

Merja Rapeli

# The Role of Social Work in Disaster Management in Finland



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Esitetään Jyväskylän yliopiston humanistis-yhteiskuntatieteellisen tiedekunnan suostumuksella julkisesti tarkastettavaksi yliopiston Ruusupuisto-rakennuksen Helena-salissa (RUU D104) joulukuun 2. päivänä 2017 kello 12.

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# The Role of Social Work in Disaster Management in Finland

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Merja Rapeli

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## ABSTRACT

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This study explores the role of social work in disaster management in Finland and its relation to international disaster social work discussions. The aim is to obtain information on the role of social work in disasters in Finland and to conceptualize disaster social work to understand it better. The framework of disaster social work interventions and the concepts of vulnerability, resilience and social capital are used in analyzing and conceptualizing the role. The methods used are integrative literature review, quantitative document analysis, and statistical analysis of the survey. Municipal social services' preparedness plan documents and survey data of private social care units' preparedness form the main empirical data. The results show that social work interventions of social and human investments, i.e. day-to-day roles, which enhance bonding social capital, were emphasized in disaster social work. Interventions of political empowerment and economic participation, which embrace bridging and linking with other disaster management actors were less common. Preparedness planning was completed only on a very general level in Finland, and the overall level of preparedness and understanding of bridging and linking with other disaster management actors was inadequate. Statistically significant differences were found between large and small social service areas in favor of the large ones. I conclude that enhancing social capital in client work, social work's own organization and in multiorganizational networking, should be central in disaster social work. The concepts of disaster vulnerability, resilience, and social capital are central in understanding the role of social work in disasters.

Keywords: social work, disaster management, vulnerability, resilience, social capital

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After finalizing my masters' degree in sociology as a young mother in the beginning of 1990's I would never have thought that I'd someday continue my studies. Working for more than twenty years in the social and health care sector and in the Finnish Red Cross domestic preparedness unit, I started to long for further studies to gain more knowledge on disaster management and social work. Without support from my supervisors, fellow students and researchers, my present employer, and family, I would never had reached this far in my studies.

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## ABBREVIATIONS

DVI	Disaster Victim Identification
FBO	Faith Based Organization
FRC	Finnish Red Cross
IPCC	The Intergovernmental Panel on Climate Change
LDC	Less Developed Country
NGO	Nongovernmental Organization
PAR	Pressure and Release Model: The Progression of Vulnerability
UNDISR	United Nations secretariat for implementation of the International Strategy for Disaster Reduction

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# 1 INTRODUCTION

A heavy truck filled with huge paper rolls and a charter coach heading to a ski resort in the North collided on a highway in Konginkangas, Central Finland, in 2004. As result, 22 youngsters and the driver of the coach were killed, and 13 passengers were seriously injured (Investigations report A 1/2004Y 2005, I). The rescue services, emergency medical care, police, central hospital, local health center, traffic management center as well as the local Voluntary Rescue Service actors were alerted by the alarm center. The psychosocial services provided by a local organization called Mobile, was alerted by the Finnish Red Cross (Investigations report A 1/2004Y 2005, 25). One could raise a question, what is the role of local social services in disasters if they are not called for response by the official alarm center in the first place? In this study, I am asking what is the role for social work in local disasters, national ones and in the increasingly global calamities which cross the borders of nation states.

In the early hours of March 19 when the aforementioned accident occurred, I was woken up by the volunteer leader of the Finnish Red Cross (FRC). At that time I was working in the FRC as a national coordinator of the Voluntary Rescue Service, and got the report of the incident from the volunteer leader and could express some supporting words for him that the volunteers were on the right track in their efforts to help the survivors and their next of kin alongside with the authorities. The volunteers were working in close cooperation with the health care authorities, guiding the relatives flowing to Jyväskylä central hospital. In the headquarters of the FRC we opened a help line for people who were worried and anxious about the accident, and activated the FRC group of crisis psychologists. My experiences in the Red Cross and other crises following Konginkangas have on one hand served as practical training on disaster management and on the other, raised my interest in learning more about the issue. As disasters are not created overnight (Turner 1976), not even accidents like the one in Konginkangas, many of them could be prevented or at least managed better. The possibility to learn more of prevention and alleviation of disaster impacts has motivated this study.

Barry Turner, a British social scientist, has studied origins of man-made disasters. He studied (1976) major accidents of which one dealt with a large truck which was hit by an express train. He found that large-scale disasters are very often incubating for years, giving only weak signals, which may be noticed or ignored. Disasters could be avoided if, for example safety regulations were complied, and outside complaints were listened to. This was also the case in Konginkangas, where speed limits and rules for driving and rest times were not complied (Investigations report A 1/2004Y 2005, VI). Not only major accidents, but also more complex and severe, interlinked and often cascading human induced events trigger the societies (Lagadec, 2007; Tierney 2014). Global warming increases the amount of disasters, and thus the consequences of disasters on social, economic and ecological environments will be greater than before. The impacts of disasters on public and private organizations, and not least on the wellbeing of the population, are inevitable (IPCC 2007), which applies also to the clients of social work. Disasters cause great losses both in terms of lives and economic impacts both in the developing world and in the wealthy nations (Tierney 2014, 2-4).

Hazards and disasters are closely linked to risk. However, the concept of risk is a complex one. Many scholars regard risks as social productions and closely related to political and economic power. Powerful organizations and institutions overlook safety and value other issues like profit more. (Beck 1999; Clarke 1999; Mascarenhas and Wisner 2012; Tierney 2014.) At the same time in the domain of disaster management, risk is very often seen as independent of power relations. United Nations, for example, defines disaster risk consisting of the potential loss of lives, health status, livelihoods, assets and services, which could occur to a community or a society over some specified future time period (UNDISR 2009).

The international community tries to combat risks under the umbrella of United Nations disaster reduction strategies. Their focus has changed from a narrow perspective of response to disasters to a more wider perspective including preventive measures and reduction of vulnerabilities (Aitsi-Selmi et.al. 2015; Arnold 2012). Three international frameworks: Yokohama, Hyogo and the latest of Sendai, all embraced by the United Nations, guide actions of disaster risk reduction globally (Aitsi-Selmi et.al. 2015; Tozier de la Poterie and Baudoin 2015). The Sendai Framework for Disaster Risk Reduction was approved by nations at the United Nations World Conference in March 2015 and is linked better than before to the Sustainable Development Goals and the Intergovernmental Panel on Climate Change (Aitsi-Selmi & Shinichi & Sasaki & Wannous & Murray 2015; Tozier de la Poterie & Baudoin 2015).

At the international level disaster risk reduction is gradually being recognized as a development and humanitarian issue and closely linked to climate change adaptation, even though conflict prevention still seems to be lacking in the Sendai framework (Manyena 2016). Provision of basic services and good governance are among the issues that are seen to make risk reduction effective (Arnold 2012). However, challenging risks and vulnerability means challenging

power, as both are caused by the social order (Tierney 2014, 5-6). Also in between the sectors of international cooperation frameworks power relations play a large role, which is seen in how funding is allocated to disaster risk reduction (Arnold 2012).

This study deals with the role of social work in disasters and thus cross-cuts the humanitarian, disaster risk reduction, and climate change adaptation domains. The core function of social work has been addressing life challenges and enhancing peoples' wellbeing from the very beginning (Zakour 1996). That is also the aim of pre- and post-disaster actions in general (Gillespie 2010) and as noted, has only lately been raised as the key aim of disaster risk reduction (Arnold 2012; Tozier de la Poterie & Baudoin 2015). Social work is also inter-linked to the wellbeing of the environment and nature (Alston 2013; Dominelli 2012; Närhi & Matthies 2016). However, social workers' roles in connection to disasters are unclear in many societies, and they are quite seldom recognized as important actors in disaster management, even though they work closely with and aim to improve the lives of vulnerable populations. (Alston 2007; Dominelli 2012, 20, 50-51.)

Social workers play an important role in disaster risk reduction and management for many reasons. Firstly, the consequences of crises and disasters are encountered in social services and in the daily tasks of social workers. Disasters impact most severely those people who in their daily life are most vulnerable (Cherry & Cherry 1997; Gillespie 2010; Sanders & Bowie & Dias Bowie 2003; Thomas & Soliman 2002) and are often already clients of social work before the crises. Secondly, social workers not only alleviate the living conditions of the vulnerable but also enhance social capital and the resilience of individuals and communities (Hawkins & Maurer 2010; Mathbor 2007). Thirdly, social workers have concrete service linkages, for example, with the rescue services and the police in search and rescue, damage assessment, emergency communication, evacuation and referral, because these response services deal with the needs of the victims in disasters (Danso & Gillespie 2010). Fourthly, as social workers do most of their work in the local level they should be well connected with the other local disaster management actors. This is because community level organizations, groups and individuals are always the first to act in disasters and they carry most of the burden of disaster response (Dynes 2006; Henstra 2010; Alexander 2015).

Research in the field of disaster social work is very limited in Finland and in the other Nordic Countries (Eydal et al. 2016; Rapeli et al. 2017). Internationally there are studies on social work's response related to disasters and its role in recovery process. Australian drought (Alston 2007) and bushfires (Du Plooy & Harms & Muir & Martin & Ingliss 2014; Hickson & Lehman 2014), Hurricane Katrina in the United States (Bell & Madden & Borah 2010), earthquake in Iran (Aghabakhsi & Gregor 2007) and the SARS Crisis in Hong Kong (Leung & Wong 2005) are examples of research and of scenes for social work's disaster response. Even though there are plenty of examples of disaster social work, recommendations, and guidelines for preparedness (e.g. Scharoun & Dziegielew-

ski 2004; Wodarski 2004; Rowlands 2013), social workers' involvement in preparedness planning and connections to other disaster management actors is still unclear and poorly studied. The aim of this study is on one hand to obtain information on the role of social work in disasters in Finland and on the other, to conceptualize disaster social work in order to understand it better.

My dissertation consists of four individual articles focusing on the role of social work and social services in disasters. In this summary article, I will first present the research questions of my thesis and thereafter briefly the four individual articles, which study social work's role in disasters from various angles. Disaster social work intervention model (Elliott 2010), which is introduced in chapter 3, forms the theoretical framework of this study. The framework was originally created to introduce disaster related practices to the curriculum of social work (Elliott 2010). I found it useful for this study, as it outlines well social work's roles in disasters. As the concepts of vulnerability, resilience and social capital are central in disaster research (Tierney 2014; Wisner et al. 2004; Zakour & Gillespie 2013) I will introduce them in chapter 4. The concepts are important in conceptualizing disaster social work and in understanding what is and what could be the role of social work in disasters. This is discussed in chapter 7 after the methods (chapter 5) and the main empirical results (chapter 6) of this thesis.



## 2 THE RESEARCH QUESTIONS AND COMPOSITION OF THE STUDY

In this study, I explore the role of social work in connection to disasters, with a special interest on preparedness. Specifically, I will explore the role of social work in the context of disaster management in Finland. I will examine this firstly using the Finnish municipal social services' preparedness plans as empirical data, and secondly, using survey data of the private social care units' preparedness. This will be analyzed in the light of international research on disaster social work and disaster social work interventions framework. The motivation of my study is cross-cutting disaster management and social work, adopting the concepts of vulnerability, resilience and social capital.

The research questions are

1. What is the role of social work in disaster management in Finland?
2. What is the role of social work in disaster management in Finland in relation to international disaster social work discussions?

I use the term *disaster social work* to describe social work practiced in the context of disaster management and implemented by professionals working in social work and social services in the micro, mezzo and macro level. In this summary article, I compile the main findings of the individual articles and highlight the most important findings to build a more coherent picture of the role of social work in disaster management in Finland. The results of Finland are reflected on the international disaster social work discussions. I use Doreen Elliott's (2010) disaster social work intervention model as theoretical framework in outlining the roles. I also reflect the findings on the concepts of disaster vulnerability, resilience and social capital. This study is motivated by the belief that vulnerability, resilience, and social capital are central concepts to both social work (Hawkins & Maurer 2010; Mathbor, 2007; Zakour & Gillespie 2013) and disaster studies (Aldrich 2012; Tierney 2014; Wisner et al. 2004).

This summary article of the thesis is based on the empirical results of four individual peer reviewed articles. The individual articles, research questions and the data used in the studies are compiled in Table 1.

TABLE 1 The individual articles, research questions and the data used in the studies

N:o	Article and the reference	Research questions	The data
I	Rapeli, M. (2016) Sosiaalityö ja katastrofitilanteet kansainvälisissä tutkimuksissa - kirjallisuuskatsaus (Social work and disasters in international peer reviewed journals - a systematic review). In M. Jäppinen & A. Metteri & S. Ranta-Tyrkkö & P-L. Rauhala (Eds.) <i>Sosiaalityön tutkimuksen vuosikirja 2016. Kansainvälinen sosiaalityö. Käsitteitä, käytäntöjä ja kehityskulkuja</i> (pp. 248-272).	1. What is the role of social work in the context of disasters? 2. What recommendations are given for disaster social work in the international research literature?	30 peer reviewed international journal articles.
II	Rapeli, M. (2017) Social capital in social work disaster preparedness plans: the case of Finland. <i>International Social Work Vol. xx, No. xx pp. xx-xx</i> . DOI: 10.1177/0020872817695643	1. Which roles and interventions are planned for social work in disasters in Finland? 2. Which forms of social capital are emphasized in the interventions?	Preparedness plan documents (N=255).
III	Rapeli, M. (2017) Assessment of Social Services' Disaster Risk Management: Case Finland. <i>Journal of Contingencies and Crisis Management Vol. xx, No. xx pp. xx-xx</i> . DOI:10.1111/1468-5973.12160	1. What is the level of local social services' disaster risk management planning in Finland? 2. What differences are found between large and small service areas?	Preparedness plan documents (N=255).
IV	Rapeli, M. and Mussalo-Rauhamaa, H. (2017) Disaster Preparedness of Private Social Services: Case Finland. <i>International Journal of Emergency Services 6(1), 40-51</i> . DOI: 10.1108/IJES-09-2016-0022	1. How were the private service providers of institutional care and sheltered housing prepared for hazards? 2. What kind of measures were taken after the heavy storms in 2013 or other recent hazards? 3. How were the organizations linked to disaster risk management actors and relatives of their clients with regard to hazardous situations and preparedness planning?	Survey questionnaire (N=797).

The first article (Article I) is a review article, which has been guiding the further individual articles of this thesis. That study explores the roles and interventions of social work in disaster situations in various parts of the world. In addition, it compiles the recommendations given for disaster social work in the reviewed studies. In conducting the review, my aim was to find out what is the role of social work in disasters. Integrative literature review (Salminen 2011; Whittemore & Knafel 2005) was used as the research method of the study. Peer reviewed articles were searched from international databases, and articles were chosen in accordance with prepared inclusion criteria. The final data consisted of 30 articles of studies on disaster social work. A theory driven content analysis (Bryman 2004, 8-9; Tuomi & Sarajärvi 2009, 113-117) was used in extracting and

interpreting the articles. Disaster social work intervention model, consisting of social and human investments, economic participation and political empowerment interventions (Elliott 2010), was used in analyzing the roles and recommendations. Results of the study showed that social and human investments were emphasized in disasters in favor of political empowerment and economic participation interventions. My conclusion of the review is that social work should develop its' community based and structural social work interventions in the context of disasters. (Article I.) Doreen Elliott's (2010) disaster social work intervention model was found useful in analyzing and describing social work's roles. The framework of disaster social work interventions is introduced in chapter 3.

