Social Capital and Well-being in the Transitional Setting of Ukraine

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MOIM RODITEL'YAM
To my parents

«Дружба та братство – найбільше багатство»
Friendship and fraternity are the greatest wealth

Ukrainian proverb
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## Introduction

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Abstract

Background: The military conflict in Ukraine that started in 2014 was accompanied with many changes in the political, economic and social spheres. It brought informal volunteering activities (i.e. one form of social capital) to emerge, function and later to be formalized, in order to support soldiers and their families. This situation is unique given the transitional setting of Ukraine, which has led to comparably low levels of social capital and negative indicators of health and well-being. This thesis aims to explore social capital during military conflict in contemporary Ukraine and to analyze the associations between social capital and well-being, as well as the distribution of social capital among Ukrainian women and men.

Methods: The study combines a qualitative and quantitative research design. A case study was conducted using qualitative methodology. Eighteen in-depth interviews were collected with providers and utilizers of volunteering services. Grounded Theory and social action ideal types methodology of Weber were used for the analysis. The quantitative research utilized two secondary datasets. The World Health Survey was utilized to analyze the association between social capital and physical and mental well-being for women (n=1723) and men (n=910) by means of multivariate logistic regression. The European Social Survey (wave 6) was used in order to investigate access to social capital and the determinants of gender inequalities in the access with a sample of 1377 women and 797 men. Multivariate logistic regression and post-regression Fairlie’s decomposition analysis were used to analyze the determinants of the inequalities.

Results: The key findings of this thesis show that social capital transforms during military conflict and takes particular forms in transitional settings. There are positive and negative effects on well-being connected to crisis-related volunteering. The associations between social capital and well-being vary for women and men in favour of women. Social capital is unequally distributed between different social groups. Some forms of social capital may have stronger buffering effect on women than men in Ukraine. Access to social capital can be viewed as an indicator for social well-being, and thus social capital can be used both as a determinant and an outcome in social capital and health research.
**Conclusion:** Informal social participation, i.e. volunteering might play an important role in societal crises and needs to be considered in social capital measurements and interventions. Social capital measurements utilized in stable societies do not evidently capture these forms, i.e. it is not taken into account. The associations between social capital and well-being depend on the measurements that are used. Since social capital has both positive and negative effects on well-being, this should be considered in research, policies and practices in order to prevent negative and promote positive outcomes. In Ukraine, as well as in other settings, social capital is an unequal resource for different societal groups. Reducing gender and income inequalities would probably influence the distribution of social capital within the society.

**Keywords:** social capital, social support, volunteering, transformation, crisis, military conflict, transitional, well-being, health, inequality, Ukraine
Sammanfattning på svenska

Bakgrund: Den militära konflikten i Ukraina som startade 2014 fick många politiska, ekonomiska och sociala konsekvenser. Konflikt situationen triggade bland annat framväxten av omfattande informella volontärverksamheter (en form av social kapital) som senare formaliserades, för att stödja soldater och deras familjer. Denna situation är relativt unik, med tanke på Ukrainas postsovjetiska historia med jämförelsevis låga nivåer av socialt kapital och negativa indikatorer för hälsa och välbefinnande. Denna avhandling syftar att undersöka betydelsen av socialt kapital under pågående militär konflikt i Ukraina, samt att analysera sambandet mellan social kapital och välbefinnande, såväl som fördelningen av social kapital mellan kvinnor och män i Ukraina.


Resultat: Resultaten i denna avhandling visar att social kapital transformeras under pågående militär konflikt och antar särskilda former i övergångssamhällen som Ukraina. Det finns både positiva och negativa effekter på välbefinnande relaterat till volontärarbetet under pågående samhällsskriss. Sambanden mellan socialt kapital och välbefinnande varierar för kvinnor och män till förmån för kvinnor. Vissa former av social kapital kan ha en starkare skyddande effekt för kvinnor än män i Ukraina. Resultaten visar också att socialt kapital fördelas ojämnt mellan män och kvinnor. Tillgången till socialt kapital kan betraktas som en indikator för socialt välbefinnande och socialt kapital kan därmed användas både som determinant och ett utfall i studier om socialt kapital, hälsa och välbefinnande.
Slutsats: Informellt socialt deltagande, dvs volontärarbete, kan spela en viktig roll i samhällskriser och behöver beaktas i såväl mätningar som interventioner av socialt kapital. Mätningar av socialt kapital i ”stabila” samhällen fångar nödvändigtvis inte dessa former av socialt kapital. Sambandet mellan social kapital och välbefinnande beror till stor del på vilka mått för socialt kapital som används. Eftersom socialt kapital har både positiva och negativa effekter på välbefinnande bör det tas i beaktande i forskning, policy och praxis för att kunna förhindra negativa effekter och främja de positiva effekterna. I Ukraina, liksom i andra samhällen, är socialt kapital en ojämnn resurs för olika samhällsgrupper. Att minska klyftor mellan könen och inkomstgrupper skulle troligen påverka fördelningen av socialt kapital i samhället.

Nyckelord: socialt kapital, socialt stöd, volontärarbete, omvandling, kris, militär konflikt, övergångssamhälle, Ukraina, välbefinnande, hälsa, ojämlikhet
Original Papers

The thesis is based on the following papers, referred to as studies 1-4:


Abbreviations

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<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>CI</td>
<td>Confidence interval</td>
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<tr>
<td>CSDH</td>
<td>Comission on Social Determinants of Health</td>
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<td>ESS</td>
<td>European Social Survey</td>
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<td>LMIC</td>
<td>Low and Middle-Income Countries</td>
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<tr>
<td>OR</td>
<td>Odds ratio</td>
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<td>PhD</td>
<td>Doctor of Philosophy</td>
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<td>SDG</td>
<td>Sustainable Development Goals</td>
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<td>SDH</td>
<td>Social Determinants of Health</td>
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<td>UNDP</td>
<td>United Nations Development Programme</td>
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<td>USSR</td>
<td>Union of Soviet Socialist Republics</td>
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<td>WHO</td>
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<td>WHS</td>
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Preface

The history of Ukraine, as an independent country, is shorter than my life span, so I had a chance to observe it since childhood. Being a child, I already knew what happens when the country collapses suddenly, and how difficult it is to get a new national identity when the old one is not valid anymore. Some people have not even thought about how others might feel when they experience the change of their flag, the anthem, the laws and even the language of education while being a student, without moving to another country. I did, as all the other Ukrainians, and thought it was the last time it would happen in my country.

While being in Kyiv for my studies in 2004, I became a witness of something extraordinary happening in my country. I had my childhood memories of demonstrations that took place during the times of the Soviet Union, but this one was different! All the streets were covered with orange colours, people, having either orange stripes or an orange piece of clothing, stuck together in smaller or larger groups, moved in the same direction. This is how the day after the elections in 2004 started. In the evening, we found out that the massive protest had started at the central square of the country, the protest that later got the name of the Orange Revolution. If I were not present during this event, I would have probably believed, as many others, that this was just a “political technology”; that the election had worked out in a perfect way, and that people were just influenced and paid for, as it was later stated in the press. However, I saw, for the first time in my life, the power of people united by one (non-communist) idea, even if being unfamiliar to each other. People in unity, managed to change the results of the elections peacefully. After years of past totalitarian regime, it seemed almost impossible! I was privileged to witness how kind people in general were in the public transport, and how helpful people were towards those not local but attending the event just to support their voting rights. I also saw how easily people trusted strangers and allowed them to stay at their houses without knowing them before. This fascinated me, because I already knew how difficult it was to find a place to stay in the capital and how intolerant native Kyivans could be towards outsiders (those who were not native there)!

A few years later, while studying social psychology, I found out interesting things about the power of “mass”, but still could not get all the answers to the questions that had intrigued me. Only later, when I started my Master of Public Health studies in Sweden, I got acquainted with the concept of social
capital and finally, could understand the processes that my eye’s witnessed during the time of the Orange Revolution. Social capital included everything: voting, or to be more precise, corrupted election results that started the “revolution”, political aspects that were inseparable out of the whole event, social participation, volunteering, reciprocity and help, social networks that spread the information so quickly, generalized trust that suddenly became visible, and linking support of some political parties etc. For me, it was not so important how it had started, but the outcomes of these processes interested me a lot. Within my field of studies, public health, I also found out that social capital is related to health as well, being one of the social determinants of health.

Nine years after the Orange Revolution, when I had already started my PhD journey about social capital and health, similar things started to happen in my country again. This protest started in 2013 and happened because of different reasons. In the very beginning, it was just a massive human protest that was ignored by authorities. It started at the same place as before – the central square of the capital. Later, special forces were involved, and this time it ended up tragically. In February 2014 protesters were shot by the snipers and neither the government nor the police stopped them. People were shot at the central square of the capital of the country and different media channels reported about it. Moreover, it was not one, two or three persons! It was more than a hundred! It became clear to people that political leaders could not ensure even physical safety in the “heart” of the country. Later, the situation escalated even more, and resulted in annexation of one part of the country and a military conflict that still takes place in the Eastern part of the country. This tragic situation, with ten thousand deaths, at least twenty-three thousand injured and more than a million of displaced, has of course affected the well-being of people in Ukraine. Since 2014 Ukraine has had six waves of mobilization to the military forces. But, in the wake of these dramatic events, and despite low trust in authorities and politicians, people again rose to help out and support each other, not least by extended voluntary services to the soldiers and their families that were initiated throughout the country. Thus, even if being negatively affected by the situation in my country myself, I got a chance to “catch the moment” and study the formation and effects of social capital in action. As a result, this thesis is about social capital and well-being in the transitional setting of Ukraine.
Introduction

**Social capital and its role in public health**

The World Health Organization (WHO) states that the fundamental causes of health and illness have strong social and environmental components. This implies that health is determined by the living conditions in which we are born, grow, work, and age, including social networks and the political context. (WHO, CSDH, 2010; Marmot et al., 2008; Marmot, 2005). Social capital has received a lot of attention in health research during the last decades, as one potential important social determinant of health (Kawachi & Subramanian, 2017; Moore & Kawachi, 2017).

