximately 53% were volunteers. In the age category 65 years and above, people who volunteered were more likely to live with somebody; however, the differences were not significant, $\chi2(1, N = 141) = .01$, p = .94.

Volunteering status and gender

Females 55 years and above volunteered in more cases than men 55 years and above. Among those who volunteered, nearly 79% were females and 21% were males. Within gender categories, 39% of females, as opposed to 21% of males, were volunteers. The differences were significant, $\chi2(1, N = 273) = 5.64$, p = .018.

Volunteering status and employment status

People 55 and above who were not in the workforce were more likely to volunteer than those in the workforce, $\chi2(1, N = 274) = 7.39$, p = .007. Of those 55 and older who volunteered, 81% were not in the workforce.

Volunteering status and education

People age 55 and older who were more educated were not more likely to be volunteers than were those with less education. Among those who volunteered, approximately 47% were high school educated and approximately 27% were college educated, whereas 17% had an apprenticeship certificate and nearly 10% had completed just middle school. However, across all levels of education, approximately 'one third' in each category were volunteers, so the differences were not statistically significant, $\chi2(3, N = 270) = .33$, p = .954.

Volunteering and perceived religiosity

People 55 and over who perceived themselves to be religious were more likely to volunteer than people who did not perceive themselves to be religious. The magnitude of the difference was large. Of those who volunteered, approximately 67% perceived themselves to be religious and 33% did not. Among those who perceived themselves to be religious, volunteers comprised 40% and among those who did not perceive themselves to be religious, volunteers comprised 26%. The differences were significant, $\chi 2(3, N = 267) = 5.75, p = .017$.

Volunteering status and health

The data suggested that health status among those 55 and older did not influence volunteering status, $\chi 2(2, N = 270) = 2.65, p = .266$. Of those who volunteered, 60% indicated very good or good health, 33.5% indicated not bad but also not good health, and 7.5% indicated poor to very poor health. However, within health status categories, volunteers who indicated good to very good health comprised 37% of volunteers, and those who indicated not good but not bad health comprised 38% of volunteers, so the initial differences disappeared. Volunteers who indicated poor to very poor health comprised 22% of volunteers.

Volunteering status and household income

The level of household income influenced volunteering status among the elderly. Among those 55 and older who volunteered, almost 30% reported income lower than $500 per month, 27% reported an income of $500 – $750 per month, 27% reported an income of $750 – $1,000 per month, as opposed to approximately 16% of those who

reported household incomes above $1,000 per month**.** Within income categories, 45% of those who had monthly household income below $500, approximately 44% who had monthly income between $500 and $750, and 32% who had monthly income between $750 and $1,000 volunteered, as opposed to 21% who had monthly income above $1,000. The differences were significant, $\chi2(2, N = 215) = 8.77, p = .033$.

Volunteering status and free time

The amount of free time seemed not to influence a person's likelihood of being a volunteer. Among those 55 years old and above who volunteered, 65.6% indicated they had enough free time, whereas 34.4% of volunteers indicated they did not have enough free time. Across free time categories, volunteers who indicated having enough time comprised one third of the sample and so did volunteers who indicated not having enough free time; thus, the initial differences disappeared, $\chi2(1, N = 265) = .25, p = .893$.

Bivariate Results for Social Capital Variables

Volunteering status and associational membership

Associational membership seemed to have a strong and positive influence on volunteering status among people 55 and older. Among those who volunteered, 50.1% were members of one non-governmental organization and 33% were members of two or more non-governmental organizations, whereas only 16% of those who volunteered were not members of any non-governmental organization. Within the membership categories, 13% of those who were not members of any non-governmental organization, 51.5% of those who were members of one non-governmental organization, and 56% of those who

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were members of multiple non-governmental organizations, volunteered. The differences

were significant, χ2(2, N = 262) = 44.50, p = .001.

Volunteering status and social trust

Level of social trust seemed to influence one's likelihood of volunteering;

however, in the population of interest, the influence was negative. Among those 55 and

older who volunteered, only 16% of volunteers ranked high on social trust; the remaining

84% of volunteers ranked either low or medium (equally likely) on social trust. Within

trust categories, 44% volunteers ranked low, 37% ranked medium, and 20% ranked high

on social trust. The differences were significant, χ2(2, N=274) = 11.55, p = .003.

Volunteering status and informal social capital

The frequency of contact with friends, neighbors, and relatives, in this study

labeled as informal social capital, did not seem to influence the likelihood of

volunteering. Among those 55 and older who volunteered, approximately 32% ranked

low, 36% ranked medium, and 33% ranked high on informal social capital; however, the

results were not statistically significant, χ2(2, N=266) = .52, p = .772.

Bivariate Results for Country Specific Variables

Volunteering status and helping

A strong and positive association between volunteering and helping was found

among those 55 and older. Slightly more than a half (52.3%) of those who volunteered

monthly contributed 2 to 10 hours of help to their friends and neighbors, approximately

24% contributed more than 10 hours, and approximately 23% contributed 0 to 1 hour of

help. Within the amount of time helped categories, 17% of volunteers did not contribute more then 1 hour of help, and approximately 48% of volunteers contributed 2 to 10 hours of help monthly, and the same percentage of volunteers contributed even more hours. The differences were significant, $\chi2(2, N = 253) = 26.80$, $p = .003$.

Volunteering status and size of hometown

In the sample, the vast majority of respondents were city dwellers. For this reason, the variable size of hometown was set up to distinguish between those living in cities and those living in smaller localities. However, no significant differences in likelihood of Czechs 55 years and above living in cities (localities with more than 50,000) and Czechs 55 years and above living in smaller localities were found. Among those 55 years and above who lived in localities with less then 50,000 inhabitants, 34.7% were volunteers. Among those 55 years and above who lived in localities with more than 55,000 inhabitants, 34.1% were volunteers, $\chi2(1, N = 273) = .01$, $p = .52$.

Volunteering status and years spent in current hometown

Number of years spent in one's current hometown did not influence volunteering. Fifty-one percent of volunteers had lived in their current hometown since birth, and more than 47% of volunteers had lived there for more than 5 years. However, within number of years spent in current hometown categories, 36% of those native, and 33% of those residing in hometown for more than five years, were volunteers, as opposed to 22% of those residing in current hometown for less than five years. The differences were not statistically significant, $\chi2(2, N = 271) = .93$, $p = .628$.

Volunteering status and mobility mode

People 55 years and older who either use public transportation or use (drive) a car as their main means of transportation to get to distant places were more likely to be volunteers than those who relied on someone to drive them. Among those who volunteered, approximately 53% used public transportation and 33% used a car as the main means of transportation, whereas only 14% of volunteers relied on someone to drive them to distant places. Within mobility categories, nearly one half (47%) of those who used public transportation as their main mean of transportation and nearly one third (30.3%) of those who used car as their main mean of transportation were volunteers, whereas only 23% of those who relied on someone to drive them were volunteers. The differences were significant, $\chi2(2, N = 260) = 11.32, p = .003$.

Volunteering status and volunteer literacy

Given that fact that one questionnaire item inquired about past volunteer experience, an aggregate measure of volunteer status could be used. People 55 years and older who either were volunteers in 2012 or volunteered sometimes between years 1989 and 2011 had better knowledge of volunteering than those who never volunteered. More specifically, 56.6% of either present or past volunteers had a very good knowledge of volunteering, i.e., were able to define volunteering and provided an example of a non-governmental organization. Nearly one third (32.3%) of current or past volunteers had a good knowledge of volunteering, as opposed to 10.6% current or past volunteers who had low knowledge of volunteering. As expected, there were no volunteers without at least some knowledge of volunteering. Within knowledge categories, 61.5% of those with a very good knowledge of volunteering, 35.6% of those with good knowledge and 24% of

low knowledge of volunteering were volunteers. The differences were significant, χ2(3,

N = 274) = 36.42, p = .001.

These bivariate results are summarized in Table 4.4 below.

Table 4.4 Bivariate Results of Cross Tabulation of Volunteer Status and All Variables Included

Variables	χ2	DF	N
Socio-structural variables			
Age	13.29***	2	274
Gender	5.64*	1	273
Relationship status	6.31**	1	272
Education	.33	3	270
Employment status	7.39**	1	274
Perceived religiosity	5.75*	1	267
Perceived health	2.65	2	270
Household income	8.77*	3	215
Social capital variables			
Assoc. membership	44.50***	2	262
Social trust	11.55***	2	274
Informal social capital	.52	2	266
Country specific & control variables			
Helping	26.81***	2	253
Size of hometown	.01	1	273
Years spent in hometown	.93	3	271
Mobility mode	11.32***	2	260
Volunteering literacy	36.42***	3	274

Note: *** p < .001; ** p < .01; * p < 0.05

<u>Logistic Regression Results</u>

The primary purpose of the study was to examine factors drawn from two

resources theories and one built upon familiarity with the Czech culture that can predict

volunteering status among elderly and pre-elderly people in the Czech Republic. Thus, in

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the first stage, the effect of independent predictors within each construct on the dependent variable was examined. Second, a binomial logistic regression model for the most accurate prediction of volunteering among the Czech pre-elderly and elderly population was built. Country specific variables were first tested as covariates but due to their non-predictive power seen in the bivariate analyses, they were excluded from the final model, except for helping, which showed a strong relationship with the dependent variable, formal volunteering. Hypotheses were tested.

The Power of Socio-Structural Variables to Predict Volunteering Status

All the independent predictors that had more than two categories were dummy coded into k-1 variables. Categories 'do not know' and 'do not want to answer' for the income variable were coded to 'missing' (59 cases) to improve the symmetry of the distribution of values, which, on the other hand, resulted in a decrease in cases available for this analysis from 250 to 191 cases. The model showed reasonable predictive ability, with a correct classification of 70.7% cases. While the model correctly predicted 86.9% of non-volunteers, it correctly predicted only 36.9% of volunteers. The test of the full model against the intercept only model was significant, $\chi 2$ (DF = 13, N = 191) = 28.43, p = .008, indicating that the predictors, as a set, reliably distinguish between volunteers and non-volunteers. The non-significant Hosmer-Lemeshow test, $\chi 2$ (DF = 8, N = 191) = 9.04, p = .34, showed there is a difference between observed and predicted values on the dependent variable. The classification accuracy from the null model to the full model increased only by 2.6%, indicating that the overall predictive power of the model is not

impressive at all. The Nagelkerke's pseudo R-square for the model was .194. Only two predictors in the model, age and employment status, were statistically significant. The odds ratio of an individual predictor retirement status suggests that retirees are 3.23 times more likely to become volunteers than those in employment. At the same time, and consistent with life cycle and other research, people 65 to 74 years old were more likely to become volunteers than those who were 55 to 64 years old. The Beta coefficients and odds for individual predictors in the model are presented in Table 4.5. Given these factors, the odds ratio for being a volunteer was 1.9, 95% CI [1.86, 1.94]. That is, the Czechs 55 years and older with the characteristics in the model were nearly twice as likely to be volunteers as the Czechs 55 years and older who did not have these characteristics.

