CONNECTED AND BENEVOLENT: THE POSITIVE IMPACT OF

SOCIAL CONNECTIONS IN REDUCING ECONOMIC

CONCERNS FOR VOLUNTEERING

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Dissertation Prepared for the Degree of

DOCTOR OF PHILOSOPHY

UNIVERSITY OF NORTH TEXAS

May 2018

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Baktir, Yusuf. Connected and Benevolent: The Positive Impact of Social Connections in Reducing Economic Concerns for Volunteering. Doctor of Philosophy (Public Administration and Management), May 2018, 119 pp., 13 tables, 10 figures, references, 144 titles.

This dissertation attempts to answer how social and economic mechanisms operate in individual, community and state levels to impact volunteering. Both social processes and economic factors significantly impact the amount of volunteering. However, researchers have a tendency to explain volunteering only by one of these factors. As both theories are equally important in explaining volunteerism, the development of a coherent theory is necessary to combine economic and social theories. This dissertation suggested that, when evaluated together, the influences of the economic factors on volunteering diminish as individuals get more connected with the other members of the society. The three-level analysis of the volunteering largely supports the primary hypothesis of the dissertation that economic concerns for volunteering are crowded out when individuals or the society is highly connected. This finding can help practitioners design better strategies to enhance volunteering such as creating opportunities for the members of the society to interact with each other.

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ACKNOWLEDGEMENTS

I would like to dedicate this dissertation to my father and my grandfather that I lost almost 10 years ago in one year apart. I am who I am mostly because of them. Although being two different characters, they had a lifetime impact on me. My grandfather, Mehmet, taught me how to how to be grateful in life, while my father, Mustafa, taught me how to enjoy the life. I am sure my father and grandfather would be very proud seeing me getting this degree. I am a father myself now and I understand them better each day. I will do my best to be a good dad and a grandfather. This degree will hopefully help me achieve this goal.

My journey to getting this degree would not even have started if professors of this department did not help me. The most thanks go to Dr. Collins, my supervisor for his excellent guidance throughout my journey in the doctoral program. Also sincere thanks to professors Dr. Benavides, Dr. Jang, Dr. Bland for the unwavering support.

I am very fortunate to have my daughter Betul and my wife Nurgul with me on this journey. Although being a student herself, Nurgul always shared her love with us. My daughter Betul motivated me to work every day and be hopeful for the tomorrow. Betul is the best thing happened to me in this life, and I am so grateful. This dissertation is a tiny attempt on my part to create a better future for my daughter. Hopefully, she will work to make this world even better a place.

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CHAPTER 1

INTRODUCTION

In democratic countries, the science of associations is the mother of science; the progress of all the rest depends upon the progress it has made.

Tocqueville

The purpose of this dissertation is to theorize and test whether economic and sociological approaches can collectively explain the volunteering phenomenon. The dissertation is devoted to answering one simple question: Does social capital decrease individualistic concerns for volunteering? More specifically, the question asks whether socially networked subjects are less likely to be motivated to volunteer with economic rewards. Although the question is simple, the answer needs to bring in multiple perspectives and different levels of samples to give a proper answer.

The dissertation is particularly concerned with volunteerism since it is an indispensable part of the American society. A bold yet true statement would be that volunteer culture is one important reason that makes America such a great nation. The culture of volunteerism is at the roots of the American society. This is best reflected in the earlier works of French philosopher Mr. Tocqueville. In 1813, Mr. Tocqueville was assigned to the United States to study the prison system by the French government. Tocqueville took the opportunity to observe all aspects of America. When he got back to France, he took the time to write a book about American society. In his book, he devoted a special chapter to analysis the American associations, as he got truly impressed with their advancement (Tocqueville, 1863). Tocqueville stated Americans of all backgrounds share the keen interest in founding associations. Tocqueville carefully distinguished the human service organizations from the political associations. Unlike the associations in his

home country, he observed the associations in the U.S. are founded to help others with activities including but not limited "to give entertainments, to found seminaries, to build inns, to construct churches, to diffuse books, to send missionaries to the antipodes; they found in this manner hospitals, prisons, and schools" (Tocqueville, 1863, p. 129). More importantly, Americans got involved in these associations voluntarily. He shared his admiration to the American associations gathering great people around a common cause and more specifically "inducing them voluntarily to pursue it" (Tocqueville, 1863, p. 129). The nature of associations in the U.S. did not change since Tocqueville's observation. The number of the registered nonprofit organizations reached to 16 million today meaning that there is at least one association for every 20 Americans and the associations still heavily rely on the volunteers.

The second important aspect of U.S. volunteering is its relation to the democratic values. Volunteering is an expression of American understanding of democracy. Tocqueville nicely connects the rationale of associations to the American's devotion to democratic values. Founding fathers created a political system to give the highest discretion to the local authorities and communities. The federal government duties were restricted to provide general coordination between states and provision of national policies. Greater discretion to the individuals and the communities reflected as volunteering where the members of the society share individual concerns to help one another without much expectation from the higher authorities. Tocqueville observes that governments can easily turn into tyranny if not supported with fresh ideas of the public. He places a special duty to the associations where "Governments, therefore, should not be the only active powers: associations ought, in democratic nations, to stand in lieu of those powerful private individuals whom the equality of conditions swept away" (Tocqueville, 1863, p. 133).Tocqueville refers the United States as the "most democratic country in the face of earth"

and states that the members of the democratic nations are independent. Americans share the motivation to solve their problems themselves and not rely on others to solve the problems. Volunteering enables individuals to be part of the solution in society. The members of the democratic nations "become powerless, if they do not learn voluntarily to help each other." (Tocqueville, 1863, p. 131).

Lastly, volunteering has a significant economic value. Volunteers constitute 2.5% of the total workforce in the United States and 1 percent of the GDP is accounted for the efforts of the volunteers (Salamon, Sokolowski, Haddock, & Tice, 2013). This means that American volunteers produced the 184 billion dollars worth of GDP (Corporation for National and Community Service, 2017), which is larger than 128 countries' GDPs in the world according to the World Bank database (World Bank, 2017). Americans' volunteer hourly work was estimated to be \$24.14 per hour as of 2016, which increased by around 29 percent in the past decade (Independent Sector, 2017). Demand for volunteering increased at the same time. Nonprofit organizations in the United States steadily grew over the past decade with a slight hit during the 2008 financial crisis. While the number of all registered nonprofit organization was nearly 799 thousand by 2003, the number increased to about 976 thousand in 2008. As nonprofit organizations struggled with the crisis, the number reduced to 955 thousand by 2013 (McKeever, 2015). The number of charities increased by nearly 20 percent by 2013 in ten years.

In spite of the vital importance of the volunteers in the United States, volunteering rates are unfortunately decreasing (Gaskin, 1998; Merrill, 2006; Raposa, Dietz, & Rhodes, 2017).

Decreasing volunteering rates are best observed for the past five years. According to the Bureau of Labor Statistics report, although 26.8 percent of the U.S. population volunteered in 2011, only 25.3 percent did so by 2014 (Bureau of Labor Statistics, 2016). Volunteering faced yet another

drop between 2014 and 2015 by 0.4 percent, and dropped to 24.9 percent in the U.S. This indicates that almost 1 million Americans chose not to volunteer the next year. This was recorded as the lowest volunteering rate of the last ten years of the U.S. history (Clolery, 2014). Volunteer rates in the U.S. between the dates of 2002 and 2015 are shown in Figure 1.1.

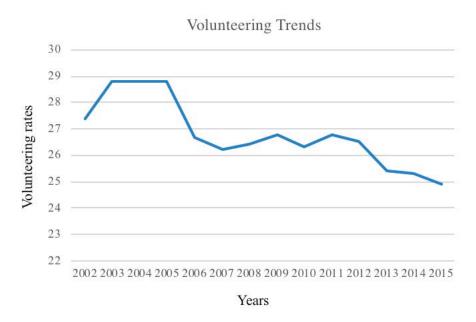


Figure 1.1: Volunteer rates in the U.S. by year (Source: Bureau of Labor Statistics).

Decreasing volunteer rates confirm earlier warnings about overall decreasing social capital including volunteering (Putnam, 1995, 2000; Stolle & Hooghe, 2005). In a later analysis, Putnam showed that the years following 9/11 caused the widespread resurrection of social capital nationwide (Sander & Putnam, 2010). However, as the data from Bureau of Labor Statistics shows, the increasing interest in volunteering only lasted for a couple of years. Decaying interest for volunteerism continues to this day.

The U.S. government made several attempts to ensure Americans continue to volunteer by directing and encouraging volunteer programs. The government encouraged volunteering through several organizations such as the Peace Corps, Points of Lights and many government programs such as Faith-Based Initiative to support the establishment of a volunteering society

(Michelman, 2002). Moreover, governments historically supported the nonprofit organizations financially and government grant is still the major fund resource for many of the organizations. Government initiatives apparently are not powerful enough to stop the diminishing supply of volunteering.

The current volunteerism literature has several limitations. Two problems are more apparent than others. First, the bulk of the literature is limited to individual-level studies. Most volunteer management strategies are limited to peer-to-peer resolutions, meaning that strategies look at individual characteristics to assess one's potential for volunteering. However, the dissertation presents here that volunteering rates are largely independent of the individuals or even organizations but mostly depend on the situational factors such as community features. The second important limitation of the volunteerism literature is that volunteerism studies are largely restricted to either economic or sociological perspectives to volunteering. While economic theories highlight the individualistic concerns for volunteering (Freeman, 1997; Lee & Brudney, 2009), sociological theories highlight the social factors (Musick & Wilson, 2008; Wilson, 2000). This is very problematic considering one particular view cannot explain a complex phenomenon such as volunteering (Hustinx, Cnaan, & Handy, 2010).

In response to this, this dissertation attempts to show a more coherent theory of volunteering which takes into account both the economic and sociological perspectives. On the following pages, I define volunteerism, explain the levels of analysis being used in this study, provide the framework and present the application of theory. Chapter 2, Chapter 3 and Chapter 4 will examine empirically the volunteering phenomenon at different levels of analysis. The second chapter tests social embedded theory (Granovetter, 1985) for volunteering at the individual level. The third chapter uses regenerative approach to volunteering (Brudney & Meijs,

2009) to examine volunteering at the community level. The fourth chapter mainly uses social capital theory (Putnam, 2000) to test whether social engagement at the state level influences individual volunteering. The last and fifth chapter reconciles the three empirical chapters, restates the problem, reviews the major findings in the empirical chapters, discusses the implications and shows the limitations to inform the future studies.

Volunteer Definition

During the first use of "volunteer" as a term, volunteers were referred to those freely decide to join the military in times of emergency for help (Cnaan, Handy, & Wadsworth, 1996). The idea of free choice is still at the core of volunteering. Volunteering is the result of a free choice to contribute to a cause with one's own discretion. Volunteerism scholars agree that volunteers are individuals who participate without having the goal of meeting biosocial needs, such as sleeping or being compelled for socio-political reasons, such as compulsory community service (Cnaan et al., 1996; Smith, 1981; Snyder & Omoto, 2008). The action of helping others because of personal relationships or because of feeling obliged to contribute does not fall under the category of volunteerism either (Ellis & Noyes, 1990; Snyder & Omoto, 2008).

On the other hand, to call any action "volunteer" just because it is taken with free choice is far from able to define volunteerism. Volunteering is rather a complex phenomenon that is hard to define with a single sentence (Snyder & Omoto, 2008). To be categorized as "volunteer," a behavior has to meet several other criteria. The following is one way to formulate the criteria to identify volunteerism. Volunteerism involves 1) unpaid service, 2) formal commitment, and 3) intended benefits to strangers (for similar dimensions see (Cnaan et al., 1996; Snyder & Omoto, 2008).

Volunteering is unpaid work. The strict definition of volunteering rejects any form of monetary benefits (Scheier, 1980). This criterion differentiates volunteering from paid work. The content of the work remains the same; what differentiates these types of work is whether the labor is paid or unpaid. Another criterion is that volunteers must perform meaningful and productive work. It is more than spending the time in a leisure activity (Wilson & Musick, 1997).

Volunteering is exercised within a formal structure. Volunteering is a formalized and public activity (Snyder and Omoto, 1992). Individuals do the volunteer work within a structured setting (Scheier, 1980), which is provided by the formal organizations. It is important to note that the definition of volunteering is still given broadly in developing countries to include informal helping activities (Verduzco, 2010). Being part of a formal structure is different from being a member of a group (Musick & Wilson, 2008). However, members of the organization do not necessarily take on volunteering responsibility but are likely to receive the benefits of membership (Smith, 1994). While volunteers are the producers of the common goods, members are the primary consumers (Wilson, 2000).

Volunteering is a sub-part of the broader category of helping activities; however, the intended beneficiary of volunteering differentiates it from other forms of helping. While the intended beneficiaries of volunteering are strangers, informal helping involves giving help to one's family and friends and caring also involves helping one's family members (Snyder & Omoto, 2008; Wilson, 2000).

Besides this given criteria to define volunteering, there is lack of agreement to what extent the individuals may receive benefits and to what extent they need to bear the costs to be called "volunteer." Scholars who view volunteerism from a "sacrifice" perspective argue the volunteers need to bear some form of personal for cost an action to be considered volunteering

(Handy et al., 2000; Meijs et al., 2003). Meaning that costs of volunteering need to exceed the benefits. The public especially perceives volunteers as those who make personal sacrifices to help others (Handy et al., 2000). Individuals are more likely to be considered "volunteers" to the degree that it is perceived that the net cost of volunteering exceeds the benefits (Meijs et al., 2003). The more costs individuals bear, the more they actually "volunteer."

Another perspective to volunteering classifies volunteers based on their intentions or motives during volunteering. This perspective is not particularly concerned with the final balance of cost or benefits at the end of volunteering. To this view, while individuals might receive benefits, they must not decide to volunteer with an expectancy to receive benefits (Snyder & Omoto, 2008). So, volunteering is the reflection of motives that people hold such as love, gratitude, courage, compassion, and desire for justice (Musick & Wilson, 2008; Wilson & Musick, 1997). Another definition regards the benefits criterion more broadly and argues that volunteering can have psychic benefits (Smith, 1981) such as self-actualization, self-esteem, and self-purpose.

On the other hand, it is not clear whether the "pure altruism" assumed from the previous approaches ever exists (Smith, 1981). "Volunteers are not angelic humanitarians in any sense" (Smith, 1981, p. 33). All the participants are assumed to be receiving some form of benefits that motivate their volunteer contribution. From an economic viewpoint, volunteering is a "conscience good" such that individuals feel obliged to participate in order to secure their benefits (Freeman, 1997). The benefits the individuals secure may include "warm glow", positive feelings about themselves (Andreoni, 1990). Other benefits consist of but are not limited to, skill improvement, employment, social relationships, and income (Chinman & Wandersman, 1999; Handy & Greenspan, 2009; Spera, Ghertner, Nerino, & DiTommaso, 2015). In short, the

benefits may include any other than direct remuneration. Volunteering is a choice of action for a variety of other activities that bring benefit to the individuals who engage in it.

Levels of Analysis

Most of the volunteering studies use the individuals as the level of analysis. The individual level analyses hold the inherent assumption that volunteering is independent of context. However, context is really what makes volunteering meaningful. First of all, volunteering is practiced within a formal organization. These organizations produce the volunteer opportunities for the individuals. Additionally, volunteering is a community activity involving several actors. A most simple volunteer activity involves the volunteer, the organizer and, of course, those who are helped (Snyder & Omoto, 2008), while more complex ones may involve the governments, businesses and higher education (Haski-Leventhal, Meijs, & Hustinx, 2010). So, looking at volunteering only as an individual endeavor is a very limited view to understanding volunteering.

As most of the literature focuses on individuals, relatively little is known about the contextual factors (Hustinx et al., 2010; Musick & Wilson, 2008; Wilson, 2000). Fortunately, latest research on volunteering is expanding its focus to different levels of analysis (Gesthuizen & Scheepers, 2010; Gil-Lacruz, Marcuello-Servós, & Saz-Gil, 2016; Lim & MacGregor, 2012; Prouteau & Sardinha, 2013; Rotolo & Wilson, 2012, 2014; Sohn & Timmermans, 2017; Stadelmann-Steffen & Gundelach, 2015; Voicu & Voicu, 2009). There is not a simple way to categorize the different levels of analyses used in the volunteering literature. However, several researchers attempted to categorize the literature by the level of analysis in their reviews. Penner et al (2005) classified the different levels of analyses as meso level, micro level, and macro level.

While meso level is described at the interpersonal level, the micro level analysis is concerned with the individual factors. The authors present macro-level studies concerned with individuals within an organizational context. Baer et al (2016) present two levels of analysis to analyze macro-level determinants of volunteers as country-level and community-level. While country-level studies involve state-level determinants of volunteering besides countries, community-level studies are mainly concerned with cities and neighborhoods.

Table 1.1: Level of Analysis of the Main Variables in Each Chapter

Main	Level of Analysis		
Variables	Chapter 2	Chapter 3	Chapter 4
Volunteering	Meso (Individual)	Macro (Community)	Meso (Individual)
Employment	Meso (Individual)	Macro (Community)	Micro (Individual)
Social interaction	Micro (Individual)	Macro (Community)	Macro (State)

I mainly use individual level of analysis in Chapter 2, the community-level analysis in Chapter 3 and state level analysis in Chapter 4. However, the use of each individual variable in each of the corresponding chapters is more complex. I integrate micro, meso and macro level analyses in the empirical chapters. Table 1.1 summarizes level of analysis for each of the main variables used in each chapter. The second chapter of the dissertation is mainly concerned with the individuals and uses micro and meso level analysis. Since individual volunteering is context and situation dependent, volunteering is noted as a meso level variable. On the other hand, Penner et al (2005), classifies cost-reward analysis of helping as a meso level analysis, while suggesting reciprocal altruism as the micro level analysis. Since employment variable mainly follows cost-reward analysis, employment variable is a meso level variable and social interaction is a micro level variable since reciprocal relationships are the key to the individual volunteering.

I follow Baer et al (2016)'s approach to categorization for macro-level components of volunteering as state level and city level analysis of volunteering for the third and fourth chapter. The third chapter analyzes the macro level mechanisms of volunteering especially at the community level. Volunteering, employment, and social interaction variables are all aggregate values at the community level, thus representing macro-level variables at the community level. The fourth chapter mainly analyzes individual volunteering at the embedded in different states. Volunteering is still a meso level variable while employment status is presented as an individual attribute. State level variable is, however, an aggregate value of social interaction at the state level thus becoming a macro level variable. A more detailed description of the choice of the variables is given in the corresponding chapters.