As such, social capital has been a key concept in social epidemiology for almost 20 years (Moore & Kawachi, 2017; Kawachi et al., 2013). Still, there is no unite definition of social capital and prominent scientists like James Coleman, Pierre Bourdieu, Glenn Loury, Alejandro Portes, and Robert Putnam have their own definitions (Moore & Kawachi, 2017). Social capital is believed to impact individuals’ health in different ways by influencing psychosocial processes and reducing stress, affecting access to health services and facilities, and by influencing health-related behaviours and choices (Harpham et al., 2002; Ferlander, 2007; Putnam, 2000). Social capital theory tries to explain qualitative and quantitative characteristics of social interactions by means of trust, networks and social participation. Despite previous debates whether social capital is a property of groups/individuals or/and communities/places most scholars today agree that social capital has both collective and individual features (Eriksson et al., 2010; Kawachi et al., 2008). A collective approach to social capital sees social capital as something characterizing a whole community by levels of social cohesion and trust, and is often referred to as the social cohesion approach. Kawachi and Berkman consider social cohesion as a broader social capital approach (Moore & Kawachi, 2017; Kawachi & Subramanian, 2017). In this thesis, I mainly utilize an individual approach to social capital, sometimes referred to as a social network approach. Thus, I follow an approach, where social capital is viewed
as resources accessible to individuals by involvement in social networks, while also highlighting inequalities in access to social networks and resources (Kawachi et al., 2008; Moore & Kawachi, 2017).

Numerous studies support a positive association between social capital and health, and not least self-rated health (SRH) (Kim et al., 2008; Poortinga, 2006; Lomas, 1998). This has been found in studies from different cultural contexts such as Belgium (Verhaeghe et al., 2012), Canada (Moore et al., 2011), Finland (Hyppä & Mäki, 2001; 2003; Nyqvist et al., 2008), Japan (Iwase et al., 2012; Murayama et al., 2013; Miyamoto et al., 2015), Russia (Rose, 2000), Sweden (Mohseni & Lindström, 2008; Eriksson et al., 2010), Taiwan (Song & Lin, 2009), the UK (Giordano et al., 2012; Verhaeghe & Tampubolon, 2012), and the US (Schultz et al., 2008). However, studies have also indicated that the association between social capital and SRH differs across countries. Poortinga, (2006) used data from the European Social Survey (including 22 countries) and found a positive association between individual social capital and good SRH in countries with high levels of social capital, while the same was not always true in countries with lower levels of social capital. Studies on social capital and health have mainly been conducted in Western societies, while evidence from developing and transitional countries such as Ukraine are largely missing (Story, 2013). In addition, studies on the association between social capital and mental health are still under-researched (Cullen & Whiteford, 2001; De Silva et al., 2005; Almedom & Glandon, 2008; Hadjimina & Furnham, 2017). There is a hypothesis that social capital may protect against mental illness, but there is still no consistent answer to this. The relation between social capital and mental health might vary due to level of analysis (individual or contextual), as well as for different forms of social capital and various mental health outcomes (Harpham et al., 2002; Ferlander, 2007). It is well-known though in existing literature that social support is a protective factor for health, including mental health (Sedivy et al., 2017; Berkman & Glass, 2000; Ferlander, 2007; Murthy & Lakshminarayana, 2006; Summerfield, 2000; Uchino et al., 2012; Lakshminarayana, 2006).
Social capital and volunteering

Prosocial behaviour, civic engagement, social resources and volunteering are used interchangeably quite often, and there is a consensus that they are related to social capital (Wilson & Musick, 1998; Penner, 2004; Wilson, 2000; Weinstein & Ryan, 2010; Janoski et al., 1998). Volunteering can be any kind of unpaid activity that is freely done in order to increase the well-being of others, either a person, group of people or sometimes even an organization, except for family or household members. The most important characteristic is that it should provide benefits to another person and be done out of free will (Penner, 2004; Wilson, 2000). Volunteering activities are sometimes categorized by formality: formal activities imply that they are carried out by people within established entities or organizations, while informal activities are carried out outside or without formal organization (Lee & Brudney, 2012).

Wilson & Musick (1998) state that a high level of civic engagement is related to excess supply of social capital. Wilson also states that social capital has independent and additive effects on volunteering in a way that social capital creates access to resources that further increase chances of involvement into community work. One example can be that people involve their colleagues or friends into volunteering why it becomes quite difficult to not accept the request to engage due to reciprocal norms within the networks. In addition, the information and resources provided by social capital make volunteering easier.

Research confirms a positive association between human capital and volunteering; thus, education (an individual characteristic) is a good predictor for prosocial behaviour (Lee & Brudney, 2012; Wilson, 2000; Wilson & Musick, 1998). One of the explanations might be that people who are rich in human capital have more social skills for accomplishing their tasks, why they are more likely to be asked for engagement, and also more likely to understand a need for volunteering. In addition, education might provide individuals with a higher access to social capital (Wilson, 2000; Wilson & Musick, 1998).
**Structural and cognitive social capital**

Structural and cognitive are perceived as two different forms of social capital. Structural social capital consists of actions that people take within their social networks, while cognitive - reflects the values, feelings and beliefs people have concerning their social network involvement (Harpham et al., 2002; Ferlander, 2007). These different forms have shown different effects on health (Ferlander, 2007). The different forms of structural and cognitive social capital are illustrated in Figure 1 below.

![Diagram of social capital](image)

Figure 1. Different forms of social capital.

Figure 1 represents cognitive (the left column of the Figure) and structural (the right column of the Figure) components of social capital. Generalized trust is sometimes called “thin” trust and defines the belief that people in general are reliable and honest. Most often generalized trust is measured by the question “Generally speaking, would you say that people can be trusted?”
or “Do you need to be careful in dealing with people?” (Harpham et al., 2002). Reciprocity represents the norms that come out of the interaction within a certain network. In simple words, people feel that other members of the network will behave in the same (helpful) way as they do when it is needed.

The next cognitive measure (not very commonly used), is called security or feeling of safety and the glossary of Moore & Kawachi (2017) relates this to “thick trust” within the neighbourhood. Quite often this is measured by the question: “Do you feel safe to walk alone in your neighbourhood after dark?”

The last one is called institutional trust, and reflects vertical trust in the political and powerful institutions that represent the country at a higher level. All four measures are so called cognitive social capital, while the right part of the Figure represents structural social capital. Structural social capital can be divided into bonding, bridging and linking forms, referring to the contexts where social capital operates (Moore & Kawachi, 2017). Bonding refers to relations in networks between people with similar social identity, for example ethnicity, age, education. As a rule, these networks are homogeneous (CSDH, 2010; Ferlander, 2007). Bridging social capital is heterogeneous and includes people from different socio-demographic groups. Linking is a vertical form of relations between agents with different power, which gives access to resources beyond bonding and bridging social networks (Ferlander, 2007; CSDH, 2010). Institutional trust and linking form of social capital represent vertical connections and the arrows indicate the distance.

Both cognitive and structural social capital and their role for well-being in Ukraine were explored in this thesis. All the mentioned (in Figure 1) forms of social capital were touched upon in Studies 1 and 4, structural forms of social capital, and in particular, volunteering activities, were analyzed in Study 2 and cognitive - institutional trust and the feeling of safety, were analyzed in Study 3.
Social capital and gender

“Gender refers to the socially constructed roles, behaviours and attributes that a given society considers appropriate for women and men” (WHO, 2016). The literature about social capital and health is not very involved with gender and the associations show diverse results in different settings (Kaasa & Parts, 2008). Gender differences in access to social capital have been found in employment, age and family (Kaasa & Parts, 2008). One possible explanation is that the birth of a child changes the quality and the access to social networks for the mother, but does not have the same impact on the father’s networks. It is also likely that gender norms can influence the formation of different social networks for men and women. Further, traditional gender relations and the hierarchical position of a man in almost all societies may also influence his social capital (Lin, 2000).

Some studies have found that women are more civically involved, i.e. have higher access to bridging social capital than men, and discuss that this might be due to gendered expectations of women to be more involved in civil society (Eriksson et al., 2010; Eriksson & Ng, 2015; Putnam, 2000). Further, the kind of associations that men and women engage in have been found to differ: Lowndes (2000) found that men tend to be more active in sports and recreation associations, while women tend to be more active in associations related to health and social services. Similarly, Son and Lin (2008) found that civic action was gendered in that women were more likely to be involved in “expressive” and voluntary civic actions than men. Other research has shown lower level of engagement of women in formal networks, while in the informal ones – women are more active (Kaasa & Parts, 2008). There is no consensus regarding gender differences in generalized trust: some research shows that women have higher generalized trust than men, while other research contradicts this statement (Kaasa & Parts, 2008). In addition, there is no clear answer on whether institutional trust is associated with gender.

With regard to gender differences in the health effects of social capital, Kawachi and Berkman, in their review of social ties and mental health (Kawachi & Berkman, 2001), found that the stress-related negative
consequences of social networks involvement may have greater influence on women’s psychological health than the positive effects of support. Silvey and Elmhirst (2003) similarly found that women’s involvement in social networks had protective effects for their families during the time of crisis, but not evidently for themselves, since their social capital was highly affected by gender expectations of caring for other family members. In a study about social capital, health and life satisfaction, based on data from 50 different countries, authors concluded that women might benefit more from social capital with regard to health (Elgar et al., 2011).

In summary, the limited amount of existing research about social capital, gender and health indicates that there are gender differences both in the access to social capital and in its association to health, but these gender differences seem to vary by context. Furthermore, gender is a context bound construct and by itself influenced by the socio-political context and the cultural norms that are dominant in a particular society. Moreover, military conflict plays an important role in the gender construction for those who take part in it directly, as well as those who are affected by it (Bjarnegård et al., Chinkin & Kaldor, 2013; Heinecken, 2015). My thesis might shed some new light on how gender influences access to social capital and its association to well-being in the transitional setting of Ukraine.

**Health or well-being**

In this thesis, I have chosen to focus on the relation between social capital and well-being, rather than using the concept of health. According to the United Nations Development Programme (UNDP), the third Sustainable Development Goal (SDG) is good health and well-being (UNDP, 2015). Further, the WHO defines health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (WHO, Constitution, 1946). Mental health, according to WHO is “a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community” (WHO, 2014). All three
definitions contain well-being; the difference is only whether health includes well-being (WHO definitions) or whether well-being is separated from the concept of health (UNDP definitions). It goes without saying that well-being is a very complex and important concept, but the problem is that it doesn’t have a uniform definition. There are several definitions of well-being, but there is none given by the WHO. Quite often this term is substituted with the term “quality of life.”