Table 4.5 Prediction of Volunteering among Czech Elderly from Socio-Structural Variables - Full Model

Independent variables	B	Exp(B)
Age (75+ - reference)		
Age 55 – 64	1.48	4.37*
Age 65 – 74	1.78	5.9*
Relationship status (single - reference)		
Relationship status - living with somebody	-.37	.69
Gender (female - reference)		
Gender - male	-.42	.66
Education (apprenticeship or lower - reference)		
Education - high school and higher	.33	1.39
Income (> $1,000 - reference)		
Income < $500	.49	1.63
Income < $750	.23	1.26
Income < $1,000	.28	1.33
Employment (employed - reference)		
Employment - retired	1.17	3.23*

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Table 4.5 continued

Health (very good - reference)		
Health poor or very poor	-1.08	.34
Health - not poor not very good	-.64	.53
Religiosity (no - reference)		
Religiosity - yes	.08	1.09
Free time (not enough - reference)		
Free time - enough	.14	1.15
Constant	-3.02*	

Note: -2 log likelihood = 210.86, Nagelkerke's pseudo R square = .194, N = 191; 70.7% prediction accuracy, ** p < .001 * p < .05 (2-tailed)

In the next step, variables that were significant in the full model for predicting volunteering from the socio-structural variables were entered in a reduced model. The model for socio-structural variables included two variables, age and retirement status. The prediction accuracy from the null model to the final model did not improve at all (66.4%), and the model only predicted non-volunteers. The Omnibus χ^2(DF = 3, N = 262) = 22.77 and was significant at .001. Given these factors in the model, the odds ratio for being a volunteer was 2.41, 95% CI [2.4, 2.44]. That is, the Czechs 55 years and older with the characteristics in the model were nearly twice-and-half times as likely to be volunteers as the Czechs 55 years and older who did not have these characteristics.

The results are presented in Table 4.6 on the next page.

Table 4.6 Prediction of Volunteering among Czech Elderly from Socio-Structural

Variables - Reduced Model

Dependent variable
Volunteering status (no-reference)

Independent variables

	B	S.E.	Wald's χ2	Exp(B)
Age (75+ - reference)				
Age 55 – 64	1.67	.55	9.11	5.29*
Age 65 – 74	1.79	.52	11.87	5.99**
Employment (employed - reference)				
Employment - retired	.97	.37	6.75	2.64*

Note: -2 log likelihood = 311.68, Nagelkerke's pseudo R square = .115, N = 262;
64.5% prediction accuracy, ** p < .001, * p < .05 (2-tailed)

Given the -2 log likelihoods of the two social capital models presented in this

section, the reduction of the number of predictors did not improve the predictive power of

the model or the prediction accuracy but increased the odds of being a volunteer. Next,

the social capital variables were tested.

The Power of Social Capital Variables to Predict Volunteering Status

Next, social capital as a construct was tested for prediction of volunteering status

among the Czech pre-elderly and elderly. The test of the full model against the constant

only model was significant, χ2 (DF = 5, N = 254) = 57.76, p < .001, indicating that the

predictors, as a set, reliably distinguish between volunteers and non-volunteers. Indeed,

the prediction model correctly classified 73.2% of non-volunteers and 72.2% of

volunteers, which could be considered a good prediction quality of the model. The null

model correctly classified 64.6%, and the prediction model correctly classified 72.8% of

cases, which is an improvement in prediction accuracy by more than 8%. The Goodness-of-fit test, $\chi 2$ (DF = 5, N = 254) = 11.71, p = .17, showed there is a difference between observed and predicted values on the dependent variable, indicating that the predictive model is a good fit for the data. In the model, only two variables, social trust and NGO membership, were significant predictors of volunteering. Specifically, people ranking high on social trust were only .31 times as likely to volunteer as people ranking low on social trust, and people ranking moderate on social trust were .8 times as likely to volunteer as people ranking low on social trust. On the other hand, members of any type of non-governmental organization(s) were almost 8 times as likely to be volunteers as those who identified themselves as non-governmental organization(s) members. The Beta coefficients and odds for this model are presented in Table 4.7.

Table 4.7 Prediction of Volunteering among Czech Elderly from Social Capital Variables - Full Model

Independent variables	B	Exp(B)
Social trust (low - reference)		
Social trust moderate	-.23	.8
Social trust high	-1.17	.31*
Informal social capital (low - reference)		
Informal social capital moderate	-.13	.88
Informal social capital high	.2	1.22
NGO membership (no - reference)		
NGO membership	2.04	7.66*
Constant	-1.58**	

Note: -2 log likelihood = 272.48, Nagelkerke's pseudo R square = .28, N = 254; 72.8% prediction accuracy, ** p < .001, * p < .05 (2-tailed)

Given the factors in this model, the odds ratio for being a volunteer was 2.513.

That is, the Czechs 55 years and older with the characteristics in the model were twice-and-half times as likely to be volunteers as the Czechs 55 years and older who did not have these characteristics; however, the odds ratio fell outside the 95% CI [2.531, 2.515], suggesting that this result may not be significant on .05 level.

Next, the predictors significant in the full model were entered in a reduced model. The reduced model for social capital included two independent predictors, social trust and NGO membership. The prediction accuracy from the null model to the final model increased from 64.5% to 72.5%, and the model correctly predicted 73.4% of non-volunteers and 71% of volunteers. The omnibus χ^2(DF = 2, N =262) = 57.06 and was significant at .001. Given the factors in this reduced model, the odds ratio for being a volunteer was 1.45, the 95% CI [1.44, 1.46]. The results are presented in Table 4.8.

Table 4.8 Prediction of Volunteering among Czech Elderly from Social Capital Variables - Reduced Model

	B	S.E.	Wald's χ^2	Exp(B)
Dependent variable Volunteering status (no-reference)				
Independent variables				
Social trust (low - reference)				
Social trust moderate	-.21	.33	.41	.81
Social trust high	-1.14	.39	8.49	.31*
NGO membership (no - reference)				
NGO membership	1.99	.33	36.8	7.23**

Note: -2 log likelihood = 283.79, Nagelkerke's pseudo R square = .269, N = 262; 72.5% prediction accuracy, ** p < .001, * p < .05 (2-tailed)

In comparison of the full social capital model with the reduced social capital model, it can be seen that the predictive power of the reduced model did not improve, nor did prediction accuracy.

Hypothesis 1 posited that social capital variables would be better predictors of volunteering than socio-structural variables. Since the socio-structural variables model had a lower -2 log likelihood than the social capital variables model while having a slightly lower prediction power (see Table 4.9), the two reduced models helped to make a decision. Based on their -2 log likelihoods and prediction accuracy information, NGO membership and trust seem to be better predictors of volunteering than age and retirement status; thus; **Hypothesis 1** is **confirmed**.

Table 4.9 Comparison of Full Socio-Structural and Social Capital Logistic Regression Models

Model	Number of IVs	N	-2 log likelihood	Nagelkerke's pseudo R-square	Prediction accuracy
Socio-structural resources	9	191	210.86	.194	70.7%
Social-capital	5	254	272.48	.28	72.8%

<u>The Power of Country Specific Variables to Predict Volunteering Status</u>

Next, country specific variables as a construct, including the presumed control variables, were tested for prediction of volunteering status among the Czech pre-elderly and elderly. For this model, 237 cases were available. The decrease in number of cases was caused by 21 cases missing data on the variable help and 14 cases missing data on the variable mobility mode. The test of the full model against the constant only model was significant, $\chi 2$ (DF = 7, N = 237) = 59.12, p < .001, indicating that the predictors, as

a set, reliably distinguish between volunteers and non-volunteers. The model correctly predicted 85.8% of non-volunteers, and 51.2% of volunteers. The prediction accuracy of this model was 73.8%, and it increased by 8.4% when compared to the null model. The Goodness-of-fit test, χ^2 (DF = 7, N = 237) = 4.85, p = .68, showed there is a difference between observed and predicted values on the dependent variable, indicating that the predictive model is a good fit for the data. The Nagelkerke's pseudo R-square for this model was .305. Two independent predictors in the model, helping and volunteering literacy, were statistically significant. Helping was defined as low for those who contributed maximum of 1 hour of help per month, moderate for those who contributed 2 – 10 hours of help per month, and high for those who contributed more than 10 hours of help per month. Volunteering literacy was build as an index of three questions inquiring about volunteering; low volunteering literacy meant a person either did not answer any of the three questions or answered one, moderate volunteering literacy meant a person correctly answered two out of three questions, and high volunteering literacy meant a person correctly responded to all three questions inquiring about volunteering. The missing responses on these three questions were by default set to 'no knowledge.'

In consistence with the bivariate results, this model suggested that people who are helpers and people with knowledge of volunteering become volunteers more often than those who do not help and have no knowledge of volunteering. More specifically, people were ranked as moderate helpers were 3.7 times more likely to be volunteers than no helpers, and, similarly, people who were ranked as high helpers were 3.56 times more likely to be volunteers than no helpers. Neither the size of person's current hometown as

defined, nor the numbers of years spent there, showed any significant predictive power, so they would be excluded from the development of the final model. The Beta coefficients and odds ratio for factors in this model are presented in Table 4.10.