Each of these levels of analysis is important for volunteering. The individual-level analysis is the most prominent in the literature. Also, most of the organizational practices are derived from the individual level studies. It is important to build on the previous studies and inform newer practices for the practitioners. The social capital theory was largely used at the individual level, however, the theory can be equally important at the macro level analysis (Hustinx et al., 2010; Parboteeah, Cullen, & Lim, 2004). As for the community level of analysis, most of the volunteer organizations are supported by a larger community such as a social group or church. Many of the organizations are founded and maintained by the community members to provide solutions to the community problems. Communities are critical units for social engagement (Dunkelman, 2014; Putnam, 2000). Considering the community problems may significantly differ across regions, the demand for volunteering may also similarly change which may call for less or more volunteering in each region. Third, many organizations structure their operations based on state borders. This reflects on different organizational activity in each state.

There are significant differences of volunteers between states (Glanville, Paxton, & Wang, 2015; Rotolo & Wilson, 2012), yet little is known about the cause of the difference. States with more active organizational activity may produce more volunteering. In states with more organizational activity, information regarding volunteering might be more accessible and prevalent. More organizational activity may also produce more volunteering.

Framework of Analysis

As mentioned earlier, the current research on volunteering focuses mainly on economic or sociological variables to understand volunteering. Economic models assume that individuals are rational actors who constantly evaluate the costs and benefits of volunteering. The economic motivations for volunteering are generally measured with the level of income or employment (Freeman, 1997; Rotolo & Wilson, 2007). Economic theory suggests that those who are employed have only limited time to invest while those with higher income have the higher opportunity costs. So, the theory suggests that unemployed people are more motivated to volunteer. Social capital theory suggests that individuals with higher social interactions with others ultimately volunteer more than those who interact less. The theory suggests that individuals with higher levels of social resources are more likely to be aware of the volunteering opportunities (Wilson & Musick, 1998). As nonprofit recruiters look for individuals with high levels of resources, they approach these people.

I do not suggest that either one or both economic or social capital theories are wrong. I argue that understanding volunteering necessitates a coherent approach. Good theories are multidimensional and combine different approaches (DiMaggio, 1995), which is an absolute necessity for the concept of volunteering (Hustinx et al., 2010). The theoretical framework

suggested by this study acknowledges both economic and sociological explanations of volunteering. Both economic and social approaches are similarly important for volunteering in an ideal world. However, situational factors are different in each case. While the economic theory may become more important in one context, social theories may minimize the importance of economic theories in other contexts.

The recognition of social structures informs new sets of assumptions about the human behavior. With a wider appreciation of the ongoing social relationship, individuals do not act solely independently, and they are not selfish. Coleman (1990) illustrates this with a simple example. When B person does something to help A person, B person basically gives credit to the A person. If B person gives these credits to multiple people, then the B person builds a large credit capital to use when needed. So, it is fairly rational for the B person to reach out to others and help. Coleman carefully argues that one's willingness to reach out others really depend on social factors such as trustworthiness and the number of obligations. For example, in a more trustworthy environment, the actors are expected to interact more than actors in an environment with low levels of trust. Greater levels of obligations mean that the actor may call for credit in the future and most likely be returned the favor. The question then becomes whether the future favor will be any more valuable than the favor given by the actor. The rational actor expects the future return to being more valuable than the given favor. Only then, the social exchange is deemed profitable for the rational actor. Coleman gives an answer to this problem. Coleman suggests that the first favor given by the actor comes at zero or very low cost. However, the favor is very valuable to the recipient. Since the favor is very valuable to the recipient and the favor has a very low cost to the actor, the recipient is very likely to return the favor in the future and the recipient is very likely given the favor at a much higher value to the actor.

Although Coleman's explanation is important, this dissertation makes a crucial distinction in understanding social capital. Coleman's explanation only captures the interpersonal relationships and the return is always expected directly to the giver. This is not always the case. In a well-connected society, by favoring others the giver is actually building a better society the person is living in. Living in a better community is an indirect yet very important benefit to the giver. Also, Coleman's conceptualization of social capital captures the relationship in the short term. The giver - unconsciously or consciously – seem to record all the characteristics of the favor such as when it is given, whom it is given and at what amount it is given. However, the return of favor may come after a very long time. Expectancy of an immediate return is not usually a strong motive. To illustrate this, helping a disadvantaged kid in the community can be fairly rational action. By helping the kid, the giver might actually be nurturing a future employee or even an employer. Also helping the kid reduces the risk of criminalization.

This dissertation considers the difference of social structures as a contextual value for volunteering. Social structures can be both individual and group/context level features (Putnam, 2000). Individuals may find themselves embedded in the ongoing relationships (Granovetter, 1985). However, economic concerns for volunteering are presented as individual characteristics unless the studies are concerned with macro-level governmental financial policies. Additionally, while it is very hard for an individual to influence the society alone unless he or she holds a powerful position, the individual is inevitably influenced by the societal interactions.

Depending on each level of social engagement, the strength of economic determinants will vary considerably. Overall, each of these theories mainly suggests that the influence of the economic variables on volunteering is weakened and become non-relevant in the case of strong social relationships. The main mechanism is that in cases with higher social interactions,

individuals will develop greater social empathies, which will reduce the individualistic rationality for volunteering. On another hand, as individuals lack social connections, they are prone to the influences of social structures. In these cases, individual economic determinants for volunteering are expected to be strong.

It is important to differentiate the three different theories. The idea is that there exist several interpersonal, intercommunity and interstate differences in volunteering. However, the reasons for the differences are not the same for each unit. At the individual level, individuals are connected and bounded by interpersonal relationships. The individual-level analysis assumes that there exists a pure communication between the individuals not restricted to anything such as technological advancements, geography or culture. The individual-level analysis assumes that a person in Texas has the same interpersonal relationship potential with a person in Zambia. Moreover, in the individual level studies, individuals interact with each other to participate in the volunteer work. However, this is not the same for the communities. Community-level studies assume that social interactions and volunteer work all happen in the same community. Communities are primarily restricted by geography. Individuals are assumed to live, reside, interact and volunteer in the same community. So, the communities have their unique general propensity for volunteering that is generally different from other communities. Geography as criteria does not directly apply to the States. States have massive land where individuals living in different parts of the state end their life without interacting most of the members of the State. Members of the different states are separated from each other by the institutional rules. States enjoy high autonomy and able to create laws according to their needs. Different institutional environments in each state may influence the volunteer activity.

My framework of analysis relies on social capital indicators to measure social structures and employment status to represent economic variables. Employment and social capital variables are commonly used in economic and social theories of volunteering (Collins & Long, 2015; Lee, 2012; Rotolo & Wilson, 2007; Wilson & Musick, 1997). These variables are consistent, although in changing formats, used to examine volunteering throughout the dissertation. Corresponding literature reviews are included for each of the empirical chapters. However, a brief analysis of the current literature better highlights the importance of this dissertation. As for the employment status, several scholars included employment an explanatory variable into their models predicting volunteering. However, the current literature is still weak to suggest whether being employed is significantly associated with volunteering, if so, the direction of the relationship. Some studies suggest that especially working women volunteer less largely because they are restrained between the work responsibilities and family (Einolf, 2011; Rotolo & Wilson, 2007). Feelings associated with employment also remain important. A US study designated a category of underemployment to refer to those who involuntarily remain in part-time employment (Collins & Long, 2015). They found that individuals who were educationally over-qualified in their current jobs and those feeling they deserved better jobs tended to seek volunteer opportunities. Students and house makers were also found to volunteer more than those working (Taniguchi, 2006). However, several other studies found no significant difference among the categories of employment (Forbes & Zampelli, 2014; Hackl, Halla, & Pruckner, 2007; Lee, 2012; Nesbit, 2012). Some studies even found that higher working hours being positively associated with volunteering (Ertas, 2014).

The primary reason why economic variables are inconsistent in predicting volunteerism is that economic studies largely ignore the social mechanisms. Economic studies hold the bold

assumption that economic man is likely to behave just the same regardless of the interpersonal relationships, community characteristics, and social systems. To what extent one's economic motives will influence the person's actions is dependent on to what extent the environmental factors is influential on the person. For example, living in a community or family with fairly strong social norms leave little discretion for the individual decision. Individuals develop such a strong character that influence the decisions. For example, for an economic man, it is fairly rational to pocket a wallet found in a street. This would be money earned with little effort. Most individuals either do not touch the wallet or try to find the owner of the wallet to return. Economic theories are unable to explain why a rational person would return the wallet instead of keeping for himself or herself. Many societies developed social norms dictating that acquiring someone else's property without the owner's consent is illegitimate. In this case, keeping the wallet is likely to have serious social consequences. Even if no one detects that the person took the wallet, the pre-developed social norms would not allow the person to take the wallet. By not taking the wallet the person executes the social norms. By not taking the wallet the person is assured that someone else will try to return the person's wallet if the person loses the wallet. Again, the diagnosis for the most inconsistencies in the economic studies is the lack of appreciation for the social conditions. For example, one cannot expect a rational person to just the same in a community where people have lack of trust on each other and in a community where individuals mostly rely on each other. In the context of volunteering, the relationship between an economic variable and volunteerism is most likely to depend on to what extent the person is connected with the society and to what extent the person trust others.

Contrary to the economic variables the literature largely supports the propositions of the social capital theory in the context of volunteering. Surveying American adults, a study found

that those who belong to churches and secular organizations are more likely to volunteer than who do not (Lee & Brudney, 2012). Those who have a higher frequency of social contact contribute more volunteer hours in the US (Taniguchi, 2006). A later study carried out in the United States also found individuals with more diverse friends and more developed informal networks tend to volunteer more (Forbes & Zampelli, 2014). Formal and informal ties are equally important for volunteering. A U.S. study found that higher informal and formal participation is associated with volunteering with a greater number of organizations and with different types of organizations such as religious, educational, and senior organizations (Ertas, 2014). More frequent attendance at meetings and religious services and having high neighborhood trust predict both volunteer likelihood and a higher number of volunteer hours for US adults (Einolf, 2011). The influence of social networks on volunteering is weaker for members of the older population. Generalized trust is a determinant of volunteering in Japan (Taniguchi, 2013) and European countries (Glanville et al., 2015).

To sum up, the brief literature of volunteering highlights that there are no consistent results regarding employment status. On the other hand, the relationship between social capital and volunteering is fairly consistent. The inconsistent findings of the employment status may be the result of lack of consideration of the social theories in the volunteering studies. The analyses of the employment status with respect to the social capital this dissertation gives a better picture of volunteering. As explained in the theoretical framework, individualistic concerns for volunteering may change based on the individual's level of social interaction with the society as well as the society's own level of social interaction potential. The following section makes a brief introduction to the next empirical chapters.

Application of Theory

In the following three chapters, I attempt to apply the theory proposed earlier under the theoretical framework. The main difference in each chapter is the level of analysis. While the second chapter mainly uses individuals as the level of analysis, the third chapter is concerned with the communities and the last chapter analyzes the state level factors on volunteering. In each chapter, I use employment status as an indicator for economic theory while controlling for the other economic factors such as income or government spending. I am using the same general propositions that lead to similar hypotheses in each chapter. First, I hypothesize that employed people are less likely to volunteer since they have only limited time and more opportunity cost of volunteering. I also consistently hypothesized that higher levels of social interactions lead to higher levels of volunteer engagement. Finally, I hypothesized that the relationship between employment and volunteering become nonsignificant as social capital increases. Although the basic proposition of the theory is the same, the basic mechanisms of volunteering show differences based on each level of analysis. For example, at the individual level, volunteering rates may largely be dependent on the interpersonal relationships. However, at the community level, volunteering rates are the outcome of the volunteering potential of the community, which is represented by the measure of overall community organizational activity. The mechanisms for volunteering are explained in detail in the chapter.

In chapter 2, I use a sample of U.S. adults with data from Social Capital Community

Benchmark Survey. I rely on Granovetter (1985)'s social embeddedness theory suggesting the individual relationships are embedded in social structures. Some of the results are surprising. The results suggest that employed people volunteer *more* than non-employed individuals, contrary to the hypothesis. Chapter 3 is a community level analysis that uses U.S. cities as the unit of

analysis. Volunteering, unemployment rate, and social interaction variables are aggregate values at the city level. The unit of analysis in Chapter 4 is the individuals nested in a macro context such as states. The aggregate value of the group involvement is a state level predictor, while volunteering and employment are individual-level variables.

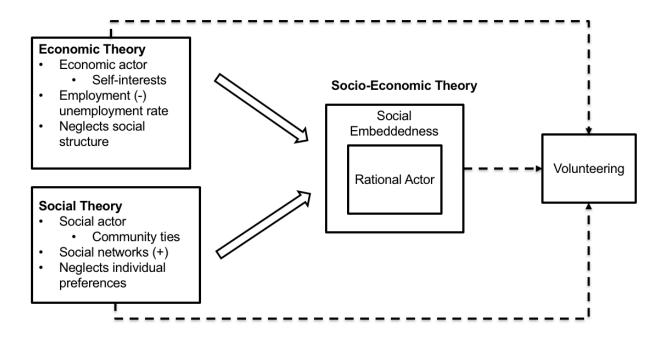


Figure 1.2: Flowchart.

The theory of volunteering I am presenting has a simple proposition: economic concerns for volunteering are contingent upon social engagement. Both matters, but context is crucial. The idea recognizes that economic actions are embedded in a greater social structure (Granovetter, 1985). Rational actors are not ignorant of social connections, yet very responsive to the changes in social dynamics. The theory suggests that stronger social structures leave only little room for economic behavior. Investment in social ties is likely to bring volunteers to the organizations. Given the importance of social ties, I suggest the development of volunteer management strategies for building active and reliable communities. Additionally, I acknowledge that there are different levels of social structures need to be incorporated into the theory. Apart from being

an individual, people live in different cities and states that impact social engagement. To test the validity of the theory, the theory is tested at the individual, community and state level. In the individual level, we suggest that individual-level social capital is likely to influence volunteering. However, at the community level community-level social capital is taken into account and expected to influence community-level volunteering. Social capital is aggregated at the state level for the next chapter. Theory suggests that social capital is a positive factor in each factor. Moreover, the theory suggests that increased levels of social capital decrease the importance of economic factors for volunteering at each level.

Following these methods, I am hopeful to contribute to the existing body of literature in two respects. First, there are several inconsistencies in the volunteering literature, especially with the economic approach. Economic measures such as income and employment are not consistent for volunteering. The source of conflict can be due to the lack of appreciation for the social mechanism in the volunteering literature. The application of the theory can provide a better picture. Second, there is a need for newer methodologies for volunteering to produce robust results. I will apply general linear modeling and hierarchical linear modeling as well as other common methods such as logistic regression models to test the volunteer theories.

The following chart briefly illustrates the conceptual relationship between social structures, economic factors, and volunteering. This framework illustrates that economic factors are important determinants of volunteering. Economic factors are expected to have a direct effect on volunteering. However, economic exchanges in the context of volunteering are not independent of the social environment. In fact, the relationship between economic factors and volunteering is dependent on the ongoing social structures. More specifically, the hypothesis that individuals only volunteer for the economic reasons such as opportunities for future employment

hold true only when individuals lack connections. In other words, in absence of overarching social structures, economic variables strongly influence volunteering. However, in an ideal world, individuals are connected with each other. The connections help individuals to become more community oriented. When individuals are well connected, they evaluate the opportunities for volunteering not only in terms of their self-interests but the community interests as well. Individuals are usually better off living in a community where individuals more likely to help each other.

CHAPTER 2

INDIVIDUAL LEVEL DETERMINANTS OF VOLUNTEERING

Many researchers showed the growing individualism as the diagnosis of weakening commitment to the organizational causes (Hustinx, 2005; Wuthnow, 2002). Decaying social embeddedness or 'dis-embedment' in the society deteriorates voluntary contributions (Gaskin, 1998; Hustinx, 2010; Lorentzen & Hustinx, 2007). Thus, 're-embedding' strategies gain importance in enhancing volunteers by enhancing the population's willingness and availability of volunteering (Hustinx & Meijs, 2011).

Individualism can be best seen in the behaviors of employed people. They have limited time and lack of incentive in becoming volunteers. Volunteer recruiters face increasing challenges recruiting employed people (Freeman, 1997; Rotolo & Wilson, 2006; Tiehen, 2000). Especially in the recent years changing the balance between work and family constrain the individual availability of volunteering (Hustinx & Meijs, 2011). The research on employed people's volunteer decisions is still underdeveloped. While some studies find being employed is a positive factor for volunteering (Einolf, 2011; Taniguchi, 2006), others suggest the opposite (Rotolo & Wilson, 2006; Tiehen, 2000). These inconsistencies could surface due to a lack of consideration for the social structures in the context of volunteering. Consideration of employment and social factors together can provide a better picture of volunteering. Many of the volunteerism studies examine volunteering from either focus on social ties or economic motives. This is unfortunate considering there is a history of theoretical discussions stating that economic and social approaches can co-exist (e.g. Granovetter, 1985)). Granovetter's social embeddedness theory can effectively explain the volunteering phenomenon (Granovetter, 1985).

The purpose of this study is to explain and test volunteering within the perspectives of the

social embeddedness theory. This study suggests that focus on increasing interpersonal reliability can effectively reduce individualism and help people become "re-embedded" with the society. Using the framework from the social embeddedness theory, this study first explains the decision for volunteering between employed and non-employed individuals. Then, I explain how social trust may affect volunteering. The last section provides the social embeddedness as an integrative theory to explain how individualistic concerns for volunteering changes as social trust increases. Then, I use the Social Capital Community Benchmark survey to test the theory. I discuss the results and discuss the practical implications.

Literature Review

There is a strong theoretical discussion in literature to suggest that non-employed people volunteer more than employed people. The general proposition is that employed people have only limited time to invest in volunteer activities (Freeman, 1997). Volunteering is a time-consuming activity, so those with more free time may volunteer more. Although the proposition is plausible, empirical evidence is weak. Several studies on volunteering found no evidence to suggest that there is a significant difference between employed and unemployed people's volunteering (Lee & Brudney, 2012; Nesbit, 2012, 2013; Taniguchi, 2011; Wang, Mook, & Handy, 2016). One exception is a Spanish study finding that people with excessive amounts of daily working hours volunteer less than others (Ariza-Montes, Roldán-Salgueiro, & Leal-Rodríguez, 2015). This is a limited finding considering that another study conducted with a European sample found that unemployed people actually tend to volunteer *less* (Glanville et al., 2015).

More specific theories and findings are revealed when gender status, parental status, and workload are taken into account. The proposition related to gender status. Women have much more limited time than men since they have more family-related responsibilities (Rotolo & Wilson, 2007). It makes it challenging for women to get involved in volunteer activities while working. Therefore, being employed becomes more detrimental to women's volunteer contributions than men's. Women who work full-time, overtime or even part-time have a lower tendency for volunteering (Rotolo & Wilson, 2007; Tiehen, 2000). Another study conducted among women also found that full-time employment has a negative effect on volunteering (Einolf, 2011). However, the same study conflicts the previous studies finding that part-time employment actually increases volunteering. A later study conducted in Germany makes a separate analysis of women and men (Helms & McKenzie, 2013). Non-employed and part-time employed women volunteer more than those who work full-time. However, employment status makes no difference for men. This highlights that the time-related propositions are only supported among women, and they may not be generalizable to the overall population.