In this thesis, I chose to approach well-being as a part of health in line with the definition of WHO. Further, the division of physical, psychological and social well-being is used. Physical well-being in relation to health has less confusion for the understanding and is operationalized by self-rated health in this thesis. Mental well-being is sometimes called psychological well-being in this thesis, and relates to subjective satisfaction in life and its impact on the personal functioning or “self” (Bradburn, 1969). Further, in Study 1, mental well-being was measured and operationalized by depressive symptoms. Social well-being is everything that relates to others, in other words “self and others” and it includes social integration, contribution, coherence, acceptance and actualization (Keyes, 1998). Out of this, I argue that access to social capital could be seen as social well-being. Thus, in this thesis I utilize social capital in both ways: as a social determinant of physical and mental well-being, and as an outcome in itself, i.e. as social well-being. In Study 1 the (trans)formation of social capital can be viewed as an intermediary determinant of well-being (because of the voluntarism), however strongly influenced by structural determinants i.e. socioeconomic and political context. Study 2 has explored the effects of social capital (i.e. volunteering) on well-being. In Study 3 social capital was treated as a determinant for SRH and depressive symptoms, while in Study 4 it was viewed as an outcome in itself. Consequently, following this reasoning, access to social capital (i.e. social well-being) can be seen as a determinant for physical and mental well-being, while evidently not for social well-being.
Social capital and well-being in Ukraine

Ukraine belongs to a transitional setting that, according to Rose et al. (1997) is characterized as a “stressful society” with a constantly decreasing population of 42-44 (there is no precise number) million at present, while in 1991 there were 52 million (Rose et al., 1997).

In 1991 Ukraine became an independent state. The collapse of the communism and the Soviet Union in 1991 brought not only structural changes, but also economic changes with cuts in welfare spending, hyperinflation and economic crisis. These changes increased inequalities, resulting in increased poverty, violent crime and unemployment (Abbott & Wallace, 2006). Just from this, it is clear that economic crisis was also combined with cultural, psychological and social aspects, where uncertainty played a huge role. This has been reflected in the well-being indicators in Ukraine, where male mortality and suicide rate increased rapidly and self-rated health and psychosocial well-being has fallen (Abbott & Wallace, 2007).

In 2004 the European Union enlarged with new members and Ukraine happened to be in the middle of them, but without membership status. Since that time Ukraine has been located in-between two political forces: The European Union and The Russian Federation. The division of the population into these two political fractions became obvious during the Orange Revolution of 2004 and the military conflict in 2013, that resulted in the annexation of Crimea (part of Ukrainian territory was annexed by Russian Federation). This military conflict between Ukrainian forces and separatists’ units, supported by The Russian Federation, is still taking place.

A central issue in social capital theory is the relationship between government institutions and the individual (Rose et al., 1997). One could ask then what kind of trust could be built in the context of Ukraine? Rose (1997) states that “distrust to institutions is a norm” in post-Soviet countries. Research also confirm that transitional countries have lower levels of social capital than western democracies, which at the same time rate better in self-rated health (d’Hombres et al., 2010; Carlson, 2004). All post-communist
countries have a history of totalitarian rule and forced participation in public affairs, and this has created distrust in public institutions and a retreat from the public sphere into the private (Ziersch, 2005). Further, Pitchler and Wallace compared the patterns of social capital in Europe and concluded that Scandinavian countries had the highest levels of both formal social capital (trust) and informal social capital (social networks and social and family support), while in Eastern Europe informal social capital was more prominent over formal social capital (Pitchler & Wallace, 2007).

The level of social capital may fluctuate over time due to societal changes. Tremendous changes in societal structure like two massive civic protests within less than 10 years, military conflict in the territory in addition to transitional changes in 1991 - has imprinted the changes in Ukraine. The recent case of the voluntary services that emerged as a response to the military crisis in 2014 is unique, considering the relatively low levels of social capital in Ukraine (Gatskova & Gatskov, 2016).

In addition, the deterioration of health systems has further influenced the health of the population. As Ukraine’s health minister Uliana Suprun clearly puts it: “The reason that there is a problem in [the] health care system in Ukraine is because for 70 years of communism and 25 years of independence nothing was done to make it better” (interview in Politico, 2017 (webpage)).

Therefore, the present study aims to explore social capital and its association with well-being in Ukraine in different periods of time, while considering societal changes in a given context.
Thesis Aims

The overall aim of this thesis is to explore social capital during military conflict in contemporary Ukraine and to analyze the associations between social capital and well-being, as well as the distribution of social capital among Ukrainian women and men.

The specific aims of the thesis are:

- To analyze how social capital may transform in times of military conflict and explore the role of voluntary services in this transformation (Study 1);
- To explore the relations between social capital, volunteering and well-being in times of military conflict (Study 1 and Study 2);
- To analyze the associations between social capital and physical and mental well-being among men and women in Ukraine (Study 3);
- To investigate the distribution of social capital for women and men and to assess determinants of gender inequalities in access to social capital in Ukraine (Study 4).
Conceptual framework

The conceptual framework for this thesis was developed influenced by the final form of the conceptual framework of the WHO Commission on the Social Determinants of Health (CSDH) since it contains many relevant factors explored in this thesis.

The CSDH was set up by the WHO with the purpose of identifying, and clarifying how political, economic, and social institutions on global, national and local levels interact and affect health and health inequity of the population. In addition, it aimed to provide specific recommendations to take actions influencing health inequities and act upon the social determinants of health. After reviewing many different frameworks, CSDH came up with their final form of the conceptual framework presented in Figure 2 (CSDH, 2010 p. 6).

The complexity of understanding health and health inequity as determined by social factors is presented in Figure 2 below.

Figure 2. Final form of the Commission on Social Determinants of Health (CSDH) conceptual framework (WHO, 2010).
Structural determinants are those that stratify the society and divide individuals by their socioeconomic positions. They are influenced by socioeconomic and political context. Resource allocation, prestige and power play a key role in structural mechanisms of health inequities. The socioeconomic and political context creates different socioeconomic positions based on e.g. gender, ethnicity, education, occupation and income, which altogether constitute social determinants of health inequities (CSDH). These structural determinants influence health outcomes through intermediary determinants of health. These include health systems as a mediator in the sense of different access, as well as psychosocial, behavioural and material circumstances factors. Structural determinants are understood as “the interplay between the socioeconomic political context, structural mechanisms generating social stratification and resulting socioeconomic position of individuals” (CSDH, 2010 p.28).

Structural determinants of health inequities may affect equity in well-being through the following pathways:

- Social hierarchy through socioeconomic position
- Class through different access to the resources
- Power through political context forces
- Prestige through communities
- Discrimination

Intermediary determinants are those that are downstream, namely health systems, material circumstances, psychological and social factors, and behavioural and biological circumstances.

Social capital, together with the concept of social cohesion, has the features of both structural and intermediary determinants and thus has a unique place in the framework. Access to social capital is believed to be influenced by structural and socioeconomic conditions, which is why the distribution of social capital may differ between social groups in a society. Further, access to social capital is believed to influence health and well-being through behavioural, psychosocial and material pathways. In addition, social capital
has proven to be context bound in that it varies between cultural settings (Helliwell & Putnam, 2004).

For the purpose of this thesis, the following framework was developed based on the CSDH and adjusted to the context of Ukraine and the aims of this thesis. See framework below (Figure 3).

Figure 3. Conceptual framework

Figure 3 describes how the socioeconomic and political context, together with cultural norms, steer the formation social capital why it therefore contextually bound. Further, the socioeconomic and political context create different socioeconomic positions that lead to unequal distribution of resources as well as access to social capital. The level of access to power, resources and social capital further leads to differences in behavioural and psychosocial factors of relevance for health and well-being.

As indicated in my conceptual framework above, Study 1 analyzed how the political context, and in particular the ongoing military conflict, effected the formation/transformation of social capital in Ukraine. The relations between social capital, behavioural factors (i.e. volunteering) and their influence on well-being was explored in Study 1 and 2. Further, Study 3 analyzed gender differences in the association between social capital and physical and mental well-being, while Study 4 investigated the distribution of social capital for
different social groups and assessed gender inequalities in access to social capital.

Among the contextual components, the one that affects health in the most powerful way is the welfare state that "plays the key role in protection and promotion of the economic and social well-being of the citizens. It is based on the principles of equality of opportunity, equitable distribution of wealth and public responsibility for those unable to avail themselves of the minimal provisions for a good life." (CSDH, 2010. p.26). In order to understand differences between welfare states and their role in redistribution of resources, a classification of countries by groups of different welfare regimes has been used. The most utilized classification is the one developed by Esping-Andersen, containing liberal, conservative and social democratic regimes, while Ukraine belongs to a typological group called post-socialist regime (Rostila, 2013; Esping-Andersen, 1996). The post-socialist regime is additional to the three existing ones, according to Rostila, and is less theorized, rarely analyzed and quite often neglected in general context. This type of regime is characterized by high coverage of policies, but low benefits received from them. The lack of the government provision may further influence families to function in cooperative ways (Rostila, 2013).

Civil society participation and transparency in public administration are important indicators for understanding how social and political contexts cooperate. A very good indicator of transparency is the level of corruption. A global movement that works in more than in 100 countries, “Transparency International”, produces corruption perceptions index annually. By corruption, they mean the “misuse of public power for private purposes.” For the year 2016 Ukraine ranked 131 out of 176 countries, indicating that corruption is very common (Corruption Perceptions Index, 2016).
Materials and methods

The different methodological approaches utilized are presented in Table 1. This thesis is built on findings from four studies which have different aims and employed different methods, as illustrated in the Table below.