Table 4.10 Prediction of Volunteering Among Czech Elderly from Country Specific Variables - Full Model

Independent variables	B	Exp(B)
Years in home town (< 5 years - reference)		
Years in home town	-1.13	.88
Size of home town (< 50,000 - reference)		
Size of home town	.11	1.12
Helping (no or low - reference)		
Helping moderate	1.31	3.7**
Helping high	1.27	3.56*
Mobility mode (being driven - reference)		
Mobility - travel independently	.44	1.55
Volunteering literacy (no or low - reference)		
Volunteering literacy moderate	2.56	12.88**
Volunteering literacy high	1.58	4.88*
Constant	-3.51*	

Note: -2 log likelihood = 246.58, Nagelkerke's pseudo R square = .305, N = 237; 73.8% prediction accuracy, ** p < .001, * p < .05 (2-tailed)

Given these factors, the odds ratio for being a volunteer was 2.72. That is, the Czechs 55 years and older with the characteristics in the model were nearly three times as likely to be volunteers as were the Czechs 55 years and older who did not have these characteristics. However, this odds ratio fell outside the 95% CI [2.73, 2.75], suggesting that this odds ratio may not be significant at .05 level.

The Best Predictive Model for Volunteer Status-H2

Data from approximately 241 respondents were available for this analysis. The volunteer to non-volunteer ratio was approximately 1:3. A model that best predicts volunteering among the pre-elderly and elderly Czechs was developed with independent variables social trust, NGO membership, help, gender, relationship status, volunteering literacy, and age. The test of the full model against the intercept only model was significant, $\chi 2$ (DF = 11, N = 241) = 106.75, p < .001, indicating that the predictors, as a set, reliably distinguish between volunteers and non-volunteers. The model showed good predictive ability, with a correct classification of 78.4% of cases, comprising 84.7% of correctly predicted non-volunteers and 66.7% of correctly predicted volunteers. The Goodness of fit test, $\chi 2$ (DF = 8, N = 241) = 6.36, p = .61, showed there is a difference between observed and predicted values on the dependent variable, indicating that the predictive model is a good fit for the data. The classification accuracy from the null model to the full model increased by 13.3%. The Nagelkerke's pseudo R-square for the model is .493.

The greater values of Beta weights are associated with greater likelihood of volunteering and vice versa. In general, the directionality of the Beta weights is in accordance with the findings of bivariate analyses (Table 4.4). The odds ratios of independent variables in the full model predicting the volunteering status among pre-elderly and elderly Czechs are presented in Table 4.11.

Consistent with the bivariate findings, among the Czech pre-elderly and elderly population, the increase in social trust decreases the likelihood of volunteering. The

social trust categories were created as three equal groups from the continuous distribution of the scores, and for the purpose of this analyses, they were further dummy coded. The analysis revealed that those ranking as moderate trusters are nearly half as likely to volunteer as low trusters, and those ranking high on social trust are even less than half as likely to volunteer as low trusters, holding all other variables in the model constant; however, in the case of the moderate trusters, the likelihood is not significant. The membership in an NGO increases the odds of becoming a volunteer more than seven times, suggesting that volunteering and membership in a non-governmental organization are related. Causal effect, given the cross-sectional nature of data, cannot be assessed. Helping was defined as low for those who contributed maximum of 1 hour of help per month, moderate for those who contributed 2 – 10 hours of help per month, and high for those who contributed more than 10 hours of help per month. The odds of becoming a volunteer increase 3.25 times for those who are moderate helpers compared to non-helpers and approximately 3.05 times for those who are high helpers as opposed to no helpers. The odds of becoming a volunteer are approximately by a half lower for males than they are for females. Overall, living with somebody decreases the likelihood of volunteering of people 55 years and above; however, despite the fact it is a statistically significant finding, it has no practical meaning, and the meaning becomes more interpretable when interaction term is added into the model. The odds of becoming a volunteer are approximately twenty times higher for those who are 65 to 74 years old and live alone than for those who are older and live with somebody. The Beta coefficients and odds for the individual predictors in this model are presented in Table 4.11. Given these

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predictors, the odds ratio for being a volunteer was 5.63. That is, the Czechs 55 years and

older with the characteristics in the model were nearly six times as likely to be volunteers

as the Czechs 55 years and older who did not have these characteristics; however, the

model odds ratio fell outside the 95%.CI [5.67, 5.8].

Table 4.11 Final Model for Prediction of Volunteering among Czech Elderly

Independent variables	B	Exp(B)
Social trust (low - reference)		
Social trust moderate	-.55	.57
Social trust high	-.94	.39**
NGO membership (no - reference)		
NGO membership	1.98	7.24**
Help (no or very low - reference)		
Help moderate	1.18	3.25**
Help high	1.12	3.05*
Gender (female - reference)		
Gender- male	-.8	.45*
Relationship (single - reference)		
Relationship	-3.19	.04*
Volunteering literacy (low - reference)		
Volunteering literacy moderate	2.04	7.68**
Volunteering literacy high	1.26	3.53**
Interaction		
Age category x relationship (75+ - reference, single - reference)		
Age 55 – 64	2.01	7.48
Age 65 –74	3	20.2*
Model		
constant	-2.87	

Note: -2 log likelihood = 204.89, Nagelkerke's pseudo R square = .493, N = 241; 78.4% prediction accuracy, ** p < .001 * p < .05 (2-tailed)

Due to the fact that some of the variables presented in the final model were

continuous by nature, point-biserial correlations for volunteering status could be run to

check the directionality and magnitude of the relationships. These revealed that volunteering status is moderately negatively correlated with social trust ($r = -.29$, $p < .01$), positively correlated with association memberships ($r = .4$, $p < .001$), and it was found that current hours volunteered and helped are also positively moderately correlated ($r = .35$, $p < .05$).

The Hypothesis 2 posited that the best prediction model would be achieved by a combination of socio-structural, social capital, and country specific variables. The -2 log likelihoods, Nagelkerke's pseudo R-squares, and prediction accuracy of all models tested are summarized in Table 4.8. Final model with rather high number if independent predictors demonstrates the best predictive ability. **Hypothesis 2** is **confirmed**.

Table 4.12 Comparison of All Logistic Regression Models

Model	Number of IVs	N	-2 log likelihood	Nagelkerke's pseudo R-square	Prediction accuracy
Socio-structural resources	9	191	210.86	.194	70.7%
Social-capital	5	254	272.48	.28	72.8%
Country specific	7	237	246.58	.305	73.8%
Final model	11	241	204.89	.493	78.4%

Informal Volunteering as a Substitute for Formal Volunteering – H3

The third hypothesis posited that among the population of interest, helping substitutes for volunteering. To examine this hypothesis, the following steps were taken. First, the respondents were divided into groups based on their volunteering and helping status. Thus, four groups were formed: no helpers/no volunteers, volunteers only, helpers only, and volunteers and helpers. Second, the helping hours categorical variable was recoded to a continuous variable by taking the mean of each category except for the last

one (>10 hours per month), which was left as it was. Third, a univariate analysis of variance (ANOVA) with post-hoc tests was run. The overall ANOVA was significant, suggesting a difference between groups, $F (3, 249) = 103.9$, $p < .001$. The post-hoc analyses revealed that helpers on average contribute 4.23 hours of help monthly, whereas volunteers on average monthly contribute 5.19 hours of help while also volunteering. The difference by approximately one hour is statistically significant at a .05 level, suggesting that helping does not substitute for volunteering among the pre-elderly and elderly Czechs. Furthermore, Pearson's product moment correlation of .32, $p = .01$ was found between hours volunteered and helped. Thus, based on the data, **Hypothesis 3** is **rejected**. If H3 was not to be rejected, a higher count of helpers who are not volunteers and either a non-significant difference in helped hours between helpers only and volunteers or a significantly higher number of hours volunteer in group of helpers only would have been expected.

In this research, three hypotheses were tested. Their confirmation or rejection is summarized below is Table 4.13.

Table 4.13 Summary of Hypotheses and Their Confirmation or Rejection

Hypothesis	Statistical Method Used	Result
H1: Social capital better predicts volunteering among people 55+ in the Czech Rep. than other constructs used.	Logistic regression	Confirmed
H2: A combination of social capital and socio-structural resources variables predicts the volunteering the best.	Logistic regression	Confirmed
H3: In the Czech Republic, helping substitutes for volunteering.	ANOVA with post-hoc comparisons	Rejected

CHAPTER V

DISCUSSION

Because volunteering among the pre-elderly and elderly in the Czech Republic is low in international comparisons, the overarching goal of this study was to find a linear combination of variables drawn from two theories (socio-structural resources and social capital) that can predict and also promote volunteering. This was achieved by first examining the individual contributions of each independent variable to predict volunteering status. As an additional goal, this study explored the role of the Czech non-governmental sector, its level of professionalization, and its extent twenty-three years after the liberating Velvet Revolution. A description of the Czech non-governmental sector was made possible through inclusion of questions on associational membership, frequency of association membership, questions inquiring about the channels through which people learn about volunteer opportunities, and also by a set of three questions regarding volunteer management, given to respondents who indicated they are/were volunteers sometimes in past 23 years.

Addressing the Missing Data and Out of Age Range Respondents

For the vast majority of variables tested, the data were fairly complete. The response rate was lower among the variables created for this study that required

respondents to handwrite a piece of information rather than just choose an answer from a list of answers. Among the questions requiring a written piece of information, the highest non-response rate (20%) was found for the question asking to provide a definition of volunteering. This is not surprising given that this question was the one requiring the most time for thinking. A similar low response rate was also found for the question asking people to provide the name(s) of non-governmental organization(s). The non-response rate on the six questions representing frequency of talking to and meeting with friends, neighbors, and relatives, requiring respondents to handwrite approximate weekly frequencies of their contact with these groups of people, was better (on average 6.2 %); however, for both variables asking about frequency of contact with neighbors, it was higher (on average 10.4%), suggesting that some people might have very closed networks. It also might be that respondents skipped the more difficult questions, i.e., questions requiring thinking and handwriting, with an intention to complete them later and never did so, or they simply did not want to think and answered (checked) questions that provided a list of options.

Next, due to the fact that the volunteer centers could not provide the co-investigator the list of names and addresses of their volunteers due to confidentiality, and also the fact that some organizations do not keep such information, the coordinators of volunteers or supervisors of volunteers relied upon to aid in the distribution of survey packets. Finally, sometimes questionnaires from volunteers younger than 55 years of age were returned, and these questionnaires had to be excluded from the data analyses.