The second and third articles (Articles II and III) are based on the same data: Municipal social services' disaster preparedness plans of Finnish municipalities. In these articles, I found my motivation again from prior practical work with disaster issues, as I wanted to study what the local social services' preparedness plan documents consist of. The aim of the second article was to find out what can be learned from the current state of Finnish social work preparedness in order to improve future interventions to better use social capital in disaster social work. I found social capital an important concept, that has been used both in disaster studies (Dynes 2006, Aldrich 2012, Tierney 2014), disaster social work (Mathbor 2007; Hawkins & Maurer 2010, Zakour & Gillespie 2013) as well as in social work research in general (Ersing & Loeffler 2008). Therefore, I used the concept in analyzing the documents. In the second article (Article II) quantitative content analysis (White & Marsh 2006) was used as the research method, and the analysis of the data was based on the concept of social capital and its dimensions of bonding, bridging and linking. The results show that micro level social work and bonding social capital were particularly important for disaster social work as they were emphasized in the preparedness plans. Bridging and linking social work to disaster-related structures should be developed and social capital enhanced pre- and post-disasters.

In the third article (Article III) I wanted to assess the capacities of municipal social services' preparedness, as local actors are crucial in disaster management. The specific aim was to study how social service areas of various sizes were prepared for disasters in Finland. Quantitative document analysis was used and the level of preparedness was analyzed using Emergency Management Program Measurement (Henstra 2010). The results showed that disaster management capacity varied significantly between large and small towns or social service areas. Larger areas were better prepared for supporting management and had better procedures to activate their response, and deeper cooperation with the private sector, civil society and volunteers. (Article III.) Article III also discusses whether the overall level of preparedness is adequate in Finnish municipalities and social service areas, as pre-disaster planning is an important measure in reduction of vulnerabilities and increasing resilience of individuals and local communities in disasters (Tierney 2014; Wisner et al. 2004).

The fourth (IV) article describes private social care units' preparedness and continuity planning as well as actions taken during the heavy storms of 2013 in Finland. Several heavy winter storms struck Finland in the end of 2013. In worst cases, there were week-long power disruptions in local communities which affected also social services. To inquire on the impacts of the storms and to explore preparedness measures taken in the private social services, we initiated a survey on the service providers in the Preparedness Unit of the Ministry of Social Affairs and Health in the spring of 2014. (Article IV.) Me and my colleague working at the Preparedness Unit of the Ministry designed the survey and analyzed the results together. My colleague, the second author of the final article (Article IV), carried out the statistical analysis of the data while I was responsible for the writing and discussion process of the article. In Finland, social service areas can purchase services for their clients from the private sector, and a significant share of sheltered housing are units of private businesses or not-for-profit service providers. (Arajärvi & Väyrynen 2011; Institutional care and housing services in social care 2014, 2015, 1-11.) In this article preparedness and response were studied with a survey data gathered from the privately produced institutional care and sheltered housing services in Finland. The study showed that less than one fifth (19%) of the private service providers had a disaster preparedness plan, and only 11 percent reported that it was a requirement agreed on with the service purchaser. The size of the unit predicted only partly the differences in the level of preparedness. The major impacts of storms were on energy supply, leading to disruptions in the daily activities of the services. The most vulnerable to disasters are people dependent on others, which include those in institutional care and sheltered housing services. Consequently, it is recommended in the Article IV that the local governments' service purchasers include private services in their disaster preparedness activities, in order to increase resilience of the local communities. Private businesses are increasingly involved in producing social services in Finland, hence their preparedness to face hazards and link to the disaster management partners is vital. (Article IV.) The fourth article focuses on the disaster preparedness of private institutional care and sheltered housing services, which has seldom been the subject of studies in Finland. It also broadens the perspective of this thesis to the private social services which are gaining more importance in the Finnish welfare model and, thus, should be better involved with disaster management in the future.

## 3 DISASTERS AND SOCIAL WORK

### 3.1 Disaster risk reduction and management

Disaster, crisis, disturbance and emergency are terms that describe unexpected, unusual, unmanageable and adverse situations. According to Boin and t'Hart (2007) the term disaster refers usually to natural disasters, while crisis refers to human-made undesirable events. In the Finnish Security Strategy for Society (Ministry of Defence 2011) the term disturbance (häiriötilanne) is used instead of disaster. Disturbance is "a threat or an occurrence which endangers security in society, capacity to act, or the population's living conditions. Co-operation and communication of the authorities and other actors on a wider or more intensive scale are needed to manage the situation" (Ministry of Defence 2011). Handbook on emergency planning in social services (Ministry of Social Affairs and Health 2008, 11) notes also disturbances as the reason for preparedness planning and examples given are prolonged disruption in power supply, strike in a vital sector of society, weather conditions causing wide harm or damage, and serious economic disturbance in the society.

United Nations secretariat for implementation of the International Strategy for Disaster Reduction (UNISDR) has developed definitions for central terms to promote common understanding worldwide among various actors of societies (UNDISR 2009). Therefore, UNISDR definitions (2009) of disaster, disaster risk reduction, and disaster management are used as a starting point in this study. In addition, they are used here because disaster is the term used in Doreen Elliott's social work intervention systems model, which is used as a framework in analyzing the role of social work in this study. In the UNDISR definition disasters are not limited to natural ones: Disaster is "a serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources" (UNDISR 2009).

Many scholars argue that in addition to technological disasters and conflicts so called natural disasters, like hurricanes, floods, plaques and famines, are human made and closely linked to the economic and political power structures (Bolin 2007; Tierney 2014; Wisner et al. 2004, 50). Even disasters like mass casualty accidents seldom emerge suddenly or overnight. Turner (1976) studied three fatal accidents in the U.K. and found that there had been warning signs that had been ignored and the incubation time for the disasters had been years.

Disaster risk reduction and management are actions taken pre- and post-disasters. Disaster risk reduction refers to “the concept and practice of reducing disaster risks through systematic efforts to analyse and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events” (UNDISR 2009). The United Nations is promoting disaster risk reduction in the global level by initiating strategies and frameworks for action (Aitsi-Selmi et al. 2015; Drennan & McConnell & Stark 2015, 231-232). Sendai Framework for Disaster Risk Reduction is the latest strategy, approved in 2015. The framework is brought up in this study because it gives the frame for and guidance of disaster management. In addition, the framework is recognized globally, and it contextualizes and links this study to the international discussions.

From the perspective of social work there are important pros and cons in the newly adopted Sendai Framework. The framework has been praised for including mental and physical health, resilience and wellbeing (Aitsi-Selmi et al. 2015) and for its many references to the needs of people with disabilities: Universal design of environment is adopted to disaster mitigation, disaster management activities are guided to be inclusive, technology and communications should be accessible, and notifying individuals with disabilities and their advocacy organizations as important stakeholders of disaster management (Stough & Kang 2015). However, the new framework has also been criticized for emphasizing technological advances in favor of valuing local community knowledge and participation. The strategy acknowledges the needs to support the most vulnerable and exposed communities, but the approach is seen to be top-down: Assistance in the form of expertize and information to the local communities. (Tozier de la Poterie & Baudoin 2015.) The strategy has also been criticized for not requiring states to allocate funding for the implementation of the framework (Aitsi-Selmi et al. 2015; Tozier de la Poterie & Baudoin 2015; Stough & Kang 2015). The Sendai Framework for Action also acknowledges the human impact in creation of disasters, social vulnerability, and capacity to respond better than the earlier frameworks (Aitsi-Selmi et al. 2015).

Disaster risk reduction is a wider concept than disaster management. According to my understanding, it aims to reduce vulnerabilities in the long run, and thus the concept is important from the point of view of ordinary day-to-day social work. However, the focus of my study is on disaster management, which forms one part of disaster risk reduction. I started my research using the term disaster risk management which refers to “application of disaster risk reduction

policies and strategies to prevent new disaster risk, reduce existing disaster risk and manage residual risk.” (UNDISR 2009), but finally I found the term disaster management the most appropriate term. This is because preparedness planning is central in my study. The terms emergency management and civil protection are also widely used in this context (Alexander 2005 and 2015; Henstra 2010; Waugh 2007), but, as noted, in this study the term disaster management is used. Disaster management refers to: “The organization, planning and application of measures preparing for, responding to and recovering from disasters. Disaster management may not completely avert or eliminate the threats; it focuses on creating and implementing preparedness and other plans to decrease the impact of disasters and “build back better”. Failure to create and apply a plan could lead to damage to life, assets and lost revenue” (UNDISR 2009). Better disaster risk governance, capacity assessment, accountability and recognition of all stakeholders are elements in the Sendai Framework aiming to strengthen disaster management capacities of nations (Sendai Framework 2015). Recognition of social work and services in the context is thus important.

As noted earlier, disaster management, emergency management and civil protection are terms that are common in disaster research and practice. Emergency managers are usually central actors in coordinating disaster related actions in the local level. However, the question of which authority takes the responsibility of emergency management coordination varies from country to country. (Alexander 2015; Henstra 2010; McEntire 2007; Waugh 2007.) For instance, each Nordic country has a different way of organizing disaster management coordination in the state, regional and local levels (Eydal et al. 2016; Rapeli et al. 2017). In this study, the question of which profession or agency is responsible for coordination of disaster management is not relevant. What matters more from the point of view of outcomes is cooperation. Cooperation with all relevant stakeholders in disaster management is recognized to be crucial in pre- and post-disaster actions. (McEntire 2007; Waugh 2007.)

Disaster management cycle is very often used to illustrate the life cycle of managing disasters, which consists of mitigation, preparedness, response and recovery phases of disaster (Drennan et al. 2015, 30-21; Gillespie & Danso 2010, xiii). There are scholars, though, who remind us that disasters do not truly follow phases, and that in reality, the phases are overlapping each other. It has been argued that the cycle-approach can even cause a neglect of important actors in the disaster management process. (Wisner et al. 2004, 20.) Nevertheless, the concepts of mitigation, preparedness, response and recovery are used in this study, although acknowledging the challenges related to the phases. Mitigation refers to prevention or limitation of the adverse consequences of hazards (Drennan et al. 2015, 30-21; Gillespie & Danso 2010, xiii; UNDISR 2009). Disaster prevention is vital, but it usually pertains only to already known crises and disasters, thus resilience and flexibility is needed in response (Boin & t’Hart 2007). In addition, as noted earlier, risks are very closely interlinked with political and economic power and thus the root causes of disasters are far from an easy task to prevent (Tierney 2014, 9).

Disaster preparedness consists of the knowledge and capacity of governments, local communities and individuals to respond to and recover from adversities. Preparedness planning, training and exercises are executed in preparation for possible contingencies (Drennan et al. 2015, 30-21; Gillespie & Danso 2010: xiii; UNDISR 2009). Business continuity planning is the respective term used in the private sector instead of preparedness planning (Drennan et al. 2015, 117-118; ISO 2012; Lindström et al. 2010). Preparedness as part of disaster management is a central term in this study, as the main empirical data consists of the Finnish municipal social services' preparedness plan documents. Preparedness to act in case of disasters or disruptions in daily activities makes us better to cope and in that way, more resilient (Tierney 2014, 5), and thus the planning documents give a good starting point to study disaster management.

UNDISR (2009) defines the term response as follows: "The provision of emergency services and public assistance during or immediately after a disaster in order to save lives, reduce health impacts, ensure public safety and meet the basic subsistence needs of the people affected." Response consists of wide range of tasks such as incident management, information gathering and assessment, facilitating communication and so on (Drennan et al. 2015, 167-176; Henstra 2010). Disaster response is two-tiered: on the one hand actions taken and management 'on the ground', and on the other hand actions dealing with the political upheaval, instability caused by the disaster and the public opinion (Boin & t'Hart 2007). Recovery consists of acute and long-term tasks such as rehabilitation and reconstruction but also learning of the incident and assessment of the response taken (Drennan et al. 2015, 31; Henstra 2010).

### **3.2 Social work interventions and disaster management**

Historically social workers have been involved in producing emergency services for people in need in disasters and during conflicts, for example in Chicago fire of 1871, San Francisco earthquake and fire of 1906 and during the World Wars (Zakour 1996). More recently, development of social work theory and practice to meet challenges raised by environmental disasters and climate change have been called for (Alston 2013; Dominelli 2012). There are plenty of studies on social workers' involvement in disaster response and recovery (e.g. Araki 2013; Bell 2008; Chou 2003; Du Plooy et al. 2014; Huimin et al. 2009; Manning et al. 2006). According to my systematic review (Article I) the emphasis of disaster social work research is in response and recovery and in giving recommendations and guidelines for the work (e.g. Rowlands 2013; Wodarski 2004; Scharoun & Dziegielewski 2004). There are also studies on emergency preparedness in nursing homes as well as on the impacts of disasters on vulnerable populations. However, there are only a few studies on how social workers have been involved in disaster management and preparedness planning, which is the main focus of this study. Scharoun and Dziegielewski (2004) describe studies on preparedness of emergency departments in the United States, and conclude that



few hospitals were truly prepared, especially for assisting people during and after a bioterrorist attack. Cyganik (2003) studied preparedness of Arlington hospital after September 11 attacks, and discovered that social workers were not involved in the disaster committee of the hospital, and its role was not defined in the preparedness plan.

People living in institutional care and nursing homes have special needs, which make them more vulnerable to hazardous situations (Alexander & Sagramola 2014; Dosa et al. 2010; Seale 2010; Thomas & Soliman 2002). Therefore, it is important that the institutions are prepared for disasters. Preparedness and evacuation planning of nursing homes have been studied for example in the United States. Extensive variability has been found both in the state requirements for planning but also in the level of preparedness planning of nursing homes (Brown et al. 2007). Castle (2008) evaluated evacuation plans and found that some nursing homes needed more specific plans than they had, and that water supply was the most addressed and evacuation routes the least addressed areas of planning. Claver et al. (Claver & Dobalian & Fickel & Ricci & Horn 2013) found that residents' biological, psychological and social needs should be better taken into consideration while preparing for disasters and for possible evacuation of the facility.

In this thesis, I use Doreen Elliott's (2010) model of disaster interventions (Figure 1) as a theoretical framework in exploring the roles of social work in disaster management. I use this model, because being based on the internationally well recognized approach of social development, it is consistent with central theoretical traditions of social work, for example structural social work and strength based practice (Elliott 2010). In the model, social development is seen to be the main goal of social work's disaster related interventions, which should be implemented in micro, mezzo and macro levels. In her model, Elliott refers to Midgley (1995), who defines social development as a planned process of social change aiming at wellbeing of people through economic development. Other scholars also acknowledge the importance of livelihoods and economic security in building resilience and safeguarding people in disasters (Wisner et al. 2004; Cannon 2008).