Table 1. Aims and methods used in the four studies in this PhD thesis

<table>
<thead>
<tr>
<th>Study</th>
<th>Analytical approaches</th>
<th>Number of informants or respondents</th>
<th>Data collection methods</th>
<th>Study designs</th>
<th>Aims</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Grounded theory</td>
<td>18 volunteers and utilizers of volunteering services</td>
<td>In-depth interviews</td>
<td>Qualitative Exploratory and analytical case study</td>
<td>To analyze how social capital may transform in times of military conflict and explore the role of volunteering services in contemporary Ukraine</td>
</tr>
<tr>
<td>2</td>
<td>Grounded theory</td>
<td>18 volunteers and utilizers of volunteering services</td>
<td>In-depth interviews</td>
<td>Qualitative Exploratory and analytical case study</td>
<td>To explore the motives for people to become involved in volunteering in times of military conflict and to investigate the effects of volunteering on the well-being of the volunteers in Ukraine</td>
</tr>
<tr>
<td>3</td>
<td>Social action ideal types</td>
<td>1723 women and 910 men</td>
<td>World Health Survey Data in 2003</td>
<td>Quantitative Cross-sectional study</td>
<td>To analyze the associations between social capital and physical and mental well-being among men and women in Ukraine</td>
</tr>
<tr>
<td>4</td>
<td>Multivariable logistic regression and post-regression Fairlie’s decomposition analysis</td>
<td>1377 women and 797 men</td>
<td>Social Survey Data</td>
<td>Quantitative Cross-sectional study</td>
<td>To investigate the distribution of social capital for women and men and assess the determinants of gender inequalities in access to social capital in Ukraine</td>
</tr>
</tbody>
</table>
Qualitative part

The qualitative part of this thesis contains two studies that explore a case of volunteering and social capital during military conflict in contemporary Ukraine. The city chosen as the research case is called Khmelnyskyi and is located in the Western part of Ukraine. The approximate situation for the location of rebel-held and controlled areas at the time of data collection is presented at the map below (see the upper left corner of the Figure 4). The reason for choosing this city as a “case” was because it was the leading place for the mobilization of soldiers, and in addition volunteering bloomed there. It must be mentioned that while volunteering emerged in different parts of Ukraine, our case city has a unique geographical location and special possibilities to get the necessary utensils for the military conflict zone. As a result, the group of volunteers that participated in the study had connections with other volunteering groups around the country. Among other things, they helped other volunteers to find the necessary supplies needed in the military conflict zone that were not available or in scarcity in other regions. During this communication with other groups, they exchanged experiences on how voluntary services could be improved, taking the needs and experiences of others into account. Multiple perspectives on the same phenomenon of volunteering were in our interest, why a case study approach was suitable. In addition, the chosen case was bound in activity, time and space, which makes it very specific and suitable for our case (Ragin & Becker, 1992; Baxter & Jack, 2008; Wenviorka, 1992).

Sampling of informants and data collection

Volunteering activities and volunteering centres with activities related to the military conflict situation were in our focus of interest. We wanted to capture multiple perspectives on volunteering activities in our research. Snowballing technique, implying that one research participant was a source for recruiting the next ones, i.e. next participants were referred by the previous ones, was used as the sampling strategy (Dahlgren et al., 2007). Sometimes this method is called chain sampling (Dahlgren et al., 2007). This technique
was very helpful since the case aimed to study volunteering from different perspectives. The main inclusion criteria were that our informants should be either a utilizer or a provider of the volunteering services related to military conflict’s activities. Two key informants were initially contacted, and they referred to further members of the volunteering circles as well as utilizers of the volunteering services. At the end, eighteen informants shared their experiences. All the informants were invited by phone first and later, when the time and place of the interview was decided, they signed an informed consent after oral introduction of the topic of discussion. A friendly and informal atmosphere was present during the interviews and it helped to get in-depth views of the informants. The topics of the interviews included general questions, as well as questions related to their social capital before versus after becoming involved in volunteering activities; health-related questions, and questions about the volunteering centre. Two different interview guides were used, one for the providers and another - for utilizers. However, in most of the cases, the interviews had a pure qualitative approach where the interview was 
conducted as an open discussion and in the end, I checked whether all the topics from the interview guide were covered. This approach helped to build a less stressful and not so official situation for the informants, allowing them to be more relaxed and open.

**Data analyses**

The analysis started immediately after the interviews, when analytical memos were written. Later, open coding was performed to open up the data and new updated memos were written. All the data was divided into two parts: one set of data that contained information about social capital of the utilizers and another set of data containing information about motives for and effects of volunteering among the providers. These two data sets were initially analyzed separately, but later merged together and divided again by open codes. The division was done following the aims for Study 1 and Study 2, i.e. codes referring to social capital transformation were utilized for Study 1 while codes referring to motives for volunteering and its effect on well-being were utilized for Study 2.

For Study 1 and 2, we followed the constructivist approach to Grounded Theory as developed by Kathy Charmaz (Charmaz, 2014). Grounded Theory was used because of its ability to conceptualize an understanding of the case in a systematic way. Further, the constructivist approach of Grounded Theory acknowledges the subjective involvement and interpretation of the researcher performing the analysis (Charmaz, 2014, p.14). The process of analysis followed the principle of constant comparisons and an oscillation between open codes and categories using abductive technique. In addition, situational analysis tools were very helpful in the process of analysis. We followed the recommendations of Adele Clarke and produced what she calls situational maps that helped me to see the broader picture of the case (Clarke, 2005).

In the second study, I additionally used the framework of Weber’s social action ideal types (analytical generalized constructs highlighting motives for action) as sensitizing concepts to construct categories explaining the main
motives for volunteers to be involved (Psathas, 2005; Aronovitch, 2012). Social action ideal types are presented in the Figure 5 below.

Figure 5. Social action ideal types of Weber

An illustration of the construction of categories in an oscillation between Weber’s social action ideal types and our open codes is presented in the Table 2 below.

A category describing the effects of volunteer’s well-being was constructed later and further divided into the effects on physical, psychological and social well-being. The final model presented in Study 2 (see Figure 2 in Study 2) was inspired by Adele Clarke’s situational analysis graphs, and especially by her description of positional maps.
Table 2. Construction of social action ideal types in the qualitative Study 2.

<table>
<thead>
<tr>
<th>Codes</th>
<th>Motives</th>
<th>Social action ideal type</th>
<th>Metaphorically constructed category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowing whom you defend is important, everyone should be involved in protection, afraid that all men would be drafted, when we are together we are strong, united we can defend the enemy, nice that unions of volunteers exist</td>
<td>Life is much easier in peace, fear of negative changes that war may bring, e.g. all men would be drafted, unity of people produce strength, only united we can defeat the enemy</td>
<td>Means-ends rationality</td>
<td>Peace Mediator</td>
</tr>
<tr>
<td>Not getting salary for volunteering creates trust, transferring feelings makes people trust, trusting people should get help, by giving you fill your soul</td>
<td>It is very easy to lose trust, trust has a value by itself, desire to help, love for humanity, understanding the grief of the others</td>
<td>Value rationality</td>
<td>Entrusting Philanthropist</td>
</tr>
<tr>
<td>Keep Ukraine sovereign is a task, loving country and wanting independence, strives for equal rights, wants to contribute to righteousness, wants the evil to finish</td>
<td>Pride for belonging to the nation, desire to have independence and identity, seeing violation of human rights and freedoms, strive for dignity</td>
<td></td>
<td>True Patriot</td>
</tr>
<tr>
<td>Rural people have nothing prepared for the war, soldiers should feel love from volunteers, awful to see that state doesn’t care for medicine, shaming to ask soldiers</td>
<td>Impossible to leave in trouble those who are in need because of poverty, lack of medication and treatment, lack of emotional care</td>
<td>Affectual action</td>
<td>Merciful Samaritan</td>
</tr>
<tr>
<td>Understanding the word &quot;war&quot;, shame from hiding from the army, having need for help even in real life, inherited helping from mother</td>
<td>Feeling guilt, common grief should be shared the other members of the family are involved, pleasant feeling of being helpful</td>
<td>Traditional action</td>
<td>Habitual Attendant</td>
</tr>
</tbody>
</table>
Quantitative part

Data sources

The quantitative part of this thesis is based on two national representative survey data in Ukraine including the World Health Survey (WHS) in 2003-2004 (Study 3) and the European Social Survey (ESS) in 2012/2013 (Study 4). The WHS is a cross-national health survey that was implemented by the WHO in 70 countries in 2002-2004. In Ukraine, the full extended version of WHS was implemented (WHO, WHS, 2017). The European Social Survey (ESS) is a repeated cross-sectional academically driven social survey that was initiated in 2002 (ESS, 2017). The ESS covers 36 countries in Europe and is conducted every second-year through face-to-face interviews with a national representative sample. In Study 4, I used the Round 6 of ESS collected in Ukraine during 2012-2013. This dataset provides a good opportunity to explore social capital in Ukraine before the crisis started in 2013.

Variables

In Study 3, self-rated health was based on the questions: “In general, how would you rate your health today?” The outcome variable of poor self-rated health was constructed out of the responses to the categories “moderate”, “bad” and “very bad”, and respondents who reported a good and very good health were categorized as those, who have good self-rated health. The depressive symptoms outcome was constructed out of four questions, including: experiencing difficulties with concentration and remembering things; feeling low, sad or depressed; experiencing problems with sleeping within the last 30 days and problems with coping with all the things in everyday life. The answers were merged and dichotomized: “mild” and “none” symptoms were defined as good meaning the absence of depressive symptoms, and all the other were defined as having depressive symptoms (see Study 3 Table 1).

Different forms of social capital were used as the outcome variables in Study 4. Consequently, several outcome variables were included in this analysis.
Institutional trust included trust in parliament, legal system, police, politicians, political parties. Generalized trust was measured by the question of how much people can be trusted in general. Reciprocity/helpfulness was measured by the question about fairness of people (would people try to take advantage if they got the chance?) and a question about how helpful people are. Safety was measured by the question of how safe one feels when walking alone after darkness. All these four outcomes belong to cognitive form of social capital. Structural social capital was measured by bonding, bridging and linking. Bonding measure included frequency of social meetings with friends, relatives and work colleagues and the amount of people with whom intimate and personal matters can be discussed. Bridging measure included social activities, religious attendance and volunteering. Linking social capital was constructed out for the following question: “Did you vote in the last national election?” and the question “There are different ways of trying to improve things in the country or help prevent things from going wrong. During the last 12 months, have you done any of the following?” with a multiple choice: contacted a politician, government or local government official; worked in political party or action group; worked in another organization or association; worn or displayed a campaign badge/sticker; signed a petition; taken part in lawful public demonstration; boycotted certain products.