<u>Relationship Between Volunteering Status and Socio-Structural Variables</u>

Variable gender

The final logistic regression model revealed that Czech females 55 years and above are nearly one-and half times as likely to become volunteers than males. In the sample used, more females than males filled the questionnaire, the gender split was 7:3 for females overall, and it was even 8:2 for female volunteers. Similar gender splits were also obtained in the purposeful sampling of 401 volunteers 50 years old and above in Morrow-Howell, Hong, and Tang's (2009) research. The gender split could be partially attributed to the fact that females, on average, live longer. On the other hand, when geographically possible, elderly Czech females help their children with households and childcare; however, in the sample, the same percentage (20%) of volunteering females as non-volunteering females were daily or almost daily babysitting. The higher likelihood of females to become volunteers was apparent in socio-structural variables model as well as in the final model. Thus, with evidence that females volunteer more than males, this study contributes to the conclusion that gender as a predictor probably behaves differently in different cultures or age groups. In Warburton and Stirling's (2007) research done on an Australian sample as well as in Wilson and Musick's (1997) research done on an American sample, no significant differences were found between the likelihood of females and males to become volunteers. However, Petrová-Kafková (2012) who compared the EVS data from 1991, 1998, and 2008 waves for the Czech population found that among Czechs 60 years and older, more males than females volunteered although the gender difference is disappearing.

Variable age

In this study, bivariate analyses suggested that young people are more likely to volunteer; however, the logistic regression results (reduced model) suggested that those who were 55 – 64 years old are 5.3 times more likely to volunteer than those who are not in this category but those who were in age category 65 – 74 years are even 6 times more likely to volunteer than those who were not in that age category. While there is no coefficient for those who are 75 or older, the results, as they stand, show that older people are slightly more likely to volunteer. A similar trend is also seen in the socio-structural resources full model. The fact that people in the age group 65 – 74 are slightly more likely to volunteer than people 55 – 64 years negates Warburton & Stirling (2007) finding that younger people are more likely to volunteer. On the other hand, Vidovicová (2005), who clustered activities the elderly and examined them against socio-demographic indicators, found that despite the fact that all activities decline with progressing age, productive activities, in which volunteering also belongs, seem to be the least dependent on age. Vidovicová attributes this to the fact that such activities are more connected to personal values than age. Similarly, Wilson and Musick's analysis (1998) of range and amount of volunteering discovered that while the range of volunteer activities declines with age, the amount of volunteering does not. Last, but not least, Petrová-Kafková (2012) who analyzed longitudinal EVS data for the Czech Republic also failed to find a significant decline in volunteering participation as people age. In the current research, a negative low correlation (r = -.14) between hours volunteered and age was found; however, the result was not significant (p = .18). After all, a finding that there is not a

sharp decline in volunteering as people move from economically active stage of life to retirement suggests that those civically minded volunteer as long as their health permits. This finding might inspire organizations that employ volunteers to adjust the environment to suit the elderly (e.g., making convenient times in which volunteering takes place or altering the physical environment) so they could be valuable contributors to others' and / or society's wellbeing for a long time.

Variable relationship status

Some research (e.g., Okun & Michel, 2006) shows that people who live with somebody have a higher likelihood of volunteering. The reason often cited is a better material background and wider social networks. On the other hand, Musick and Wilson (2003) found a .27 correlation between being single and volunteering. In this study, similar to Musick and Wilson (2003), the bivariate analysis revealed that more Czechs 55 years and older who live alone are volunteers. Such was particularly true for those in age group 55 to 64 years. In the full socio-structural model, relationship status (as a collapsed marital status) was not found a significant predictor of volunteering; however, in the final prediction model, for those who were 65–74 years old and lived with somebody, the likelihood of being in the group of volunteers was much higher than for those 55–64 years or those 75 years and older. In fact, married/cohabitated respondents in age group 65–74 were 7.3 times more likely to volunteers than those who were not in that age category, whereas married / cohabitate respondents in age group 55–64 were 4.4 times as likely to volunteer than those who were not in that age category. Thus, it seems that there is a curvilinear relationship between volunteering and relationship status. It can only be

suggested that people who live alone and do not want to be alone, choose volunteering as a productive activity to be among people.

Variable health

In general, it is assumed that the likelihood of volunteering is higher for those who are healthy. In the current research, both the bivariate and multivariate analyses did not show a significant negative relationship between subjective health and volunteering status among Czechs 55 years and older. The full socio-structural logistic regression model showed that respondent who indicated being in poor or very poor health were .34 times as likely to volunteer than people who indicated being very good health, and people who indicated not poor but not very good health were .53 times as likely to volunteer than respondents in very good health. Thus, the relationship between volunteering and subjective health was found to be negative and linear but did not reach statistical significance. Similarly, Vidovicová (2005) notices that subjective health does not seem to be associated with the intensity of community-oriented activities. In her research, community-oriented activities were defined as volunteering for community and working in pensioner and women's associations that are, in the vast majority of cases, not paid positions. Petrová-Kafková (2012) also found that the influence of one's health on volunteering status among elderly Czechs is much smaller than was expected, since in her research, as in the current research, more than one fifth of respondents who were volunteers defined their health as poor. On the other hand, health in hers, as in the current research, was measured as a subjective feeling by a single item. When only a single item to assess such a complex phenomenon is used, the chance to detect any over- and under-

estimates made by a respondent equals to zero. The alternative explanation of volunteering by people with subjective poor health suggests that people volunteer because volunteering makes them focus on things other than their health problems.

Variable education

In the age group 55 years and above who live in the Czech Republic, it seems that education is not a good predictor of volunteering, although the full socio-structural model showed that people with high school or university degree are 1.39 as likely to volunteer than people with apprenticeship or lower. Such is a very surprising finding, given that in the United States, education, even in the population of interest, is a significant predictor, and the Pearson's correlation coefficient between the number of years spent in school and volunteering status is found to range from .18 (Choi & Chou, 2010) to .27 (Wilson & Musick, 1997, 1998). Contrary to the general assumption that more educated people take up volunteer jobs whereas the less educated do not, in the current research, there were 10% of volunteers who completed just middle school and 17% of volunteers who earned an apprenticeship certificate. The proportion of volunteers who were college educated was equal to proportion of volunteers who had just an apprenticeship certificate. Similarly, Vidovicová (2005) did not find any significant correlation between education and volunteering, whereas Petrová-Kafková (2012) found evidence that a college degree increases the chances of Czech elders to volunteer. On the other hand, from the three waves of EVS data, it is apparent that over the 17 years following the Velvet Revolution, the percentage of elderly volunteers with college degrees decreased by more than half, whereas the percentage of elderly volunteers with completed middle school more than

doubled (Petrová-Kafková, 2012). The fact that more educated elders are not more likely to become volunteers 23 years after the Velvet Revolution gives the recruiters of volunteers a wider pool of people to approach and recruit for volunteering.

Variable employment

In age group 55 years and above, it seems that non-employment status is a good predictor of volunteering. The bivariate analysis revealed that among the volunteers 55 years and above, 81% were not in workforce. In addition, the multivariate analysis revealed that those who were not in workforce were 3.23 times as likely to be in the group of volunteers than in the group of non-volunteers in comparison to those who are in the workforce. In fact, among the socio-structural resources variables, only non-employment status and age proved to be good predictors of volunteering. However, given that the median age in the sample was 65 years and the retirement age in the population of interest is currently approximately 60 years, such is not a surprising finding. Interestingly, whereas the non-employment status turned out to be a significant predictor, free time, operationalized as care for family members, did not show a significant relationship with volunteering status. The variable free time is discussed below.

Variable free time

Variable free time was included in the analysis due to fact that retirement status may not automatically mean that retirees have plenty of unstructured free time to devote to productive aging activities. Thus, free time was assessed by questions asking about regular spouse or grandchild care. Despite the fact that those who had enough time were 1.15 times as likely to become volunteers than those who did not have enough free time,

this result was not significant and for this reason, free time was not used to build the final prediction model.

Variable income

Variable income, as expected, proved to be one of the variables the respondents often chose not to answer, instead checking the category 'do not want to respond.' These responses were coded as missing and the number of cases used for the analyses dropped almost by one quarter. From the data that remained, it was found that income is not a significant predictor of volunteering among Czech elders 55 years and older. Despite the fact that both bivariate and multivariate analyses brought non-significant results, the trend seen seems to be contrary to the general assumption that income and volunteering are positively related (e.g., Wilson & Musick,1997; Thoits & Hewitt, 2001). More specifically, the full socio-structural logistic regression model revealed that respondent 55+ years old with monthly household income lower than $500 were 1.63 times as likely to volunteer than respondents 55+ years old with monthly household income higher than $1.000. The plausible explanation for such directionality can be as follows. Since the elderly are usually not economically active, their standard of living decreases along with their needs, thus they can use this time for volunteering. Those who chose not to answer the income question were mainly people in the age category 55–64; however, when checked for other available variables predicting income, i.e., education and employment status, these respondents did not differ from the respondents who provided answers to the income question.

Variable religiosity

The research from the United States of America suggests that religiosity status is quite a strong predictor of volunteering, often measured by the frequency of church attendance (e.g., Thoits & Hewitt, 2001). In the current research, despite the fact that among volunteers, there were significantly more people (67%) who perceived themselves as religious, the multivariate analysis for the socio-structural variables showed that religious status is not a significant predictor of volunteering. The odds for religious people to be volunteers were 1.09, and it was not significant. Among the religious volunteers, nearly three quarters were Roman Catholic, which was anticipated, given that Roman Catholic Church has approximately a 90% share among all registered Churches in the Czech Republic. It should be noted that two out of four volunteer centers participating in this research were the ADRA and the Czech Catholic Charity, two NGOs that naturally gather rather religious people. Interestingly, the remaining quarter of religious volunteers either could not specify their religion or belonged to some minor Churches. The difference between the predictive ability of religiosity for volunteering status in the United States and the Czech Republic might be explained by the very different overall religiosity in these two countries. Whereas the United States of America ranks among the most religious countries, the Czech Republic ranks among the least religious countries. Thus, it seems understandable that religiosity is not a good predictor of volunteering among elders in the Czech Republic, which is also Petrová-Kafková's (2012) conclusion. Churches provide a good institutional channel to volunteering, as Wilson and Musick (1997) put it. Therefore, recruiting elderly volunteers through churches, as a recruitment strategy, should be very successful.