The underlying values and goals of disaster social work interventions, as defined by Elliott (2010), are sustainable economic wellbeing and security for families and communities, social justice and human rights, as well as individual and community empowerment for human wellbeing. The purpose and values of each organization are acknowledged also in other domains while preparing for disasters: The International Standards that guide business continuity management stress that organizations should take into consideration their objectives and key targets as a starting point while preparing for crises and disasters (ISO 22301).

As noted previously, the disaster social work intervention model (Elliott 2010) has an empowerment approach and is thus consistent with the idea of structural social work (Mullally 1997), which assumes that the dynamics of socioeconomic structures of societies cause social problems. Social work is under-

stood to be able to embrace social change and have an impact on diminishing root causes and dynamic pressures of vulnerability. Structural social work is progressive and based on critical social theory: The way our society is structured causes social problems, which can be alleviated and diminished in changing the structures. (Mullally 1997, 108-134.) Social work has a binary role in between individuals and the structures. In structural social work both client centered micro level social work as well as work in the mezzo and macro level are needed as the levels have an influence on each other. Social workers gain vital knowledge on the needs of vulnerable people in their work with individuals, groups and communities. At the same time the knowledge gained is needed in influencing policies. (Pohjola 2011.)

Disaster social work interventions model acknowledges also systemic approach which stresses the fit between person and the social environment (Elliott 2010). Systems approach is understood to be practice focusing on interactions between people and systems in the social environment and not emphasizing individualization and psychology (Payne 2005, 142, 157). In the systems approach the strength of social work is to work with the connections between individuals, groups and communities. The work should consist of not only the client but also people and structures related to the client, "person in environment". The major functions of social work relate to enhancing clients' problem-solving capacities, linking people with and facilitating interaction between societal resource systems, contributing to the development of social policy, delivering of material resources and serving as agents of control (Pincus & Minahan 1973, xii, 3, 15-33.)

Systems approach has been criticized of supporting existing social order and not promoting social change, but praised for enlargening the focus of social work from individualizing approaches to social environment and for example social networks (Payne 2005, 142, 155-156). As disaster risk is interlinked with the existing social order (Tierney 2014), reducing vulnerabilities is not possible without social change. Therefore, structural approaches are needed in social work. Structural approach also allows ecosocial perspectives and practices (Närhi & Matthies 2016) to be included in disaster social work interventions, even though Elliott considers in her model person in environment to address mainly social environment.

Elliott (2010) understands that social investments, economic participation, political empowerment and human investments are social work's core interventions in the context of disaster management. Interventions of social investment aim to maximize inclusion and opportunities for all. Examples of social investment as intervention include ensuring basic needs like water and sanitation, material assistance, and special programs for highly vulnerable populations. Building social capital is also one of the aims of social investments, as well as securing equal access for services for all in need. Economic participation as social work's intervention explicitly promotes social development. Fund-raising for long and short term needs and micro loans are examples of this intervention. (Elliott 2010.) In the Finnish context, social assistance and benefits can be re-

garded as examples of intervention of economic participation. Political empowerment as intervention includes empowerment of marginalized people, advocating rights of vulnerable groups, good governmental relations in local, regional and central level, and defining victim status for those affected. Human investment as an intervention consists of perhaps the best-known and implemented social work's tasks, such as psychosocial support. (Elliott 2010.) Elliott's model of social work's interventions related to disasters is described in Figure 1.

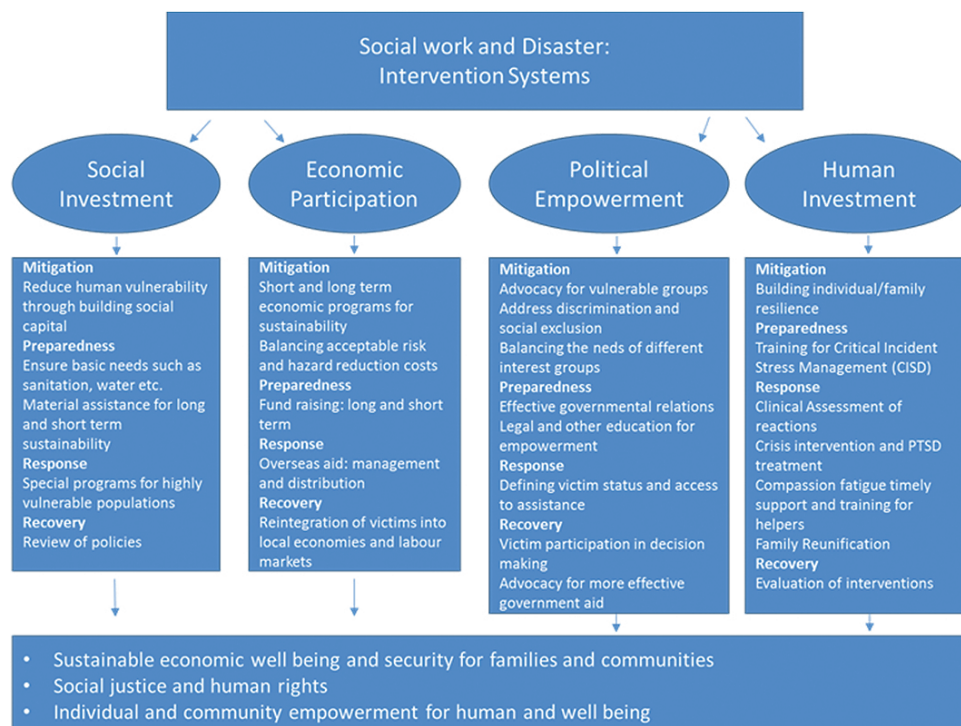


FIGURE 1 A Social Development Model for Infusing Disaster Planning, Management and Response into the Social Work Curriculum (Elliott 2010, 96)

Elliott (2010) describes each intervention as defining the role of social work in mitigation, preparedness, response and recovery phase of the disaster cycle (see also Drennan et al. 2015, 30-32). The cycle model of disaster related actions has, as noted earlier, been criticized because the various phases overlap each other and do not catch the reality of local people and communities (Wisner et al. 2004, 20). I use Elliott's intervention system model as a framework to further explore the substance of disaster social work during actual disasters but instead of phases of disaster, I have combined bonding, bridging and linking social capital to the model. This is because although reducing human vulnerability and building individual and family resilience are embedded in the interventions defined by Elliott, more concrete reference to enhancing social capital in disaster related social work is needed (Hawkins & Maurer 2010; Mathbor 2007).

### 3.3 Case Finland

#### 3.3.1 Social work in Finland

Finland shares the Nordic tradition of a welfare system, which is based on universalism, where all citizens in need are entitled to basic social security and services. Social and health care services are mainly financed by taxes and administered by the local authorities. (Social Protection in the Nordic Countries 2015/2016 2017, 16-17; Kautto & Frizell & Hvinden & Kvist & Uusitalo 2001, 6; Sipilä et al. 1997, 28.) Finland provides quite high level of social services, although currently there are major differences between the municipalities in the universality and regional coverage of the services (Kröger 2011).

The definition and contents of social work differ from country to country as the welfare state and the socio-political structures and institutions build the framework for social work (Lorenz 1994). This is also the case in Finland, where the welfare state institutions influence the work. The development of professional social work in Finland in its early stages was closely connected to poor relief in the parishes, the development of municipalities, and establishment of state and local level institutions (Juhila 2006, 12-48; Topo 2011). Education of professionals working within the emerging social services in the 1940s emphasized juridical and administrative approach which fulfilled the needs of municipal institutions. Professional social work eventually took form in the 1970's while the welfare state started to expand along with urbanization of the society. Social work developed to be on the one hand bureaucratic and on the other, casework. (Juhila 2006, 12-48.)

Currently, majority of social workers in Finland are employed in the public sector, by the municipalities or by joint municipal social service areas. They work in the child and family care services, elderly care, rehabilitation, within health care, and with people with disabilities or substance use disorders (Karjalainen & Sarvimäki 2005, 19). Social workers working in the private sector are closely connected to the public social service institutions, as they very often work in the institutional care and sheltered housing services run by private companies or non-governmental organizations (NGOs) and financed by the public sector. (Juhila 2006, 12-48; Karjalainen & Sarvimäki 2005, 20.) At the same time, along with social work, social services enlarged in the 1970's. As women were increasingly employed outside homes in Finland, day care for children and care for the elderly and people with disabilities was needed. "This type of care was socially-defined unlike the care linked to medically defined needs" (Wrede & Henriksson & Høst & Johansson & Dybbroe 2008, 14).

As in the early stages, social services are still organized locally in Finland, either by a single municipality or in cooperation with neighboring municipalities (Heinämäki 2011, 8). Since 2007, after the establishment of so called Paras-legislation, municipalities of less than 20 000 inhabitants were required to merge or organize collaboratively health care services and health care related

social services. The aim of the reform was to increase efficiency of the services and promote cooperation between social and health care services. (Kokko & Heinämäki & Tynkkynen & Haverinen & Kaskisaari & Muuri 2009; Kröger 2011.)

The proportion of privately produced social services is in the rise in Finland. This can be seen also in the work of social workers who must increasingly deal with procurement and purchasing processes (Karjalainen & Sarvimäki 2005, 26). The municipalities can purchase a part of their services from the private sector, and currently approximately 30 percent of social services are privately produced (Arajärvi & Väyrynen 2011). The share varies by service, but the private sector provides a significant share of sheltered housing. Nearly 90 percent of the services for mental health rehabilitation clients, and nearly half of the services provided for the elderly in sheltered housing, are units of private businesses or not-for-profit service providers. (Institutional care and housing services in social care 2014 2015, 1-11)

Social work is in this study viewed from a broad perspective, even though in Finland social work refers very often only to work done by licensed social worker with Master's degree from university. I use the concept of social work to broadly refer also to development of social services, and to work implemented in social services which aims at enhancing human rights and equal opportunities in society. Social services are on the one hand social work's method to enhance human well-being, and on the other, organizational context to work within. (Kröger 2004.) Social work is thus considered here to also include municipal social services in general and for example residential care services. Yet there are professionals with various educational backgrounds working in the social services, either in public, private or voluntary organizations (Mizrahi & Davis 2008; Munday 1989, 8-10). Care workers in Finland provide comprehensive socially defined care, although it has been argued that lately the social dimension has been eroded at least in the home care services (Henriksson & Wrede 2008).

In this study the concept of social services refers to municipal social services, such as social care services or personal social services (Sipilä et al. 1997), as well as to social services purchased by the local government from the private companies. This is consistent with the Nordic Statistical Committee's (Social Protection in the Nordic Countries 2015/2016 2017) way of using the concept.

### **3.3.2 Disaster management in Finland**

Finland is one of the 187 nations that has adopted the Sendai Framework for Disaster Risk Reduction and is aiming to reach its goals (UNDISR Finland 2016). Finland has a long tradition of preparedness planning and a model of comprehensive security, in which all the sectors of society are urged to cooperate in preparing for disasters (Ministry of Defense 2011; Kolbe 2011, 14-15; Tervasmäki 1983, 29). All authorities and the public sector in general are mandated to prepare for disasters according to the emergency powers legislation (Ministry of Defense 2011). At the local level, the Finnish municipalities are vital actors of disaster management. The rescue services, which are organized regionally

but are governed by municipalities, guide local level preparedness planning if this has been agreed upon with the local municipalities. The Regional Administrative Authorities, which are state authorities, monitor local preparedness efforts and organize preparedness exercises for the municipalities. (Rapeli et al. 2016.)

The municipal preparedness plans consist of a general plan and sub-plans for each service sector; for example, land use, building, and social services. The Ministry of Social Affairs and Health has given disaster preparedness planning guidelines for the social services in 2008 (Ministry of Social Affairs and Health 2008). The private social services don't have a legally binding obligation of preparedness or business continuity planning, and regarding safety and security issues only fire safety and rescue plans and plans for quality supervision of the services are legally based requirements for the service providers. Municipalities are guided to agree on the continuity of the services while purchasing social services from the private sector (Ministry of Social Affairs and Health 2008).

Concerning hazards and risks, Finland is regarded as a low risk country, although flooding, storms, mass shootings, and mass casualty accidents are examples of disasters that are unfortunately not unknown to Finland. The National Risk Assessment names 21 risk scenarios, which are either nationwide disasters or those with more regional impact. The wide-ranging disasters include serious disruptions in energy supply or in the cyber domain, serious human infectious diseases, security policy related crises, severe nuclear accidents and solar storms. Flooding, serious accidents and fires, disruptions related to drinking water, storms and other weather-related disasters, acts of terrorism or other violence, and mass influx of migrants are considered to affect regional safety and security. (Ministry of Interior 2016.)

Finland has rarely been affected by extreme weather conditions causing significant damage, yet in recent years there have been some severe storms. The storms in the summer of 2010 caused significant damage to the built environment, and this also affected institutional care and residential service units, which were less prepared for electricity cuts than for instance the hospitals (Investigation Report S2/2010Y 2010 2010: 8). Early winters of 2011 and 2013 faced also exceptionally severe storms. The winter storms of 2013, impacts of which are followed in this study, were characterized by high winds. The storms caused black-outs in electricity supply, mobile coverage, and internet connections in wide areas of Finland. (Finnish Meteorological Institution 2013a and 2013b; Viestintävirasto 2013.)

As noted, local actors are the first to encounter crises and disasters ((Dynes 2006; Henstra 2010; Alexander 2015). Social workers are most often employed in the local social services and are closely connected to the community level vulnerabilities. Consequences of various emergencies and crises are encountered in the daily tasks of social workers. Social workers have concrete service linkages, for example, with the rescue services in case a family has lost their home in a fire, and with the police for example in a case of a mass shooting. Therefore, social workers should be involved actively in disaster management. However,

the results of a study of social and health care emergency services in Finland showed that only 19 percent of emergency social services had a duty to act in case of crises like major accidents or fires, and only 16 percent of them were nominated as the first ones to be alarmed in such on duty emergencies. The main duty of emergency social services was related to child protection issues. (Reissell et al. 2012.)

## **4 VULNERABILITY, RESILIENCE AND SOCIAL CAPITAL IN DISASTER RESEARCH**

### **4.1 Key concepts in disaster research**

Disaster research is based on many disciplines such as sociology, geography, anthropology, civil engineering, public health and disaster medicine (Zakour & Gillespie 2013, 12). Sociological and social science based research of disasters is voluminous especially in the United States. The first empirically based study of disasters is considered to be that of Samuel Henry Prince (1920) on an explosion in Halifax, and the first theoretical work “Man and Society in Calamity” (1942) by Pitirim Sorokin. (Dynes 1988.) Organized social science studies of disasters gradually started in the end of 1940s in the United States and focused on nuclear war threat, though other human induced and ‘natural’ disasters were also research topics. People’s behavior, like looting, panicking and mental disorders in consequence of disasters were topics of the early studies. (Bolin 2007; Tierney 2014, 198-199.) The focus of comparative sociological disaster studies has been on organizational and community levels, but there have not been any distinctive theoretical approaches in the field. However, as Dynes has argued, as disasters are social phenomena, they should be identified and explained in social terms. (Dynes 1988.)