Data analyses

The analyses for Study 3 and 4 were based on binary logistic regression analysis. The outcome and the independent variables that were used for both papers are presented in the Table 3 below. We used logistic regression analysis in Study 3 to compare the associations between social capital and poor SRH and depressive symptoms for women and men. Odds ratio (OR) with 95% confidence interval (CI) were calculated for each of the independent variables. All the logistic regression analyses were sex-stratified hence the ORs were calculated separately for women and men.

For Study 4, logistic regression analysis was performed in order to see the association between the determinants i.e. sex, age, education, cohabitee
status, having children at home, feelings about the income, and self-rated health for all the forms of social capital. After logistic regression, the data was decomposed by sex using the extension of the Oaxaca-Blinder decomposition method for non-linear models called Fairlie decomposition, which is not widely used in public health field yet. Decomposition techniques are useful when studying disparities in outcome variables between groups and identifying the determinants of the disparities. The Fairlie decomposition method can be used when the outcome is binary and the coefficients are calculated using logit model (Fairlie, 2005; Schweibert, 2015). In this thesis, we excluded two forms of social capital (institutional trust and linking) from the decomposition analysis because gender differences in access to these two forms of social capital were very small and not statistically significant. We conducted all the analyses in Stata 13, and for Fairlie decomposition, we used the seed number 123456 to ensure reproducibility and randomized the order of variables in the decomposition.

Table 3. Data source, variables and statistical methods used in Study 3 and Study 4.

<table>
<thead>
<tr>
<th>Data sources</th>
<th>Study 3</th>
<th>Study 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data sources</td>
<td>World Health Survey (WHS) in 2002</td>
<td>European Social Survey (ESS), wave 6</td>
</tr>
<tr>
<td>Outcome variables</td>
<td>Poor self-rated health</td>
<td>Access to social capital including:</td>
</tr>
<tr>
<td></td>
<td>Depressive symptoms</td>
<td>• Institutional trust</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Generalized trust</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Reciprocity/fairness</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Safety</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Bonding social capital</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Bridging social capital</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Linking social capital</td>
</tr>
<tr>
<td>Socio-demographic characteristic variables</td>
<td>Age</td>
<td>Age</td>
</tr>
<tr>
<td></td>
<td>Education</td>
<td>Education</td>
</tr>
<tr>
<td></td>
<td>Cohabitee</td>
<td>Cohabitee</td>
</tr>
<tr>
<td></td>
<td>Presence of small children at home</td>
<td>Presence of children at home</td>
</tr>
<tr>
<td></td>
<td>Sex of the respondents</td>
<td>Feelings about income</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sex of the respondents</td>
</tr>
<tr>
<td>Life style variables</td>
<td>Smoking</td>
<td>Not available</td>
</tr>
<tr>
<td></td>
<td>Alcohol consumption</td>
<td></td>
</tr>
<tr>
<td>Other variables</td>
<td>Cognitive social capital:</td>
<td>Self-rated health</td>
</tr>
<tr>
<td></td>
<td>• Trust in the national government</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Feeling of safety</td>
<td></td>
</tr>
<tr>
<td>Statistical method used</td>
<td>Binary logistic regression</td>
<td>Binary logistic regression with Fairlie</td>
</tr>
<tr>
<td></td>
<td></td>
<td>decomposition (Oaxaca-Blinder's decomposition extension)</td>
</tr>
</tbody>
</table>
Ethical considerations

Ethical approval for the overall PhD project was obtained from the Regional Ethical Board in Umeå. In addition, each of the participants taking part in the qualitative case study signed an informed consent prior to the interview. The secondary datasets utilized in the quantitative studies had obtained ethical clearance prior to the WHS and ESS data collection, and both datasets are available in public domain.

Ethical considerations were in line with the Declaration of Helsinki and the “Ethical principles for medical research involving human subjects” (WHO, 2001). The most common way to present ethical principles in public health is by the four principles: autonomy, justice, non-maleficence, beneficence.

Autonomy, or in other words respect for the persons involved in the research, was ensured in my project by allowing the participants of the interviews to share any ideas they wanted, add their own interpretations and having a right to stop the interview at any time if feeling uncomfortable (though luckily for me it didn’t happen). All of them knew in advance the topic of the interview, were aware of their rights and signed an informed consent.

Non-maleficence was not easy to achieve since the discussion about the army friends was sensitive for men from the conflict zone and for some volunteers as well (those, who had created ties with soldiers that were killed later). This principle was the most difficult to balance while still getting the necessary information. Here my own knowledge of interpersonal psychology was helpful. In addition, at the end of the interviews several participants expressed their feeling and shared that they felt relieved after talking about issues that they had never shared before. Using this principle, all the names and personal information that could identify a person were hidden. Also, I hope that the opportunity to talk about and share their own experiences was beneficial for the participants, in line with the principle of “Beneficence”. Some volunteers also expressed that the interview helped them to clearer see the value and meaning of their work.
Justice was applied by inviting and treating all informants in the same way and by the same principles. In addition, I tried to gather views and opinions from all possible “sides” of the case study, in order to implement justice to the explored case.
Main results

The overall aim of this thesis was to explore social capital during military conflict in Ukraine and to investigate the distribution as well as the associations between social capital and well-being among women and men in Ukraine. In regard to well-being, I have chosen to follow the WHO definition of health as "a state of complete physical, mental and social well-being..." and thus I will present the overall results following this definition and logic.

The results are divided into two parts: first, I present the qualitative results, i.e. the case of social capital, volunteering services and well-being in times of military conflict. Thereafter, I present the quantitative results, i.e. the distribution of social capital and the association between social capital and physical and mental well-being.

Qualitative studies

The analysis of qualitative data in Study 1 and 2 aimed to explore social capital during military conflict in contemporary Ukraine and situational maps were drawn. These maps were used to see the connections and relations between categories. One such situational map is presented below. This “ordered situational map” helped to identify all the elements (as suggested by Clarke, 2005) involved in the process of volunteering in the beginning of the analysis that resulted in two papers with different research questions.
Table 4. The ordered situational map for *Volunteering activities*.

<table>
<thead>
<tr>
<th>Individual Human Elements/Actors</th>
<th>Nonhuman Elements Actors/Actants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volunteers</td>
<td>Ministry of Defense</td>
</tr>
<tr>
<td>Soldiers</td>
<td>Ministry of Health</td>
</tr>
<tr>
<td></td>
<td>Enemy</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Collective Human Elements/Actors</th>
<th>Implicated Silent Actors/Actants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Families of soldiers</td>
<td>Volunteers’ families</td>
</tr>
<tr>
<td>Families of volunteers</td>
<td>Pseudo volunteers</td>
</tr>
<tr>
<td>Friends of soldiers</td>
<td>Psychologists</td>
</tr>
<tr>
<td>Friends of volunteers</td>
<td>Centres created and financed from above</td>
</tr>
<tr>
<td>People who help</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Discursive Constructions of Individual and/or Collective Human Actors</th>
<th>Discursive Construction of Nonhuman Actants</th>
</tr>
</thead>
<tbody>
<tr>
<td>People are tired to donate</td>
<td>Provision of the Army</td>
</tr>
<tr>
<td>Volunteers are tired but can’t stop</td>
<td>Acting against safety</td>
</tr>
<tr>
<td>Relatives vs volunteers</td>
<td>Government vs people</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Political/Economic Elements</th>
<th>Sociocultural/Symbolic Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-provision of volunteers</td>
<td>Hero shouldn’t be ashamed</td>
</tr>
<tr>
<td>Constant threat of full scaled war</td>
<td>Children should be proud of their parents</td>
</tr>
<tr>
<td>War actions</td>
<td>Gender norms</td>
</tr>
<tr>
<td>Raised costs for living</td>
<td>In unity is the power</td>
</tr>
<tr>
<td>Lack of provision to the army</td>
<td></td>
</tr>
<tr>
<td>Corruption at different levels</td>
<td></td>
</tr>
<tr>
<td>Medical costs and state provision</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Temporal Elements</th>
<th>Spatial Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broken hopes</td>
<td>Depth of involvement</td>
</tr>
<tr>
<td>War will end up</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Major Issues/Debates</th>
<th>Related Discourses</th>
</tr>
</thead>
<tbody>
<tr>
<td>United we have power</td>
<td>Pseudo volunteering</td>
</tr>
<tr>
<td>Needs exceed the possibilities</td>
<td>Historical issues: WWII, famine, recent collapse of Soviet Union and hardships</td>
</tr>
<tr>
<td>Government put everything on the shoulders of people</td>
<td>Political crisis</td>
</tr>
<tr>
<td></td>
<td>Economic crisis</td>
</tr>
<tr>
<td></td>
<td>Relational enemy</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other Kinds of elements</th>
<th>Emotional Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Courage</td>
<td>Compassion, mother’s feelings towards “sons”, grief, fear, anger for the authorities and enemy, pride, passion, concern, empathy</td>
</tr>
<tr>
<td>Shame, guilt</td>
<td></td>
</tr>
<tr>
<td>Respect</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Emotional Elements</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The results of Study 1 illustrate how social capital transformed due to the military conflict. The case was discovered from different angles. The first one was to see whether social capital transforms due to a military conflict and if so – what is the role of volunteers in this transformation. The Grounded Theory analysis resulted in seven categories illustrating the transformation of different forms of cognitive and structural social capital, as presented in Figure 6 below.

![Diagram](image_url)

Figure 6. Categories representing the transformation of social capital due to the military conflict experiences.