Relationship Between Volunteering Status and Social Capital Variables

Informal social capital

Contrary to the general assumption that volunteers would rank high on informal social capital, meaning that they have more dense informal social networks (Hodgkinson, 2003), in the current study, among volunteers, there were approximately equal proportions of those with low, moderate, and high levels of informal social interaction. Thus, the bivariate analysis showed no difference in level of informal social interaction between volunteers and non-volunteers. The multivariate analysis brought some evidence that more informally socially active people are more likely to become volunteers; however, this result was not significant. To quite a surprise, a high non-response rate for contact with neighbors was seen in the data, suggesting that people do not communicate with their neighbors. This might be influenced by the fact that majority of respondents resided in major Czech cities and cities are considered more anonymous, since they provide many opportunities for socializing other than with neighbors, whereas in villages, in general, there are not many opportunities, so people usually socialize within the village. Wilson and Musick (1997) also found an indirect effect of informal social capital on helping, as a different face of volunteering. The current data allowed for a simple comparison of the ability of informal social capital to predict helping, as in informal volunteering. In case of helping, people who ranked higher on informal social capital were significantly more likely to contribute more hours of helping. Thus, despite the fact that informal social capital did not prove to be a good predictor of volunteering status,

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there is some evidence that people who volunteer also help and people who help have more dense informal networks.

Association membership

From all the variables tested for a relationship with volunteering status, the associational membership showed the highest Chi-square test value. In the sample, more than three quarters of all volunteers were also members of at least one nongovernmental organization and more than half of all members of nongovernmental organization(s) volunteered. The logistic regression revealed that members of an association were more than 7 times as likely to be volunteers than those who were not members, and the point biserial correlation between volunteering hours and NGO membership was moderate. Similarly, in Petrová-Kafková's (2012) predictive model for volunteering among the Czech elderly, associational membership was the strongest predictor of volunteering. In addition, given three waves of EVS data Petrová-Kafková (2012) had available for secondary analysis, she found that the importance of an associational membership for prediction of volunteering increased between 1991 and 2008. This is an interesting finding implying that motivating people to participate in civic life and become members of non-governmental organization will also increase their likelihood of volunteering.

The survey instrument also collected data on the frequency of associational membership to distinguish card-carrying membership from active members, as in Warburton and Stirling's (2007) research. However, the 114 respondents who indicated themselves as non-members in the previous question, checked the category 'not applicable' for the frequency of meetings question, so the number of valid answers

decreased to 145. Given the listwise deletion principle used in regression analyses, inclusion of this variable would have significantly decreased the total number of available cases, which was not desirable, so this variable was excluded from further analyses and served only for a description of the non-governmental sector in the Czech Republic. To address the number of card-carrying members, there were approximately 17% associational members who indicated they never attend meetings of their association(s).

Variable social trust

Since in the Czech Republic, social trust, operationalized as trust of mostly unknown people and society's institutions, was found to be the highest among post-commuist countries sampled but still low in comparison to Western European countries (Letki & Evans, 2005) and international research has shown that social trust is positively related to volunteering, it was expected that among volunteers, social trust would be higher in comparison to non-vololunteers. In the Czech sample, a negative relationship between volunteering status and social trust was found, and the negative relationship between volunteering and social trust was significant at .001 for those who ranked the lowest on social trust. Thus, it seems that the less people trust, the more likely they are to become volunteers. Such result is consistent with a Czech scholar Petrová-Kafková (2012), who analyzed the European Values Study data for a subpopulation of Czechs 50 years old and above.

Petrová-Kafková (2012) made an assumption that the negative relationship might be due to the fact that EVS questionnaire included only one question on social trust. In the present study, a strong measure of social trust, a scale created from interpersonal and

organizational trust scales with alpha reliability of .82 (details in Table 4.3) was used, and even the bivariate analysis (details in Table 4.4) revealed that the relationship between volunteering status and social trust among the Czech pre-retirement and retirement population really is negative. This is supported by the coefficients generated by the logistic regression model.

Petrová-Kafková (2012), offers an explanation that it might be that elders who perceive social trut important to improve the quality of life and society become volunteers. In this study, using the interpesonal social trust scale and the organization trust scale, a follow-up analysis, which is not part of the results section, revealed that volunteers and helpers on avarage scored 2.88 (SD = .49) on organizational social trust scale whereas the non-volunteers-non-helpers scored on average higher, 3.01 (SD = .58), $F (1, 246) = 3.2$, $p < .075$. However, the difference is not statististicaly significant at the .05 level, which is commonly used in social sciences. Similarly, non-helpers-non-volunteers scored on average higher (M = 3.07, SD = .63) than volunteers and/or helpers (M = 2.78, SD = .55) on the interpersonal trust scale, $F (1, 246) = 13.75$, $p < .001$; however, the homogeneity of variance test, which is one of the underlying assumption of ANOVA, was violated. It can be concluded that despite the problems with significance level and homogeneity of variance, these two follow up analyses provide some evidence that less trusting elderly Czechs are more likely to become either formal or informal volunteers than the trusting ones. The ratio of non-volunteers to volunteers in the sample was approximately 3:1.

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Relationship Between Volunteering Status and Country Specific Variables

Variables years in hometown, size of hometown, and mobility mode were first intended as control variables, given that people living in rural areas, those who recently moved to a new village or town and those who do not live in inner city and are dependent on someone to drive them to distant places, do not have many opportunities to volunteer. Due to their non-significant relationship with volunteering status, at least not in the way they were defined, these variables were added to the country specific variables.

Years is hometown

It was assumed that people who recently moved in a city or village where they were sampled, did not have time to settle down and search for volunteer opprotunities. However, in the sample, only 1.5% of respondents recently moved to a new city and the next 1.5% moved in within past five years. Almost half of the sample even stated they had lived in their current hometown since their birth. The other half indicated that they had lived in their current hometown for more than five years. Since this category was very broad (i.e., more than five years but not entire life), some respondents took time and wrote the exact number of years they lived there on the margin. Given the life cycle, it appears they moved in when they were in their young adulthood, probably due to marriage or job placement. Approximately one third of those who lived in their current hometown for more than five years were volunteers, whereas among those who lived there for less than five years, only one fifth were volunteers. However, this difference was not significant. Overall, the data show that in the age group of concern, there is

almost no intercountry mobility, which, on the other hand, might motivate people to do something for their community and start volunteering in place they know very well.

Size of hometown

This variable was intended to be used as a control for initial differences between people from cities and smaller in population localities. However, no statistically significant differeces were found. Similarly, Petrová-Kafková (2012) did not find any differences in size of hometown and older person's likelihood of volunteering, except for cities with 100,000 inhabitants and above. However, if the variable was coded into more categories, the difference might have yielded statistically significant differences, given that small towns do not provide the same broad network of non-governmental organizations as cities.

Helping

A moderate correlation was found between the number of hours helped and volunteered, making helping a strong predictor of volunteering. It was found that volunteers who also help, on average, contribute more than five hours monthly. Given that the majority of volunteers contribute eight hours of voluntary work per month, along with helping, it adds to 13 hours of free work per month for the benefit of others and society. This finding negates the assumption that helping and volunteering in the Czech Republic is mutualy exclusive. In fact, they are not, so approaching people who are known to be helpers may result in recruitment of more volunteers.

Mobility mode

It was assumed that people who are more homebound would have lower likelihood of being volunteers. In the Czech Republic, car ownership is not a standard among people sixty years old and above. This is not due to low incomes but rather to the fact that these people lived their adulhood in times when a car was a luxurious good, so they either did not learn to drive or did not buy a car when cars became available. At the same time, the Czech Republic has had a very dense network of public transportation, although this is slowly changing. Thus, elders who do not drive rely on public transportation or their family members with cars. This was reflected by the variable mobility mode. The bivariate analysis revealed that one half of volunteers relied on public transportation, one third drove, and only less than one sixth relied on their family to drive them. Not surprisingly, among those who relied on their family, only approximately one fifth were volunteers. However, in the full logistic regression model, variable mobility mode was no longer significant, so it was not included in the final prediction model. The practical implication for recruiters of volunteers is to approach people who are spatially active on their own, since the chance to recruit them for volunteering is somewhat higher than of those who are not spatially active.

Volunteering literacy

Volunteering literacy was explored due to the presumption that for 40 years of communism, the non-governmental sector was heavily ruled by the central government and volunteering was presented as a sort of obligatory collective activity and demanded from all members of society. Thus, it was expected that this undestanding would be a

negative predictor of volunteering status. Volunteering literacy was created as an index. The index variables were the ability to define volunteering and to name some non-governmental organization. The first variable was an open-end question and generated a high non-response rate. Overall, among the present or past (period 1989--2011) volunteers, three quarters had either a very good knowledge or good knowledge of volunteering. The proportion was similar for non-volunteers. Interestingly, among volunteers, one tenth had a low knowledge of volunteering, whereas among non-volunteers, it was one sixth. However, it should be repeated that respondents who did not provide answer to any of the questions creating this index, were assigned score of 0 for the unanswered question, and it might appear that there are volunteers that have a low level of volunteering literacy when in reality, they do not. At the same time, whereas more than a half of volunteers had a very good knowledge of volunteering, among non-volunteers, it was only one third. Thus, volunteering literacy was found a good predictor of volunteering in the age group considered in this research. The practical implication of this finding is that the more people know about volunteering and their volunteer opportunities, the more likely to become volunteers.

The Non-Governmental Sector 23 Years After the Velvet Revolution

As announced at the beginning of this chapter, the data also allowed for assesment of the state of Czech non-governmental sector. Petrová-Kafková (2010) found that the role of NGOs in volunteer management and recruitment increased in the past decade. This can also be reflected by the fact that four fifths of volunteers indicated that they were trained for their volunteer positions, approximately two thirds of volunteers

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attended supervision meetings, and more than three-quarters were also appreciated for their efforts by the non-governmental organizations. These data indicated quite a high level of professionalization. On the other hand, in the area of promotion of volunteering, more might be done, given that nearly one half of non-volunteers stated they did not have information about volunteering opportunities from any source. It appears that mass media could play a more important role in volunteer recruitment. Currently, less than a third of non-volunteers indicated they learn about volunteer opportunities through the media, which was rated number one among sources of information about volunteer opportunities. At the same time, more information about volunteering and volunteer opportunities could also decrease the high (approx. 60%) percentage of those who indicated they were either not at all interested or very little interested in volunteering.