Vulnerability and resilience are essential concepts in disaster research. (Tierney 2014; Zakour 2010.) They are also vital concepts for social work research and practice (Gillespie 2010; Zakour 2010) and therefore, central for this study along with the concepts of bonding, bridging and linking as dimensions of social capital. Social capital links individuals as social actors to social structures (Coleman 1988; Putnam 2000) and it is at the same time closely connected to both vulnerabilities and resilience (Tierney 2014). In this section I will introduce these disaster related concepts and how they are used in this study. Resilience can be understood to be the opposite of vulnerability, as lack of resilience makes us more vulnerable to disasters (Tierney 2014, 166). The same can be said of social capital, although it is not quite so straight forward, as certain vulnera-



ble people and groups can also be more resilient to a disaster than others (Tierney 2014, 185-196). Because vulnerability and resilience are not just the opposite features of each other it is important to describe here both concepts separately. In addition, social capital is linked to social work practice (Ersing & Loeffler 2008) and therefore needs a closer look.

The concept of risk is an inherent part of disaster research and links to vulnerability and resilience (Tierney 2014, 11). According to Ulrich Beck (1999), the world has transformed to what he calls risk society and reflexive modernity which is characterized by uncertainties. The first modernity of nation states, characterized by exploitation of the nature and local risks has changed to the second modernity where societies must respond to many challenges simultaneously: Globalization, individualization, gender revolution, underemployment and global risks. (Beck 1999, 1-2.) Many scholars, including Beck, regard risks as products of social order and closely related to political and economic power. Powerful organizations and institutions overlook safety and value other issues like profit more. (Beck 1999; Clarke 1999; Mascarenhas & Wisner 2012; Tierney 2014.) At the same time, we don't always want to minimize risks, as it is also connected to innovation which produces economic growth, for example (Giddens 2000, 21). Risk is here understood to be very closely linked to disasters, being the outcome of the interaction between vulnerability and hazard, either caused by natural forces like floods or technological causes like chemical spill-out. Therefore, the social production of vulnerability should be addressed at least as thoroughly as understanding and calculating the prevalence of so called natural hazards. (Wisner et al 2004, 49-50.) Because risks are human induced they can be reduced by humans, but not eliminated totally. Therefore, it is important to build resilience to be better able to counter the remaining risks. (Tierney 2014, 7.)

## 4.2 Disaster vulnerability

Vulnerability is an important concept from the point of view of social work and for its role in disasters, because social workers concentrate in working with societies' vulnerable individuals, groups and local communities (Gillespie 2010; Payne & Askeland 2008; Zakour 2010). Regarding disasters, their consequences are often the worst for people who in their daily life are also more vulnerable, and are often already involved with social work and services: Children, people with disabilities, the elderly and minorities of the society (Cherry & Cherry 1997; Gillespie 2010; Sanders et al. 2003; Thomas & Soliman 2002; Zakour & Gillespie 2013: 12-13). Older people, particularly those who live in poor areas, need special attention in preparedness planning as well as in case of evacuation, because they suffer the most if their supportive connections to family, social- and health care system and the religious institutions are broken (Sanders et al. 2003). People with disabilities have special needs to be considered in disasters (Priestley & Hemingway 2005) and certain ethnic groups, and for example female headed

households with young children, can be more vulnerable than others (Zakour & Harrell 2003).

Vulnerability, for example to the impacts of climate change, is a complex phenomenon and often a sum of many overlapping social processes such as socio-economic status and/or discrimination due to gender, age or ethnicity (IPCC 2007). Gender, for example, affects vulnerability in many ways. Women are more likely than men responsible for care and emotional support within their household and may lack of information, and evacuation shelters might not be gender sensitive. In addition, it has been found that violence against women increase after disasters. (Drolet et al. 2015.)

UNISDR (2009) defines vulnerability as “the characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effects of a hazard”. In this research, I am focusing on people because people and their safety and security should ultimately be the target of preparedness efforts as well as social work, keeping in mind that people are dependent on wellbeing of the Earth and its nature (Dominelli 2012). Therefore, I will use the concept definition of Wisner and his counterparts (2004) who have developed a theory of disaster vulnerability. The theory concentrates on disaster vulnerability in the less developed countries (LDC) and natural born hazards. Therefore, the authors don't focus so much on ecological risks, which are important and overlap their theory of vulnerability, but rather focus on risks which are “remote from the dynamics of hazard, vulnerability and risk in LDCs that is principal focus” of the theory (Wisner et al. 2004, 18). The model is widely used in disaster studies (Bolin 2007; Zakour & Gillespie 2013, 37) and one can find examples of vulnerabilities in the developed countries as well as in disasters due to other than ‘natural’ hazards that fit the theory (Tierney 2014, 40; Wisner et al. 2004, 38).

In this study, vulnerability refers to

“the characteristics of a person or group and their situation that influence their capacity to anticipate, cope with, resist, and recover from the impact of a natural hazard (an extreme natural event or process). It involves a combination of factors that determine the degree to which someone's life, livelihood, property and other assets are put at risk by a discrete and identifiable event (or series or ‘cascade’ of such events) in nature or in society.” (Wisner et al. 2004, 11.)

Disaster vulnerability theory (Wisner et al. 2004) broadens our understanding of the causal chains of disasters (Tierney 2014, 39-41; Zakour & Gillespie 2013, 10) which are understood to be socially produced, and thus closely interlinked with social, political, economic, and cultural factors (Wisner et al. 2004, Tierney 2014, 5, 38). The Disaster Pressure and Release Model (PAR) (Figure 2) forms the core of the disaster vulnerability theory, as it illustrates the progression from vulnerability to disasters. Zakour & Gillespie (2013) have further developed the theory and adapted it to social work.

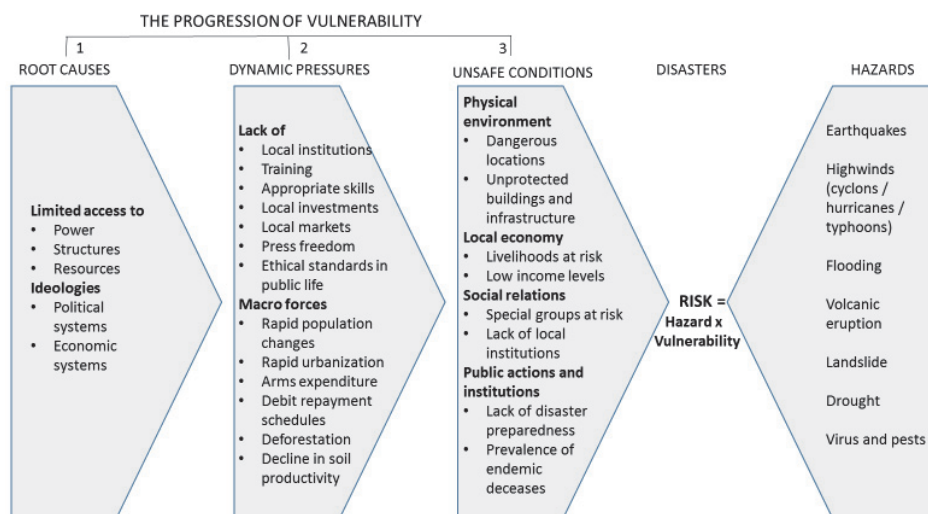


FIGURE 2 Pressure and Release (PAR) model: the progression of vulnerability (Wisner et al. 2004, 51).

In the PAR model disaster is understood to be a product of hazard and vulnerability of the population. Disaster risk is created when hazards affect vulnerable people. Vulnerability springs from root causes and dynamic pressures which lead to unsafe conditions. Root causes can be either historically or spatially distant and they can arise from global economy or politics. Economic, political and demographic processes impact for example the allocation of resources among various groups of people in societies. (Wisner et al. 2004, 51-52). Globalization affects financing of welfare states as well as leads the global south to focus more on economic than social development of societies. Although it is difficult to influence global trends, enhancing democratic participation, human rights and cohesion of local communities could be part of advocacy for better response to the negative effects of globalization. (Payne & Askeland 2008, 18-19.)

Dynamic pressures, for example rapid urbanization, violent conflicts, foreign debt adjustments, deforestation, or lack of training, channel the root causes to unsafe conditions, which in turn can consist of people's low income, belonging to a risk group (e.g. certain religion, ethnic or age group) or lack of preparedness measures taken in the community. (Wisner et al. 2004, 53-54). People with bad health status, for example, are more vulnerable than others to disasters. The old and the very young, as well as people with mental problems are more vulnerable in case of heat waves. Yet heat waves affect differently even these vulnerable groups depending on, for example, whether they have access to air-conditioned facilities or not. (Thomas & Soliman 2002.) Dynamic pressures are structural but can be affected easier than root causes. Unsafe conditions, like poor working conditions, indecent housing, or polluted environment are also easier to prevent and cure than the underlying root causes of disasters.

(Zakour 2013.) All in all, Wisner and his counterparts argue that emergency management, better forecasting or good relief do not reduce vulnerabilities even though they are important. We should tackle the root causes of vulnerabilities to make a difference. (Wisner et al. 2004, 61.)

The disaster vulnerability theory has a social development perspective as social and economic factors are seen to impact both pre- and post-disaster vulnerability of people (Zakour & Gillespie 2013, 39-40). Wisner and his counterparts state that there is also a time aspect built into the concept of disaster vulnerability. Livelihood and future livelihoods provide means of living for the affected, which, on the other hand, are important in the recovery process. (Wisner et al. 2004.) Livelihood means income or other resources needed, such as information, cultural knowledge, social networks, legal rights, or tools, and other physical resources, which people or groups use to satisfy their needs (Cannon 2008; Wisner et al. 2004, 12). The time frame is important aspect of vulnerability also because it brings the intergenerational equity and question of sustainability into daylight (Wisner et al. 2004, 9). Environmental disasters, for example, can unfold after years and cause major impacts on the lives and livelihoods of future generations.

Besides risks and vulnerability, it is important to notice that people, groups and communities have also capacities, and we should avoid victimization (Cannon 2008). Resilience and sensitivity, social capital and collective action are also important in measuring the impacts of disasters. (Wisner et al. 2004, 14). Resilience and social capital safeguard people and communities in disasters (Tierney, 2014, 185-196).

### 4.3 Resilience

Resilience is a concept originally used in engineering, psychology, research on social-ecological systems and economy. In disaster research, the concept has been developed and used more widely since the 1990s. The wider use of the concept can be related to the efforts to link disaster risk reduction to sustainable development. (Dahlberg & Johannessen-Henry & Raju & Tulsiani 2015; Tierney 2014, 163-166.)

The concepts of disaster vulnerability and resilience both increase our understanding of disaster impacts. Vulnerability describes the potential loss or damage caused by a hazardous event that might or might not take place (Tierney 2014, 166; Wisner et al. 2004; Zakour & Gillespie 2013, 20, 68). The losses may not actualize in case there are no hazards or in case the social systems or environment absorbs and copes with the impacts. The capacity to cope with the hazards forms the essence of resilience. Disaster resilience can be studied from various angles, for it exists in various domains, for example economic domain concerning a single company, region or state economics as well as built environment and ecological systems. (Tierney 2014, 166, 172.) In this study, I am interested in the social aspects of disaster resilience and especially how it can be

enhanced by social workers both in client work and in disaster management actions.

Zakour & Gillespie (2013, 149) have developed the Vulnerability+ theory in which they have added the concept of resilience as a process in reducing vulnerability and progressing to safety. However, in Vulnerability+ theory resilience is referring to coping abilities of individuals and communities after disasters (Zakour & Gillespie 2013, 55), while in this study I will use the concept as describing coping capacities and resources of individuals, communities and organizations of social work both pre- and post-disasters (Tierney 2014, 173; Dominelli 2012, 65; Cannon 2008). According to Tierney, *inherent and adaptive resilience* distinguish pre- and post-disaster capabilities. Inherent resilience refers to social systems' capacity to absorb disasters. It exists pre-disasters and can be activated for use when disasters strike. By increasing this capacity social networks and social capital are related to inherent resilience. Savings in a bank account can also be regarded as a means of inherent resilience of individuals or social systems. At the same time, adaptive resilience refers to the activation of resources or reconstruction of forms of inherent resilience in case of disaster. (Tierney 2014, 173-174.)

Resilience has various aspects which I consider to be important for disaster social work. Robustness describes the strength or ability to function and withstand stress, whether being a personality trait that safeguards from stress or an engineering technique that protects in earthquakes. Redundancy refers to the possibility to substitute resources with alternatives in case they are lost or damaged during disaster. (Tierney 2014, 168-169; Zakour & Gillespie 2013, 55-56). Resourcefulness is the ability in response and recovery to identify and address problems and needs, improvise, and mobilize for example material, information and communications. Finally, rapidity refers to the time it takes to restore what has been lost and damaged and the level of functionality after disasters (Tierney 2014, 168-171). Robustness, redundancy and resourcefulness are used later in this summary article of the thesis in analyzing the resilience of social work disaster preparedness.

Resilience can be studied from various perspectives. An example of inherent ecological resilience in Finland are the wetlands and mosses that absorb high quantities of water from melting snow in the spring saving us of flooding. Earthquake safe building codes represent inherent resilience in engineering. These kinds of resilience influence and are interdependent with the social resilience. In the social- and other domains there are also interdependencies vertically. Family, community and society level resilience have impact on each other. (Tierney 2014, 174-187.)

Adaptive resilience consists of activation and mobilization of inherent resilience, as well as novel and emerging behavior and actions related to response and recovery from disasters. Disasters are always somehow new, emerging as a surprise, and flexibility and adaptation of plans, for example, are needed to enable us to respond. (Tierney 2014, 197-224.) Disaster preparedness plans contribute significantly to adaptive resilience, although, in most cases actions must

be improvised during disasters. (Tierney 2014, 207-217.) Preparedness planning is an opportunity to establish networks related to disaster management and build inherent resilience. However, there are challenges in dissemination of the plans, i.e. reducing the gap between preparedness planning process and actual performance in disaster response (Eriksson 2009). Preparedness plans allow gaining knowledge of inherent resilience of local social services, and also of their adaptive disaster resilience.

Already the early studies of disasters found adaptive resilience in peoples' behavior while facing calamities: Instead of wide-spread looting and malevolent behavior people were altruistically helping each other, organizations adapted to the new situation to be able to respond and support was offered even outside the affected community (Tierney 2014, 199-200). Pro-social behavior is one form of adaptive resiliency of individuals and communities. It has been found that women are active during disasters in creating community cohesion, even though post-disaster response often reinforces existing gender inequalities. (Drolet & Dominelli & Alston & Ersing & Mathbor & Wu 2015). There are also studies of communities and groups that intentionally or unintentionally exclude minority or marginal groups or individuals from benefits or treat them harshly in other ways in disasters (Tierney 2014, 200; Aldrich 2012, 151).