Having children at home may become a contingency factor that explains the relationship between employment and volunteering. From an economic standpoint, each additional child at home is a cost to parents in terms of time and money. In turn, the existence of children at home determines social involvement. Parents, especially women, consider the presence of children at home when accepting jobs (Andersen, Curtis, & Grabb, 2006). As for the full-time, part-time or stay-at-home mothers, the tendency for volunteering is lower for moms with preschool-aged children compared to those with no children (Rotolo & Wilson, 2007). Although the presence of children at the school age appears to have a significant independent effect on volunteering, it has

been found to be a contingency factor for employment and volunteering relationship (Tiehen, 2000).

From a workload perspective, time shared for volunteering may be inversely related to the time spent at work (Lee, 2012). So, volunteering rate may decrease from unemployment to respectively part-time employment, full-time employment becomes the lowest at the excessive amount of employment. In general, however, the employment categories do not make a significant factor determining the volunteer rates. Volunteer rates among unemployed and full-time employees remain insignificant for most of the studies (Lee & Brudney, 2009; Nesbit, 2012; Taniguchi, 2006). Part-time employees tend to volunteer more than full-time employees (Piatak, 2016; Taniguchi, 2006).

Literature reflects the findings found at the individual level. The literature shows that there is lack of empirical of studies to show that employed people are more willing to volunteer than non-employed people. However, there are several significant differences among people from different genders and homes with children. Females find it harder to distribute time for volunteer activities when working. Also, having children at home is also a time-consuming activity preventing parents to join volunteer activities. The employment workload is, however, only weakly associated with volunteering.

Theory

Social embeddedness theory suggests that economic actions are embedded within the ongoing social relations.

Actors do not behave or decide as atoms outside a social context, nor do they adhere slavishly to a script written for them by the particular intersection of social categories that they happen to occupy. Their attempts at purposive action are instead embedded in concrete, ongoing systems of social relations. (Granovetter, 1985, p. 487)

The theory has several propositions for the employment and volunteering relationships in connection with social embeddedness.

Employment

Social embeddedness theory assumes that individuals are rational actors. The theory recognizes that rational actors weigh the costs and benefits of their actions and act only when benefits exceed the costs. However, rationality in social embeddedness is different from a neoeconomic conceptualization of the economic man as a self-interested utility maximizer. Quoting Williamson (1975), Granovetter (1985) emphasizes that the "economic man ... is thus a more subtle and devious creature than the usual self-interest seeking assumption reveal" (p.487).

Individuals are strategic rational actors and plan for the long-term. Social relations are not one-shot games. Instead, individuals "win some, gain some" through the interpersonal relationships (Granovetter, 1985). In this regard, rational actors evaluate that the costs and benefits of volunteering are a wider spectrum. Individuals do not necessarily quit volunteering in the face of initial costs. Rational volunteers are rather more strategic and evaluate a larger amount of benefits and cost factors (Lee & Brudney, 2009). Benefits received from volunteering are also limited to the personal benefits. Individuals evaluate public benefits of volunteering in addition to the private benefits when volunteering (Cnaan et al., 1996; Handy et al., 2000).

Employed and non-employed individuals are also rational actors. Both groups have perceived costs and benefits of volunteering. The decision for volunteering among these groups depends on the strategic assessment of the volunteering behavior. A cost-benefit analysis of volunteering would suggest that it is in the interests of the non-employed individuals to volunteer more than employed individuals. One reason is that those who do not work have more free time

to invest than employed individuals (Freeman, 1997). Employed people report high rates of time-related pressure and show lack of time for not volunteering (Roxburgh, 2002; Sundeen, Raskoff, & Garcia, 2007). Time devoted to the volunteer activities constitutes a greater proportion of the free time of employed individuals than of non-employed individuals (Hackl et al., 2007; Menchik & Weisbrod, 1987). The other reason is employed individuals have little incentive to volunteer. Employed individuals already enjoy the benefits of skill development, remuneration, and status as a result of having jobs. On the other hand, volunteering is attractive to non-employed individuals since it improves their skills and may provide them with job opportunities (Chinman & Wandersman, 1999; Spera et al., 2015; Wilson & Musick, 1999). While those who are working may prefer not to volunteer, those who plan to work in the future contribute to volunteer efforts (Stephan, 1991). The conditions of rationality apply in each level of social embeddedness. Individuals are primarily rational regardless of the social context. In light of this discussion, I hypothesize:

Hypothesis 1: Non-employed individuals are more likely to volunteer than employed individuals.

Social Trust and Volunteering

Social embeddedness theory also recognizes that individual decisions are affected by some degree of social trust and volunteering. Economic exchanges are not one-shot games but rather part of the ongoing relationships. The history of relationships then produces social trust, which enables the individual exchange. Social trust is an internal part of the economic exchanges. According to the theory, to state that economic transactions happen between the individuals, "some degree of trust must be assumed to operate" (Granovetter, 1985, p. 489).

Social trust overcomes the problems of free riding and enhances the feelings of reciprocity. Higher interpersonal trust is likely to increase one's willingness to participate in economic exchanges since trust is a powerful resource to overcome the collective action problem (Ostrom, 1998). Higher trust encourages individuals to engage in volunteering. It gives the assurance that others will not shirk or free ride. Putnam (2000, p. 21) describes this concisely as a situation in which "I'll do this for you without expecting anything specific back from you in the confident expectation that someone else will do something for me down the road." Overall, higher trust enhances the willingness to volunteer (Brown & Ferris, 2007; Forbes & Zampelli, 2014; Taniguchi, 2013). The increased trust on others is likely to have a positive effect on both employed and non-employed individuals. The hypothesis is the following:

Hypothesis 2: An increase in social trust is associated with an increase in the likelihood of volunteering.

Social Trust, Employment, and Volunteering

Social embeddedness theory implicitly states that interpersonal trust is likely to have reflections on the individual's rational action. Overall, self-interested behaviors are rare in relationships with high trust. Individuals with higher social embeddedness are likely to become more community-minded. Granovetter (1985) gives the example of a family in a burning theater. He reports that it is unlikely for the family members to selfishly run for the door and trample on each other. Such a behavior is never heard of since there is a high interpersonal trust among the family members. The family members are likely to think of the welfare of others than their own welfare.

Individual's friends and professional contacts could be an extended family as they build high trust between them. Maintenance of the trust requires both sides to meet the interpersonal

obligations. For example, a help request from a close friend cannot be easily rejected.

Maintenance of these obligations ultimately crowds out their individual concerns (Coleman, 1990). It is inherently rational for a person to acquire these obligations since these obligations bring valuable future benefits with negligible present costs. By contributing to the welfare of each other, the individuals may enjoy the benefits of being part of a better group or society (Schiff, 1990; Unger, 1991). At the lower levels of social embeddedness or as there is low reliability between the individuals, self-oriented motivations become more powerful. In the absence of reliability, individuals decide whether to volunteer without the influence or concern for social connections. The decision to volunteer is more likely to be guided by the self-oriented motives.

In low levels of trust between the individuals, employed and non-employed decisions to volunteer are more likely to be guided by the self-oriented motives. As discussed earlier, as employed people lack time to volunteer, non-employed employed people have a high incentive for joining the volunteer workforce. At higher levels of social embeddedness, individualistic concerns no longer guide the personnel decisions. Thus, the hypothesis is:

Hypothesis 3: The effects of social trust on volunteering are stronger for employed individuals than non-employed individuals.

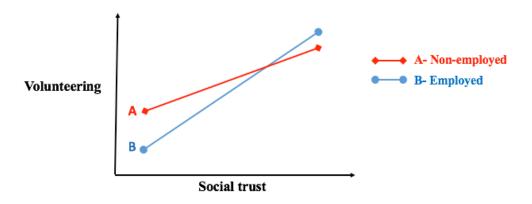


Figure 2.1: Theoretical model.

Data and Method

This study adopts the Social Capital Community Benchmark Survey (SCCBS) administered by Harvard Kennedy School's Seguaro Seminar. The unit of analysis is the individuals. The population of the study is US adults older than 18. The first wave was collected from mid-January to late April in 2006 in 14 communities. The second wave began in May and ended in August 2006. A random-digit-dialing telephone survey method was used to sample the population. The survey reached out to almost 12,100 individuals. The final sample size reduced to 10739 after the deletion of the missing values. Listwise deletion was used to ensure that same individual are included in each of the models in this study.

This study uses several logistic regression models to test the model. While volunteer likelihood is the dependent variable, employment and social trust are main independent variables. Control variables include income, house ownership, education, age, income, marital status, minority status, gender, community type and the number of children under the age of 18. There are five models used in this study. The first model tests whether employed individuals' volunteer likelihood is different from non-employed individuals controlling for demographic factors. The second model tests the relationship between volunteering and social trust. The second model also controls for the demographic factors. The third model adds employment variable to the second model and tests the effect of social trust and employment on volunteering at the same time. The fourth and last model adds the interaction term of social trust and employment into the third model.

Dependent Variable: Volunteer Likelihood

The participants were asked, "How many times in the past twelve months have you

volunteered?" To indicate the meaning of "volunteering," the following statement was made when necessary: "By volunteering, I mean any unpaid work you've done to help people besides your family and friends or people you work with." This definition of volunteering is close operationalization of the study definition of volunteering. Volunteerism variable is recoded 0 if the person did not volunteer and 1 if the person volunteered at least once. This measure was also extensively adapted from the previous studies (Brown & Ferris, 2007; Forbes & Zampelli, 2014).

Independent Variables

- Employment: In the employment question, the respondents were asked: "We'd like to know if you are working now or temporarily laid off, or if you are unemployed, retired, permanently disabled, a homemaker, a student, or what?" For this question, we chose the categories that are currently employed in studies of the workforce. The variable was coded 1 if the person was working it is 0 if the person is not currently working.
- Social trust: Social trust is an indicator of social embeddedness (Granovetter, 1985). Social trust index includes trust in others, neighbors, co-workers, co-religionists, local shop clerks and local police. This measure of social trust is well adapted in the volunteering studies (Brown & Ferris, 2007; Forbes & Zampelli, 2014). Social trust index is calculated by taking the average of the social trust indicators. Specific questionnaire questions regarding each indicator are detailed in the appendix.

Control Variables

Age: The bulk of the literature suggests that older people are more likely to volunteer.
 As people grow older, they acquire resources enabling their integration into various volunteer

roles. A study using European sample found that individuals tend to volunteer to more number of organizations as they get older (Glanville et al., 2015). Another study using the U.S. sample found that as people get older they are more likely to volunteer and contribute more hours (Nesbit, 2012). The findings were confirmed by other studies as well (Taniguchi, 2006). The respondents' age ranges from 19 to 106 in the model.

- Gender: The literature also shows that females have a higher tendency for volunteering than males. Females have more prosocial motivation than men, which makes them more likely to participate in volunteer events (Einolf, 2011). Women are more socialized into care roles than men; thus, they score higher on empathic and altruistic concerns (Musick & Wilson, 2008). Many US studies have confirmed that females tend to contribute volunteer hours more than their male counterparts (Brown & Ferris, 2007; Lee, 2012; Lee & Brudney, 2012). This is confirmed in older population studies as well (Dong, 2015). However, while these results seem to be largely confirmed for the US population, they are not always the same in other settings. A Netherlands study found that it was actually males who tend to contribute more (Bekkers, 2005). Additionally, an Austrian study found that not only were females less likely to volunteer but also they contributed fewer volunteer hours and did volunteer work for a smaller number of organizations (Hackl et al., 2007). The lower tendency for volunteering among females was also confirmed by a Belgian study (Dury et al., 2015). It is coded 1 if the person is female, and 0 if the person is male.
- Minority status: Overall, the literature suggests that minorities are less likely to contribute. Minorities often lack social and human resources that enable them to participate in volunteering opportunities. Recent studies are still controversial. For example, one study finds that no difference in volunteering between Whites and other races (Collins & Long, 2015).

Another US study found significant only between Asians and whites, Asians being less likely to volunteer (Forbes & Zampelli, 2014). This challenges a previous study that found volunteering to be higher among Asian Americans (Brown & Ferris, 2007). Although there is no difference in the tendency to participate in volunteerism between Hispanics and Whites, Hispanics volunteer less frequently (Forbes & Zampelli, 2014). They also contribute fewer volunteer hours (Einolf, 2011). African-Americans devote fewer volunteer hours (Nesbit, 2012), however, they volunteer for the similar frequency with whites (Brown & Ferris, 2007; Forbes & Zampelli, 2014) If the person is white than it is coded 1, otherwise, it is coded 0.

Education: Researchers widely agree that education is the strongest and most consistent predictor of volunteering (Musick & Wilson, 2008; D. H. Smith, 1994; Wilson, 2000). Education is an important asset of volunteers, and this makes certain individuals more preferable volunteer candidates than others (Huang, Maassen van den Brink, & Groot, 2009; Musick & Wilson, 2008). Educated people belong to more organizations where volunteer opportunities may arise or in which they might be asked to volunteer (Gesthuizen, Meer, & Scheepers, 2008). Educated people also have more awareness of the issues surrounding them and are thus more likely to try to work for a solution (Musick & Wilson, 2008). Minor differences exist among lower levels of education. A US study found that people with a high school degree and some college experience seem to have no difference in their tendency to volunteer and have a greater tendency than those with only high school education (Forbes & Zampelli, 2014). As for the types of volunteering considered, another US study found that education differences do not explain differences in volunteering in religious and senior serving organizations (Ertas, 2014). Education variable range from 1= less than high school degree 7= graduate or professional degree.

- Income: The majority of the literature suggests that there is a positive relationship.

 Poor people especially have lack of motivation to volunteer compared to the richer people
 (Musick & Wilson, 2008). Higher income gives financial resources to deal with the cost of the
 volunteering. The literature also suggests that people in higher income status have better chances
 of volunteering. A U.S. study found that income has a positive significant effect on volunteering
 (Einolf, 2008). Measuring income at the household level, another U.S. study found that members
 of families in higher income status have a higher likelihood of volunteering both the religious
 and secular organizations (Nesbit, 2012). The income categories range from 15000 to 115000.

 The detailed coding of the variable is presented in the appendix.
- Marital status: In general, married people are more likely to volunteer. Married people have better chances of getting information about the volunteer activities through their spouses. Most of the studies also confirm this proposition. A U.S. study found that married people volunteer at a higher frequency than the non-married people in a given day (Lee & Brudney, 2012). Another U.S. study also confirmed that married people volunteer more (Dong, 2015). Responses are coded 1 if the individuals reported being married, otherwise, it is coded 0.
- Homeownership: Homeowners are suggested to hold higher networks within the local community than those living as a tenant. This is why home-owners are expected to volunteer more. U.S. studies confirmed that homeowners volunteer more (Lee & Brudney, 2012; Nesbit, 2012). It is coded 1 if the participant reported owning a home and 0 if the participant pays rent.
- Rural residence: People living in rural areas a have higher sense of belonging which leads to the higher rates of volunteering. People living in urban areas are found to volunteer less (Hackl et al., 2007). Individuals living in areas with small population tend to volunteer more (Stephan, 1991). If the respondent is living in a rural area at the time of the survey, the residence

variable is coded 1, otherwise, the residence variable is coded 0.

• Children at home: Having children at home is a factor enhances the family's social networks (Lee & Brudney, 2012). Members of families with higher numbers of children at home are found to contribute more to the volunteer events (Freeman, 1997). People with families having children at home and both more likely to volunteer and contribute more hours (Dury et al., 2015; Einolf, 2011). The variable is the number of children living at home and ranges from 0 to 20. A detailed description of the sample is included in the appendix.

Results

Descriptive Statistics

The summary statistics of the variables are presented in Table 2.1. The results suggest that nearly 65 percent of the population participated in a volunteer event at least once in the past year. The results also suggest that 61 percent of the sample was employed. The descriptive statistics also suggest that 78 percent of the participants owned a house, while others lived as a tenant. Also, the education of the individuals averaged around some college degree. The average age of the participants is 51. Fifty-six percent of the respondents are married, and minority population holds the 21 percent of the whole sample. Twenty percent of the participants reported living in a rural area, and most of the participants reported living with a child at home.

The correlation matrices are presented in Table 2.2. There is no susceptible case to suggest there is multicollinearity between the variables. Highest correlation is between age and employment status by the value of .43. The correlation between education and income is .42 but the relationship does not yield a bias in the results. However, none of these indicate high correlation.

Table 2.1: Summary Statistics

	N	Mean	SD	Min	Max
House owner (Rent)	10,739	0.776	0.417	0	1
Education	10,739	3.766	1.852	1	7
Age	10,739	51.09	16.65	19	106
Income	10,739	4.325	2.078	1	8
Volunteer Likelihood	10,739	0.651	0.477	0	1
Social trust	10,739	0.009	0.722	-3.139	1.052
Employed (Non-employed)	10,739	0.609	0.488	0	1
Married (Non-married)	10,739	0.562	0.496	0	1
Minority (White)	10,739	0.214	0.410	0	1
Male (Female)	10,739	0.399	0.490	0	1
Rural (Urban and Suburban)	10,739	0.206	0.405	0	1
Number of children under 18	10,739	0.703	1.185	0	20

Logistic Regression Analysis

Table 2.3 reports the results of the logistic regression models. The results show models have considerably improved, as the full model giving the most explanatory power. Although the pseudo R square is .077 in the first model, the R square improved to be .086 in the second model, and is highest in the last model as .0874. The result of first regression model suggests that employed people are significantly more likely to participate in the volunteer events than non-employed individuals, controlling for the other factors. More specifically, employed people are 1.19 times more likely to volunteer than non-employed people, controlling for other factors. The second model shows that higher social trust is associated with higher likelihood of volunteering, all else being equal. The third model shows that both higher social trust and being employed have a positive impact on volunteering. Figure 2.2 shows the graphical visualization of the relationship between employment status and social trust affecting volunteering based on Model 3. The data suggest that, when employment and social trust are considered independently, there is no moderation effect between the two. Interaction terms are included in Model 4.