The transformation of social capital starts from the category “Becoming separated to the closest ones”, which illustrates how soldiers became separated from their families due to the military conflict. The next category, called “Developing brotherhood”, further illustrates how the loss of bonds to the closest ones is substituted by developing ties to their military friends. Bridging supporters, who are volunteers in our case, are steered by the desire to reciprocate with those who protect their peace and the category “Wanting
to reciprocate to soldiers” describes this. “Feeling abandoned by government creates distrust” is a category that further describes why volunteering occurs: there is no feeling that the government can protect and fulfill its functions and thus, the functions of the government are overtaken by volunteers. In our interpretation, this illustrated weak linking social capital in this setting. This category belongs at the same time to cognitive institutional trust and facilitates bridging supporters to act and help soldiers with reciprocity. Safety is represented by the category “Restructured view of safety”, where the perceptions change after being involved in military conflict activities. Physical safety was perceived as less important after being involved in the military actions, while emotional safety got a more important role. This in turn affected generalized trust since neither emotional nor physical safety could be provided by the generalized society. In addition, the category named “New bonding relations substitute for mistrust in others” illustrated the reciprocity that is provided within the new networks of brotherhood substitute for the lack of trust to the authorities. This new bonding relation also influenced generalized trust in that the newly formed bonding ties become the most reliable resource and substitute for the mistrust in others. All these categories are connected to each other, however not as a chronological chain but in a complex pattern (see further Figure 2 in Study 1).

In addition, the results of Study 1 show how the social support provided by the volunteers contain instrumental, informational, companionship and emotional support, that affects physical and mental well-being of the utilizers of social services. Through the social support provided by volunteers (mostly instrumental), emotional support come as implicit together with informational support and companionship.

The second qualitative study (Study 2) aimed to find out the motives that make people willing to be involved in non-paid activities in times of military conflict. Here, five social action ideal types were constructed and these ideal types illustrate different motivations for the voluntary action. In general, we found four main motivations (in line with Weber’s social action ideal types)
that facilitate volunteering: goal-orientation, value orientation, affectual motives and traditional behaviour as described in Study 2. The categories and the process of oscillating between Weber’s social action ideal types and our data is illustrated in Table 5 below.

Table 5. Categories describing motives for volunteering, their affiliated social action type and quotes illustrating how the categories are grounded in the data.

<table>
<thead>
<tr>
<th>Social action ideal type</th>
<th>Quotes</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Means-ends rationality</td>
<td>“Looking at our volunteering one can see that it shows that people must not be afraid. They must unite for solving problems”.</td>
<td>Peace Mediator</td>
</tr>
<tr>
<td>Value rationality</td>
<td>“We will be happy, but we must suffer for it. Freedom is not given easily. We must fight for decent life!”</td>
<td>True Patriot</td>
</tr>
<tr>
<td>Value rationality</td>
<td>“First of all, I am a volunteer and my task is to help a needy person or family. Versatile activity and we plan to develop for sure! We will not focus on one activity – it goes without saying!”</td>
<td>Entrusting Philanthropist</td>
</tr>
<tr>
<td>Affectual motivation</td>
<td>“Sometimes despair seizes! He is without medical treatment! He fought for our country and our authorities can do absolutely nothing for him! They do not think of wounded soldiers, their treatment and rehabilitation. Here we feel despair! It is worse than to be killed! When they are killed - we mourn for them and remember them! But can they live without arms and legs?”</td>
<td>Merciful Samaritan</td>
</tr>
<tr>
<td>Traditional action</td>
<td>“Perhaps this is one of the mental and valuable characteristics of our nation “treat the others the way you want to be treated”. Perhaps this is the basic life principle and view. We were brought up in this way and perhaps this is why I decided (to take part in volunteering activities). When a man is in need and I can help him - I do not hesitate whether to do it or not. I just know that I must help”.</td>
<td>Habitual Attendant</td>
</tr>
</tbody>
</table>

Later, the effects on the well-being of the volunteers were explored. The main category “Life became harder, but is full of meaning” was constructed to capture the effects on well-being of volunteering. It included the effects on
the lives of volunteers. Further, these effects were divided into social, psychological and physical challenges and returns.

The effects had positive (i.e. returns) and negative (i.e. challenges) sides. Among the positive effects, there were expansion of social networks and getting good friends through volunteering activities, positive emotions out of activities, and compensation of the multiple resources that were used for volunteering (see Figure 1 Study 2). The negative effects were the challenges that providers of volunteer services met while being involved in the activities. The negative effects included: a lot of time spent for the activities make a volunteer tired, unsafety connected to activities in military conflict zones, activities may make volunteers disconnected from ordinary people who are not involved in military conflict actions, activities bring negative emotions and bad feelings and “force” volunteers to neglect their own needs for the benefit of others.

Quantitative studies

In Study 3, the levels of physical (measured by self-rated health) and mental (measured by depressive symptoms) well-being and their association with cognitive social capital indicators (measured by trust for national government and feeling of safety) were assessed. In general, poor self-rated health was prevalent in Ukraine, particularly among women (77% among women vs. 63.1% among men, p<0.001) as shown in Figure 7. The proportion of people with poor mental well-being was also high in Ukraine, with the same pattern of men reported less depressive symptoms than women (20.2% among men vs. 37.8% among women, p<0.001) as shown in Figure 8.
The next figures present the distribution of social capital i.e. the distribution of institutional trust (Figure 9) and the feeling of safety (Figure 10) among the population of Ukraine. As seen from the Figure 9 below, low trust in the national government was dominant among women and men and only around 12% of women and men reported high trust in the national government and it did not differ much between women and men. With regards to safety, moderate feeling of safety was the most common for both women and men in Ukraine. A higher proportion of men reported that they had higher levels of feeling of safety compared to women as shown in Figure 10.
Figure 9. The distribution of trust in national government among women and men in Ukraine.

Figure 10. The distribution of the feeling of safety among women and men in Ukraine.

The association between physical well-being (measured by poor self-rated health) and cognitive social capital (i.e. institutional trust and feeling of safety) was analyzed using logistic regression. The results indicated that low level of institutional trust had a significant association with poor self-rated health for women in Ukraine (OR=1.88; CI=1.12-3.15), but not for men. There was no significant association between low level of feeling of safety and self-rated health for both men and women as shown in Table 6 below.

Table 6. Adjusted odds ratio (with 95% confidence interval) for poor SRH by levels of cognitive social capital for women and men

<table>
<thead>
<tr>
<th>Cognitive social capital</th>
<th>Odds Ratio (95% Confidence Interval) for poor self-rated health</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Women</td>
</tr>
<tr>
<td></td>
<td>Men</td>
</tr>
<tr>
<td>Trust in national government</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>1</td>
</tr>
<tr>
<td>Moderate</td>
<td>1.29 (0.77-2.16)</td>
</tr>
<tr>
<td>Low</td>
<td><strong>1.88 (1.12-3.15)</strong></td>
</tr>
<tr>
<td>Feeling of safety</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>1</td>
</tr>
<tr>
<td>Moderate</td>
<td>1.35 (0.81-2.24)</td>
</tr>
<tr>
<td>Low</td>
<td>1.44 (0.91-2.36)</td>
</tr>
</tbody>
</table>

Note: The model is adjusted for age, education, marital status, presence of small children at home, ever alcohol drinker and smoking.
A similar logistic regression analysis was performed for the association between mental well-being (measured by depressive symptoms) and cognitive social capital. The analysis indicated that institutional trust did not have any statistically significant association with depressive symptoms, neither for women, nor for men as shown in Table 7 below. However, there was a significant association between low feeling of safety with depressive symptoms for women (1.72; 1.13-2.62).

Table 7. Adjusted odds ratio (with 95 % confidence intervals) for depressive symptoms by levels of cognitive social capital for women and men

<table>
<thead>
<tr>
<th>Cognitive social capital</th>
<th>Odds Ratio (95% Confidence Interval) for depressive symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Women</td>
</tr>
<tr>
<td><strong>Trust in national government</strong></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>1</td>
</tr>
<tr>
<td>Moderate</td>
<td>0.98 (0.62-1.54)</td>
</tr>
<tr>
<td>Low</td>
<td>1.20 (0.78-1.87)</td>
</tr>
<tr>
<td><strong>Feeling of safety</strong></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>1</td>
</tr>
<tr>
<td>Moderate</td>
<td>1.04 (0.65-1.65)</td>
</tr>
<tr>
<td>Low</td>
<td><strong>1.72 (1.13-2.62)</strong></td>
</tr>
</tbody>
</table>

Note: The model is adjusted for age, education, marital status, presence of small children at home, ever alcohol drinkers and smoking.

In Study 4, inequality in the distribution of social capital for women and men and the determinants of gender inequalities in the access to social capital were assessed. The levels of access to different forms of social capital among women and men are presented in Figure 11 below.
Figure 11. The levels of access to different forms of social capital for women and men.

As seen from the Figure 11 above, social capital was unequally distributed between women and men. Women showed more access to institutional trust, generalized trust and reciprocity/fairness (cognitive forms of social capital) as well as to bonding and bridging (structural forms of social capital). On the contrary, men had more access to safety and linking form of social capital. Institutional trust, bridging and linking social capital could be characterized as very low for both men and women in Ukraine. Bonding social capital was the most prevalent form of social capital for both women and men in Ukraine. The differences in access to different forms of social capital between women and men are presented in Table 8. The numbers in the Table represent the regression coefficients resulted from the logistic regression analyses.
Table 8. The difference in access to different forms of social capital between women and men.

<table>
<thead>
<tr>
<th></th>
<th>Probability of access among women</th>
<th>Probability of access among men</th>
<th>Difference in access between men and women</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cognitive social capital</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Institutional trust</em></td>
<td>0.172</td>
<td>0.171</td>
<td>0.001</td>
</tr>
<tr>
<td><em>Generalized trust</em></td>
<td>0.632</td>
<td>0.594</td>
<td>0.037</td>
</tr>
<tr>
<td><em>Reciprocity/fairness</em></td>
<td>0.512</td>
<td>0.447</td>
<td>0.066</td>
</tr>
<tr>
<td><em>Safety</em></td>
<td>0.447</td>
<td>0.650</td>
<td>-0.202</td>
</tr>
<tr>
<td><strong>Structural social capital</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Bonding</em></td>
<td>0.772</td>
<td>0.721</td>
<td>0.051</td>
</tr>
<tr>
<td><em>Bridging</em></td>
<td>0.278</td>
<td>0.212</td>
<td>0.066</td>
</tr>
<tr>
<td><em>Linking</em></td>
<td>0.053</td>
<td>0.054</td>
<td>-0.001</td>
</tr>
</tbody>
</table>

The Figure 12 below presents the proportion of the gender difference (inequality) in access to cognitive social capital that was explained by the determinants including: age, the highest level of education, cohabitee status, presence of children at home, feelings about income, and self-rated health. The negative position (i.e. below zero) denotes negative contribution to the inequality, which means that the determinant offset the inequality, while the positive position presents the positive contribution to the gender inequality. Figure 13 presents similar contributors to the inequality for the structural forms i.e. bonding and bridging social capital.
Figure 12. Determinants that contribute to gender inequality for three forms of cognitive social capital: generalized trust; reciprocity/fairness and safety.