Emergence of new forms of organizational behavior is adaptive resilience. In disasters, organizations may extend their tasks or expand and there might be new emergent forms of organizing tasks as well as totally new organizations. Rescue and police organizations typically expand in disasters, while community members and emergent volunteers may form a new emerging organization. There might also be some novel tasks performed by some units, like forming an evacuation center in the premises of an organization. (Dynes 2006; Tierney 2014, 200-201.)

Emergent networks have been found to be important in adaptive resilience, and especially collaborative nature of the networks is vital. Emergent multiorganizational networks appear in consequence of pro-social norms and collective will to take part and contribute to the response efforts. These networks consist of planned designated response organizations and partners, but also of organizations that consider they can and are willing to contribute. Emergent networks in managing disasters are often described as chaotic but have been found to be flexible, responsive, innovative and self-learning and therefore managing disasters better than solely command and control based organizations. (Dynes 2006; Tierney 2014, 204-207.)

Pre-disaster vulnerability and weak inherent and adaptive resilience have been associated with poorer and slower outcomes in post-disaster resilience. Economic capital, i.e. wealth, increases adaptive resilience: Financial resources such as better insurances and savings buffer the losses. However, not only economic capital, but also social capital prior to disasters affects adaptive resilience. (Tierney 2014, 2017-220.)

## 4.4 Social capital

Social capital is an important aspect of inherent resilience, which is built and exists before and in preparing to disasters. As noted earlier, it also makes up a vital part of adaptive resilience. (Tierney 2014, 197-224.) Social capital consists of connections between people, while physical capital refers to objects like buildings and bridges, and human capital to individuals and their capabilities (Putnam 2000, 19). Access to various types of capital, like economic, financial or cultural capital, in addition to the aforementioned capitals, is the result of social capital. (Ersing & Loeffler 2008.)

There is a wide range of literature concerning the concept of social capital. Sociologists such as Bourdieu, Coleman, Putnam, and Lin have developed the concept and the theory (Lin 2001). In my study, I am interested in how the concept of social capital, and the three types of it, namely bonding, bridging and linking, can enlighten the role of social work related to disaster management. I refer to these social capital dimensions in the first review article (Article I) and use it more widely in the second article (Article II) operationalizing the concept. I use the definitions of Coleman (1990) and Putnam (2000) who regard social capital as a collective asset that facilitates individuals' actions in the social structures (Coleman 1990, 302). In cases of bonding, bridging and linking social capital, I refer mainly to Aldrich (2012).

According to Coleman (1990), social capital is essential for creation of human capital, as well as for functioning of social structures. It is built in relations between individuals and in networks facilitating productive activity. Social capital is less affected by disasters than physical or human capital and it can be mobilized quickly. It provides resources for accomplishing critical emergency tasks. (Dynes 2006.) High levels of social capital support recovery more than external material or economic aid. Therefore, in disasters it serves like an informal insurance for people who, in connection to others, get access to networks and resources. (Aldrich 2012, 2, 15.) Social capital is essential in building resilience in individuals, families and communities (Tierney 2014).

Bonding, bridging and linking play a central role in discussions of social capital. Daniel Aldrich calls these dimensions or types of social capital (Aldrich 2012, 31; Aldrich & Meyer 2014). Social relations inside a homogenous group are called bonding social capital, and bridging refers to relations with 'the others', external assets and information (Putnam 2000). The third type of social capital, linking, refers to "norms of respect and networks of trusting relationships between people who are interacting across explicit, formal or institutionalized power or authority gradients in society" (Szreter & Woolcock 2004, 655). In the development and research on the theory of social capital there has been a strong emphasis on volunteer action and involvement with civic associations. Szreter & Woolcock (2004) take a position that social capital can be facilitated by the state and dynamic local government agencies, which can balance between

isolated and self-interested social groups possessing strong bonding but weak bridging and linking social capital.

Social capital influences individuals', families' and communities' ability to reach their objectives and goals in their every-day lives and at the same time builds inherent and adaptive resilience in disasters. Researchers have found that pre-disasters existing social capital builds up and is used as adaptive social capital in crises and disasters. Emerging multiorganizational networks are building on social capital that has been existing already before the disaster. (Tierney 2014, 174-187.)

Norms, trustworthiness, information, and resources are available through social capital (Aldrich 2012, 33). All these are vital in disasters. During disasters, there is a huge increase in the need of information, which is also facilitated by social capital (Dynes 2006). Information about risks and mitigating risks enhances resilient recovery (Zakour & Gillespie 2013, 62-64). Shared pro-social norms facilitate appropriate action (Dynes 2006; Tierney 2014, 200), and trustworthiness keeps institutions functioning (Aldrich 2012, 39). Dynes (2006) describes how social capital can save lives of those who have it: After an earthquake in Italy in 1980 those who had family were searched and rescued more quickly than single living persons, as the family members could locate their next of kin from the collapsed buildings. The same was evidenced in a gasoline explosion in Mexico where victims had been buried alive. (Dynes 2006.) It is very often the local people and community who are the first ones to rescue and give support for the victims (Alexander 2015; Dynes 2006; Henstra 2010).

Social capital can also be harmful and facilitate idle norms and actions of groups, networks or societies (Aldrich 2012, 148-149; Putnam 2000, 22-23; Szreter & Woolcock 2004). In his wide study of social capital and disaster recovery in Japan, India and U.S.A., Aldrich (2012) found that social capital promotes mutual assistance within communities after disasters, help communities solve common problems like debris removal or delivery of aid, and increase the potential of residents to rebuild their homes and communities. At the same time, however, strong social capital can lead to discrimination of outsiders, like ethnic minorities or women, and unwillingness to aid communities that don't have good links to external resources. In the aftermath of Hurricane Katrina in the United States in 2005 communities with strong social capital and capability of recovery were also strong in resisting to have temporary government supported mobile housing and people with low socio-economic status in their backyard. (Aldrich 2012, 148-151.)

Hawkins and Maurer (2010) studied individuals and families affected by Hurricane Katrina in New Orleans in 2005 and found positive effects of social capital. They found that nearly all the survivors studied benefited from social capital pre- and post-disaster. Bonding social capital provided safety in the disaster through assistance of their close network. People exchanged physical, emotional and economic support, which turned out to be psychologically an important source of resilience. Bridging across racial and socio-economic lines



provided assistance, information, supplies and food for the victims, as well as the linking connections to the local and national aid suppliers.

Enhancing social capital is a way of increasing the resilience of individuals and communities (Hawkins & Maurer 2010; Mathbor 2007), but because it is not permanent, it must be nurtured and regenerated constantly (Ersing & Loeffler 2008). Bonding, bridging and linking represent vertical interdependencies in social resilience as well as robustness of resilience. This plays an important role in aiding people to prepare for and act during a disaster and to recover after it. People use their connections and resources, their positive social capital, as a survival mechanism (Hawkins & Maurer 2010.) At the same time, social capital is embedded in forms of leadership and activism among public workers and officials themselves, and structures of service delivery. (Szreter & Woolcock 2004.)

Ersing and Loeffler (2008) are among the scholars who take a strong position to advocate that social workers should enhance social capital in their practice in micro, mezzo and macro level. They highlight the close connection on one hand with the three dimensions of social capital, bonding, bridging and linking, and on the other hand with other types of capital: Economic, financial, cultural and human capital. Access to various types of capital is the outcome of social capital and important in alleviating poverty. (Ersing & Loeffler 2008.)

Social workers in their daily micro level work can nurture bonding social capital of families. Acting in mezzo level they enhance bridging in supporting strong ties of their clients with neighbors and local organizations. Finally, macro level social work consists of linking communities with aid and support, and advocating their interests with external policy-making institutions. (Ersing & Loeffler 2008.) At the same time, good management of social workers themselves strengthens relationships within social service units among social work professionals, and it enhances bonding social capital in this way (see Dynes 2006; Szreter & Woolcock 2004).

#### **4.5 Summary of the key concepts**

Disaster vulnerability, resilience and social capital are central in disaster research and they enable understanding also the role of social work in disasters. The key concepts used in this study are summarized in the Figure 3. Vulnerability is produced by root causes and dynamic pressures, which lead to unsafe conditions of people and communities (Wisner et al. 2004). Resilience is, at the same time, linked closely to reduction of vulnerabilities and, thus, diminishes risk (Dahlberg et al. 2015). Resilience can be increased by enhancing social capital, but other measures are also important. Disaster preparedness, for example, is vital in increasing the resilience of local communities. Resourcefulness is particularly useful in measuring the resilience of preparedness planning. (Tierney 2014.) Social capital is vital in building inherent and adaptive resilience (Tierney 2014).

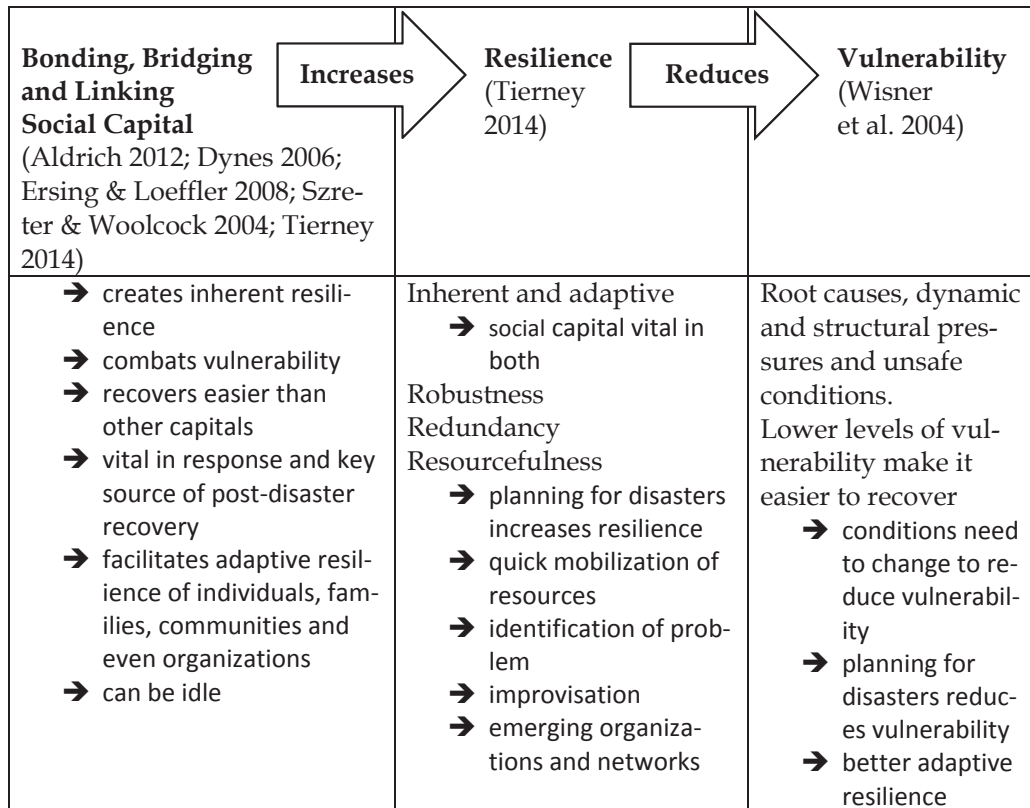


FIGURE 3 The key concepts of the thesis

These concepts together with Doreen Elliott's (2010) Disaster Social Work Intervention Model tie together the individual articles of this study. I began my research project exploring the role of social work in disasters using the concept of vulnerability as a starting point: The role of social work in reducing and alleviating vulnerabilities of individuals, families and communities. At the same time, I found Elliott's model and adopted it into my research as the model has a wider approach than concentrating on vulnerabilities. Reducing human vulnerability through building social capital, building individual and family resilience, and advocacy of vulnerable groups are the main goals of disaster social work interventions in Elliott's model. I used her model in my first article, which is an international research review (Article I). In the following second article (Article II) I concentrated more in the concepts of disaster resilience and social capital and operationalized bonding, bridging and linking social capital. Bonding, bridging and linking social capital were used in analyzing the emphasis of the role of social work in disaster management as seen in the Finnish municipal social services' preparedness plan documents (Article II). In this second article, I already started in my thinking to consider combining disaster social work interventions and the dimensions of social capital in building the resilience of individuals, families and communities.

I continued my research using the concepts of disaster vulnerability and resilience in general in discussing the results of the articles III and IV. Article III studies the level of municipal social services' preparedness planning in Finland and article IV private social care units' disaster preparedness. In this summary article of the thesis I combine the central concepts of disaster vulnerability, resilience and social capital with Doreen Elliott's Disaster Social Work Intervention Model aiming at depicting and conceptualizing better the role of social work in disasters.

## 5 THE STUDY DESIGN

### 5.1 Methodological approach of the study

This study represents scientific realism, which aims at having a systematic and critical grasp of reality – in this case of disaster social work. The aim of my thesis is two folded. On one hand, I want to obtain information and describe the role of social work in disasters, which is rather weakly studied area in Finland and deserves more attention. On the other hand, my aim is to conceptualize disaster social work using the concepts of vulnerability, resilience and social capital, and Elliott’s framework of disaster social work interventions. Using the concepts and the framework I aim at deepening our understanding of disaster social work. Therefore, I adopt scientific realism, which admits that scientific knowledge is fallible, but also considers that theories can reveal reality even beyond what empirical studies reveal (Mäntysaari 2005; Niiniluoto 1999: 167).

Critical realism acknowledges both human agency and social structures that produce tendencies in human life (Houston 2001). Vulnerability, for example, is an “unseen causal mechanism” (Houston 2001, 850), which does not determine, but produce tendencies in the impacts of disasters. As social structures have impact on human lives, I see that the structures have effects also on, for example, how social workers are taking part in disaster management. The concepts of disaster vulnerability, resilience and social capital are used here to conceptualize disaster social work. They are essential in understanding on one hand how disasters are created and on the other, how they can be prevented and alleviated. The concepts and Elliott’s framework guide my way in understanding the empirical reality of disaster management and its connections to social work which are both aiming at prevention and alleviation of human suffering.

I have approached the empirical reality using three kinds of data. Firstly, I have used research review of peer reviewed journal articles on disaster social work to get an overview, of what prior research can tell about social workers’ roles in actual disaster situations and what is seen to have been lacking in the

response. Secondly, I have used Finnish preparedness plan documents, which enable me to analyze how social work has prepared for disasters, as planning plays an important role in reducing vulnerabilities and increasing the resilience in disasters (Tierney 2014, 208-217; Henstra 2010). Thirdly, I have used survey data to analyze Finnish institutional care and residential housing services' preparedness, with the aim of gaining a wider picture of the role of social work in disasters. The private-sector services do not have an obligation of preparedness planning in Finland, but it is important to gain knowledge how they are prepared for disasters and linked to the public social services.

Municipal social services' preparedness plans reveal what the role of social work is in disasters, although only partly, because they represent pre-disaster planned roles. However, the documents do reveal the role as part of disaster management, which consists both pre- and post-disaster actions. The survey data to the private social care units and international research complement the picture of social work roles in disaster preparedness.