Table 2.2: Correlation Analysis

		1	2	3	4	5	6	7	8	9	10	11	12
1	Volunteer Likelihood	1											
2	Employed (Non-employed)	0.13	1										
3	Social trust	0.17	0.00	1									
4	Male (Female)	-0.04	0.11	-0.04	1								
5	Age	-0.09	-0.42	0.26	-0.05	1							
6	Income	0.21	0.29	0.22	0.12	-0.11	1						
7	Education	0.26	0.16	0.26	0.03	0.01	0.42	1					
8	Married (Non-married)	0.10	0.09	0.14	0.09	-0.03	0.39	0.12	1				
9	House owner (Rent)	0.11	0.04	0.23	0.00	0.18	0.35	0.16	0.27	1			
10	Minority (White)	-0.06	0.03	-0.35	0.00	-0.22	-0.16	-0.14	-0.10	-0.24	1		
11	Rural (Urban and Suburban)	0.02	0.01	0.06	-0.01	0.04	-0.06	-0.06	0.06	0.07	-0.11	1	
12	Number of children under 18	0.07	0.14	-0.13	-0.03	-0.42	0.06	-0.03	0.19	-0.03	0.17	-0.01	1

Table 2.3: Logistic Regression Models of Employment and Social Trust predicting Volunteer Likelihood

	Model 1	Model 2	Model 3	Model 4
Employed (Non-employed)	1.22*** (0.06)		1.19*** (0.06)	1.20*** (0.06)
Social trust		1.46*** (0.05)	1.45*** (0.05)	1.33*** (0.06)
Employed x Social trust				1.17** (0.07)
Male	0.75***	0.77***	0.76***	0.77***
	(0.03)	(0.03)	(0.03)	(0.03)
Age	0.99***	0.99***	0.99***	0.99***
	(0.00)	(0.00)	(0.00)	(0.00)
Income	1.09***	1.09***	1.08***	1.08***
	(0.01)	(0.01)	(0.01)	(0.01)
Education	1.31***	1.28***	1.28***	1.28***
	(0.02)	(0.02)	(0.02)	(0.02)
Married (Non-married)	1.08	1.04	1.05	1.04
	(0.05)	(0.05)	(0.05)	(0.05)
House owner (Rent)	1.25***	1.22***	1.21***	1.21***
	(0.07)	(0.07)	(0.07)	(0.07)
Minority (White)	0.91+	1.06	1.06	1.06
	(0.05)	(0.06)	(0.06)	(0.06)
Rural (Urban and Suburban)	1.21***	1.19**	1.18**	1.18**
	(0.06)	(0.06)	(0.06)	(0.06)
Number of children under 18	1.08***	1.09***	1.09***	1.09***
	(0.02)	(0.02)	(0.02)	(0.02)
Chi2	1081	1196	1208	1214
-log likelihood	-6405	-6348	-6342	-6338
Pseudo R2	0.0778	0.0861	0.0869	0.0874
Number of Observations (N)	10739	10739	10739	10739

Notes: Odds ratios in parentheses. *** p<0.001, ** p<0.01, * p<0.05, + p<0.1

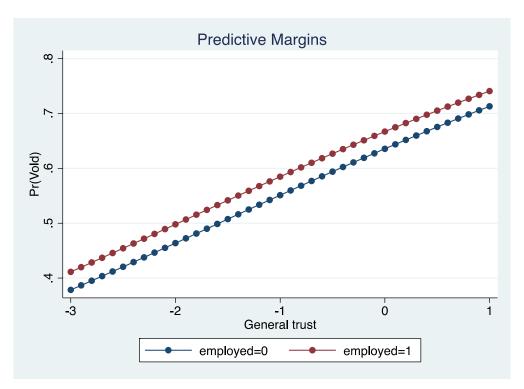


Figure 2.2: Volunteer likelihood of employed and non-employed individuals in different levels of social trust.

The fourth model shows that employment and social trust remain to be the significant factors affecting volunteering. Overall, employed people are 1.18 times more likely to volunteer than non-employed people. More importantly, the interaction term of employment and social significantly influences. This shows that social trust is a contingency factor affecting the relationship between employment and volunteering. Figure 2.3 shows the graphical description of the relationship between employment and volunteering. The figure shows interesting results. The relationship between social trust and volunteering is stronger for employed people than non-employed people. For an average level of social trust, there is no difference between employed and non-employed people in terms of volunteering. At lower than average levels of social trust, non-employed people have a higher likelihood of volunteering than employed people. However, social trust becomes above average, employed people become more likely to volunteer.

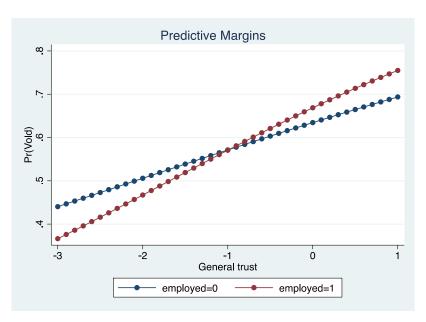


Figure 2.3: Social trust as a contingency factor explaining the difference between employed and non-employed individual volunteer likelihood.

Discussion and Conclusion

The present study validates the social embeddedness theory in the context of volunteering. The social embeddedness theory is a key to understanding the relationship between the employment status and volunteering. The results suggest that the relationship between employment and volunteering becomes clearer once the ongoing social embeddedness in taken into account. The significant differences of employed and non-employed individual volunteering range from being positive to negative based on the level of individual embeddedness.

The first hypothesis suggested that non-employed individuals are more likely to volunteer than employed people. The findings are the opposite. Across all the models, employed people are found to have a higher tendency for volunteering than non-employed people. The findings challenge the earlier studies in the field, which found that employment is a negative factor for volunteering (Tiehen, 2000). This is an interesting result to show that self-interested motivations for volunteering may not explain the volunteer behavior. Excuses about lack of time or

opportunity cost are not apparently big excuses for volunteering at the interpersonal relationships. Individuals apparently have more strategic considerations for volunteering, which is not very well captured in the volunteer theories. An alternative look at employment suggests that employers may expand the individual networks that may lead to volunteering (Rotolo & Wilson, 2007).

The second hypothesis suggested that higher social trust is positively related to volunteering. Social trust is a significant factor in each model. In general, those who trust people more have a higher likelihood of volunteering. The results can be generalized to both employed and non-employed people. Trust in people increases the likelihood of both groups. This finding is consistent with the previous literature (Brown & Ferris, 2007; Forbes & Zampelli, 2014).

The third hypothesis suggested that the effect of social trust on volunteering is stronger for employed people than the non-employed people. The results support this hypothesis as well. At the lower levels of social embeddedness, non-employed people volunteer more than employed people, however, the relationship is opposite at the higher levels of social trust. However, when people are assumed to have an average level of social trust employment is not a factor in employment.

There are several reasons why employed individuals might more likely to volunteer. higher embeddedness might be due to several reasons. First, employed people have higher resources to engage in economic exchanges. Higher social embeddedness encourages them to participate more with the assurance that shirking is not likely to happen. This is why employed individuals might be willing to volunteer more when they are highly embedded. Second, the self-interested motivations may not be a factor for employed people. It might be the interest of

employed people to live in a better society since better environment allows more reliable economic exchanges.

This study is not without its limitations. A person's social embeddedness is captured with interpersonal trust in this study. Individuals are assumed to be subject to similar social embeddedness regardless of the context. However, some communities may be more embedded than others. Community-level engagement might have a significant independent impact on individual volunteering. The next chapter attempts provide a solution to this problem by conducting a survey analysis to examine community-level factors influencing volunteering. Social embeddedness attached to the communities and its reflections on the volunteering is in the interests of the next chapter.

CHAPTER 3

COMMUNITY LEVEL DETERMINANTS OF VOLUNTEERING

The United States lost an alarming number of volunteers in recent years. While nearly 29 percent of the population volunteered in 2003, the number dropped to about 25 percent in 2015 (Bureau of Labor Statistics, 2008; Bureau of Labor Statistics, 2016). These numbers fulfill the previous presumptions about diminishing civic engagement rates (Putnam, 1995, 2000; Stolle & Hooghe, 2005). Concerns were especially highlighted for community-level engagement.

Analyzing participation to the community affairs, Putnam (2000) pointed out that "the forms of participation that have withered most noticeably reflect organized activities at the community level" (p.44).

The decrease in volunteering rates urged many scholars to seek alternative strategies toward volunteer engagement (Macduff, Netting, & O'Connor, 2009; Meijs & Hoogstad, 2001). One of the popular approaches in the regenerative approach to volunteering was proposed by Brudney and Meijs (2009). Regenerative approach gave a contemporary conceptualization of volunteering. This conceptualization treats volunteerism being a natural resource that may deplete over time. Thus, the regenerative approach shows natural ways to keep volunteer energy alive. Moreover, regenerative approach calls for communal responsibility to keep volunteering reserves safe. Although the suggestions of this approach are intriguing, there is lack of application of the theory. In other words, the theory is much cited, but little used.

This paper is an effort to understand volunteering with the regenerative approach.

Departing from this purpose, this paper first presents the previous literature on determinants of volunteering within the communities including counties, cities and lower dwelling units. Then, this paper uses a regenerative approach to explain volunteering by natural resource modeling of

volunteering. Thirdly, this dissertation introduces several community-level factors such as unemployment and social capital that are important yet received only a few attention in the literature. To highlight the importance of these nearly neglected factors, I then adopt data from several resources including the National Citizen Survey and Census Bureau to test if these community factors enhance volunteering. Finally, the results and implications sections are discussed at the end.

Literature Review

As volunteering is a communal effort involving the practices of institutions surrounding individuals rather than merely an individual effort (Haddad, 2004), this study has purposefully selected its unit of analysis as cities and counties instead of individual volunteers. Communities are important units influencing the members' behaviors. The sense of belonging and societal connectedness is best observed at the community level (Putnam, 1993). Moreover, the core energy of the whole nation is hidden in the communities. Yet, some research indicates that characteristics of the communities are the primary determinants of engagement especially in the United States (Dunkelman, 2014). Given the importance of communities, surprisingly only limited number of studies examined the inner level mechanisms of volunteering.

Despite the importance of social capital and unemployment for communities, volunteering scholars have paid little attention to these variables. Community ties tend to have strong implications for the individual behaviors (Putnam, 2000). A study analyzed older population in 141 municipalities in Belgium (Dury et al., 2015). The findings suggested that individuals with stronger community ties, such as greater family and friend interactions volunteer more (Dury et al., 2015). Another study found that members of counties with greater

trust to other people have a higher likelihood of volunteering (Glanville et al., 2015). However, the same study found no support for the hypothesis that social interactions affect volunteering.

The consideration of economic measures such as employment is rare in the community level volunteering studies. One study included the labor force participation, which includes a factor influencing volunteering at the state level (Rotolo & Wilson, 2012). The level of labor force participation is found to have no influence on individual volunteering. The authors published another 2014 article examining the contextual factors for volunteering among the U.S. cities, but chose not to use the employment measure anymore (Rotolo & Wilson, 2014). Another study compared the unemployment rates in European countries and their reflection on active participation to the voluntary organizations (Savelkoul, Gesthuizen, & Scheepers, 2014). Similarly, unemployment rates have been found to have no influence on participation in the voluntary organizations. A U.S. study found that higher unemployment rates in the metropolitan areas are associated with decreased individual volunteering (Spera et al., 2015). Lack of consideration of employment at the community level studies is very unfortunate since employment status at the individual level is usually associated with greater volunteering (Ariza-Montes et al., 2015; Collins & Long, 2015; Lee & Brudney, 2015; Rotolo & Wilson, 2007; Wilson & Musick, 1997).

Unemployment is likely to have strong reflections on community volunteering considering the significant influences of unemployment rates on several community-level measures such as community affairs, health, psychology, and crime are long documented (Ajimotokin, Haskins, & Wade, 2015; Coulton, Korbin, Su, & Chow, 1995; Dragano et al., 2007). Several individual-level studies of volunteering also found employment having a significant impact on volunteering (Dury et al., 2015; Freeman, 1997; Nesbit, 2013). In light of

the previous research, one can argue that unemployment may have significant reflections on the levels of volunteering. However, there is no persuasive evidence to suggest whether unemployment is positively or negatively associated with volunteering at the community level.

Additionally, there is a lack of discussion as to how community ties might operate in relation to unemployment as it affects volunteering. Given the high importance of community ties in the communities (Putnam, 2000), it would not be surprising to see the influences of unemployment mediated by the ongoing communal networks. It is well documented that economic exchanges are not independent of the ongoing social relationships (Granovetter, 1985). To sum up, briefly, aggregate level studies for volunteering are still underdeveloped. There is lack of empirical study testing community-level social capital predicting community volunteering. Given that community dynamics are critical for American civic engagement (Glanville et al., 2015; Putnam, 2000), it is important to turn our focus to the economic and social factors at the community level.

Regenerative Approach for Volunteering

In conceptualizing volunteering, Brudney and Mejis (2009) propose that

volunteer energy can be understood as a human-made, renewable/recyclable resource that can be grown, and whose continuation and volume of flow can be influenced by human beings positively as well as negatively. (p. 570)

This definition suggests that volunteering is a natural resource subject to exhaustion, but can be used privately by separate institutions. They are particularly concerned that overemphasis on using the volunteer energy may lead to its exhaustion. Instead, Brudney and Mejis (2009) suggest that organizations need to adopt a regenerative approach for volunteering. The goal of the organizations should be to enhance volunteering potential. The regenerative approach

emphasizes that volunteer energy must be constantly kept alive for the sake of future extractability. Brudney and Meijs (2009) highlight that "volunteer energy—using community must shift from an instrumental to a more sustainable approach" (p. 573). In dissecting the regenerative approach, the authors introduce two concepts in relation to the natural resource literature: current reserves and potential reserves. Current reserves are the present volunteer energy that could be extracted with the present levels of recruitment efforts. Potential reserves are the future reserves that require additional effort to extract and often subject to higher extraction costs. Although the regenerative approach has several implications for the enhancement of volunteering, the theory has not yet been empirically tested. However, the theory suggests that potential supply volunteering could be dependent on several factors such as the employment rate and societal ties.

Employment

Higher unemployment means lower extraction costs for the nonprofit organization and higher volunteering rates. Higher numbers of people become available for joining voluntary efforts as unemployment rates increase. It takes great effort and time to extract volunteers from an employed population. Employed people have obligations to their employers. They control only a limited time between work and family (Freeman, 1997; Roxburgh, 2002; Sundeen et al., 2007). It becomes challenging for the volunteer recruiters to convince the employed people to dedicate their time to volunteer causes.

According to the theory, the balance between the community family, work and leisure time factors may determine the supply of volunteering. These intuitions are described as "greedy" competing for the scarce resource of volunteers at all times (Coser, 1974, p. 1). Family

and work time constitute much of the daily time leaving little room for leisure or other activities (Sundeen et al., 2007). Increase demand from family and work often result in the sacrifice of leisure time that includes the volunteering time (Rotolo & Wilson, 2007). Although family time is perpetual and anticipated, employment time can be volatile as people can lose their jobs and may be temporarily unemployed. When confronted with the choice between family and work, people often stick to family resulting in unemployment (Rotolo & Wilson, 2007). Unemployed people, on the other hand, constitute valuable potential volunteer reserves for the organizations since these reserves can be extracted with much fewer recruitment costs. Unemployed people are already attracted to the volunteering since volunteering may lead to self-development and increase financials in the long run (Chinman & Wandersman, 1999; Handy & Greenspan, 2009; Spera et al., 2015).

Hypothesis 1: An increase in the unemployment rate is associated with an increase in the volunteering rates of communities.

Social Capital

The regenerative approach recognizes that volunteering is not only limited to the host organizations. According to this approach, host organizations should not be the sole responsibility for the volunteer extraction and production. Brudney and Meijs (2009) suggest volunteering involves larger society in the form of including the enhancement of skills, self-confidence, and civic engagement. They emphasize that "at the center of our analysis is the argument that the nexus of volunteer involvement must be expanded beyond the focal organization to embrace the larger community including a broad array of stakeholders" (p. 575). Volunteering is not only about one's devotion of time for a particular organization, but it is a

societal value. While volunteers may be influenced by the society's overall civic engagements, volunteer workforce might be influenced by the society's potential level of skills.

The activities of the community organizations are the critical resources as well as clients for the volunteer reserves. Institutional establishments including associations, social clubs, civic institutions as well as government and nonprofits agencies both consume and create the volunteering reserves. These organizations reflect the social dynamics of the community and create revenues for social interaction. The societal dynamics are critical for the supply of volunteering. Volunteer reserve is directly correlated with the social capital since volunteering is basically an extension of the current social capital (Putnam, 2000). An important study on prosocial behaviors highlights that "the more involved people are in their community, the more likely they are to be asked to volunteer and then to agree when asked" (Penner et al., 2005, p. 376).

People's association with the organizations is critical for volunteer recruitment. When people join organizations, they become accessible by the volunteer recruiters. They also reach out to the information about the future volunteer opportunities through the organizations. The individuals also learn about the volunteering opportunities through their organizations (Musick & Wilson, 2008), which makes them more advantageous over those without any membership. Higher participation in the community organizations means that greater percentage of the community members is attached to the community with the organizational ties. Having more numbers of attached, rather than isolated members of the community is an indicator of greater volunteering potential.

Hypothesis 2: An increase in social capital at the community level is associated with an increase in the volunteering rates of the communities.

Social Capital, Employment and Volunteering

The amount of the social capital in the community benefits the organization by increasing the volunteer reserve in the community as well as by reducing extraction costs. Social capital helps the employed people become more connected with the society and makes them available for the reach of the voluntary organizations. Stukas and colleagues (2016) look at the relationship between extrinsic motivations and volunteering. They conclude that feelings of a sense of community are going to lead to better community volunteering ultimately reducing the power of the individual factors.

The difference between employed and unemployed individuals may disappear once they engage themselves into the organizations. The employed workforce may find opportunities for social networking in organizations. They might be more willing to increase their networks by participating in the community affairs. Unemployed people, on the other hand, might basically make "signaling" their abilities to the prospective organization members. Organizational factors such positive attitudes toward volunteering, and structural features such as pathways for volunteering encourage volunteering (Studer & Schnurbein, 2012). Those people who feel good about the others in the community and those satisfied with the level of engagement by the others contribute to the volunteering efforts (Mellor et al., 2009).

Moreover, many of the organizations require their members to contribute (Musick & Wilson, 2008). Volunteer experiences with the job, appreciation of volunteers influence intention remain at the job (Presti, 2012). Employed people with memberships to the organizations may eventually volunteer for the organizations. This helps employed people to become more open to new volunteering invitations and help them share similar enthusiasm toward volunteering similarly to their unemployed counterparts.

Hypothesis 3: The relationship between unemployment rate and volunteering becomes weaker as social capital at the community level increases.

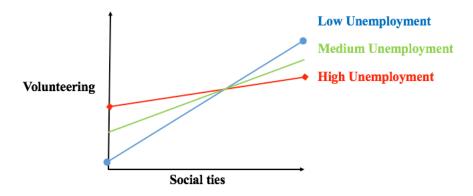


Figure 3.1: Conceptual model.