Figure 13. Determinants that contribute to gender inequality for two forms of structural social capital such as bonding and bridging.
The percent that is stated under the form of social capital in each graph of the Figures 12 and 13 denotes the proportion of gender inequality that was possible to be explained by all the determinants included in the graph. The positive sign means that the determinant contributed positively to the inequality, while the negative one means that the determinant decreased gender inequality in access to social capital observed between women and men, in other words offset the inequality. The only difference with a positive sign was safety, where self-rated health explained 10.4% of the gender inequality observed. Self-rated health was the determinant that largely offset the gender inequality in access to other forms of social capital as well. There was inequality in access to social capital in that women had higher access to bonding, bridging, reciprocity and generalized trust compared to men, but this inequality was offset by differences in self-rated health between women and men. This implies that if women had equally good self-rated health as men, they would also have even higher access to these forms of social capital and the gender inequality in access to these forms of social capital would be bigger. On the contrary, men had higher access to safety compared to women, and self-rated health is the main determinant for this inequality as well, however, in the opposite “positive” direction. This implies that if women had equally good self-rated health as men, the inequality in access to safety in favour of men would have been smaller.
Discussion

In this final section, I begin by discussing the main findings of my thesis in the light of other research and in relation to the conceptual framework. Thereafter, I bring up some methodological considerations that need to be discussed in relation to my results. Finally, I end up with some short conclusions and suggestions for further research.

**Social capital transformation in times of military conflict**

The result of my thesis shows how social capital transforms during times of military conflict in contemporary Ukraine. Altogether, cognitive and structural social capital transformed in different ways. Traditional bonding social capital, such as strong family ties, in some Ukrainian families, was destroyed during the conflict period and was substituted by new ties to “brothers” in the army. New forms of bridging ties were generated through the voluntary services, since volunteers functioned as a bridge between soldiers and their families. Further, linking social capital and trust in public institutions, that was weak before the conflict became even weaker during the time of conflict. This weak trust and linking social capital further reinforced the development of voluntary services in the form of bridging social capital to compensate for the lack of governmental support and attention.

These results illustrate how structural and political factors clearly influence the formation of social capital. This is illustrated in CSDH conceptual framework as well as outlined by others (CSDH, 2010). According to Fukuyama (2001; 1999), the state may have both positive and negative influence when it comes to the creation of social capital. In particular, by not providing public safety and rights to property (in other words, public goods), institutions create distrust that further obstructs the formation of safety, trust and supportive networks. The self-reported levels of cognitive social capital in Ukraine in 2002 were very low as shown in Study 3 (Karhina et al., 2016). Woolcock, (2001) in his paper about the place of social capital in understanding social and economic outcomes emphasised how the formation
of social capital is influenced by societal factors, such as political instability (Woolcock, 2001). In Ukraine and other transitional post-soviet countries, trust in public institutions is low in general (Rose et al., 1997, Habibov & Afandi, 2015, Sapsford & Abbott, 2006; Raiser et al., 2002; Abbott & Sapsford, 2006). This could be explained by rapid changes in the social spheres after the collapse of the USSR, resulting in increased insecurity, income inequality and erosion of social trust (Abbott & Wallace, 2007; Rose et al., 1997). Further, Rose et al., (1997) discuss how social capital in post-totalitarian regimes is characterized by distrust in public institutions and why social capital networks thus can become a tool against the state. This phenomenon is illustrated in my thesis by the rise of voluntary services when distrust in public institutions deepened due to the military conflict context (Karhina et al., 2017). Sapsford and Abbott (2006) in their study about trust in eight post-communist societies equally found very low political trust, while trust between friends and family was much higher. They also found that trust differs between these countries and thus concluded that trust is sensitive to sudden and dramatic societal changes (Sapsford & Abbott, 2006). My results further show the complexity of the transformation of social capital during military conflict, where social capital not only increases or decreases, but also transforms into new forms (Karhina et al., 2017). Transformation of informal social capital into a formal one happened before as well during the Orange Revolution in 2004 (Polese, 2009).

**Voluntarism as a particular form of bridging social capital in transitional societies and its role for well-being**

In this thesis, volunteering is presented as a particular form of bridging social capital, and my results show how this plays a special role in the Ukrainian society in times of military conflict. Informal volunteering is not always used as a measure of bridging social capital (Harpham et al., 2002; Ferlander, 2007; Patulny & Lind Haase Svedsen, 2007). The most commonly utilized measurement of bridging social capital is involvement in civic associations (i.e. only formal volunteering can fit into it). For example, Putnam (2005) in his study of social capital in the United States, included only
involvement in formal associations in his social capital index. Equally, the social capital questionnaire developed by the World Bank includes mainly membership in formal groups and networks in their measurement (Grootaert et al., 2004). My thesis indicates the importance of including informal civic engagement, such as informal volunteering, in social capital measurements, at least in transitional settings and in critical societal situations. Furthermore, in Study 4, where we have measured different forms of cognitive and structural social capital in pre-conflict period in 2012, bridging social capital showed relatively low levels among seven social capital indicators. If we had been able to measure informal volunteering as well, the levels of bridging social capital could have potentially been higher.

Why then might informal social participation be more important in transitional settings? One of the explanations could be found in differences between welfare regimes. As previously stated, Ukraine belongs to a post-socialist welfare regime, and using the typology of Espin-Andersen (Rostila, 2013), it can’t be classified as either social-democratic, conservative or liberal, but has some particularities. Post-socialist welfare regime includes broad social welfare coverage by the state, but very low real benefits to the citizens. The lack of social security from the government therefore enforces people to “take care of each other” and thus facilitates a collectivistic way of functioning in these societies (Rostila, 2013, Kumar et al., 2015). As a consequence, formal social contacts are lower in these countries, while informal ones are higher (Rostila, 2013). Thus, this could also explain the significant role of informal social ties in general, and particularly during critical situations, such as the military conflict in Ukraine. Round & Williams (2010) also discuss how informal networks and friendship have become especially important in Ukraine as a way of coping during the times of societal transition (Round & Williams, 2010).

In my thesis, voluntarism is characterized as a particular form of bridging social capital since it brings unknown people with different backgrounds together (supposedly, weak ties). At the same time, the way of their
functioning is very informal and friendly, which gives them more characteristics of bonding forms of social capital that creates strong ties between people. As a conclusion, in some settings the distinction between bonding and bridging social capital may be less “visible.”

The associations between bonding and bridging social capital and health were already established in other studies (see e.g. Moore & Kawachi, 2017, Kawachi et al., 2008, Ferlander, 2007). However, the effects of bonding and bridging social capital on physical well-being may vary despite both forms containing horizontal relations. For example, a study based on adult residents of Okayama city in Japan (Iwase et al., 2010) found that bridging social capital had a protective effect on SRH, while no effect was found for bonding social capital. Further, the effects of structural and cognitive social capital on physical well-being might differ in different cultural settings. A World Health Organization’s Study on global AGing and adult health (SAGE) based on data from six LMIC (China, Ghana, India, Mexico, the Russian Federation, South Africa) found that bridging (i.e. structural) social capital had the strongest positive association with self-rated health. This is opposed to other studies from high-income countries that have shown a stronger association between cognitive social capital and SRH (Ng & Eriksson, 2015). This goes in line with the results of our Study 3, where no significant associations between cognitive social capital and SRH, and depressive symptoms were found for men (Karhina et al., 2016). Presumably, measurements of the association between physical and mental well-being and structural social capital would be stronger. Story (2013) in his review of social capital in the least developed countries discusses how structural social capital might be especially important in low and middle-income settings as means of access to information and resources. I believe that the same holds for the transitional setting in Ukraine.

In addition, negative health effects have been found for structural social capital and especially for bonding social capital (Ferlander, 2007; Eriksson & Ng, 2015, Villalonga-Olives & Kawachi, 2017). Mitchel & LaGory, (2002) in their study from an inner-city neighbourhood of Alabama found that bonding
social capital increased mental distress in this deprived community. The results of our Study 2 confirm that this particular form of bridging social capital, e.g. volunteering, may have potential negative as well as positive effects on physical and psychological well-being for both volunteers and the recipients of the volunteering services. Among the positive effects on physical well-being for the recipients, the healthcare provided by the volunteers is evidently one. For the providers, we found that volunteering gives (for example) meaning to life, which positively influences psychological well-being. Among the negative effects, we found that there are physical negative effects on the body, such as tiredness and lack of sleep, as well as negative psychological effects by feeling separated from the society. The negative stress-related effects of caregiving (i.e. providers of social capital) were also reported in studies of both volunteering (see Moreno-Jimenez & Hidalgo Villodres, 2010; e.g. Weitenkamp et al., 1997), and social capital (Berkman & Kawachi, 2001; Silvey & Elmhirst, 2003; Villalonga-Olives & Kawachi, 2017).

**Gendered associations between social capital and physical and mental well-being**

My results show that a higher proportion of Ukrainian women had poor SRH as well as more depressive symptoms compared to Ukrainian men. In addition, a protective effect of cognitive social capital on poor SRH and depressive symptoms was found for women, while no such effect was found for men (Study 3). Gendered differences in association between social capital and health have also been reported in other settings. Iwase et al., in their study from Japan found that women benefit more in regard to SRH from access to bridging social capital compared to men (Iwase et al., 2010). On the contrary, in a study from Russia the authors found a protective effect of social capital on SRH for men, but not for women (Ferlander & Mäkinen, 2009; Jukkala et al., 2008).