I have chosen to look at my research topic from various angles and in this way, try to capture a picture of the phenomenon of disaster social work better than I would in using only one kind of data. I use multiple data and multiple methods in my study (Brannen 1992, 10-12). The quantitative research tradition steers my research and the way I analyze the data (White & Marsh 2006). In this study, I have applied theory-derived analysis of the empirical data. Elliott's framework and the concepts of disaster vulnerability, resilience and social capital are the basis that I lean on in analyzing the data. At the same time, the tradition of and research on disaster management on one hand and earlier studies of disaster social work on the other, have guided the way I treat and see the data which I use. (Brannen 1992, 4-5.)

As noted earlier, Wisner's and his co-authors' (2004, 34) concept of disaster vulnerability guides this study, but only partly, as my aim is not to study vulnerability as such. Preparedness plan documents and the survey of the private sector on their preparedness and actions in actual disasters allow us to see hypothetical vulnerabilities and unsafe conditions. With these two data sets, I can also get a picture of social relations and social capital embedded in the preparedness efforts, revealing possible dynamic pressures of vulnerability in the Finnish local communities. Lack of preparedness efforts can lead to unsafe conditions. At the same time, the two data sets enable me to study inherent resilience and tentatively also adaptive resilience. The reviewed international articles enlighten social work's adaptive resilience as the research reviewed focus on post-disaster actions of social work. This study emphasized measuring inherent pre-disaster resilience, but at the same time tries to predict possibilities of adaptive resilience to be used in disaster situations.

## 5.2 Systematic literature review

The first article of this study is a systematically conducted research review of disaster social work (Article I), which is used to find answers to the question of social work's role in disasters and to come up with recommendations for development of the work. I wanted to form a complete picture of the roles and recommendations and study the topic in a systematic manner, and therefore applied integrative literature review as the research method (Whittemore & Knafl 2005). Systematically conducted literature review enables construction of a more complete picture of the phenomenon than when a single piece of research is viewed in isolation. While conducting a review the researcher follows systematically a strict protocol which consists of identification, appraisal, and the way to synthesize literature of a certain topic. In addition to the protocol, she documents the review process explicitly to enable other researchers to repeat the review. (Aveyard 2007, 10-22; Fink 2005, 17; Kallio 2006.) In this study, I used integrative literature review, because it allows incorporating studies conducted with diverse methods to the review and thus, reveals various aspects of the phenomenon reviewed. (Whittemore & Knafl 2005, Salminen 2011.)

Identification of the problem and defining research questions is the first stage of a systematically conducted literature review, as that guides the further review process from searching relevant primary studies to the analysis and synthesis process of the research found (Aveyard 2007, 19; Fink 2005, 4). The research questions of the review were as follows: What are the roles of social work in disasters, and what recommendations have been given for disaster social work internationally. Peer reviewed articles of international scientific journals were identified as the relevant primary studies to be used in the review, as journal articles tend to provide up-to-date picture of research. The articles were chosen following this prepared inclusion criteria: Research had to be theoretical or empirical, and be based on post-disaster social work practice, and provide answers to the research questions, i.e. describe social work's disaster related roles and give recommendations for social work. The beginning date to start the search was set at year 2000, because the terror attacks in New York in 2001 are regarded as a turning point in disaster management and research (Mackelprang & Mackelprang & Thirkill 2005; Padgett 2002; Perry & Lindell 2003). The search period was set between January 2000 and August 2014, after which I began the analysis and synthesis process of the review. An additional inclusion criterion was that the research had to be conducted in English language. Articles that dealt with social work in conflict and war were excluded, as the roles of disaster management actors might be different during martial law than in normal time.

The articles reviewed were searched using online electronic databases AS-SIA and Social Sciences Collection, including Social Services Abstracts, Sociological Abstracts and Worldwide Political Science Abstracts. The research questions and pre-searches guided the final search. The following key words were used in various combinations in the search: (Social work) AND (disaster OR

catastrophe) AND (case OR field study); (social care) AND (disaster OR catastrophe) AND (tasks OR roles) or AND (occupational roles). The search produced 59 peer reviewed articles. In searching for the articles some of the journals provided references to additional published studies related to the topic. I also looked through the suggested references as well as the reference lists of the retrieved articles in the initial search (Aveyard 2007, 68-69; Petticrew & Roberts 2006, 121). This snowball search produced additional 29 articles, after which the total count was 88. Next step in the review process was to read the abstracts of the retrieved articles and evaluate whether they complied to my inclusion criteria and can give answers to my research questions. After this stage 35 articles were left to be evaluated critically, of which five were finally dropped out because the articles did not state clearly, how the researchers came up with the findings and/or recommendations of the study (Aveyard 2007, 103-117).

The final data consisted of 30 articles of studies on disaster social work published in between January 2001 and August 2014. To support the synthesis process of the review I created various classification tables to support the analysis process (Petticrew & Roberts 2006, 165). A theory driven content analysis was used in extracting and interpreting the articles. Doreen Elliot's (2010) Disaster Social Work Intervention Model was used as the theoretical framework guiding the analyzing process. The roles of social work were classified under four disaster social work interventions: Social and human investments, political empowerment and economic participation (Elliott 2010). The model is described in chapter 3.2.

In this thesis study the review process has served for me as a thorough introduction to disaster social work and the needs of social work practice, education and research. In this summary article, the review is used to present post-disaster social work actions taken in other parts of the world, which are reflected with the findings from Finnish disaster social work.

### **5.3 Analysis of the disaster preparedness plan documents**

Local social service areas' disaster preparedness plans were used as the main data in two articles (II and III). Using the documents, I aim to answer the question of what is the role of social work in disaster management in Finland. I chose to use the written preparedness plan documents as data in studying social work disaster management because I consider that we can get a reliable picture of social work preparedness using the documents as source of information. The Finnish tradition of preparedness planning emphasizes written documents, as they are regularly gathered from the local level and monitored by the Regional Administrative Authorities, at least in the social and health care sector. The regional authorities organize regularly preparedness exercises for the municipal authorities in cooperation with the Finnish Rescue College. The aim of the exercises is to test and improve the preparedness plans.

It is widely acknowledged that preparedness planning should be a continuous process in organizations and that written documents are not enough for good response since the plans describe only the status of preparedness of a specific organization at a certain point. Preparedness plan documents are not a guarantee for proper action, although they are important for adequate response. (Perry & Lindell 2003; Tierney 2014.) I recognize that as the data consists of only the written preparedness plan documents, the description or evaluation of actual performance in disaster situations is limited. That needs further research.

I was very lucky to acquire almost all the documents of local social services in Finland from the Regional Administrative Authorities. While the total number of mainland municipalities in Finland was 304 in 2014 when the documents were requested from the regions, I acquired 255 municipalities' disaster preparedness subplans of social services.

I applied quantitative content analysis as the research method as it is a systematic approach that can be used to analyze documents (White & Marsh, 2006). Krippendorff (2004, 18) defines content analysis as "a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use". Further, he elaborates various features of texts that are relevant in understanding the method. One of these is that texts do not have meaning without the reader. At the same time, texts do not have a single meaning as they can be read from numerous perspectives. What is important is that texts have meanings relative to particular contexts. (Krippendorff 2004, 21-24.) In this study, the document texts are analyzed in the contexts of disaster management and social work. In deriving analytical constructs of the documents, I rely mainly on previous research but also on existing policies and practice of Finnish disaster management and social services (see White & Marsh, 2006).

There is no consensus on what should be included in a preparedness plan, but most commonly lines of authority, roles and responsibilities and means of coordination should be identified (McConnell & Drennan, 2006). Vital elements to be included in the documents are also identification of hazards, vulnerability analysis, means of obtaining valid information of the actual crisis or disaster situation i.e. situational picture, measures to be taken when a disaster strikes, promoting flexibility in response, as well as training and exercise plans. (Perry & Lindell, 2003.) I used the above mentioned general contents of preparedness plan documents as guidelines for my research process, while starting to develop a coding scheme for the document analysis.

The method I used was deductive, as the coding scheme was determined before the coding began. Manifest contents of the document texts were coded. (White & Marsh, 2006.) The unit of the primary content analysis was a sentence or a phrase (for example elderly care as a role of social work, or rescue services as a cooperation partner) which was coded into the coding scheme based on key elements of preparedness planning (Neuendorf 2002, 95-96; Perry & Lindell, 2003; McConnell & Drennan, 2006). The key elements were finally deducted from the preparedness plan guidelines given by the Finnish Ministry of Social



Affairs and Health (2008) and the Finnish Security Strategy for Society (Ministry of Defense, 2011). The same coding method was used in both articles: Articles I and II.

Variables in the coding frame were mainly dichotomous with some exceptions, where a three-scale coding system was implemented. The day-to-day functions of social work is an example where a three-scale coding was used: The service 1) was not noted in the document, 2) was noted or 3) was noted and regarded as a service to be extended during disasters. An example of this is social assistance as a social work task.

Reliability of the data was ensured by creating clear definitions and instructions in the coding scheme (White & Marsh, 2006; Neuendorf, 2002, 112). This was important, because the coding process lasted several months, and a research assistant coded 30 percent of the data. After the coding process, I went through all the documents coded by the assistant to find deviances in the coding. I found only few deviances and did some recoding to ensure consistency within the data interpretation. We agreed on nearly all (99%) of the cases with the research assistant.

In Article II, the final analysis of the data was based on conceptualization of bonding, bridging and linking social capital (Dynes, 2006; Hawkins and Maurer, 2010; Mathbor, 2007; Szreter and Woolcock, 2004). Support to homophilous networks in micro level day-to-day social work as well as management of social work were regarded as enhancing bonding social capital. Social work's connections to outreaching or expanding social systems or close partners like the NGOs and the Church, the health care and private social services as well as financing of disaster management actions and staff training were regarded as bridging social capital. Finally, social work linking to emerging disaster specific structures like the police and rescue services represented linking social capital. Descriptive statistics, like frequencies of variables, were used to quantitatively measure and describe the emphasis of social work interventions as well as forms of social capital. (Article II.)

In Article III, the level of preparedness was compared between small and large municipalities/joint social service areas. Daniel Henstra's (2010) Emergency Management Program Measurement (EMPM) was adapted to study the level of social services' disaster management. Henstra's (2010) model is based on his studies where he has compiled various preparedness planning guidelines and standards to develop an evaluation model of local level public sector preparedness programs. In this study, the comparison of the preparedness planning by size of the social service areas reveals whether there are differences in disaster social work interventions depending on the way the services are organized. In previous studies, it has been found that the level of preparedness is better in large service areas compared to small ones (Palm & Ramsell, 2007; Savoia et al. 2009; Sadiq 2010; Chikoto & Sadiq & Fordyce 2012). The size of the social service area was used as an independent variable in the data analysis. It was a two-scale variable: small area consisting of under 20 000 inhabitants, and large service area consisting of more than 20 000 inhabitants. The reason for this

scale was that according to the Finnish legislation (Heinämäki, 2011), primary health care services and social services related to health care must be organized in service areas that consist of 20 000 or more inhabitants.

In these studies (Article II and III), municipalities were regarded as the unit of analysis. In this data 51 percent of the plans were completed by small municipalities and only 49 percent were completed by large municipalities, cities or social service areas which, as noted, had over 20 000 inhabitants. The mode of the length of the documents was 18 pages, ranging from 4 to 230.

The data was analyzed using SPSS Statistics, version 22 (IBM). Mainly descriptive statistics, such as comparison of means and crosstabs, were used in analyzing the data. Pearson chi-square ( $\chi^2$ ) analyses were conducted to test for differences by the size of the service areas. Significance was set at  $p < .05$ . In creating summary variables, the consistency of the variables was tested with Cronbach's alpha to ensure reliability of the variables. Reliability was set at 0.60.

#### 5.4 Survey of the private social care units

In order to get answers to the research questions of this thesis it is vital to gain knowledge not only from the public social services but also from the private ones to have a more complete picture of the role of social work in disaster management. As noted earlier, the private sector produces already 30 percent of the social services in Finland (Arajärvi & Väyrynen 2011), but in the institutional care and residential housing services the percentage is even higher (Institutional care and housing services in social care 2014 2015, 1-11). In addition, the service structures of social and health sector are in ongoing flux in Finland as the responsibility to organize the services is planned to be transformed from the more than 300 municipalities to 18 regions by 2019. Freedom of choice is one of the leading principles guiding the reform and this means that private companies' and NGO's share of the service providers will increase.

Thus, the Finnish Ministry of Social Affairs and Health initiated a survey targeted at the private social care units after heavy storms in 2013, to gain more information of the hazard impacts and disaster preparedness. In this study, private institutional care and sheltered housing services refer to housing in which assistance is provided 24/7 or part-time and which are provided by private enterprises or not-for-profit organizations.

The survey was initiated in the spring of 2014 after several heavy storms in late 2013 and consisted questions of the service producers' preparedness but also actual measures taken after the storms, i.e. post-disaster. With the data gathered I can explore the social services' preparedness from a different perspective other than the written preparedness plans, and therefore get a more complete picture of the role of social work in disaster management in Finland.

The specific research questions of the survey study were: 1. How were the private service providers of institutional care and sheltered housing prepared for hazards? 2. What kind of measures were taken after the heavy storms in

2013 or other recent hazards? 3. How were the organizations linked to disaster management actors and relatives of their clients regarding hazardous situations and preparedness planning? The questionnaire consisted of 29 closed and 15 open-ended questions, and they addressed the following topics: (1) general business information; (2) disaster preparedness activities undertaken by the businesses; (3) disaster management cooperation among businesses and the local government; (4) impacts of the storms or other previous hazards on the service units; (5) whether the service units were forced to evacuate or consider evacuation of their clients as a result of the hazards; (6) sources of assistance utilized following the hazards; and (7) reliance on and cooperation with volunteer organizations or relatives of their clients pre- and post-hazard situation.

An invitation with an internet link to a web-based questionnaire was sent to all private social service organizations providing institutional care and sheltered housing services in Finland. The organizations provide care for various vulnerable client groups: Children and youth in 24/7 child protection services, people with mental or functional disabilities, clients with mental problems or alcohol/drug dependencies, and the elderly. The invitation was sent to 1326 service providers, which had either one or more service units. The email addresses of the respondents were provided by the Finnish National Supervisory Authority for Welfare and Health (Valvira). The survey was sent in the spring of 2014 and two reminders were sent to ensure wide response.

The survey received altogether 797 answers, the response percentage being 60. The fact that it was the ministry that initiated the survey may have resulted in such good response percentage. The data represents private social care units from all parts of Finland, and they represent evenly all the client sectors in line with the whole population. This was secured from the Valveri register of private social and health care service providers in Finland. Institutional care and sheltered housing units for the elderly represent 35 percent of the data. Service providers for clients with mental problems represent 14 percent, services for people with disabilities 12 percent, units for children 11 percent and units for persons with dependencies 5 percent of the data used in this study. The rest of the data falls into the category of other housing services. Medium size units with 16-49 clients represent 40 percent of the data, and units with 5-15 clients, 39 percent of the data. Very small units with only 1-5 clients represent only 3 percent, and large units with more than 50 clients represent 18 percent of the data. Most of the medium-size or large units provided services for the elderly (40%). The small units, with 5-15 clients, were most often service units for persons with disabilities (47%), but also for children, of which 81% were small units. (Article IV.)