Volunteering Status Prediction Model

To answer the research question, *What factors promote volunteering among Czechs 55 years and above?,* a final prediction model was built. The best predictors of volunteering were found to be: (1) low levels of social trust, (2) associational membership in at least one non-governmental organization, (3) a moderate level of help provided to neighbors, friends, and strangers, and (4) volunteering literacy. In the case of volunteering literacy, it was found that moderate level of volunteering literacy increases the likelihood of volunteering more than a high level of volunteering literacy. These data suggest that volunteers are more likely to be recruited among those who are somewhat skeptical about the role of state and tend to think that world is not a safe place to be. In addition, elderly volunteers are more likely to be recruited among those who actively

participate on the wellbeing of society by taking memberships in non-governmental organizations and providing help to people in need. Last, but not least, elderly volunteers are more likely to be recruited, if they have good knowledge of volunteering and volunteer opportunities.

Limitations

This study has several limitations that should be acknowledged and addressed. The first limitation is seen in the sample. Due to time and financial constraints, it was not possible to draw a representative sample of Czech population of people 55 years and older. Thus, a convenience sample was drawn. Formal volunteers were purposefully oversampled. The sample was more educated then expected and the locations sampled were mainly urban, not following the geographical stratification of elderly population in the Czech Republic. At the same time, sampling bias might have been created by those who decided to fill the questionnaire. Consequently, the results of this study cannot be generalized beyond this sample.

Second, despite the fact that a quantitative study allows for reaching a higher sample, it does not allow one to research the topic in depth, as would a qualitative study. However, it may provide a ground for a future in-depth qualitative study on current volunteers or volunteer management.

Third, the high number of predictors included in the study did not allow each predictor to be examined in depth due to the lack of data and statistical power for such further analyses. More specifically, for several predictors, scales were used and for

others, where a scale would make the questionnaire extensive and decrease the likelihood of completion, a single question per predictor was used. This was the case of, for example, health status, which, in general, is a good predictor of volunteering (e.g., Wilson & Musick, 1997) but in the current research, it turned out the opposite.

Fourth, the highest (up to 20%) non-response rate was found for questions that required respondents to fill in a piece of data rather than choose and answer from a list. Thus, the unwillingness of respondents to write in piece of information should be taken in account in future research. To generate a high response rate for certain variables, the survey questionnaire should include maximum of multiple-choice questions.

Fifth, as Wilson (in Omoto, 2005, Ch.1) critiques, the conceptualization of volunteering is rather loose and heavily dependent on social surveys, which take the individual as both the unit of observation and the unit of analysis, ignoring broader external factors, such as quality and type of social networks one has, the necessity to consider entire households, neighborhoods, communities, and cultures on lives in. In addition, he sees another bias in the way the data analyses are conducted, since factors are treated as if they were totally independent of each other when in real word, they are not. In this analysis, despite the criticism, an individual is the unit of analysis. At the same time, all the factors included in this analysis were treated as if they were independent each of other. It is believed that given the very limited picture of volunteering among the elderly in the Czech Republic, this approach still brought valuable information and set a ground for future research in Czech environment.

Conclusion

The current geographical trend shows that the Czech population is aging and that elders can even enjoy longer life than previous generations. Retirement is sometimes associated with plenty of unstructured time and a sense of uselessness. At the same time, volunteering is one activity that can benefit both the individuals who volunteer and the society. Therefore, it is desirable to increase the number of elderly volunteers in the Czech Republic, or, in the first step, increase the interest of older adults in volunteering.

To sum up, the current research confirmed that both socio-structural and social capital theory can be used to explain volunteering among the Czechs 55 years and older. Despite the fact that among post-communist countries, the level of social trust and the level of volunteering are highly correlated, social trust, at least in the Czech Republic in the study and contrary to the international research, seems to negatively influence a person's likelihood of volunteering. Contrary to the assumption that the close-tied informal channels as a remnant of the communism promote helping at the expense of volunteering, this research rejected it. Several variables, indentified by the international research as good predictors or volunteering, e.g., education, health, turned out not to be significant predictors of volunteering or even turned out the have an unexpected directionality (e.g., income, relationship status). Given that the research on volunteering and volunteering among the elderly in the Czech Republic in particular has emerged recently, future studies might want to take a close look at these variables and confirm or reject their prediction power of volunteering status.

When looking across the analyses performed, the absolutely best predictor of volunteering was membership in some non-governmental organization(s). The second best predictor was volunteering literacy. Both these factors might be increased by better non-governmental sector promotion as suggested above, and, in a long run, increase the interest of elders in volunteering.

APPENDICES

Power Analysis

Data source	Effect size	Cohen's δ	N estimate α = .05 1-β = .8
Socio-structural variables and volunteering			
Thoits & Hewitt (2001) Correlation between **age** and volunteering	r = -.11 p < .001 N = 3,617	.22	156
Wilson and Musick (1997) Correlation between **age** and range of volunteering	r = .09 p < .001 N = 2,846	.181	193
Wilson and Musick (1997) Correlation between **gender** and volunteering	r = .03 n.s.	n.a.	n.a.
Wilson and Musick (1998) Correlation between **gender** (female) and volunteering	r = .08 p < .05 N = 637	.161	240
Thoits & Hewitt (2001) Correlation between **marital status** and volunteering	r = .075 p < .05 N = 3,617	.15	277
Musick & Wilson (2003) Correlation between being single as proxy for **marital status** and volunteering	r = .27 p < .01 N = 2,348	.561	22
Wilson & Musick (1997) Correlation between **education** and volunteering	r = .27 p < .001 N = 2,846	.516	25
Thoit & Hewitt (2001) Correlation between **education** and volunteering	r = .19 p < .001	.387	43

	N = 3,617		
Haski-Leventhal's (2009) Correlation between **health** and volunteering	r = .106 p < .01 N = 30,023	.213	138
Wilson and Musick (1997) Correlation between **health** and volunteering	r = .13 p < .001 N = 2,846	.262	92
Wilson and Musick (1997) Correlation between **income** and volunteering	r = .2 p < .001 N = 2,846	.408	39
Thoits & Hewitt (2001) Correlation between **income** and volunteering	r = .24 p < .001 N = 3,617	.494	27
Wilson & Musick (1997) Correlation between church attendance as proxy for **religiosity** and volunteering	r = .28 p < .001 N = 637	.583	20
Thoits & Hewitt (2001) Correlation between church attendance as proxy for **religiosity** and volunteering	r = .29 p < .001 N = 3,617	.606	19
Social capital variables and volunteering			
Okun & Michel (2006) Correlation between **informal soc. capital** and volunteering	r = .18 p < .001 N = 653	.366	48
Musick, Wilson & Bynum (2000) Correlation between **informal soc. capital** and volunteering	r = .19 p < .001 N = 2780	.387	43
Musick, Wilson & Bynum (2000)	r = .41	.899	10

Correlation between **frequency of meeting attendance** and volunteering	p < .001 N = 2780		
Wilson & Musick (1998) Correlation between **frequency of meeting attendance** and volunteering	r = .33 p < . 001 N = 637	.699	10
Badescu (2003) Correlation between **social trust** in the Czech Rep. volunteering (associational membership)	r = .14 p not reported N not reported	.283	79
Delhey & Newton (2005) Correlation between **social trust** from EVS data and volunteering	r = .37 p < .01 N = not reported	.797	12

Country specific variables and volunteering

Plagnol & Huppert (2010) Correlation between **helping** and volunteering	r = .34 p < .001 N = approx. 29,630	.723	14
Wilson & Musick (1997) Correlation between **helping** and volunteering	r = .24 p < .001 N = 2,846	.494	27
Thoits & Hewitt (2001) Correlation between employment as proxy for **free time** and frequency of volunteering	r = .14 p < .001 N = 3,617	.283	79
Qualified estimate Correlation between employment as a proxy for **free time** v. volunteering	r =.1 p < .05 N = 1,000	.2	156
Vidovicova (2005)	r=-.12	-.242	107

Correlation between volunteering and **size of hometown**	p < .001 n=1036		
Qualified estimate Correlation between volunteering and **size of hometown**	r =.-10 p < .05 N = 1,000	-.2	156
Qualified estimate Correlation between volunteering and **volunteering literacy**	r =.10 p < .05 N = 1,000	.2	156
Qualified estimate Correlation between volunteering and **volunteering literacy**	r=.1 p < .05 N = 1,000	.2	156

Questionnaire English Version

Dear Research Participant,

My name is Michaela Kabelkova, I am a doctoral student at Clemson University, USA, and at the University of South Bohemia, Czech Republic, and I am inviting you to participate in my American dissertation research about volunteering of people 55 years and older. Your participation is **voluntary**, **anonymous**, and the questionnaire takes **15 to 20 minutes** to fill.

The goal of my research is to create a statistical model that would provide an explanation for person's participation in volunteering. You can imagine this searching for the best model as searching for a recipe for some delicious meal, you have tasted and you assume the ingredients it contains, and you have to find the best ratio of ingredients to acquire the right taste of this meal. My ingredients for research of volunteering are included in the questions of this questionnaire. All the questions are important for me, so I would like to ask you to fill as many questions as possible. The coding of each answer category (e.g., 2=agree) has no meaning; it is only there to help the researcher with the data entry. The geometric shapes on the first page are codes for participant recruitment method used, for example a circle means that these questionnaires were handed in, a triangle means that these questionnaires were mailed in.

When finished answering, please, insert the filled questionnaire in the enclosed envelope with my return address and mail it. As appreciation of your time, I will make

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the research result summary available to you. The summary will be posted on www.misinadisertace.cz in November 2011. A carbon copy will be available at the same time upon your telephone or email request. I will mail it to you free of charge. You may detach this cover page. If you have any questions regarding this research, you may contact me or my colleagues. In advance, I would like to **thank you for your time**.

Mgr. Michaela Kabelková   (tel.+420-607-640-393)   mkabelk@clemson.edu

Primary investigator: Mark Small, JD, Ph.D. (tel. +1 864-656-6286) communication in English

Research Supervisor in the Czech Republic: Mgr. et Mgr. Jitka Vacková, Ph.D. (tel. +420-387 315-472) communication in Czech

Please, use ☑ or ☒ to indicate your answer(s).