Gendered associations between social capital and health could be understood from a gender theoretical perspective. The WHO CSDH emphasised gender as one of the structural determinants of health inequities
and thus underlined the importance of considering gender in policies as well as actions to improve health and reduce health inequalities (CSDH, WHO, 2010). Gender inequalities in Ukrainian society are evident, as shown in for example the gender inequality index presented by the Human Development Report. This index reflects inequalities that are gender-based in three dimensions, namely reproductive health, empowerment, and economic activity. On this index, Ukraine ranked 55th out of 159 countries in 2015 (Human Development Report, 2015). This clearly implies that Ukrainian women have less access to power and resources compared to men. This could in turn negatively influence their health and well-being (as indicated by the high proportion of women having poor SRH and depressive symptoms compared to men). One could assume that social capital is a more important buffering resource for those being subordinated in a society. Therefore, the gendered associations between cognitive social capital and physical and mental well-being found in Study 3 may indicate that access to cognitive social capital is more important as a buffering resource for health among Ukrainian women compared to men (Karhina et al., 2016).

**Distribution of and inequalities in social capital between different social groups in Ukraine**

The results of this thesis show that social capital is unequally distributed between women and men, as well as different social groups in Ukraine. Women in general show higher access to social capital, (except for safety and linking social capital) compared to men (see Table 4 Study 4). The fact that men have higher levels of safety (i.e. one form of cognitive social capital) have been reported from many other countries as well, both in high- and in low-income countries (Eriksson et al., 2010; Ng & Eriksson, 2015). In addition, several studies have found that people with a higher education tend to accumulate more social capital than less educated groups (Ferlander, 2007; Eriksson et al., 2010; Ziersch, 2005; Kaasa & Parts, 2008). Surprisingly, this pattern was not as clear in my results (see Table 4 Study 4). The only form of social capital that was higher among higher educated people was linking social capital (i.e. voting and political activities), while there were no differences


between educational groups regarding other forms of social capital. More so, the highest access to institutional trust was found among people with the lowest education. The association between education and trust, and in particular institutional trust, thus seems to differ between different settings (Kaasa & Parts, 2008). As illustrated in Study 3 in this thesis, as well as other studies (Rose, 1997; Abbot & Wallace, 1997), institutional distrust in general is very high in Ukraine. In this kind of setting, one can assume that higher education further facilitates awareness of existing institutional corruption and thus further increases distrust.

Further, the results show that access to social capital varies between income groups. Groups that have hardships in coping with available income show lower access to all forms of cognitive and structural social capital. In the Ukrainian society income is unequally distributed among the population which also leads to other inequalities (e.g. access to social capital). This confirms Bourdieu’s reasoning that having access to one form of capital (i.e. social, financial, human) facilitates the access to other forms of capital (Bourdieu, 1986).
Methodological considerations

This thesis combines qualitative and quantitative methods and data collected at different points in time. The interview data used for the qualitative studies (Study 1 and Study 2), were collected by myself during my PhD training while the survey data, used for the quantitative studies (Study 3 and Study 4), was secondary, and collected earlier in time. This approach allowed me to capture data from different periods in Ukraine and to explore social capital and well-being retrospectively as well as in contemporary Ukraine. In addition, this strategy also allowed to explore and measure different forms of social capital in this thesis: cognitive as well as structural components. Furthermore, available data from the different surveys (ESS and WHS) utilized enabled the exploration of social capital as both a determinant and as an outcome.

Qualitative studies

The trustworthiness of qualitative studies is often judged by its credibility (Dahlgren et al., 2007). In my thesis, credibility was achieved by capturing the case from multiple perspectives, i.e. by interviewing both utilizers and providers of voluntary services. In addition, prolonged engagement, implying spending time with the participants beyond the time for the interviews, was performed. This was balanced with persistent observations (implied emotional reactions and pauses before the answers were given) and memos (notes, that were taken immediately after the interview, while opening the data as well as during other stages of analysis) that were very beneficial for the analysis. Prolonged engagement was very helpful for building trust with the participants, since the topics of the interviews covered the issues of personal experiences that were not easy to talk about. For example, men who returned from the military conflict zone were sharing stories about their feelings, when they lost friends due to mines, bullets etc. Some of them didn’t want to share their military experiences with a woman, since they considered military actions not a female thing. Knowing this in advance (since being native to the cultural setting), I was always ready to rephrase the question in a more
personal way. In this situation, careful listening and ability to wait (psychological mastery) were very helpful in addition to prolonged engagement. Snowballing sampling, i.e., using trusting gate keepers, was also helpful in this regard, since there was somebody whom they knew who referred them, and helped in building a trusting atmosphere. Triangulation in data collection was achieved by different perspectives: from the providers and utilizers of the services (Dahlgren et al., 2007). Triangulation between investigators was achieved by coding the same data and checking the results together. In addition, the results of the Study 1 were presented at a peer-reviewed conference, where they were discussed.

Transferability implies how applicable the results of a current study are in different settings or with other informants (Dahlgren et al., 2007). Generalizability in qualitative studies differs from the quantitative ones in several ways: the depth of the knowledge is deeper in qualitative studies, the sample is smaller and is not demographically representative (Dahlgren et al., 2007). Since we had a case study, the naturalistic generalization is followed by sharing the results in detail. However, similar work is being carried out in other volunteering centres in Ukraine, why I assume that similar ideal types and the effects of volunteering on well-being would be found in those settings. In addition, taking into account that a Grounded Theory approach was utilized, the analytical generalizations made might potentially be relevant not only in the Ukrainian setting, but maybe even in Sweden, while e.g. working with migrants from military conflict zones.

Dependability implies how probable it is that same research in the same context with same participants would show similar results in another study, and is judged by consistency (Dahlgren et al., 2007). I believe that the topics that would emerge could be very similar even if another researcher performed the study since some of the respondents started to talk and continued for a very long time without a stop by themselves (wanted to share and having somebody to listen to their experience).
Confirmability means that the findings could be affected too much by the personal views of the researcher or include some biases (Dahlgren et al., 2007). This could imply that the results are not grounded in the data. One way of handling this is to keep the open codes close to the text, which was done in my analyses. In addition, continuous discussions and checking of the results with other co-authors were also used to ensure that the findings are really grounded in the data.

One of the challenges was the period of data collection, i.e. military conflict period. It must be mentioned here that Ukraine as an independent country with a history of 26 years now, experiences military conflict within its territory for the first time, which means that the results are even more interesting to explore. The military conflict situation has changed the lives of both providers and utilizers of volunteering services and of course was central for the discussion. The importance of this in the everyday life of the interviewees and lack of opportunity to share these experiences created a unique situation for collecting very rich data.

**Quantitative studies**

In the quantitative studies, there are some limitations that should be mentioned. The cross-sectional design of the studies is a limitation by itself, since this does not help to establish causality. Both data sets that were utilized for our analyses had cross-sectional design. The other limitation is the old data that utilized for Study 3 and Study 4. The former data is based on a nationally representative health survey and was collected before the first revolution took place in Ukraine. It was important in our case to account for the periods of the revolutions that could have shown “shocks” in social capital. The latter dataset is based on a social survey that gave an opportunity to explore and analyze several forms of social capital (which would not be possible using just health data) and was collected before 2013. For the purpose of this thesis, it was important to capture the pre-conflict period at the nationally representative sample.
Though the response rate for WHS was 89% for the individual survey which is quite high compared to other similar studies and the data was quite complete for most of the variables, using secondary data doesn’t allow tracing missing data in the dataset and the missingness might have contributed to biased results if the data did not miss at random.

One of the strengths in my quantitative studies is the sex stratification, and that sufficient data allowed for separate analyses for women and men. It helped to analyze different gender patterns in the associations between social capital and well-being, as well as in the distribution of different forms of social capital.

The use of decomposition technique for the analysis of the determinants of gender inequality in access to social capital provides more in-depth information on factors that could be targeted through intervention programmes to reduce the gender gaps in access to social capital.
Conclusions

In conclusion, this thesis shows that:

Social capital takes particular forms in transitional settings and transforms in times of societal crisis. This needs to be considered in studies about social capital and health in transitional settings and/or during societal crises. Results based on studies from Western, or comparably stable societies, are not evidently transferable to this kind of settings, thus the differences should be considered when social capital is utilized as a potential resource in health interventions there.

Informal social participation, i.e. volunteering, might play a particular important role in transitional periods and settings and needs to be taken into account in measurements, as well as interventions utilizing social capital in these settings (at least in critical situations).

The associations between social capital and well-being vary between men and women, in favour of women, but might also depend a lot on the measurements of social capital used. Some forms of social capital might have a stronger buffering effect on health for women than men in the Ukrainian setting. In addition, social capital may have positive, as well as negative effects on well-being in transitional (as well as other) settings, which needs to be considered in research, as well as in policies and practice.

In Ukraine, as well as in other settings, social capital is an unequal resource between different social groups. Reducing gender, as well as income inequality, would probably also influence the distribution of social capital within the society.

Access to social capital could be viewed as an indicator for social well-being. Social capital could therefore be used as both a determinant and an outcome in social capital and health research. Investigating the association between
social capital and health could thus be interpreted as analyzing how social well-being influences physical and mental well-being.
Future research

More research is needed from LMIC that takes contextual factors, such as political instability and military conflicts into account, in order to understand the associations between social capital and physical, as well as mental well-being. Since social capital is a determinant of health and well-being it has a potential to become a useful resource in health interventions, not least as a buffering resource for the potential negative effects of various forms of stress on well-being (Story, 2013). In addition, traditional measurements of social capital may not capture all the processes that happen in critical times, why future studies need to adjust the social capital measurements for critical periods and pay attention to its transformation. Post-Soviet countries are characterized by informal connectedness that is not always measured, but it plays an important role in the society (Ferlander, 2007; Irwin, 2009; Rose, 2000). For example, social capital may help decrease the rapidly increased level of suicides among men that were involved in the military conflict. Informal volunteering has a very good potential for societal activity measurement, which is not captured in existing questionnaires and indexes. Availability of longitudinal and panel data will allow further assessments to understand how social capital changes during critical periods of societal development. These assessments will enable exploration of the mechanisms and determinants of changes, information of which could be used to design proper intervention at societal level.

There is a lack of research focusing on gender differences in the access, as well as in the association between social capital and health from both high and low and middle-income countries. More social capital research using gender perspective is needed.
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European Social Survey (ESS) Retrieved April 26th, 2016 from: http://www.europeansocialsurvey.org/about/