SPSS version 22 (IBM) descriptive statistics were used to analyze the data. Frequencies of the variables were mainly used to describe disaster preparedness of the service providers, impacts of hazards on the service units and response measures taken due to hazards. Comparison of two proportions was conducted to test for differences by the size of the service units. Multivariate logistic regression models were used to analyze differences in background factors, such

as the number of residents, type of clients served in the unit, and planning for contingencies. Significance was set at  $p < .05$ . The answers to the open-ended questions were categorized, counted, and mainly used to understand the structured answers more specifically. (Article IV.)

## 5.5 Ethical considerations of the study

A study permit to use the municipal social services' preparedness plans as research material was obtained from the Finnish Ministry of Social Affairs and Health in 2012. As the preparedness plans are most often classified as confidential material, it could have been difficult for an ordinary university student to get access to the material. As an employee of the Ministry and having the task of monitoring social services' preparedness issues as part of my work, I did have a greater chance of getting access to the documents than an ordinary university researcher. However, I applied for a study permission for a pilot from the Southern Finland Regional Administration Office and later for a permission from the Ministry of Social Affairs and Health to get access to the documents of the whole country to be used as research material.

As noted previously, the preparedness plans are classified as confidential in Finland because the documents can reveal details that can threaten the services', service areas' or national security if used inappropriately. I have tackled this threat firstly by ensuring that all the documents are stored and analyzed securely. The documents are stored in the Ministry's facilities and servers. The written documents will be destroyed, and the digital data will be anonymized properly when the research is completed. The articles that have and will be published based on the documents do not reveal anything specific of any single municipality or social service area. The publications don't reveal any details or summaries that would be a threat for the national security either. The study tries to improve the safety and security and resilience of individuals, local communities and the nation in revealing areas that need to be upgraded in disaster management.

The survey to the private service producers of institutional care and sheltered housing can also raise ethical questions. The survey was initiated and completed by the Finnish Ministry of Social Affairs and Health and a general report of the results was published in 2016. As noted earlier, the response percentage was very good, at 60 percent. The reason for the good response can be that it was the Ministry that initiated the survey. At the same time, the survey was conducted anonymously, and it was secured so that the results do not reveal any specific information that could impact the business. The survey data, the report and the articles written of the material do not reveal any details of single businesses.

I consider that my own position as Ministerial Adviser and Preparedness Secretary of the Finnish Ministry of Social Affairs and Health does not raise major ethical dilemmas. My position has not influenced the creation of the primary

data, social service areas' preparedness plan documents. At the same time, from the Ministry I might be able to influence on the development of future social services' preparedness plan guidelines and disseminate lessons of this research into practice.

## 6 THE MAIN EMPIRICAL FINDINGS

Social work's role in disaster management was studied in all the four individual articles of this thesis (Articles I-IV). I start by describing findings of the role of disaster social work from the review of 30 international academic articles concerning studies of disasters where social workers were involved. Thereafter I go to the empirical findings of the Finnish data.

### 6.1 The role of social work in disasters internationally

In the international articles, there were various disasters that were studied: Earthquakes in Iran, China, Japan and Taiwan; draught, bushfires and floods in Australia; hurricanes in the U.S.A., terrorist attacks in Great Britain, Israel and U.S.A. to mention a few. The theoretical framework of disaster social work interventions (Elliott 2010, Figure 1.) was used in analyzing the results and in compiling the roles noted in the articles (see table 3).

*Social investment* interventions, as noted earlier, aim at reducing human vulnerability, ensuring that basic needs are met, material assistance is delivered, vulnerable populations are reached, and volunteer support is enhanced in disasters (Elliott 2010). In the reviewed articles, these tasks were well noted. In the context of disasters social workers were identifying persons in need of help, giving support and aiding for those most in need, as well as supporting groups and communities. Social workers did outreach to assess the conditions of disaster affected families and were linking people with resources and support services. They supported persons with special needs, like the elderly and people with disabilities, arranged temporary housing, delivered food and clothing, and provided practical help as well as information for the disaster victims. Support for community development was noted as a task for example in the Wenchuan earthquake in China in 2008, where social workers organized group activities for the community and were promoting citizens' mutual help system (Wang &

Lum 2013). Coordination, guidance and support for the volunteer organizations was noted as an important role of disaster social work. (Article I.)

*Human investment* intervention was also widely noted in the articles reviewed as one or more human investment interventions were noted in 66 percent of the articles (Article I). Consisting of tasks mainly related to psychosocial support (Elliott 2010) it is an intervention that is well acknowledged among social workers themselves as well as other disaster management actors (Alston 2007; Rowlands 2013). Trauma and bereavement counselling and support for personnel of disaster victim identification (DVI) are examples of social work's roles in disasters (Article I).

As reconstruction of livelihoods of disaster affected persons, families and communities is vital in disaster recovery (Cannon 2008), and as such it should also be focused on in social work practice. This intervention of *economic participation* was noted in one third of the articles reviewed (Article I). Social work's task was to deliver benefits and refer the affected to apply for insurances and financial support. They supported the victims in regaining employment, developed means for livelihoods with the communities and promoted micro credits. One of the tasks noted was channeling funds and goods raised for the victims. (Article I.) Disasters promote pro-social behavior and the public very often wants to take part in aiding the affected by donating goods and funds (Dynes 2006; Tierney 2014 204-207). For example, during Australian bushfires in 2009 one role of social workers was to coordinate donations to communities (Du Plooy & Harms & Muir & Martin & Ingliss 2013).

The roles of social work that can be regarded as interventions of *political empowerment* were noted in nearly half of the 30 articles reviewed. This intervention consists of for example advocacy of vulnerable groups and effective governmental relations (Elliott 2010). The international articles showed that social workers did political empowerment in micro, mezzo and macro levels. In individual micro level, victims were motivated and activated in getting support and benefits they have right to. In community level, social workers supported decision makers and management advocating the needs of the most vulnerable. (Article I.) Social workers advocated policy changes for example for relocated Hurricane Katrina survivors to get affordable housing (Bell 2008). They also had a role in mediating conflict between the community and the government and took part in coordination and management of response and recovery efforts (Article I). Social work's role in disasters is summarized in the following table 2.

TABLE 2 Tasks of social work during disasters in international research (Article I).

Social Investment		Economic Participation	Political Empowerment	Human Investment
<ul style="list-style-type: none"> <li>* Outreach</li> <li>* Identification and needs assessment of the affected</li> <li>* Linking those in need with resources and further support / referral services</li> <li>* Support for special groups in need</li> <li>* Temporary housing</li> <li>* Delivery of food and clothing</li> <li>* Practical help</li> <li>* Providing information</li> <li>* Ensuring safety of the affected</li> </ul>	<ul style="list-style-type: none"> <li>* Support for community development and reconstruction</li> <li>* Information for the communities</li> <li>* Support groups</li> <li>* Support for NGOs to ensure efficient aid</li> <li>* Guidance, support and coordination of the voluntary action</li> </ul>	<ul style="list-style-type: none"> <li>* Financial support</li> <li>* Support for gaining employment</li> <li>* Support for applying for insurances and benefits</li> <li>* Channeling funds and goods raised</li> <li>* Developing means for livelihoods with communities</li> <li>* Promoting micro credits</li> </ul>	<ul style="list-style-type: none"> <li>* Motivation and activation of victims to get support and benefits they have right to</li> <li>* Support for decision makers and management to advocate the needs of the most vulnerable</li> <li>* Advocacy for changes in policy if the most vulnerable do not get benefits</li> <li>* Conflict mediation between communities and government</li> </ul>	<ul style="list-style-type: none"> <li>* Psycho-social support</li> <li>* Trauma counselling</li> <li>* Bereavement counselling</li> <li>* Family reunion</li> <li>* Support for DVI personnel</li> <li>* Support at funerals</li> <li>* Help line as a measure of psychosocial support</li> </ul>

The review shows that the role of social work in actual disaster situation is very broad as seen in Table 2. The tasks vary from individual and family centered work to coordination and management of response, community work and advocacy. As was noted in some of the international articles, current social work training is a good starting point for the practice in disaster related situations. However, disaster response is usually somewhat chaotic and in that respect, differs from the daily practice. On one hand trauma and bereavement counselling and support for the practitioners themselves are stressed in the work and on the other, management and linking to other disaster management actors. Therefore, it is not a surprise that further training of social workers in disaster social work was recommended in many of the international articles (Article I).

Multi-sectoral work and linking better with other disaster management actors was also recommended in many of the articles. Focusing more on one hand on community based work and on the other, stressing the importance of psychosocial support for those affected and of the disaster management personnel and social workers themselves were also recommended. (Article I.)

The results show that interventions of social and human investment were emphasized in favor of political empowerment and economic participation, which was the least noted intervention (Article I). One can raise a question whether the most vulnerable and the most affected groups receive enough financial assistance and support for regaining their livelihoods post-disasters. During Australian droughts, for example, economic constraints had impact on children's and elderly people's work load in rural areas (Alston 2007). Howev-



er, even though political empowerment and economic participation interventions were noted less seldom than the other two interventions in the articles reviewed, there were a variety of social workers' roles described that represent these two interventions (Article I).

## 6.2 The role of social work in disasters in Finland

In this chapter, I will firstly describe what is the role of social work in disasters in Finland as described in the Finnish preparedness plan documents and which roles are emphasized in the plans (Article II). I use both disaster social work interventions (Elliott 2010) and bonding, bridging and linking social capital as a frame of reference in describing the roles. I will also describe the differences found between small and large social service areas. Secondly, I will describe the results of the survey to the private institutional care and sheltered housing services (Article IV). The aim of this survey of the private sector is to find out what implications can be derived from the results that could be taken into consideration regarding the role of disaster social work.

### 6.2.1 The role of social work in preparedness plans

The results show that 84 percent of the Finnish municipalities' social service areas, regardless of their size, had completed their duty of preparedness planning as part of disaster management (Articles II and III). When comparing the small and large social service areas, significant differences in the level of planning were found between them. The plans were reviewed within last three years in 88 percent of the large service areas in comparison to 67 per cent of the small ones ( $p < .001$ ). It is anticipated that fresh documents are better adapted to the contingencies than the old ones. The large areas' plans were better also in various other measures. It was also more common for large service areas to have a high level of planning in program coordination, program committees, local hazard identification, planning of vulnerability assessment and business engagement. (Article III.)

Securing the continuity of day-to-day social work tasks and *interventions of social and human investments* were in general noticed in very high frequency in the preparedness plans, varying between 92 and 98 percent by the task (Article II). In these variables, there were no significant differences between small and large size service areas (Article III). The day-to-day tasks consisted of ordinary roles of social work, for example child protection, care for people with disabilities, elderly care and home care. Rehabilitation of persons with substance use disorders was an exception among these tasks, thus being absent in more than one fifth (22%) of the plans. In the documents, social work was also given disaster specific roles, such as providing shelter, securing nutrition and clothing for the affected and these were also noted in a very high frequency in the docu-

ments. Psychosocial support was noted in nearly all (97%) of the preparedness plans. These day-to-day roles enhance bonding social capital. (Article II.)

At the same time, it was found that in only half (51%) of the plans the assessment of the most vulnerable as one of the roles of social work in disasters was noted. Groups that were noted to need special attention in disasters in these documents were, for example, children, the elderly and immigrants. (Article II.) The results of the Article III show that there was statistically significant difference ( $p < .0,5$ ) in the way vulnerable population groups were planned to be assessed in responding to crises depending on the size of the service area. Large service areas had planned the assessment better than small areas, even though the level of preparedness was not in general in an adequate level. (Article III.) Also, less than half (47%) of the plans noted guidance for the affected or setting up a helpline (27%) as a measure of psychosocial support (Article II). In these measures, there were also significant differences found in favor of the large service areas (Article III).

Management of own services and teams of social work were documented well in the preparedness plans studied. However, social work's own management was noted in all the large service areas' plans but in only 92 percent of the small areas ( $p < 0.1$ ). (Article III.) Social work joining municipal emergency operations center during disasters was noted more seldom, in only 75 percent of the plans (Article II), with no significant difference between the various sizes of the service areas (Article III). In addition, there were deficiencies in supporting management and decision making of social work. Measures for increasing awareness of the disaster situation as support for the management were not included commonly, and there was a significant difference between the large and small service areas. Situational awareness was noted in 51 percent of the large areas' plans in comparison with 25 percent of the small areas'. (Article III.) Regarding alarming systems, it was found that the procedures of activating social work and services were well noted in only 11 percent of the small service areas' and 34 percent of the large service areas' preparedness plans. The following variables were used in a summary variable measuring the level of social services' procedures to activate their response organization: Naming of social emergency services as a task of the organization, activation procedures defined for regular working hours, and activation procedures defined for off hours' response. The difference between the small and large areas was statistically significant ( $p < .001$ ) in this measure, but the overall level of planning even in the large areas in this measure was poor. (Article III.) These tasks, which I regarded as intervention of political empowerment, are needed especially when *bridging and linking* to wider disaster management networks (Article II). The findings of this study indicate that even when social work was prepared for the management roles, basic supporting functions of management were often forgotten in the written plans. (Article II and III.)

Supplying information to the public, which support disaster management in general and is an important measure during disasters was noted in almost all (98%) of the documents. Taking a closer look at the information techniques, it

was found that information on a public website was noted in only 38 percent of the large areas' and 18 percent of the small areas' documents ( $p < .001$ ). The use of social media as an information channel was noted even more seldom: In 14 percent of the large areas' documents compared to 2 percent of the small areas' documents ( $p < .001$ ).

In this study, I regarded cooperation either social work's intervention of *political empowerment or social and human investment*. As cooperation for instance with the rescue services, the police or management of the municipality enables social work to advocate for the most vulnerable, it was regarded political empowerment intervention. At the same time, cooperation related to social and human investment interventions support social workers to extend and expand their own tasks directly, which is the case when volunteers or the Church adds to the resources of social work and when the services are produced in the private sector. (Article II.) The results show, that cooperation with various partners was noted well in general in the preparedness plans. Bridging with basic health care (94%), volunteer organizations (85%) and the Church (90%) scored high in the documents as well as linking with the rescue services (91%) and the police (80%) (Article II). While training of the staff was noted in 82 percent of the documents, joint exercises were noted in only 66 percent of the preparedness plans. Again, the results show that the large service areas were prepared better than the small ones in some measures. There was a significant difference ( $p < .05$ ) in how often the Church was noted in the documents: 94 percent of the large service areas noted the support while the percentage for the small areas was 86. Aside from the inclusion of support from the Church, agreements on volunteer support differentiate the large and small service areas in favor of the large ones, of which 18 percent noted agreements with the volunteer organizations in comparison of 5 percent in the small areas. (Article III.)