Data and Methods

This study uses cities as the unit of analysis. City level measures of volunteerism and civic engagement come from the National Citizen Survey (NCS) survey, and economic and control variables come from the Census database. The NCS is conducted by the National Research Center (NRS) to assess resident opinion about local topics at the city level. The company employed a systematic sampling method to choose survey recipients. To do so, they first identified the households living in the cities and then randomly selected the households until the intended survey results were obtained. Individuals living in the households were selected using a birthday methodology. The researchers chose the person over the age of 18 with the most recent birth date. Beginning in March 2015, mail was sent to the selected households to notify them of the upcoming survey. The second mailing contained the questionnaire and a postage-paid return envelope. The last mailing was to remind people to turn in their household questionnaires. The cities conducted NCS surveys independently from each other. Most cities published the results as the aggregate values for each measure. During the data collection

process, the cities were asked to send the city surveys. The number of accessible city surveys was a total of 69. The final sample dropped to 62 cities after omitting the missing values.

Comparison of the sample characteristics and U.S. city population was compared in Table 3.1. The results suggest that highly populated and low populated cities are underrepresented in the sample. Additionally, cities from the northeast region were also underrepresented. Besides the main variables, this study uses demographic variables adopted directly from Census.gov. Financial information about the city expenditures was adopted from the city budgetary documents.

Table 3.1: Comparison of Cities in Census Data and Sample by Population and Region

		Number of Cities in the U.S.	Percentage	Number of Cities in Sample	Percentage
	Over 1,000,000	10	0.05%	0	0.00%
	500,000-1,000,000	24	0.12%	1	1.61%
	250,000-499,999	48	0.25%	1	1.61%
	100,000-249,999	220	1.13%	8	12.90%
	50,000-99,999	452	2.32%	24	38.71%
Population group	25,000-49,999	726	3.72%	8	12.90%
Sroup	10,000-24,999	1555	7.97%	15	24.19%
	5,000-9,999	1666	8.54%	5	8.06%
	2,500-4,999	2076	10.64%	0	0.00%
	Under 2,500	12728	65.26%	0	0.00%
	Total	19505	100.00%	62	100.00%
	Northeast	2135	10.95%	2	3.23%
	Midwest	8564	43.91%	22	35.48%
Geographic region	South	6628	33.98%	18	29.03%
1051011	West	2178	11.17%	20	32.26%
	Total	19505	100.01%	62	100.00%

The dependent variable is the percentage of the people who volunteered in the community. The independent variables are club participation and employment. The control variables include household median income, high school education percentage, per capita expenditure, population size, the average age, percentage of the male population and the percentage of minority in each city.

Dependent Variable: Volunteering

The survey asked, "In the last 12 months, about how many times, if at all, have you or other household members done each of the following" in the given city. One of the options was given as "Volunteered your time to some group/activity" in the given city. The response categories were originally given as 2 times a week or more, 2-4 times a month, once a month or less or not at all. The variable was recoded to represent the percentage of the city population that had volunteered at least once during the preceding 12 months.

Independent Variables

- Club attendance: The social capital measure is the percentage rate of club involvement in the corresponding city (Putnam, 2000, 2001). The question was "In the last 12 months, about how many times, if at all, have you or other household members done each of the following?" Participation in a club was chosen as the response category. Again, the variable was the percentage of the population that participated in a club at least once during the past year.
- Unemployment rate: As for the unemployment question, the respondents were asked what their employment status is. Responses included "working full time for pay", "working part-time for pay", "unemployed, looking for paid work", "unemployed, not looking for paid work"

and "fully retired." The unemployment rate is the percentage of respondents who were unemployed either looking or not looking for a paid work.

Control Variables

- Per capita expenditure: One of the most consistent contextual control variables is the government expenditure. According to the crowding out hypothesis as government spending increases for the social causes, there becomes less need for voluntary contribution simply because there are less social problems to solve. It is often hypothesized that in the communities with high government spending, volunteer rates are likely to be low (Hackl, Halla, & Pruckner, 2012). While some studies found no relationship (Duncan, 1999; Simmons & Emanuele, 2004; Van Oorschot & Arts, 2005), a recent study found support for a negative relationship (Hackl et al., 2012). This variable included since it is a consistent control variable in the literature. Government expenditure is represented by the measure of per capita expenditure. Per capita expenditure is calculated by dividing city expenditure by the population size. The information about the city expenditure comes from the city budget documents.
- Population size: The collective action problem indicates that people are less likely to cooperate in larger groups. While some found no support (Gesthuizen & Scheepers, 2010) others revealed a negative relationship between the community size and volunteering (Schlesinger & Nagel, 2016; Voicu & Voicu, 2009). The variable is included because it is consistently used in the literature to control the group size. The population size data were obtained from the Census Bureau. We took the log of the population size to avoid skewness.
- Percentage of the minority: Increased diversity might be detrimental to volunteering.

 Especially in the U.S. the history of race relations might have reflections on the volunteer

contributions (Rotolo & Wilson, 2014). The literature suggests that heterogeneity have negative outcomes for volunteering in the communities (Putnam, 2007; Tolsma, Van der Meer, & Gesthuizen, 2009). The more the communities are racially heterogeneous, the less the members of the community participate in the volunteer events (Rotolo & Wilson, 2014). This is not confirmed by a European study which found no significant relationship between proportion minority and volunteering (Glanville et al., 2015). Percentage minority is included as a measure of minority distribution in the cities. Percentage of the minority is adopted from the Census data and measured as the percentage of the people in the community who are not white.

- Median income: Differences in income and the negative reflections on volunteering are confirmed in the literature. Higher poverty in the communities causes lower volunteering (Lim & MacGregor, 2012). The economic differences between the cities are measured by the median income measure. Median income values are taken from Census Bureau and reported in thousands.
- Regions: The identification of the regional differences control for additional context. Regions may possess different cultures that are reflected in the volunteering. For example, a study found significant differences in volunteering in Swiss communes (Stadelmann-Steffen & Gundelach, 2015), and another one found differences between the regions of the European countries (Gil-Lacruz et al., 2016). Similarly, residing in different regions of the country, cities may show different volunteering patterns. Regional differences are controlled with the identification of the regions the cities belong to. Four main regions were identified according to the Census Bureau: South, Northeast, Midwest, and West. South is chosen to be the reference group and others were included as dummy variables.

Methods

This study introduces the descriptive statistics to explore the relationship between unemployment, club attendance, and volunteering. In the first descriptive analysis, the volunteering, unemployment, and club attendance rates were compared for selected cities to examine whether volunteering rates fluctuate in accordance with unemployment and club attendance. In the second descriptive analysis, we show the general characteristics of the cities by presenting the standard deviation, mean, minimum and maximum values. Finally, I conduct General Linear Modeling (GLM) regression analysis to test the hypotheses. Since the dependent variable is a proportion, GLM is the most appropriate methodology (Baum, 2008; Papke & Wooldridge, 1996). I created four models of volunteering. The first model tests the relationship between unemployment rate and volunteering controlling for the other factors. The second examines the effect of club attendance on volunteering while keeping the control variable constant. The third model includes both the unemployment and the club attendance variables alongside the control variables. The last model adds interaction terms between unemployment and club attendance into the model.

Results

Descriptive Statistics

Table 3.2: Volunteering, Club Attendance, Unemployment Percentages in the Sample

City Name	Volunteering (%)	Club attendance (%)	Unemployment (%)	
Park City, Utah	66	51	2	
Bozeman city, Montana	64	45	4	
Asheville city, North Carolina	60	41	2	
Charlottesville city, Virginia (County)	59	40	5	

(table continues)

City Name	Volunteering (%)	Club attendance (%)	Unemployment (%)
Ann Arbor city, Michigan	55	42	4
Gaithersburg city, Maryland	54	29	4
Harrisonburg city, Virginia	54	33	4
Sioux Falls city, South Dakota	54	32	3
Newton city, Iowa	53	38	2
Corvallis city, Oregon	51	36	8
Weston town, Middlesex County, Massachusetts	51	40	2
Davidson town, North Carolina	49	37	4
Hutchinson city, Minnesota	49	33	3
Johnson City, Tennessee	49	28	6
Twin Falls city, Idaho	49	24	3
Albert Lea city, Minnesota	48	41	3
Morristown city, Tennessee	48	25	10
New Braunfels city, Texas	48	33	2
Lynchburg city, Virginia	47	30	7
Yakima city, Washington	47	35	6
Galveston city, Texas	46	41	4
Palo Alto city, California	46	34	4
Western Springs village, Illinois	46	37	2
Bowling Green city, Kentucky	44	33	5
Dublin city, Ohio	44	29	3
Sevierville city, Tennessee	43	26	5
Battle Creek city, Michigan	42	28	6
Las Cruces city, New Mexico	41	34	7
Oak Park village, Illinois	41	24	6
Clearwater city, Florida	40	27	5
Jupiter town, Florida	40	28	4
Ashland town, Virginia	39	27	2
Elk Grove city, California	39	26	2
Livermore city, California	39	30	3
San Jose city, California	39	33	6
Palm Coast city, Florida	38	34	3
Rio Rancho city, New Mexico	38	23	2

(table continues)

City Name	Volunteering (%)	Club attendance (%)	Unemployment (%)
Scottsdale city, Arizona	37	31	3
Bloomington city, Minnesota	35	21	3
Brownsburg town, Indiana	34	17	1
Hamilton city, Ohio	34	28	4
Miami city, Florida	34	23	5
Wilsonville city, Oregon	34	20	6
Tracy city, California	33	20	6
Cape Coral city, Florida	32	25	3
Goodyear city, Arizona	32	28	2
Lake Zurich village, Illinois	32	21	2
Piqua city, Ohio	31	24	5
Yorktown town, Indiana	30	22	2
Brookline town, Norfolk County, Massachusetts	29	11	4
Victoria City, Minnesota	29	21	3
Clovis city, California	28	25	2
Meridian charter township, Ingham County, Michigan	28	26	5
Erie town, Colorado	27	18	1
Suwanee city, Georgia	27	25	4
Schaumburg village, Illinois	24	16	3
Sunnyvale city, California	24	15	5
Surprise city, Arizona	24	21	6
Orland Park village, Illinois	23	19	5
Morrisville town, North Carolina	19	11	6
Clive city, Iowa	18	16	4
Richmond Heights city, Missouri	17	10	3

To begin with, this study compares the cities with highest and lowest volunteering rates.

Table 3.2 shows the city percentages on volunteering, club attendance, and unemployment. The statistics indicate that volunteering rates tend to follow the trends of club attendance rates.

However, the numbers show no clear relationship between employment rate and volunteering.

The descriptive statistics show that the Park City, Utah has the highest volunteering rate as

almost 66 percent of the residents volunteered locally in the past year. The city also has the highest club attendance rate by nearly 51 percent while has a rather employment rate of around 2 percent for the city. On the other end of the volunteering spectrum, Richmond Heights City, Missouri has the lowest volunteering rate in the sample. Only 17 percent of the residents volunteered in the previous year. The club attendance is also the lowest in this city as only 10 percent of the residents engaged themselves in a club. However, the employment rate in the Richmond Heights City, Missouri is not, substantially different from the Park City, Utah. Only 3 percent of the Richmond Heights City residents were unemployed at the time of the survey.

Table 3.3: Descriptive Statistics

	N	Mean	SD	Min	Max
Volunteering (percent)	62	39.92	11.45	17.00	66
Club attendance (percent)	62	28.08	8.703	10.00	51
Log of Population	62	10.71	1.004	8.885	13.77
Median income (in thousand \$)	62	67.40	31.96	30.86	201.2
Northeast (South)	62	0.0323	0.178	0	1
Midwest (South)	62	0.355	0.482	0	1
West (South)	62	0.290	0.458	0	1
Unemployment rate (percent)	62	8.145	2.822	3	15.00
Per capita expenditure	62	2,731	6,429	28.85	50,940
Minority, percent	62	21.85	13.35	3.200	57.20

To have a better understanding of the sample, we report the descriptive statistics including the sample size, mean standard deviation, minimum and maximum values for each variable (see Table 3.3). The average volunteering rate among the participated cities is around 40 percent. As discussed earlier, while the lowest volunteering rate is 17 percent, the highest volunteering rate is 66 percent. Although this indicates high variation, the standard deviation value of 11.45 shows a modest level of variation. The average club attendance ranged from 10

percent to 51 percent averaging around 28 percent for the sample. The difference in the unemployment rate seems to be relatively lower. While the lowest unemployment rate is around 3 percent, the highest unemployment rate is found to be nearly 15 percent. The average unemployment rate is around 8 percent in the sample. Overall, the descriptive statistics show that there are major differences among the cities in terms of volunteering, club attendance, and unemployment. Variations in unemployment and club attendance may account for the differences in volunteering. The following model shows the general linear regression results for several models predicting volunteering rates (see Table 3.5).

Correlation Matrices

The correlation matrices reveal no information to suggest that there is multicollinearity in the analysis. The highest correlation is between the percentage of the population and the population variable by .49. However, the value is still much lower than the .70 threshold. This indicates that the models do not suffer from multicollinearity.

Table 3.4: Correlation Matrices

		1	2	3	4	5	6	7	8	9	10
1	Volunteering (percent)	1									
2	Unemployment rate (percent)	0.07	1								
3	Club attendance (percent)	0.86	0.02	1							
4	Per capita expenditure	-0.02	-0.15	-0.11	1						
5	Log of Population	0.01	0.15	0.01	-0.11	1					
6	Minority, percent	-0.10	0.22	-0.11	-0.12	0.49	1				
7	Median income (in thousand \$)	-0.18	0.05	-0.10	0.08	-0.25	0.03	1			
8	Northeast (South)	0.00	0.25	-0.05	0.03	-0.10	-0.04	0.46	1		
9	Midwest (South)	-0.18	-0.18	-0.19	0.17	-0.30	-0.42	0.06	-0.14	1	
10	West (South)	-0.03	0.06	0.08	-0.10	0.33	0.32	0.11	-0.12	-0.47	1

Regression Analysis

Table 3.5: General Linear Regression of Club Attendance predicting Volunteering

	Model 1	Model 2	Model 3	Model 4
Unemployment rate (percent)	0.325 (0.459)		0.218 (0.256)	1.674* (0.803)
Club attendance (percent)		1.140*** (0.071)	1.138*** (0.074)	1.516*** (0.186)
Unemployment X Club participation				-0.048* (0.023)
Per capita expenditure	0.000	0.000***	0.000***	0.000***
	(0.000)	(0.000)	(0.000)	(0.000)
Log of Population	-0.026	-0.278	-0.312	-0.051
	(2.103)	(0.750)	(0.756)	(0.773)
Minority, percent	-0.171	0.032	0.024	0.002
	(0.138)	(0.067)	(0.070)	(0.078)
Median income (in thousand \$)	-0.054	-0.050*	-0.048*	-0.041*
	(0.050)	(0.022)	(0.022)	(0.020)
Northeast (South)	-0.543	5.859+	4.827	5.352+
	(10.338)	(3.477)	(4.004)	(3.121)
Midwest (South)	-6.986*	-1.193	-1.170	-1.033
	(3.507)	(1.901)	(1.891)	(1.879)
West (South)	-2.260	-2.301	-2.299	-2.413
	(4.254)	(1.865)	(1.852)	(1.848)
Constant	47.966*	13.985+	12.728	-1.877
	(23.197)	(8.261)	(8.080)	(11.344)
AIC	7.872	6.473	6.495	6.493
BIC	6905	1540	1524	1471
Observations	62	62	62	62

Note: *** p<0.001, ** p<0.01, * p<0.05, + p<0.1

Listwise deletion was applied to the model samples to ensure that each model represents the same population. The total number of cities in the sample is 62 for each model. AIC and BIC values were reported to select the best model in the analysis. Lower values of AIC and BIC indicate that the model is better than others. However, none of the models in this analysis has the

lowest AIC and BIC values at the same time. Nevertheless, the fourth model is the most comprehensive model that has the lowest BIC values and one of the lowest AIC values.

As for the results of the model, the first model reveals almost no information to suggest that unemployment rate is related to volunteering. The second model shows that club attendance is a significantly related to volunteering. The communities with a higher percentage of the population participating in the clubs tend to have a higher percentage of volunteerism. The third model is consistent with the first and second model in analyzing the effects of club attendance and unemployment. According to the third model, while the unemployment rate remains nonsignificant in relation to the volunteering rate, and club attendance has a significant positive impact. The fourth and last model reveals interesting results. As the interacting term of unemployment and club attendance added into the model, the effect of unemployment changes from non-significant to significant. Higher unemployment rate predicts higher volunteering in this model while the positive influence of club attendance remains significant. The interaction term is also significantly related to volunteering suggesting club attendance is a contingency factor for the unemployment rate. The direction of the interaction term coefficient suggests that the relationship between unemployment and volunteering weakens as the club attendance rates increase. Figure 3.2 demonstrates the relationship between high, medium and low rates of unemployment and volunteering. While the medium unemployment rate is the unemployment sample mean, the high unemployment rate is two standard deviations above the mean value, and the low unemployment rate is two standard deviations below the mean value.

The visual analysis shows that the influence of unemployment on volunteering is dependent on the club attendance rates for the cities. In lower rates of club attendance, unemployment influences volunteering as hypothesized. Higher unemployment in the cities

indicates higher amounts of volunteering. In above average levels of club attendance, however, higher unemployment is either nonrelated or negatively related to volunteering. Basically, the influence of unemployment disappears as club attendance rates get above average.

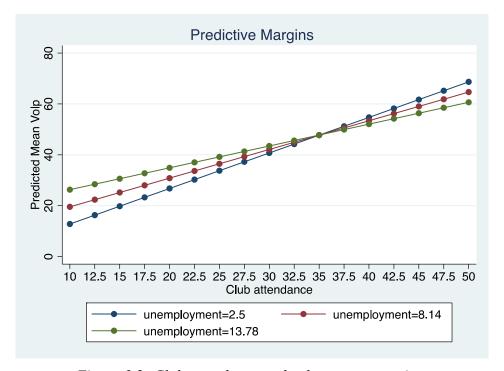


Figure 3.2: Club attendance and volunteer proportion.

Discussion and Conclusion

In general, the results confirm the stated hypotheses. The regression analysis shows cities with a higher proportion of unemployed population also have a higher amount of volunteer population. The theory suggests that this is not a coincidence. With the increase in unemployment, more people become available with free time to invest. Unemployed people are previously shown to be interested in volunteer roles for various reasons including skill development and employment. On the side of organizations, unemployment is related to the extraction costs. With the advancement of unemployment, volunteer coordinators also have to spend less energy to convince people to dedicate their limited time for the volunteer causes.

Especially the nonprofit organizations, the major reliant on volunteers, will have to spend less of their limited resources to obtain more volunteers.