1.Your gender is: ☐ 1=Male   ☐ 0=Female

2. Your marital status is: ☐ 1=married/registered partnership ☐ 2=widow/er

☐ 3=single ☐ 4=living with spouse ☐ 5=separated ☐ 6=divorced

3. How old were you on your last birthday? Please write the number: _____

4. Are you currently enrolled as a volunteer in any non-governmental organization (e.g.,

civic association, public beneficiary organization, foundation)?

☐ 1=yes, in one organization ☐ 2=yes, in more organizations ☐ 0=no

4a. If yes, do you volunteer in an accredited volunteer program (i.e., does your

organization pay volunteer insurance for you)? ☐ 1=yes ☐ 0=no

5. Do you currently volunteer for local authority for no pay? ☐ 1=yes ☐ 0=no

6. If you answered yes to q4 or q5, approximately how many hours per month do you put

in volunteering? Please write the approximate number……………

Answer question 7 only if you are not a volunteer at this time.

7. If you are not a volunteer for any non-governmental organization or local authority in

2011, were you a volunteer sometimes between 1990 and 2010? ☐ 1=yes ☐ 0=no

7a. If you answered yes, approximately how many hours did you monthly put in

volunteering? Please write the approximate number……………

7b. What was the reason for quitting? ☐ 1=poor health ☐ 2=family related

duties ☐ 3=other hobbies ☐ 4=conflict with employment …...☐ 5=other

8. What is your highest formal education achieved? ☐ 1=primary education

☐ 2=vocational training, apprentice certificate ☐ 3=high school/no graduation exam

☐ 4=high school ☐ 5=associate degree ☐ 6=college

☐ 7=other, please indicate which_____

9. Are you currently employed? ☐ 1=yes, full time job ☐ 2=yes, part time job

☐ 3=self-employed ☐ 6=not working, disability/retirement/preliminary retirement

pension ☐ 4=occasional job ☐ 5=no, I am unemployed

10. Approximately how big is the locality you live in?

☐ 1=less than 2,000 inhabitants ☐ 2=less than 10,000 inhabitants

☐ 3=less than 20,000 inhabitants ☐ 4=20,001- 50,000 inhabitants ☐ 5=more than

50,001 inhabitants

11. How long have you been living at this place?

   ☐ 1=less than 1 year   ☐ 2=less than 5 years ☐ 3=more than 5 years ☐ 4=entire life

12. How would you describe volunteering?

   _____

_____

_____

13. Does the volunteer get any money for his/her voluntary work? ☐ 0=yes   ☐ 1=no

14. Off the top of your head, could you name some non-governmental organization(s)

   that are in the locality you live in? Please, write the name(s) of the organization(s) here:

   _____

   _____

15. Volunteering can be also understood as an unpaid informal help, which does not

   make any official statistics. A help provided to your neighbor (accompanying someone

   to a doctor, minor shopping or cleaning, babysitting, assistance with self-care, advice

   and so on) can serve as an example of informal help. Estimate the average number of

   hours you provided help to your neighbors, friends, and strangers in past 3 months.

   ☐ 0= 0 hrs   ☐ 1= less than 1 hr monthly   ☐ 2= less than 5 hrs monthly

   ☐ 3= less than 10 hrs monthly ☐ 4= more than 10 hrs monthly

16. Do you consider yourself a religious person? ☐ 1=yes   ☐ 0=no (if no, continue

   with question # 19)

17. To which Church do you belong?

   ☐   1=Roman Catholic ☐   2=Evangelical Church of Czech Brethren ☐ 3=Hussite

   ☐   4=No Church   ☐ 5=other, *please indicate*:_____

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18. Not considering the major religious holidays, weddings, baptism, and funerals, how often in one month do you attend a mass or its equivalent? Please write the number here:……………

19. Approximately how many times during a typical week do you talk (including talking on phone) to:

    18a. your friends (provide number):_____

    18b. neighbors (provide number):_____

    18c. relatives (provide number):_____

20. Approximately how often during a typical week do you visit:

    19a. your friends (provide number):_____

    19b. neighbors (provide number):_____

    19c. relatives (provide number):_____

21. Do you babysit grandchildren almost every or every day? ☐ 1=yes ☐ 0=no

22. Do you care for your disabled husband, wife, or spouse on daily basis?

    ☐ 1=yes ☐ 0=no

23. Do you feel you have enough free time for yourself when all household chores, self-care, and activities stated in questions 21 and 22 are excludes? ☐ 0=yes ☐ 1=no

24. *Please, complete this statement:* All in all, I would say my state of health these days is…."¨: ☐ 5=very good   ☐ 4=good   ☐ 3=not good but not bad   ☐ 2=poor
        ☐ 1=very poor

25. Approximately how big is the net monthly income of your household (i.e. family income, unless you live alone)? ☐ 1=less than 5,000 CZK ☐ 2=5,001 to 10,000 CZK ☐ 3=10,0001 to 15,000 CZK   ☐ 4=l5,001 to 20,000 CZK   ☐ 5=more than 20,001 CZK   ☐ 99=don't know   98=I don't want to answer

  25a. How many persons live in your household?

    ☐ 1=1 ☐ 2= 2 ☐ 3= 3 ☐ 4=4 ☐ 5=5 and more

Please, choose one answer to each question in the set of questions that follow.

	1= strongly agree	2= agree	3=someti mes yes, sometime s no	4= disagr ee	5= strongly disagree
26. It is human nature to co-operate with other people.	☐	☐	☐	☐	☐
27. Most people can be trusted.	☐	☐	☐	☐	☐
28. If someone is in serious trouble, no one else cares about it.	☐	☐	☐	☐	☐
29. If you are not always on your guard other people will take advantage of you.	☐	☐	☐	☐	☐
30. A person co-operates with other people only when he or she sees it is in his or her own interest.	☐	☐	☐	☐	☐

	1= a great deal	2= quite a lot	3=not very much	4=none at all
31. How big is your confidence in the police ?	☐	☐	☐	☐
32. How big is your confidence in the social security system ?	☐	☐	☐	☐
33. How big is your confidence in the health care system ?	☐	☐	☐	☐
34. How big is your confidence in parliament ?	☐	☐	☐	☐

35. How big is your confidence in the civil

service ? ☐ ☐ ☐ ☐

36. How big is your confidence in the justice

system ? ☐ ☐ ☐ ☐

37. At present time, are you a member of some organizations/associations listed below?
   Check all types of oraganizations you are a member of.

   ☐ 1=non-governmental organizations providing social welfare and health services

   ☐ 2=non-governmental organizations providing services in the area of education, art
   or culture

   ☐ 3=trade unions

   ☐ 4=political parties or movements

   ☐ 5=non-governmental organizations providing services in the area of human rights

   ☐ 6=non-governmental organizations providing services in environmental protection,
   animal rights, or ecology

   ☐ 7=professional associations

   ☐ 8=non-governmental organizations providing services in the area of sport and
   recreation

   ☐ 9=clubs of elders or women's clubs

   ☐ 10=volunteer firemen

   ☐ 11=hunters association

   ☐ 12=fishermen association

   ☐ 13=gardeners association

   ☐ 14=breeders associations

   ☐   15=other clubs or associations, please specify: _____

38. Approximately how many times in past six months did you participate in meeting of

organization(s) you indicated in previous question?

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☐ 0=never   ☐ 1=once   ☐ 2=twice   ☐ 3=3 times   ☐ 4=4 times and more

39. How do you usually travel more distant places (i.e., places you cannot reach by foot or

bike)?

 ☐ 1= by car, I drive ☐ 2=by car, somebody drives me ☐ 3=by bus/train

40. How do you learn about vacant volunteer jobs in the place you live? Please indicate

all that apply.

☐ 1=from the advertisements in media (regional press, television, Internet) or on
public boards

☐ 2=directly from the employees of non-governmental organizations

☐ 3=from volunteer centers

☐ 4=from my Church or church group

☐ 5=from friends

☐ 6=from my employer

☐ 7=in no way

☐ 8=other way Please write how:_____

41. To what extent are you interested in volunteering?

4=very interested ---- 3=quite interested ---- 2=little interested ---- 1=very little

interested ---- 0=not interested

42. *Please answer only if you are/were a volunteer in time period 1990-2011.*

42a. Did you receive an initial training for your volunteer placement?

☐ 1=yes   ☐ 0=no

40b. Did you attend regularly supervision meetings? ☐ 1=yes   ☐ 0=no

40c. Was your volunteering appreciated somehow (e.g., public appreciation, small presents)?   ☐ 1=yes   ☐ 0=no

Thank you for your answers and time.

Room for your comments

Questionnaire Czech Version

Prosím označte fajfkou ☑ nebo křížkem ☒ vybranou odpověď.

1. Vaše pohlaví je: ☐ 1=muž   ☐ 0=žena

2. Váš rodinný stav je: ☐ 1=vdaná/ženatý/v registrovaném partnerství

  ☐ 2=vdovec/vdova   ☐ 3=svobodn/ý-á   ☐ 4=druh/družka

  ☐ 5=vdaná/ženatý/v regist. partnerství žijící odděleně   ☐ 6=rozvedený/á

3. Kolik je Vám let (počítáno dle posledních narozenin*)? Prosím napiště Váš věk*: _____

4. Jste v současné době dobrovolníkem v nějaké neziskové organizaci (př. občanském

  sdružení, obecně prospěšné společnosti či nadaci)?   ☐ 1=ano, v jedné organizaci

         ☐ 2=ano, ve více organizacích   ☐ 0=ne

    4a. Pokud ano, jste dobrovolníkem v akreditovaném dobrovolnickém programu (tj. je

  za vás hrazeno pojištění dobrovolníků)?   ☐ 1=ano   ☐ 0=ne

5. Vykonáváte v současné době dobrovolnickou práci pro místní obecní/městský úřad?

                                                                ☐1=ano

                                                                ☐ 0=ne

6. Pokud jste v současné době dobrovolníkem, přibližně kolik hodin <u>měsíčně</u>

  dobrovolnictví věnujete? *Prosím číslo napiště zde*:_____

Na otázku č.7 odpovězte jen pokud v současné době nejste dobrovolníkem.