It is important to interpret the findings related to the unemployment rate carefully. Unemployment needs to be solely seen from an extraction perspective than as a tool for the enrichment of the volunteer reserves. The unemployment rate is volatile and influenced by several macro-level factors such as economic crisis. Also, unemployment does not boost the potential volunteer reserves. For the sustainable development of volunteering people should not be guided by extrinsic motivation factors (Stukas et al., 2016). The nature of the unemployment makes it an unreliable reasoning for regeneration of volunteering. Higher unemployment may at most be seen as opportunities for the organizations to attract more volunteers.

From a regenerative perspective to the volunteering, community ties as a resource is more reliable for the proliferation of the volunteer reserves. Investment in community participation often pays out as a social support for the individuals (Cheung & Ho, 2012) and nonprofit organizations lead an important role (Shier, McDougle, & Handy, 2014). A re-socialization strategy is a much-needed approach for the organizations for the volunteer enrichment (Hustinx & Meijs, 2011). The results also consistently prove that higher engagement within the community ultimately reflects as higher volunteer contribution. Organizations strategy toward incrementation of volunteering needs to be indirect than direct. The organization holds the ultimate upper hand to enhance volunteering by helping production higher engagement in the community. Organizations can do this by creating more opportunities and activities for the residents to engage and participate. The type of activities can be in any form of sports, education or entertainment with the purpose of higher engagement. These engaged citizenries ultimately transform into being volunteers for the local organizations. However, I am still not here to say

that organizations are the sole responsibility for the volunteering proliferation. Governments or third-party institutions can take their fair share in supporting volunteering efforts (Haski-Leventhal et al., 2010). The results indeed suggest that government spending is a sign of rich volunteer supply in the area.

As previously mentioned, unemployment is not a reliable resource for organizations since it has a volatile nature. The results show that the adverse effects of changes in unemployment are successfully mitigated with higher civic engagement. This means that cities with highly engaged residents are not significantly affected by the fluctuation in unemployment, or rather they might be called *unemployment-proof* cities. Overall, the most strategic investment for the organizations and cities for their future is to invest in the enrichment of community engagement.

The discussions and recommendations need to be analyzed solely from the perspective of communities or the community level. The study does not take into account a larger context such as state-level determinants that might be influential for volunteering. The mechanisms of volunteering may differently operate as the level of analysis upgrades. A growing body of literature is dedicated to understanding volunteering from a macro context such as countries or states (such as (Glanville et al., 2015; Rotolo & Wilson, 2012; Ruiter & De Graaf, 2006).

While the current chapter takes a community-level approach to volunteering, the next chapter advances to the state and county level. It uses social capital measures at the state level and county level while analyzing the volunteering concept at the individual level. The use of county level and state level variables show how macro-level contextualization may influence volunteering.

CHAPTER 4

STATE LEVEL DETERMINANTS OF VOLUNTEERING

The volunteering rates significantly differ across the regions in the world. Which city, region, state or country the person lives in ultimately determines how likely the person is going to volunteer (Chen, 2017; Rotolo & Wilson, 2014; Sohn & Timmermans, 2017; Stadelmann-Steffen & Gundelach, 2015). There are stark differences even between neighboring locations. As for the U.S., while the state of Utah has the highest volunteering rate by 44%, the neighboring state of Nevada has the lowest volunteering rate by 18% (Rotolo & Wilson, 2012).

The importance of state-level factors is not well appreciated in the studies analyzing the connection between employment status and volunteering. The inclusion of state-level factors becomes critical considering the literature remains largely mixed in answering whether employment is effective on volunteering. State level factors may play an important role in answering whether contextual factors matter in conjunction with employment. One of the most highlighted, yet barely tested contextual factor is the social capital (Glanville et al., 2015). The inclusion of social capital may help resolve the conflicts in the employment studies.

It is the purpose of this study to analyze how the volunteering rates of employed and unemployed individuals may differ according to the level of engagement the person has. With this purpose in mind, the previous literature presented on volunteering showing employed individuals volunteering in multilevel studies. The theory presented to explain why employed individuals volunteering may be affected by macro-level civic engagement.

Literature Review

Several studies examined how individual-level employment status becomes important for

volunteering controlling for the macro level factors. Unlike the individual level studies, the use of variables at the macro level is slightly different from one study to the other. Consideration for the state level factors becomes important interpreting the results at the individual level. Especially, the results related to the individual level employment status are likely to be affected by the type of variables controlled at the macro context. The literature analyzing the relationship between employment status and volunteering in connection to the macro level factors are mixed. While some multilevel studies suggest that unemployed individuals are more likely to volunteer (Chen, 2017; Rotolo & Wilson, 2012), yet others found that unemployed individuals are actually less likely to volunteer (Gil-Lacruz et al., 2016; Glanville et al., 2015; Hackl et al., 2012).

Several studies suggest that regardless of the macro level factors unemployed individuals volunteer more. A U.S. study controlled for demographic factors such as state-level education, household composition institutional factors such as the number of nonprofits, congregations and cultural factors such as religiosity (Rotolo & Wilson, 2012). Controlling for these factors, unemployed individuals were found to be more likely to volunteer. Another study compared the regime differences across different states (Chen, 2017). It is hypothesized with the social origins theory that liberal economies including the U.S. would have the highest volunteering rates. The U.S. did not have the highest volunteering rate, yet employed individuals are found to be more likely to volunteer to control for the regime differences (Chen, 2017). This challenges an earlier argument that "volunteerism is substantially more common among employed than unemployed individuals" in Anglo-Saxon counties in cluing the United States (Penner et al., 2005, p. 376). Another study looked voluntary participation factors in the African countries (Compion, 2017). Controlling for factors such as population, development aid, GDP per capita, part time and full time employed individuals are more likely to get involved in voluntary associations.

Several other studies found that unemployed individuals are actually less likely to participate in the volunteering efforts regardless of the differences between states or countries. A European study looked at volunteering in different types of volunteering taking into account GDP, public expenditure, type of region among the European countries (Gil-Lacruz et al., 2016). They found that employed individuals in their early adulthood are less likely to volunteer for leisure and social justice organizations, while there is no statistical difference in other types of organizations. Controlling for country-level factors in Europe such as GDP, unemployment rate, and population size, another study finds that unemployed individuals are less likely to volunteering (Hackl et al., 2012). However, being self-employed is found to have no impact on volunteering. Other studies conducted in the U.S. also confirmed that unemployed individuals are less likely to volunteer when controlled for the regional GDP, education, population density and population minority (Glanville et al., 2015).

Theory

Volunteering is an unpaid service to help others within an organizational structure.

Unlike interpersonal helping, the helper-recipient relationship is rather formal and operates within the boundaries of an organization. Volunteering is essentially an expression of social capital. Social capital is "features of social organization, such as trust, norms, and networks that can improve the efficiency of society by facilitating coordinated actions" (Putnam, 1993, p. 167). The definition of volunteering also includes volunteering in places other than the current place. The basic difference between formal volunteering and informal volunteering is that informal volunteering is interpersonal helping among friends and peers, while formal volunteering is produced by being part of the organization.

Employment

Economic perspective to volunteering explains the volunteering phenomenon using economic factors, such as employment status and income. The economic model holds the assumption that individuals are rational actors that continuously assess the costs and benefits of their actions (Freeman, 1997; Hackl et al., 2007, 2012). From an economic perspective, the act of volunteering continues only when the benefits of volunteering exceed the costs of volunteerism (Andreoni, 1990; Lindenberg & Frey, 1993). Non-employed individuals hold the high interest in joining a workforce since employment is the main source of income for the individuals to enhance their well-being. Non-employed individuals seek the pathways to obtain appropriate positions.

Volunteering provides the mechanisms toward employment. First of all, volunteering signals the individuals being better candidates for the position. Volunteer experience is seen as an indicator that the candidate is willing to work with others. Several individuals are motivated to show to the volunteer experience as a positive sign to the employers. For example, resume building is one of the key motivators for volunteering among students (Handy et al., 2010; Serow, 1991). Second, volunteer work is a form of investment to gain benefits such as skill improvement and occupational prestige (Chinman & Wandersman, 1999; Wilson & Musick, 1999). Thus, volunteers can find jobs faster (Spera et al., 2015). Third, volunteering provides access to social networks that may lead to employment opportunities for the individuals (Benenson & Stagg, 2016; Handy & Greenspan, 2009). They get to know individuals who may know others willing to employ the individuals. Volunteering could especially help disadvantaged populations such as women and recent to join the labor workforce (Handy & Greenspan, 2009;

Schram & Dunsing, 1981). Overall, volunteers gain employment quicker than others (Stephan, 1991).

Individuals have only limited time and money to spend on volunteering (Freeman, 1997; Menchik & Weisbrod, 1987). Time pressure related to the work is greater among those who work (Roxburgh, 2002; Sundeen et al., 2007). Seventy-five percent the non-volunteers reported not having time as an excuse for not volunteering (Hall, Lasby, Ayer, & Gibbons, 2009). Every hour spent on volunteering is an opportunity cost that could be spent on a more profitable activity. Employed individuals have the high opportunity cost of volunteering. An additional hour of work is more profitable to the employed individuals than volunteering for an hour. Given these reasons, employed individuals might be less attracted to the volunteering opportunities than their non-employed counterparts. Therefore, we hypothesize that:

Hypothesis 1: Non-employed individuals are more likely to volunteer than employed individuals.

Social Capital

The regions, communities or the countries the individuals grow up in and live in affects the individual social involvement. The culture, available resources or institutional arrangements may significantly differ across even in neighboring regions that impact community engagement of the members (Stadelmann-Steffen & Gundelach, 2015). Rainmaker effect suggests that members of the more integrated communities get the benefits of being community members (van der Meer, 2003). The individuals do not necessarily have personal connections but benefit from being a member of the highly connected community (Putnam, 2000). Community-level social capital is a communal characteristic independent of the individuals may have an independent impact on the individual outcomes (Glanville et al., 2015).

Bourdieu (1983, p. 302) defined social capital as "the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance or recognition in other words, to membership in a group." Communities with more active organizational engagement are especially important for the volunteering. Volunteering is executed as part of formal organizations. More actively functioning organizations may produce more volunteering opportunities. Moreover, more engaged communities produce the opportunities for volunteering. Volunteering is an expression of solidarity and social integration (Wuthnow, 1991). Individuals living in such communities are more resourceful for joining organizations since the organizations offer volunteer opportunities in several kinds and shapes, durations. From this perspective, members of the engaged communities enjoy more diversity of volunteering opportunities and better informed about the opportunities.

Members of the better-engaged communities are more informed to take part in volunteer efforts. The information flow is faster and greater in highly connected communities. Individuals in those communities are decorated with information and be more informative than other individuals living in communities where they lack social connections. Proper flow of information is critical for each decision making and higher amounts of information exist in highly connected networks (Lin, 2001). Overall, being a member of a better-connected community is an indicator for higher volunteering (Glanville et al., 2015). The hypothesis is:

Hypothesis 2: Individuals living in states with higher group involvement are more likely to volunteer than individuals living in states with lower group involvement.

Institutional Theory

Institutional theory suggests that organizational environment influences the individual

volunteering (Healy, 2004). Institutions provide opportunities for the individuals to volunteer. They identify the need and cause and connect the volunteers with the people in need. Indeed, one important criterion of volunteerism is that it needs to be done through a formal organization. Lack of institutions in a region may ultimately mean lack of volunteer opportunities and lead to lack of volunteering in the region. Earlier studies suggested that greater prevalence of the nonprofit sector may mobilize more volunteers (Rotolo & Wilson, 2012, 2014). According to the institutional theory greater volunteer activity is expected in the regions with greater organizational capacity (Salamon & Sokolowski, 2003). As discussed in the previous chapter, greater nonprofit activity is not always a good sign. It may in fact adversely impact volunteering. Brudney and Meijs (2009) warned that nonprofit organizations may deplete the volunteering common resource and lead to its depletion. The extraordinary demand for the lack of volunteering supply may lead to its exhaustion. However, given the historical support for the institutional theory, I put the hypothesis in favor of the nonprofit capacity. This dissertation makes an important distinction from the previous studies. The organizational capacity is mostly analyzed at the state level; however, the state level organizational capacity is not a healthy measure. Most individuals volunteer through them I expect the greater prevalence of nonprofit organizations to be a positive determinant of the volunteering. The hypothesis statement is the following:

Hypothesis 3: Individuals living in states with higher group involvement are more likely to volunteer than individuals living in states with lower group involvement.

Data and Method

This study obtains data from both the 2010 Current Population Survey (CPS) Volunteer Supplement, the 2010 CPS Civic Engagement Supplement and 2010 National Center for

Charitable Statistics (NCCS) data. The US Census Bureau administers both of these studies. Both of the studies are part of the core CPS Series and supplements are based on main Current Population Survey. The population of the surveys is the non-institutionalized US population over the age of 15. The volunteer supplement was collected from September 2009 to September 2010, and the Civic Engagement supplement was collected from November 2009 to November 2010. The sampling process is a multistage probability procedure. The results were representative of US adults in all 50 states and the District of Columbia. The survey administers used computerassisted personal interview (CAPI) and computer-assisted telephone interview (CATI) methods in the data collection process. The units of analysis for both of the studies are individuals clustered in the 50 US States and the District of Columbia. The final sample included 54,000 households for the Civic Engagement Supplement and 56,000 for the Volunteer Supplement. All the individual level variables come from CPS Volunteer Supplement, and all the state level variables come from CPS Civic Engagement Supplement. County-level information regarding the number of nonprofit organizations comes from NCCS. The final sample includes 37,980 individuals scattered across different states and counties. Listwise deletion was applied in the models to ensure that same individuals are included in each model. The dependent variable is volunteering, independent variables are the individual level measure of employment, county aggregate level number of organizations and state aggregate level measure of social capital. The control variables at the individual level include gender, race, education, household income, age, marital status, number of children and the metropolitan status. The control variables at the state level include the percentage of the population with high school degree and the percentage of minorities.

Dependent Variable: Volunteer Likelihood

The dependent variable is a dichotomous variable of volunteering coded 0 for non-volunteers and 1 for volunteers. Current Population Survey defines volunteering as an unpaid volunteer activity for an organization. The survey communicates the volunteering concept to the participants with the following statement "This month, we are interested in volunteer activities, that is, activities for which people are not paid, except perhaps expenses. We only want you to include volunteer activities that you did through or for an organization, even if you only did them once in a while." The respondents were asked, "Since September 1st of last year, have you done any volunteer activities through or for an organization?" Additionally, they were asked, "Sometimes individuals don't think of activities they do infrequently or activities they do for children's schools or youth organizations as volunteer activities. Since September 1st of last year, have you done any of these types of volunteer activities?" This variable was coded 1 if the person answered yes to any of these questions, 0 if they answered no to the question. This measurement has been extensively adapted to measure volunteering concept by other studies (Lee, 2012; Nesbit, 2013).

Independent Variables

- Employment: The employment status is a dummy variable at the individual level.

 Employment variable is coded 1 for employed individuals and 0 for non-employed individuals.
- Nonprofit organizations per capita: This is a variable reflecting the number of
 nonprofit organizations per capita at the county level. NCCS tracks nonprofit information for
 each individual nonprofit organization in the United States. The number of nonprofit
 organization is originally a count variable, where the statistical program is coded to count how

many individual organizations are there for each county. The specific county information is determined by the county federal information processing standard (fips) codes. I have then obtained the county population estimates for 2010 from Census. Nonprofit per capita variable is calculated dividing the number of nonprofit organizations per capital to 2010 county population. This county-level information is then merged with the primary volunteering data using the unique county fips codes.

• Group involvement: The social capital measure is group involvement (Putnam, 2000). The participants were asked "Next, I will give you a list of types of groups or organizations in which individuals sometimes participate. Have you participated in any of these groups during the last 12 months, that is between November 2008 and now?" The respondents then answered yes or no for the following types of groups or organizations: (a) a school group or a neighborhood or community association such as PTA or neighborhood watch groups, (b) a service or civic organization such as the American Legion or Lions Club, (c) a sports or recreation organization such as a soccer or tennis club, (d) a church, synagogue, mosque or other religious institution or organization, not counting attendance at religious services, and (e) any other type of organization. Summing the five variables, we created the group involvement index. Group involvement variables were aggregated at the state level and combined with CPS volunteering data.

Control Variables

The control variables at the individual level are gender, race, age, education, household income, marital status, number of children and metropolitan status. Gender is a dummy variable coded 1 for male and 0 for female. Race categories include white, black, Asian and the other

races. While the white group is selected as the reference category, all other race categories were introduced into the model as dichotomous variables. Education levels range from below high school education to graduate education. Below the high school education is chosen as the reference category. The respondents are recorded 1 if they reported being married otherwise it is coded 0. Income is the log of reported household income. This is a continuous variable reporting the number of individuals under the age of 18 living in the household. It is coded 1 if the person reported living in a metropolitan area and 0 if not residing within a metropolitan.

At the state level, percentages of minorities and percentages of individuals holding at least a high school degree are chosen to be the control variables. State level demographics especially the rate of minorities and state level averages of education are significant determinants of volunteering in the literature (Rotolo & Wilson, 2012, 2014).

• High school degree percentage: Higher educated communities are more aware of the volunteering activities and more flexible with their schedules. Higher in the communities are often hypothesized to reflect on higher rates on volunteering. Countries or states with a population of higher educated individuals have with higher volunteering rates (Gesthuizen & Scheepers, 2010), while no confirmation for the significant effect between the U.S. states and cities (Rotolo & Wilson, 2012, 2014). Given the high importance of education in determining to volunteer (Musick & Wilson, 2008; S. R. Smith, 1994; Wilson, 2012) we include the education measure at the state level as well. The variable is measured as the percentage of state population who hold a high school degree. The states with higher percentage of individuals with a high school degree are measured to be more educated states reflection on higher rates of volunteering. The variable is coded at the individual level as 1 if the individuals had high school degree and 0 if they did not have a high school degree, and then aggregated to the state level. The variable is

multiplied by a hundred to ease interpretation.

Minority percentage: Less homogeneous communities or the communities with higher rates of minorities such as migrants are found to have fewer volunteers than more homogeneous states (Putnam, 2007; Rotolo & Wilson, 2012, 2014; Savelkoul et al., 2014; Wilson, 2012). States with higher rates of minorities are expected have less volunteering.
 Minority percentage is the aggregated percentage of minorities at the state level who are any race other than white. The minority percentage variable is multiplied by a hundred to make the interpretation easier.

Method

The present study uses the multilevel logistic model to test the hypotheses (Rabe-Hesketh & Skrondal, 2012). Since the social capital measures were clustered at the state level and the number of organizations is aggregated at the county level, the multilevel analysis is the most appropriate statistical approach for the analysis of the data. The variables at the individuals level are group mean centered and the variables at the state and county level are grand mean centered to execute the appropriate multilevel analysis. There are two models used in this study. The first model is the random intercept model that includes employment status along with number of organizations at the county level and the state level controls along with the individual level control variables. The second model adds the group involvement to the first model.