7. Pokud v roce 2011 nejste dobrovolníkem, byl/a jste dobrovolníkem v nějakém typu

  neziskové organizace či na úřadě v časovém rozmezí 1990 - 2010?   ☐ 1=ano   ☐

  0=ne

    7a. Přibližně kolik hodin jste měsíčně věnoval/a dobrovolnické činnosti

  v neziskové organizaci? *Prosím číslo napiště zde*: _____

    7b. Z jakéhoh důvodu jste ukončil-a dobrovolnickou činnost? ☐ 1=špatné zdraví

    ☐ 2=rodinné důvody   ☐ 3=koníčky   ☐ 4=neslučitelnost se zaměstnáním   ☐

  5=jiné

8. Jaké je Vaše nejvyšší dosažené vzdělání?

☐ 1=základní   ☐ 2=vyučený/á   ☐ 3=střední   ☐ 4=střední s maturitou ☐ 5=vyšší odborné   ☐ 6=vysokoškolské   ☐ 7=jiné *doplňte jaké*:_____

9. Jste v současné době zaměstnaný/á?   ☐ 1=zaměstnaný na plný úvazek

☐ 2=zaměstnaný na zkrácený úvazek   ☐ 3=živnostník

☐ 6=v důchodu (invalidním/starobním/předčasném)

☐ 4=příležitostná práce na dohodu o provedení práce nebo pracovní činnosti (brigády)

☐ 5=nezaměstnaný/á

10. Jak je přibližně veliká obec či město, kde žijete?

☐ 1= do 2 000 obyvatel   ☐ 2= do 10 000 obyvatel   ☐ 3= do 20 000 obyvatel

☐ 4= 20 001 - 50 000 obyvatel   ☐ 5= 50 001 a více obyvatel

11. Jak dlouho v tomto místě žijete?

☐ 1=méně než 1 rok   ☐ 2=méně než 5 let   ☐ 3=více než 5 let ☐ 4=celý život

12. Jak byste svými slovy popsal/a (definoval/a) dobrovolnictví?

_____

_____

____

_____

____

13. Dostává dobrovolník za vykonanou dobrovolnickou práci finanční odměnu?

☐ 0=ano   ☐ 1=ne

14. Vzpomenete si na jméno nějaké neziskové organizace, která ve Vašem okolí působí?

Jméno či jména pište zde:

_____

_____

_____

Dobrovolnictví lze chápat také jako práci formálně neorganizovanou, o které nejsou vedeny žádné oficiální záznamy, a za kterou vykonavatel nedostává finanční odměnu. Příkladem takové práce je **sousedská výpomoc** *(př. Doprovod souseda k lékaři, zajištění drobného nákupu či úklidu, pohlídání dětí, pomoc se sebeobsluhou, rada apod.).*

15. Zkuste odhadnout, kolik hodin jste během uplynulého <u>čtvrt roku</u> průměrně věnoval/a pomoci sousedům, přátelům či úplně neznámým lidem?

☐ 0= 0 hodin   ☐ 1= až 1 hodinu měsíčně   ☐ 2= až 5 hodin měsíčně

☐ 3= až 10 hodin měsíčně   ☐ 4= více než 10 hodin měsíčně

16. Považujete se za věřící osobu? ☐ 1=ano   ☐ 0=ne (*pokud ne, pokračujte otázkou č.19*)

17. Ke které církvi se hlásíte?

☐ 1=k Římskokatolické církvi   ☐ 2=k Českobratrské církvi evangelické

☐ 3=k Husitské církvi   ☐ 4=k žádné církvi   ☐ 5=jiné, *prosím uveďte*:_____

18. Vyjma hlavních náboženských svátků, svateb, křtů a pohřbů, jak často během měsíce chodíte na mši či náboženská setkání? *Prosím číslo napište zde*: ....

19. Přibližně kolikrát během typického týdne většinou mluvíte (a to i telefonicky) s:

19a. přáteli (*doplňte číslovku*):_____

19b. sousedy (*doplňte číslovku*):_____

19c. příbuznými (*doplňte číslovku*):_____

20. Přibližně kolikrát se během typického týdne navštěvujete s:

20a. přáteli (*doplňte číslovku*):_____

21b. sousedy (*doplňte číslovku*):_____

22c. příbuznými (*doplňte číslovku*):_____

21. Hlídáte vnoučata skoro každý nebo každý den?   ☐ 1=ano   ☐ 0=ne

22. Staráte se trvale o nemocného manžela, manželku, partner/a-ku? ☐ 1=ano   ☐ 0=ne

23. Máte po odečtení času nutného ke zvládnutí domácích prací, péče o sebe a případně péče o osoby vyjmenované v otázkách 21 a 22 dostatek volného času pro sebe?

☐ 0=ano   ☐ 1=ne

24. *Prosím doplňte tvrzení:* Řekl/a bych, že moje celkové zdraví je v současnosti:

☐ 5=velmi dobré   ☐ 4=dobré   ☐ 3=ani dobré ani špatné   ☐ 2=špatné

☐ 1=velmi špatné

25. Přibližně jaký je celkový (tj. rodinný, pokud nežijete sám-sama) čistý měsíční příjem vaší domácnosti?   ☐ 1= do 7 000 Kč   ☐ 2= 7001 až 10 000 Kč

☐ 3= 10 001 až 15 000 Kč   ☐ 4= 15 001 až 20 000 Kč včetně   ☐ 5= nad 21 000 Kč

☐ 99=nevím   ☐ 98=nechci odpovědět

25a. Kolik členů žije v této domácnosti? ☐ 1=1   ☐ 2= 2   ☐ 3= 3   ☐ 4=4 ☐ 5=5 a více

Následuje sada otázek, na které odpovězte výběrem jednoho odpověďního pole.

	1= velmi souhlasím	2= souhlasím	3=někdy ano, někdy ne	4= nesouhlasím	5=velmi nesouhlasím
26. Spolupracovat s ostatními lidmi je přirozené.	☐	☐	☐	☐	☐

27. Většině lidí se dá věřit.	☐	☐	☐	☐	☐
28. Když se člověk ocitne ve vážné situaci, ostatním lidem je to jedno, nezajímá je to.	☐	☐	☐	☐	☐
29. Když není člověk neustále ostražitý, někdo toho zneužije ve svůj prospěch.	☐	☐	☐	☐	☐
30. Člověk spolupracuje s jiným člověkem pouze když pro něho ze spolupráce plynou nějaké výhody.	☐	☐	☐	☐	☐

	1= velká	2= celkem velká	3= celkem malá	4= žádná
31. Obecně vzato, jaká je Vaše důvěra v policii?	☐	☐	☐	☐
32. Obecně vzato, jaká je Vaše důvěra v sociální zabezpečení?	☐	☐	☐	☐
33. Obecně vzato, jaká je Vaše důvěra ve zdravotnictví?	☐	☐	☐	☐
34. Obecně vzato, jaká je Vaše důvěra v parlament?	☐	☐	☐	☐
35. Obecně vzato, jaká je Vaše důvěra v úředníky veřejné/státní správy?	☐	☐	☐	☐
36. Obecně vzato, jaká je Vaše důvěra v soudnictví?	☐	☐	☐	☐

37. Jste v současné době členem někter/é-ých z níže nabízených organizací? *Označte všechny ty, jejichž členem jste.*

☐ 0=nejsem členem žádné organizace

☐ 1=nezisková organizace poskytující sociální nebo zdravotní služby

☐ 2=nezisková organizace působící v oblasti vzdělání, umění, kultury

☐ 3=zaměstnanecké odbory

☐ 4=politická strana či sdružení

☐ 5=nezisková organizace působící v oblasti lidských práv

☐ 6=nezisková organizace působící v oblasti ochrany přírody, práv zvířat či ekologie

☐ 7=profesní organizace

☐ 8=nezisková organizace působící v oblasti sportu a rekreace

☐ 9=klub důchodců nebo spolky žen

☐ 10=dobrovolní hasiči

☐ 11=myslivci

☐ 12=rybáři

☐ 13=zahrádkáři

☐ 14=chovatelé

☐ 15=jiné kluby, spolky, svazy, sdružení či družstva, *prosím uveďte:*

_____

38. Přibližně kolikrát <u>za čtvrt roku</u> se účastníte schůzí organizac/e-í, které jste uvedl-a v předešlé otázce? ☐ 0=nikdy ☐ 1=1x ☐ 2=2x ☐ 3=3x ☐ 4=4x a více

39. Jak se většinou přepravujete na delší vzdálenosti (tj. všude tam, kam se pěšky či na kole nedostanete)? *Prosím označte jednu z odpovědí.*

☐ 1= autem, řídím ☐ 2=autem, jsem dovezen/a ☐ 3=autobusem či vlakem

40. Jak se dovídáte o možnostech vykonávat dobrovolnickou činnost ve vašem okolí?

Prosím označte všechny možnosti, které ve vašem případě vyhovují:

☐ 1=z inzerce v médiích (tisk, televize, Internet) nebo na obecních vývěskách

☐ 2=přímo od zaměstnanců neziskových organizací

☐ 3=přes dobrovolnická centra

☐ 4=přes moji náboženskou společnost či skupinu

☐ 5=od přátel a známých

☐ 6=přes zaměstnavatele

☐ 7=nijak

☐ 8=jinak *Prosím napište jak:_____*

41. Jak velký je váš zájem o dobrovolnictví? *Prosím zakroužkujte vybranou odpověď.*

4=velký ---- 3=středně velký ---- 2=malý ---- 1=velmi malý ---- 0=žádný

Na otázky 42 a, b, c odpovídejte jen pokud nyní jste nebo jste v letech 1990 a 2010 byl-a dobrovolníkem v nějaké organizaci.

42a. Byl-a jste zaškolena v dobrovolnické práci? ☐ 1=ano ☐ 0=ne

42b. Účastnil-a jste se pravidelných supervizí? ☐ 1=ano ☐ 0=ne ☐ 2=supervize nebyly

42c. Byla vaše služba neziskovou organizací nějak oceněna (např. veřejným poděkováním, malým dárkem)? ☐ 1=ano ☐ 0=ne

Děkuji Vám za Vaše odpovědi a čas.

Prostor pro Vaše připomínky:

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