Table 4.1 summarizes the descriptive statistics of the variables used in the models. It shows that 26 percent of the Americans, have volunteered at least once in the past year. The table also shows that 65 percent of the individuals are employed. Group involvement is on average is pretty high. Fifty-seven percent of the Americans participate in at least one

organization's activities. Additionally, the summary statistics show that, on average, there are 10 nonprofit organizations in each county. Females constitute a larger portion of the survey by 53 percent.

Table 4.1: Summary Statistics

	N	Mean	Std. Dev.	Min	Max
Volunteering likelihood	37980	0.26	0.44	0	1
Employed	37980	0.58	0.49	0	1
Group involvement	37980	0.57	0.09	0.41	0.84
Log of nonprofit numbers	37980	.034	.02	0	.15
Male	37980	0.47	0.50	0	1
High school	37980	0.28	0.45	0	1
Log of income	37980	10.72	0.97	7.82	12.21
Black	37980	0.12	0.33	0	1
Age	37980	45.30	18.39	15	85
Married	37980	0.51	0.50	0	1
Number of child	37980	0.52	0.98	0	12
Metropolitan	37980	0.96	0.19	0	1
High school percentage	37980	0.83	0.03	0.76	0.89
Minority percentage	37980	0.23	0.14	0.03	0.80

Results

The correlation analysis shows that none of the relationships are significantly correlated with each other (see Table 4.2). The highest correlation is an observed number of children and being married .31. However, this still does not generate multicollinearity between the variables since the value is lower than the threshold of .70.

Table 4.2: Correlation Matrices

		1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Volunteering likelihood	1													
2	Employed	0.07	1												
3	Group involvement	0.10	0.06	1											
4	Number of organizations	-0.05	-0.01	-0.25	1										
5	Male	-0.07	0.10	0.01	0.00	1									
6	High school	-0.14	-0.06	-0.02	-0.06	0.00	1								
7	Log of income	0.18	0.28	0.06	0.01	0.05	-0.14	1							
8	Black	-0.06	-0.06	-0.01	0.07	-0.04	0.04	-0.15	1						
9	Age	0.00	-0.20	0.00	-0.04	-0.04	0.09	-0.03	-0.03	1					
10	Married	0.11	0.12	0.03	-0.07	0.05	-0.01	0.26	-0.14	0.25	1				
11	Number of child	0.12	0.15	0.00	-0.02	-0.04	-0.03	0.06	-0.02	-0.19	0.31	1			
12	Metropolitan	0.00	0.02	-0.03	0.25	0.00	-0.05	0.05	0.05	-0.03	-0.01	0.02	1		
13	High school percentage	0.05	0.04	0.49	-0.19	0.00	0.02	0.07	0.02	0.05	0.01	-0.04	-0.09	1	
14	Minority percentage	-0.03	0.00	-0.23	0.18	0.00	-0.02	0.06	0.10	0.01	-0.03	-0.02	-0.02	0.10	1

Regression Analysis

Listwise deletion was performed in each model to enable both models to represent the same sample. A total of 37980 individuals were sampled in each model. Individuals come from 41 states of the United States and 281 counties. An average of 926 individuals participated from each state and an average of 135 individuals participated from each county. The variance components suggest that there are significant differences in terms of volunteering between the states of the United States and between the counties.

The first model suggests that employment is loosely connected with volunteering. At the 90 percent confidence level, employed individuals are more likely to volunteer. This result is antithetical to the *Hypothesis 1* that suggested that employed individuals tend to have a lower tendency for volunteering. The results also show that group involvement has a significant positive impact on volunteering. In states with higher group involvement, the individuals have a higher likelihood of volunteering. This result confirms the *Hypothesis 2*. Additionally, nonprofit per capita is significantly related to volunteering, meaning that the member of the counties with a higher density of nonprofit organizations is more likely to volunteer.

Figures 4.1 and 4.2 show the group involvement and employment have an independent impact on volunteering. Additionally, nonprofit per capita has also independent impact. The difference between the employment categories affecting volunteering does not change, based on the different categories of state-level group involvement or nonprofit per capita at the county level. Thus, the results suggest group involvement or nonprofit per capita is not a contingency factor.

Table 4.3: Multilevel Logistic Regression Results for Group Involvement, Informal Interaction and Employment Status affecting Volunteering

Main predictors		Variables	Model 1	Model 2
Main predictors Group involvement S.82*** (2.22)				
Main predictors Croup involvement C2.22		Employed	(0.03)	(0.03)
Number of organizations	Main pradictors	Group involvement		5.82***
Number of organizations (1,050.96) (414.07)	Main predictors	Group involvement		(2.22)
Male		Number of organizations	536.79**	221.84**
Male		Trumber of organizations	(1,050.96)	(414.07)
High school		Male		
High school (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.04) (0.04) (0.04) (0.04) (0.04) (0.04) (0.06) (0.00		With	` ′	` ′
Log of income 1.44*** 1.44*** (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.04) (0.04) (0.04) (0.04) (0.04) (0.04) (0.00) (High school		
Individual level control Black 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.00		riigii seneer	` '	, ,
Individual level control Black 0.84*** 0.84*** 0.04* (0.04) (0.04) (0.04) (0.04) (0.00) (Log of income	· ·	· ·
Individual level control Age		20g 01 m 0 m 0	<u> </u>	` ′
Age		Black		
Age			` ′	` '
Married 1.18*** 1.18*** (0.03) (0.03) (0.03) (0.03) (0.03) (0.03) (0.03) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.01) (0.01) (0.01) (0.01) (0.01) (0.01) (0.01) (0.03) (0.04)	control	Age		
Number of children			` '	` ′
Number of children		Married		
Number of children (0.02) (0.02) Metropolitan 0.95 (0.11) Output			` ′	` /
Metropolitan 0.95 (0.12)		Number of children		
Metropolitan (0.12) (0.11)				, ,
State level control High school degree percentage 21.61* (28.50) (1.56) Minority percentage 0.46* (0.16) (0.25) Variance components County variance 0.33*** (0.04) (0.11) Constant County variance 0.33*** (0.03) (0.01) (0.01) Constant County variance 0.36*** (0.03) (0.03) (0.03) Number of states 41		Metropolitan		
State level control High school degree percentage (28.50) (1.56) Minority percentage 0.46* (0.16) 0.78 (0.25) Variance components State variance 0.15*** (0.04) 0.03 (0.11) County variance components 0.33*** (0.01) 0.32*** (0.01) Constant 0.36*** (0.03) 0.37*** Number of states 41 41 Number of counties 281 281 Chi2 2099 2126 -log likelihood -20164 -20158				
Minority percentage 0.46* (0.16) (0.25)		High school degree percentage		
Minority percentage (0.16) (0.25)	State level control		, ,	
Variance components State variance 0.15*** (0.04) (0.11) 0.03 (0.11) County variance components 0.33*** (0.01) (0.01) 0.36*** (0.03) Constant 0.36*** (0.03) (0.03) 0.37*** (0.03) Number of states 41 41 Number of counties 281 281 Chi2 2099 2126 -log likelihood -20164 -20158		Minority percentage		
Variance components (0.04) (0.11) County variance components 0.33*** (0.01) (0.01) Constant 0.36*** (0.03) (0.03) Number of states 41 41 Number of counties 281 281 Chi2 2099 2126 -log likelihood -20164 -20158				
Variance components County variance 0.33*** (0.01) 0.32*** (0.01) Constant 0.36*** (0.03) 0.37*** (0.03) Number of states 41 41 Number of counties 281 281 Chi2 2099 2126 -log likelihood -20164 -20158		State variance		
County variance (0.01) (0.01) Constant 0.36*** 0.37*** (0.03) (0.03) Number of states 41 41 Number of counties 281 281 Chi2 2099 2126 -log likelihood -20164 -20158	Variance		· · · ·	` ′
Constant 0.36*** (0.03) 0.37*** (0.03) Number of states 41 41 Number of counties 281 281 Chi2 2099 2126 -log likelihood -20164 -20158		County variance		
Constant (0.03) (0.03) Number of states 41 41 Number of counties 281 281 Chi2 2099 2126 -log likelihood -20164 -20158			` ′	` '
Number of counties 281 281 Chi2 2099 2126 -log likelihood -20164 -20158		Constant	(0.03)	(0.03)
Number of counties 281 281 Chi2 2099 2126 -log likelihood -20164 -20158	Number of states		41	41
Chi2 2099 2126 -log likelihood -20164 -20158				
-log likelihood -20164 -20158				
1		tions (N)	37980	37980

Note: Odds ratios in parentheses, *** p<0.001, ** p<0.01, * p<0.05, + p<0.1

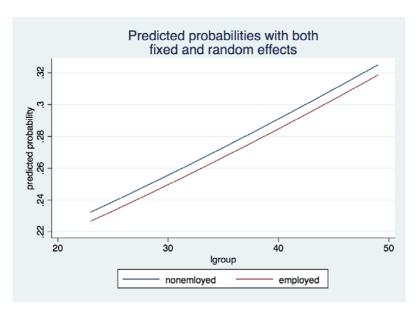


Figure 4.1: Volunteer rates of employed and non-employed with group involvement

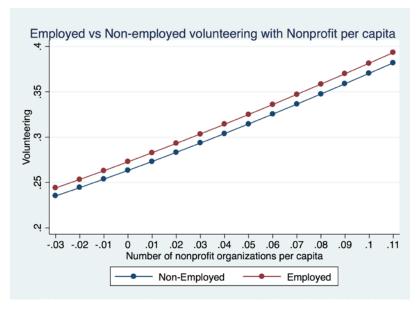


Figure 4.2: Volunteer rates of employed and non-employed with nonprofit per capita

Discussion and Conclusion

The results give important insights into the relationship between state-level factors, county-level factors, and volunteering. The study suggests that employment status is loosely connected with volunteering. These findings do not resonate with the economic propositions for

volunteering (Freeman, 1997). Instead, the findings give limited support to Penner et al (2005)'s proposition that employed individuals volunteer more in the United States, along with other studies, which finds that employed individuals volunteer more (Gil-Lacruz et al., 2016; Glanville et al., 2015; Hackl et al., 2012). At this point, there is a need for more studies exploring exactly why employed individuals have a higher tendency for volunteering.

The results confirm that it really matters which state the person lives in when it comes to volunteering. The chance of volunteering of a person is much higher living in the better-connected community. The findings related to social engagement confirm the previous contributions suggesting individual members of the better-connected communities are more likely to help each other (Putnam, 2000). Considering the strong effect of social involvement on volunteering, it should be the goal of state-level organizations and governments to focus on creating pathways to civic engagement to promote volunteering. Additionally, nonprofit organizations per capita have a significant impact on volunteering. This is a plausible finding since individuals volunteer through the formal organizations and the existence of nonprofit organizations is a vital component of the volunteering activity.

These statistics are confirmatory to those who suggested that more nonprofit presence is correlated with greater volunteering (Rotolo & Wilson, 2014). Greater organizational activity is a sign of serious supply in the area for social involvement. The existence of more active organizations indicates higher volunteering opportunities and availability of more information for the individuals to involve in volunteering activities. This is why areas with greater organizational activity and greater organizational existence produce more volunteers.

Additionally, I found no evidence to suggest that employment status is correlated with the community social capital at the state level. The previous chapters hypothesized and found that

the effect of employment is likely to be less significant when social involvement is taken into account. This indicates the individual economic motivations for volunteering are independent of state-level factors. This is partly plausible since states are very large contexts whose impacts may easily observable among the individuals. More interestingly, nonprofit density in the communities is not directly correlated with employment in predicting volunteering.

What makes multilevel studies so valuable is the extent of focus on the context.

Multilevel studies show that context is an influential factor for volunteering. The context of this study is limited to the United States. The findings may not be very generalizable to the other contexts. It needs to be the endeavor of the future studies to focus on employment with consideration to the macro level factors.

CHAPTER 5

CONCLUSION

This dissertation highlighted that greater organizational engagement in communities; states or even interpersonal interactions may help the proliferation of volunteering. It highlighted the controversy among the supply and demand of the volunteer population. In spite of increasing number of demand for volunteers, fewer people are willing to volunteer. This dissertation's findings regarding civic engagement is a very critical diagnosis for the increasing problem associated with lack of volunteering interest. Every year an increasing number of nonprofit organizations are being founded in the U.S. and demand for the volunteer workforce increases. The number of nonprofit organizations increased steadily between the years of 2003 and 2008, but 2008 financial crisis slowed down the growth. The growth of the sector remained same in the rest of the years. Regardless, between the years of 2003 and 2013, 155 thousand new charities were added to the U.S. market. This corresponded to 20% increase in the charity size (McKeever, 2015). However, organizations could not solicit more individuals for volunteering. As discussed in the introduction of this dissertation, volunteering consistently decreased over the past decade. While 28.8% of the Americans volunteered in 2005, online 24.9% volunteered in 2015. This corresponded to 14% decrease in the volunteering rates.

As suggested by Putnam, there has been a temporary resurrection of volunteering after 9/11 especially among the young population (Sander & Putnam, 2010). However, this trend turned negative in the least 5 years. Overall, the volunteering rates are the 10-year lowest points in the U.S. Although some authors suggested volunteering trends are not all the same in different countries (D. H. Smith, Stebbins, & Grotz, 2016), current research shows volunteering is decreasing in the United States.

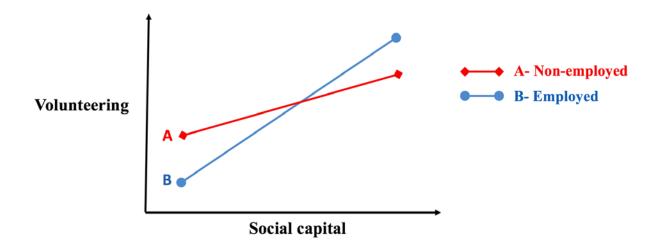


Figure 5.1: Conceptual model.

The United States cannot afford to lose volunteers. Most important, having fewer volunteers on the ground hurts the basic foundational values of America such as democracy and independence. The inability to solve societal problems invite more government involvement to the daily businesses of the individuals. Government involvement almost always comes with coercion, restrictions, and rules. Greater government involvement is not favorable in the United States. To protect the full individual independence, the democratic values need to be sustained. Individuals need to share a greater concern to help those in need. Fathering around the common cause and being actively involved in communal activities is critical for volunteering.

This dissertation also recognized the previous efforts to understand volunteering including the economic models (Freeman, 1997; Hackl et al., 2007). Economic models assume individuals are rational actors who assess the benefits and costs of their actions. They act only when it brings benefits that exceed costs of the actions. The rational actor model is applied in the volunteer setting. Scholars suggested that those with greater financial resources or limited time have higher costs of volunteering, thus they are less willing to volunteer (Hackl et al., 2007; Rotolo & Wilson, 2007). This dissertation suggested that people might be more self-motivated

than being non-employed when deciding to participate in non-volunteering activities since they have only limited time for volunteering and employed people might be motivated to invest their time in more profitable ventures, such as an extra hour of work. Along with the economic literature of volunteering, this dissertation also hypothesized as non-employed individuals are more likely to volunteer, greater unemployment in the communities indicate higher volunteer rates.

At the same time, this dissertation attempted to garner the propositions of social engagement and economic theory under a single theory. The theory suggested motivations toward volunteering are not dichotomous, such as being self-motivated or not being self-motivated. Self-motivation is rather a continuous measure indicating that individuals have a degree of self-motivation and a degree of community-interest. Individuals, more or less, can be both self-oriented and community minded. Moreover, the new conceptualization of the self-motivation suggested that individual motives may significantly change based on the outside factors, such as social engagement in the case of this dissertation. One becomes more or less self-oriented to the degree the person is engaged with others.

This dissertation highlights that the proposition individual concerns for volunteering are less likely to appear, as people get more connected with others. More engaged individuals are more willing to contribute to the overall well-being of the society although the actions may have any direct effect on the person (Lee & Brudney, 2009). Rather, the individuals may benefit from the collective action by becoming a part of a better society as a result of the collective volunteering efforts. In absence of social relations, self-oriented motives for volunteering were expected to be the highest. Thus, suggesting the hypothesis that, in situations where individuals

or communities lack social connections, self-oriented motives for volunteering are likely to predict volunteer outcomes.

Economic behavior was mainly measured by employment variables. Employment measure for the individuals was chosen as for whether being employed or not. At the community level, the employment measure is the unemployment rate. Employment variables are chosen as the measure of economic behavior since it reflects the economic propositions that are consistently used in the literature as an indicator of economic condition (Collins & Long, 2015; Rotolo & Wilson, 2007). The existence of the social structures was mainly measured by the individual and aggregated measures of social trust and organizational participation. While social trust reflects the interpersonal perception of social mechanisms, organizational participation is used as aggregate measures for the existence of active organizations in the given context such as cities or the states. To operationalize the idea of rational actor behavior in connection with the social engagement, the employment and social capital variables interacted in the empirical chapters.

Each chapter uses a different dataset from the same context. Use of different data sets was especially important to test the reliability of the results. Each used similar hypotheses while the main difference was the level of analysis. If the results associated with a given hypothesis are consistent in each chapter, the results were concluded to be strong and independent of the level of analysis. However, differences were approached to cautiously when interpreting the results. Other than the chapter differences, the data share the same context of the United States. The selection of the similar context controls for the contextual differences based on country. State or city level variances were controlled in the corresponding chapters.

Results and Implications

This dissertation tested this main thesis in different chapters, specifically in chapter two, three and four. The chapters primarily differed from each other based on their level of analysis. The second chapter of the dissertation was concerned about the individual level of analysis, while the third chapter focused on communities. The fourth chapter analyzed the influences of state-level social engagement on volunteering. The propositions of economic theory and social capital theory remained to be the same across these chapters. Being unemployed or the higher unemployment rate is hypothesized to be positively associated with volunteering. Greater social engagement in the form of active participation in the organizations or greater social trust is expected to positively influence volunteering. The given hypotheses were entered into the models with appropriate recoding and selection of good statistical analysis. Original questions of each variable and recoding methodology were summarized in the tables in each given chapter. Chapter 2 used logistic regression analysis, while chapter 3 had general linear models. Chapter 4 used hierarchical logistic regression models.

Table 5.1: Summary of Hypotheses

Main Variables	Level of Analysis						
Main variables	Chapter 2 Chapter 3		Chapter 4				
Employment	Not supported	Supported	Supported				
Social interaction	Supported	Supported	Supported				
Social capital * Employment	Supported	Supported	Not supported				

In general, there is a strong support for the hypotheses with few surprising results. As for the hypotheses related to social capital, the propositions consistently confirmed throughout the dissertation. The results show enough evidence to conclude that social capital increases

volunteering regardless of the level of analysis. Individuals with greater trust to others are contributing to volunteering efforts more, while communities with better community ties produce more volunteers. Additionally, individuals living in more engaged states have better chances of volunteering than their counterparts living in less engaged states.

The findings related to social capital confirm the previous literature (Brown & Ferris, 2007; Dury et al., 2015; Einolf, 2008, 2011; Ertas, 2014; Forbes & Zampelli, 2014; Glanville et al., 2015; Taniguchi, 2006; Wilson & Musick, 1997). The results show that organizations play a critical role in volunteer provision. Especially those who volunteer for different types of organizations or those participating in the organizations more often are better candidates for recruitment. Volunteer recruiters need to start their search for volunteers in the organizations. Volunteer recruiters need to direct the volunteering potential of the organizations into the volunteering behavior. The results also suggest that volunteer recruiters need to understand the context the organization operates. If the organization's city or the state has already low levels of social connections, the organization is in a very disadvantageous position compared to more engaged places. In these cases, it is not the single organization's mission to augment social engagement. Organizations will need to collaborate with each other to enhance volunteering potential in the area. Individuals participate and volunteer for different organizations. A successful engagement in one organization may mean future volunteer for the other organization and vice versa. Ultimately, the engaged citizenry works for the betterment of the society with members helping each other.

As for the employment measure, the results are significant yet lacks consistency across the studies. At the individual level, being employed is found to be positively associated with volunteering, antithetical to the hypothesis. When individual employment is framed under state-

level contextual measures, individual employment is found to be negatively associated with volunteering confirming the hypothesis. Also, higher unemployment rates in the communities increase volunteering.

These findings suggest that the relationship the influence of employment depends on the setting. As far as the interpersonal relationships are considered, employed people are found to be more willing to contribute. The finding that employed people is more correlated with some of the previous findings (Nesbit, 2012; Nesbit & Reingold, 2011). This may suggest that employed individuals are more responsive to the personal requests of volunteering. Employed people may also be subject to more requests to start with since they possess connections through their job environments. Employed people may be more helpful to the organizations by bringing their work experience to the organizations (Lee & Brudney, 2015; Wilson & Musick, 1997). This suggests that volunteer recruiters need to make personal requests to the employed instead of trying to recruit them with indirect methods such as, for example, distributing flyers. However, as individuals are described to be embedded in a greater social context, t such as states, nonemployed individuals may be expected to contribute more. Higher unemployment means more people without the time constraint are available to participate and the results confirm this. However, as discussed in the corresponding chapter, volunteer recruiters need to develop their strategies regarding employment very carefully. The unemployment rate is largely independent of the organizations and unemployment trends change all the time. A long-term strategy based on unemployment rates is not a viable option. However, higher unemployment creates opportunities for the volunteer recruiters to reach out people who previously did not volunteer. Volunteer recruiters may have to spend less time trying to convince future volunteers. Convincing different people for the volunteering roles is important since previous volunteers are

most likely be future volunteers or at least they will most likely persuade their household members to volunteer in the future (Nesbit, 2013).

As the hypothesis regarding the interaction of social capital and employment suggested, influences of employment are likely to disappear at the higher levels of social capital. This suggests that the difference between employed and non-employed individuals becomes irrelevant when people are highly connected with each other. However, there are persistent differences in lower levels of social capital. Implications based on the employment results can be generalized to the individuals with lower social capital, however, not for the highly connected individuals or the communities.

These results confirm the theory that people become less self-oriented when they successfully engage with others, especially via organizations. Higher socialization helps individuals to get more oriented to others' needs and make them more willing to contribute. Excuses based on one-time constraint or opportunity cost become minuscule to affect one's decision to volunteer. Willingness to be part of a larger society rather living in one's own world becomes more appealing. These results show a clear strategic path for organizations. The organizations need to invest in community engagement activities in every opportunity. They need to create reasons for individuals to get involved with the organizations. Opportunities for participation can range from social events to some sort of celebration in the organization. The key is to make as many people as possible become part of the events. The engaged individuals are less likely to turn down the future volunteering requests since they already feel engaged with organizations or show fewer excuses based on a time constraint.

This dissertation encourages volunteer managers to be aware of two major points. First of all, this dissertation showed that context matters when it comes to volunteering. Contextual

factors are largely represented as social structures controlling for the other contextual variables. Practitioners need to be aware that contextual factors are independent of individuals or event organizations to the most extent. The proliferation of volunteering needs a collaborative effort than one of an individual person or a single organization. Strategies adopted based on community development are contextually reliable options for the organizations. Governments may take their fair share in supporting volunteering efforts. Increased government spending is associated with greater volunteering rates supporting the crowding in the hypothesis. This confirms the previous findings (Day & Devlin, 1996; Salamon & Sokolowski, 2003). This may indicate that communities with better infrastructure produce more volunteers (Basl & Spera, 2013). However, the proliferation of a volunteer community cannot be the sole responsibility of governments. Reserving and enriching indicate the volunteer workforce to be a community responsibility that involves residents, organizations, and government.

The second advice to the volunteer managers is that volunteering potential for each community or state or even an individual differs from each other. For example, volunteers might be responsible in a community with low volunteering potential and might be struggling with finding future volunteers. However, the neighboring community might be enjoying the vast amount of volunteer reserves. This suggests that the degree of importance given to the social engagement will depend on each community or person. Volunteer strategies are likely to be unique to each community since the importance of volunteer recruitment depends on where the organization is located.

Contributions

There are several contributions of this dissertation. First of all, the dissertation

contributed to the literature by contributing a more coherent theory of volunteering. I adapted the well-established idea that economic actions may be embedded in social structures (Granovetter, 1985). Previous research largely avoided or incorrectly applied this idea. For example, Lee and Brudney (2009) used social embeddedness concept only with the social capital measures while not including any economic variable. This dissertation showed that a socioeconomic approach to volunteering provides a better explanation of volunteering and needs to be used in the future studies.

Second, this dissertation expands the current literature by applying newer methods. Most of the volunteering studies were limited to logistic or multivariate regression models and largely ignores the contextual variables. This dissertation used the traditional methods such as logistic regression consistent with the research question. Additionally, this dissertation applied newer methods such as general linear modeling and hierarchical logistic modeling, which were not commonly employed in the volunteering studies. This dissertation is part of the growing effort to understand volunteering with contextual mechanisms (Glanville et al., 2015; Rotolo & Wilson, 2012, 2014; Ruiter & De Graaf, 2006; Voicu & Voicu, 2009). Surprisingly, none of these studies used social capital theory especially at the state level in the context of volunteering. This was surprising considering there is a considerable theoretical discussion on the topic (Putnam, 2000). Also, as few studies were interested in community-level analysis, almost none included volunteering as a community level outcome. This dissertation also attempted to fill this gap.

Limitations

This dissertation attempted to test the impact of explanatory variables with the most robust methods possible. The results of this dissertation are quite informative for both

practitioners and researchers. However, they are still not without their limitations. First of all, this dissertation highlighted that context matters for volunteering. However, this dissertation's very own context is also limited. The information about volunteering mainly came from the U.S. population throughout the dissertation. Although the results are robust, the results may not be generalized to other populations. The identification of communities or states might be different in other regions of the world. The propositions regarding employment and social capital need to be replicated with other samples as well. The reliability of the theories can only be tested if the propositions are replicated in other contexts.

The second limitation of the dissertation is more about sample selection in one of the chapters. At the community level study, the sample is limited with selected to the U.S. cities. This sample is both non-random and small. The sample of the cities was limited to those that requested National Citizen Survey to be conducted in their cities. Since only a small number of cities requested National Citizen Survey to be conducted in their cities, the available sample was very small. Still, the surveys were not available from the survey organization. I had to collect each survey visiting the city websites. However, not all the cities made the survey available. All the cities were sent individual emails to share the surveys. The additional information was added to the data with the total number of cities still limited to 69. Another challenge with this sample was that the surveys did not always include the same questions. Especially questions regarding volunteering and club participation were missing in some cities. After excluding the cities with the missing information, the final sample was reduced to 62 U.S. cities. The 62 cities may not be well representative of other U.S. cities. Future studies need to replicate the hypotheses with a larger and more representative sample of U.S. cities. Until then, one needs to approach to the results associated with this section with caution.

Another possible limitation is that this dissertation also primarily focuses on employment as the measure of the economic theory. However, the employment variable alone may not well represent the theory. Other well-known indicators include income (Freeman, 1997). One of the findings suggests that being employed might be positively associated with volunteering, employment may not be the best all-encompassing measure of economic theory. One of the purposes of this dissertation was to resolve conflicts related to employment in the literature. However, some of the findings conflicted with each other. This dissertation primarily used the measure of income or income related factors as control variables. It is not clear whether the relationship between income and volunteering might be dependent on social engagement. The future studies may examine how the measures of income influence volunteering in connection with social capital measures. Additionally, it is important for future studies to include employment variables in their models. More replication is likely to reveal more reliable results.

High volunteer rates are indicators of a healthy society, and one needs to be seriously concerned about its decreasing rates. Volunteering is a part of prosocial behaviors that make our society a better place to live. America cannot simply afford to lose its volunteers. Giving and helping received relatively less attention. Future studies need to expand the study of prosocial behavior within the socioeconomic framework to other behaviors such as giving and helping. It is unknown whether the theory presented in this dissertation can explain giving and helping. Individuals may help others with motivations similar to volunteering. Individual concerns for helping may also disappear once individual connections to the society get stronger. Similarly, for giving, people might be attracted to giving more once they are better engaged with others.

APPENDIX SUPPLEMENTAL INFORMATION

Table A.1: Chapter 2 Measurements

Variable 1	Description	Source	Source Variable	Transformation Notes
Dependent variable	Volunteer likelihood	2006 SCCBS	"How many times in the past twelve months have you volunteered?" Additionally, the question added when necessary "By volunteering, I mean any unpaid work you've done to help people besides your family and friends or people you work with." Response:0-53 times	 Volunteering=0 if volunteering frequency =0, Volunteering=1 if volunteering frequency=>1
Independent variables	Social trust	2006 SCCBS	"Next, we'd like to know how much you trust different groups of people. First, think about (GROUP). Generally speaking, would you say that you can trust them a lot, some, only a little, or not at all?" People in your neighborhood People you work with People at your church or place of worship People who work in the stores where you shop The police in your local community	Index of social trust with the averages of the responses.

Variable	Description	Source	Source Variable	Transformation Notes
	Employment status	2006 SCCBS	"We'd like to know if you are working now, temporarily laid off, or if you are unemployed, retired, permanently disabled, a homemaker, a student, or what?"	 Employed = 1 if response if working now. Employment = 0 for other working now status.
Control variables	Age	2006 SCCBS	What year were you born?	
	Female	2006 SCCBS	Interviewer records the gender. (If necessary, the interviewer says: I am recording that you are a male/female.)	Age is calculated by the interviewer/data collector
	Household income	2006 SCCBS	If you added together the yearly incomes, before taxes, of all the members of your household for last year, 2005, would the total be: • Less than \$20,000 • Over \$20,000 but less than \$30,000 • \$30,000 but less than \$50,000 • \$50,000 but less than \$75,000 • \$75,000 but less than \$100,000 • \$100,000 or more	 Income = 15000 if income is reported as Less than \$20.000 Income = 25000 if income is reported as "over \$20,000 but less than \$30,000" Income = 40000 if income is reported as "\$30,000 but less than \$50,000" Income = 82500 if income is reported as "\$75,000 but less than \$100,000" Income=115000 if income is reported as "\$75,000 but less than \$100,000"

Variable Description	Source	Source Variable	Transformation Notes
Education	2006 SCCBS	What is the highest grade of school or year of college you have completed? • Less than high school (Grade 11 or less) • High school diploma (including GED) • Some college • Assoc. degree (2 years) or specialized technical training • Bachelor's degree • Some graduate training • Graduate or professional degree	Education = 1 if Less than high school 2 if High school diploma 3 if Some college 4 if Assoc. degree 5 if Bachelor's degree 6 if Some graduate training 7 if Graduate or professional degree
Married	2006 SCCBS	Are you currently married, separated, divorced, widowed, or have you never married?	Married=1 if married and 0 if otherwise
Own home	2006 SCCBS	Do you or your family own the place where you are living now, or do you rent?	Own home=1 if the person owns the place and 0 if rent
Minority	2006 SCCBS	Do you consider yourself to be White, Black or African American, Asian or Pacific Islander, Native American, or some other race?	 Minority = 1 if the answer is White, Minority = 0 if the answer is Other
Rural Number of	2006 SCCBS 2006	Urban, Suburban, Rural How many children,	Coded by the data collector No transformation
children under 18	SCCBS	aged 17 or younger, live in your household?	110 transformation

Table A.2: Chapter 3 Measurement

Variable I	Description	Source	Source Variable	Transformation Notes
Dependent variable	Percentage of the city population volunteered in the past year	National Citizen Survey	"In the last 12 months, about how many times, if at all, have you or other household members done each of the following" -Volunteered your time to some group/activity	Volunteering = (1-Not at all)*100 The calculated percentage of the people who have volunteered "2 times a week or more" "2-4 times a month" or "one a month or less."
Independent variables	Percentage of the city population participated in a club in the past year	National Citizen Survey	"In the last 12 months, about how many times, if at all, have you or other household members done each of the following" -Participated in a club	Club participation = (1-Not at all)*100; The calculated percentage of the people who have participated in a club "2 times a week or more" "2-4 times a month" or "one a month or less."
	Percentage of the city population who were unemployed at the time of survey	National Citizen Survey	 What is your employment status? Working full time for pay Working part-time for pay Unemployed, looking for paid work Unemployed, not looking for paid work Fully retired 	Unemployment = (Unemployed, looking for paid work + Unemployed, not looking for paid work)*100 The percentage of the people who are unemployed and looking for paid work and those not looking for a paid work.
Control variables	City expenditure per person living in the city	Census Bureau, City Budget	City expenditure per person	Per capita = City expenditure/Population
	Log of city population Median of the household income in the given city	Census Bureau Census Bureau	Population estimates Median household income (in dollars)	Population = Log (population estimate) Household income = Median household income/1000

Variable Description	Source	Source Variable	Transformation Notes
Percentage of city population who holds high school degree	Census Bureau	High school graduate or higher, percent of persons age 25 years+	No recoding
Percentage of city population who is not in the White category	Census Bureau	White, percent	Minority, percent = 1- White, percent
The city is in the northeast region of the U.S.	Census Bureau	Region	1 = North east, 0 = other (South as reference category)
The city is in the south-east region of the U.S.	Census Bureau	Region	1 = South east, 0 = other (South as reference category)
The city is in the west region of the U.S.	Census Bureau	Region	1 = West, 0 = other (South as reference category)

Table A.3: Chapter 4 Measurement

Variable l	Description	Source	Measurement	Transformation Notes
Dependent variable	Volunteer likelihood	2010 CPS Volunteer Supplement	"Since September 1st of last year, have you done any volunteer activities through or for an organization?" "Sometimes individuals don't think of activities they do infrequently or activities they do for children's schools or youth organizations as volunteer activities. Since September 1st of last year, have you done any of these types of volunteer activities?"	Volunteer=1 if the person answered "yes" to any of the questions, Volunteered=0 if the person never volunteered.
Independent variable	Community group involvement	2010 CPS Civic Engagement Supplement	Next, I will give you some groups or organizations in which individuals sometimes participate. Have you participated in any of these groups during the last 12 months (a) A school group, neighborhood, or community association such as PTA or neighborhood watch groups? (b) A service or civic organization such as American Legion or Lions Club? (c) A sports or recreation organization such as a soccer or tennis club? (d) A church, synagogue, mosque or other religious institutions or organizations, not	Group is first calculated as the number of the different groups each person is the member of. Then the group variable is aggregated at the state level.

			counting your attendance at religious services? (e) Any other type of organization that I have not mentioned?	
	Employment status	2010 CPS Volunteer Supplement	Monthly labor force recode Employed-at work Employed-absent Unemployed-on layoff Unemployed-looking Not in labor forceretired Not in labor forcedisabled Not in labor force-other	Employed = 1 if reported as employed at work, 0 otherwise reported.
Control variable	Gender	2010 CPS Volunteer Supplement	Reported by the data collector	Male = 1 if reported male, 0 if reported female
	Age	2010 CPS Volunteer Supplement	Person age as of the end of survey week "Age classification is based on the age of the person at his/her last birthday."	No transformation
	White	2010 CPS Volunteer Supplement	Race	White = 1 if recorded as White and 0 for any other race
	Highest degree completed	2010 CPS Volunteer Supplement	What is the highest level of school has completed or the highest degree has received? -less than 1st grade -1st, 2nd, 3rd or 4th grade -5th or 6th grade -7th or 8th grade -9th grade -10th grade -11th grade	Highschool= -high school grad- diploma or equiv somecollege= some college but no degree, associate degree, occupational/voca - associate degree academic program College=bachelor's degree (ex: ba, ab, bs)

		-12th grade no diploma -high school grad- diploma or equiv -some college but no degree -associate degree- occupational/voca -associate degree- academic program -bachelor's degree (ex: ba, ab, bs) -master's degree (ex: ma, ms, meng) -professional school deg (ex: MD, dd) -doctorate degree (ex: Ph.D., edd)	Graduate=master's degree (ex: ma, ms, meng), professional school deg (ex: md, dd), doctorate degree (ex: phd, edd) Reference category =lower than high school degree.
Household income	2010 CPS Volunteer Supplement	The combined income of all family members during the last 12 months. includes money from jobs, net income from business, farm or rent, pensions, dividends, interest, social security payments and any other money income received by family members who are 15 years of age or older -less than \$5,000 -5,000 to 7,499 -7,500 to 9,999 -10,000 to 12,499 -12,500 to 14,999 -15,000 to 19,999 -20,000 to 24,999 -25,000 to 29,999 -30,000 to 34,999 -35,000 to 39,999 -40,000 to 49,999 -50,000 to 59,999	Income recoded as 2500=less than \$5,000 6250=5,000 to 7,499 8750=7,500 to 9,999 11125=10,000 to 12,499 13375=12,500 to 14,999 17750=15,000 to 19,999 20250=20,000 to 24,999 27250=25,000 to 29,999 32250=30,000 to 34,999 37750=35,000 to 39,999 42250=40,000 to 49,999 55000=50,000 to 59,999 67750=60,000 to 74,999 87750=75,000 to 99,999 12500=100,000 to

Martial status	2010 CPS Volunteer Supplement	-60,000 to 74,999 -75,000 to 99,999 -100,000 to 149,999 -150,000 or more Marital status -married - spouse present -married - spouse absent -widowed -divorced -separated -never married	149,999 200000=150,000 or more Married=1 if the response is married either spouse absent or present Married=0 if otherwise
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