Only 27 percent of the large service areas had agreed with the private service producers on service continuity in case of disruptions, and the percentage was even lower, 12 percent, in the small areas (Article III). This indicates that bridging social capital was not created well enough between public and private sectors to ensure good relationships and continuity of the private services in case of disasters. (Article II.)

Concerning *intervention of economic participation*, the results show that the content of this intervention was almost completely restricted to social work's ordinary role of financial assistance, which was noted in 96 percent of the Finnish documents. The task also includes implicitly support for the clients to apply for insurances and other benefits. At the same time, securing finances for preparedness of social work was noted in less than half of the documents. (Articles II.)

## 6.2.2 Preparedness of the private social care units

The findings of the survey of the privately produced institutional care and sheltered housing services show that the requirements concerning services' safety measures, which are based on legislation were planned well in the service units:

Fire safety and rescue planning was completed in all the units, and more than 90 percent had completed a facility evacuation plan. At the same time, only one fifth (19%) of the respondents stated that their unit had completed a disaster preparedness or business continuity plan. Preparedness planning was a requirement agreed on with the service purchaser in only 11 percent of the units, and 10 percent reported that their preparedness plans had been attached to the public social service areas' plan. Preparedness planning is not obligatory for private services, but the municipal social service purchasers have been guided that they should include a requirement of continuity planning while agreeing on service production with the private sector. (Article IV.)

The results show that the units that had completed a preparedness plan had more often a plan for evacuation shelter ( $p < .001$ ), for crisis communication ( $p < .001$ ) and for recruitment of extra staff ( $p < .001$ ), as well as preparedness training ( $p < .001$ ) and exercises ( $p < .001$ ) for their staff when compared with the units that had not completed preparedness plans. (Article IV.)

The private institutional care and sheltered housing services were well equipped with gadgets and materials, like flash lights and battery radios, needed for example during power cuts, although approximately only one fourth of the service producers were prepared for hazards with alternative energy supply like aggregates. The redundancy of power supplies was analyzed further by using the client type as a factor in whether the unit had any alternative power supply. The study showed that the units for the elderly were more often prepared with power aggregates (OR 2.042 95% CI [1.289, 3.240]). Small units were better prepared in stocking medicines, but when unit types were compared, it was found that service units for persons with alcohol problems or other dependencies (OR 0.596 95% CI [0.394, 0.900]) were the poorest prepared in medicine stocking. (Article IV.) These results show on one hand differences in resilience of the service units, but also how certain client groups in private sector residential units are more vulnerable and live in possibly more unsafe conditions than others. The role of social workers in monitoring private sector preparedness should be to better ensure that the services don't create unsafe conditions for certain client groups, like in this case persons with substance abuse dependencies.

Differences in private institutional care and sheltered housing preparedness planning were compared between small and large units and between the type of clients the privately produced service units serve. Both extremes in size, small units of 15 residents and under and large units of more than 50 residents, were compared and the results were analyzed using comparison of two proportions test. It was found that preparedness planning was required more often from the large units than the small ones, and the plans of the large units were more often attached to the service purchasers, i.e. social service areas', preparedness plans ( $p < .05$ ). (Article IV.)

Multivariate logistic regression models were used to analyze whether either client type, the unit size, or some other variable explained the level of preparedness. It was found that requirement from the service purchaser / social

service area was a significant factor in whether preparedness planning was completed in the units, and thus, the client type of the unit did not have an explanatory role in this preparedness measure. When comparing preparedness measures between the units serving different client groups, it was found that preparedness and continuity plans of the services for the elderly (Odds ratio (OR) 3.262 95% Confidence interval (CI) [1.693, 6.286]) and people with disabilities (OR 1.853 95% CI [0.936, 3.669]) were more often attached to the local government plans than services for clients with mental health problems, children or persons with alcohol problems or other dependencies. (Article IV.) These results show, as do the previous ones of material redundancy, that within social services for different client groups there might be unsafe conditions that could be prevented with better preparedness planning and, thus building the resilience of the services.

The results also show that if the private social care unit's preparedness plan was attached to the municipal plan the units' power supply was prioritized by the local power company more often ( $p < .001$ ) than if the plan was completed but there was no such preparedness collaboration with the municipal social service purchaser, or if the preparedness plan was not completed at all. It seems that active cooperation, i.e. bridging and linking social capital, with the municipality enhances private social care units' better preparedness concerning dependencies on critical infrastructure. (Article IV.)

### 6.3 Summary of the empirical results

Social work's interventions of social and human investments, i.e. day-to-day roles and in disaster situations extending roles, which enhance bonding social capital, were emphasized in the Finnish preparedness plan documents. This indicates that basic level of preparedness exists in social work and the social service areas. (Article II and III.) Interventions of political empowerment and economic participation, which embrace bridging and linking with other disaster management actors were noted more seldom. The results show that preparedness planning is done on a very shallow level in Finland, and one can ask whether the overall level of preparedness and understanding of social work roles in bridging and linking with other disaster management actors is adequate. Deficiencies in the roles named for social work were found in vulnerability analysis, support for management, alarming systems, agreeing with volunteers on their support, public-private partnership, public information and measures to implement psychosocial support. (Article II.) In all these measures, there were also statistically significant differences between large and small social service areas in favor of the large ones. (Article II and III.) The findings of the private social care units are in line with the results found in municipal preparedness of social work. In addition, in the private social care units differences in preparedness were found between services provided for various client groups. (Article IV.)

In comparison with the roles described in the international journal articles (Article I) some tasks of social work were lacking in the Finnish preparedness plan documents (Article II). While the Finnish preparedness plan documents note various services or client groups, the international articles describe more concretely social work practice. Outreach and practical help for the affected are concrete ways to support individuals and families which were noted in the articles. These tasks might be lacking in the Finnish documents because the level of preparedness planning is more strategical, while the articles reviewed handled disaster response and recovery practice. In addition, ensuring safety of the affected was lacking in the documents and this function is not even mentioned in the Finnish government guidelines (Ministry of Social Affairs and Health 2008). Support for groups and communities were not noted in the Finnish documents either, nor empowerment and advocacy as roles of social work. Intervention of economic participation was narrower in Finland compared to the international research and restricted almost only to financial assistance task. (Articles I, II and III.) Regarding social capital, tasks of social work related to micro level approach and bonding social capital were slightly emphasized in the Finnish preparedness plans in comparison to bridging and linking social capital (Article II).

The Finnish Ministry of Social Affairs and Health has published a handbook on emergency planning in social services in 2008 (Ministry of Social Affairs and Health 2008), and as noted, ensuring safety of the affected is not noted in the guidelines. This might be the reason why it is not noted in the preparedness plan documents. At the same time, there are various preparedness measures that are guided in the handbook, like multisector cooperation, alarming systems and public-private partnership and agreeing on continuity of the privately produced services, which were not implemented well enough in the actual preparedness plan documents of the social service areas.

A summary of the roles on social work in disasters is compiled in the Figure 5, which illustrates disaster social work interventions (Elliott 2010; Article I), bonding, bridging and linking social capital and the roles and tasks of social work in the Finnish disaster preparedness plans (Article II) as well as in the review study (Article I). The results of the Articles III and IV support the results found in Article II. The roles which are noted in more than 80 percent of the plans in Finland are illustrated in bolded black text and the roles lacking from the Finnish plans but noted in the international research are circled with dotted round dashes.

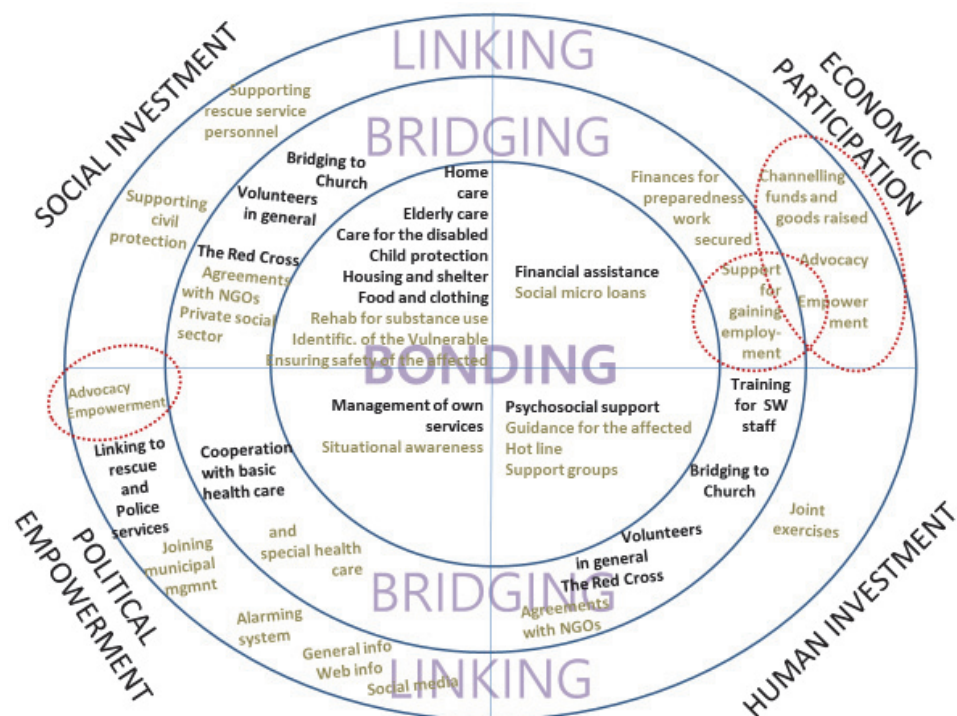


FIGURE 5 A summary of the roles of social work in disaster management  
 Bolded text: Roles emphasized in the Finnish preparedness plans.  
 Circled with dots: Roles noted internationally and lacking in the Finnish preparedness plans

Combining the concepts of bonding, bridging and linking with the four disaster social work interventions, I want to emphasize the importance of social capital enhancement in disaster social work practice in aiming to increase resilience of individuals, communities, organizations and the society in general. The concept of social capital enables to strengthen collaboration and horizontal and vertical networking in disaster management structures. In addition, there is a need to enhance social capital of the clients and persons affected of disasters. The empirical results are discussed further in the following chapter.

## **7 DISCUSSION AND CONCLUSION**

The concepts of disaster vulnerability and resilience are vital in discussing what is the proper role and contribution of social work to disaster management as well as to the lives of disaster affected individuals and communities in Finland and internationally. The concepts enlighten structural and underlying aspects of disaster management and, thus, enable us to understand the reality even better than if we only relied on the empirical findings (Niiniluoto 1999). The central concepts of this study, disaster social work framework and the empirical results are reflected and discussed in chapters 7.1. and 7.2. Thereafter the strengths and limits of the study are discussed, and further research is recommended.

### **7.1 Social work in reducing disaster vulnerability and increasing disaster resilience**

The concepts of vulnerability, resilience and social capital are all needed to understand and develop the role of social work in disaster management. The concepts are also central in international social work discussion. Vulnerability is important in understanding the complexity of how root causes, dynamic pressures and unsafe conditions cause disasters along with hazards and how their impacts might be prevented or diminished. At the same time, the concept of resilience broadens our understanding of vulnerability and inhibits polarizing thinking that for example all the poor, minority groups, or the aged, are vulnerable. Vulnerable groups can also have resilience, especially if they are strong in social capital. This study found that social care units for the elderly were better prepared for hazards than units for other frail client groups (Article IV). This indicates that people with alcohol and substance use dependencies and mental health problems are less protected by disaster preparedness planning than other vulnerable groups, such as the elderly (Article II, III and IV). Therefore, social



workers should be well informed of vulnerability, resilience, risk and other central concepts to make a difference in disaster management (Dominelli 2012, 64).

Political empowerment intervention and structural social work are tools in combating unsafe conditions, dynamic pressures and progression of vulnerabilities (Elliott 2010; Zakour 2013). As vulnerability is caused by economic, social and political processes, it can be reduced by changing the processes and unsafe conditions as well as by increasing the capabilities of people (Wisner et al. 2004, 50). Social work interventions should, therefore, also focus on these interventions. However, root causes of vulnerability can be difficult to influence by social work (Zakour 2013). Political decisions are needed for example to foster the welfare state model and to improve the level of social benefits for certain vulnerable groups. The interventions of economic participation and political empowerment are interlinked. There might be a need for more robust interventions by social workers to advocate the needs of people with economic constraints after crises and disasters. Economic participation is an important intervention from the point of view of recovery, as financial difficulties endanger and lengthen the recovery process of individuals and families. In Finland, social workers do have possibilities for additional economic support for persons affected of crises, if they consider there is a need for it. This is one of the measures of social work to be used post-disasters.

Empowerment of people and local communities and advocacy are measures used in social work internationally in reducing disaster vulnerability. Even though these measures were noted in international research as roles of social work, it was also among recommendations of the articles that social work should further develop its structural interventions in the context of disasters. Social workers should advocate that the most vulnerable get assistance and help after disasters. This would have impacts on prevention and mitigation of risks, as well as on response and recovery. These empowerment and advocacy roles were not found in the Finnish disaster preparedness plans. (Article I, II and III.)

Vulnerabilities in ordinary life cause major consequences in disasters (Wisner et al. 2004, 4). At the same time, alleviating and reducing vulnerability is among the daily tasks of social workers as they contribute to social change in the lives of the people they work with (Payne and Askeland 2008, 30). Therefore, I argue that social workers who deal with vulnerable people in their day-to-day work should link with disaster management authorities in the ways this study recommends, in order to raise the question of disaster vulnerabilities in disaster management platforms. This would make a difference not only in disaster management but also in disaster risk reduction. Sharing knowledge between various actors is a vital issue in disaster management and therefore the way forward should be in coproducing disaster risk knowledge (Alston 2013; Weichselgartner et al. 2015).

As vulnerability tends to change continuously, it should be assessed from time to time, and especially during and after societal disruptions. The focus of social workers' response in disasters should be in assisting the most vulnerable

of the affected keeping in mind the principles of social work: Social justice, human rights, collective responsibility and respect for diversities (Minahan & Pincus, 1977; Zakour 1997; Global Definition of the Social Work Profession 2014). Concentrating on the key mission of each organization is also noted in the international standards on continuity planning, which is widely used by the private sector (ISO 22301; Drennan et al. 2015, 11). However, social work's mission was not strongly present in the Finnish disaster preparedness plans, as the role of assessment of vulnerabilities was noted quite seldom in the documents (Articles II and III). In addition, the expertise to reach disaster social work aims was better in large social service areas compared to the small ones (Article III). Larger organizations' better disaster preparedness has been noted also earlier (Palm & Ramsell, 2007; Savoia et al, 2009; Sadiq 2010; Chikoto et al. 2012). For example, in a study of public health emergency preparedness in the United States, it was found that local health departments serving large populations had better emergency preparedness than their smaller counterparts (Savoia & Rodday & Stoto 2009).

The private sector has been found to be less prepared for hazards than public or voluntary organizations (Chikoto et al. 2012) and the results of this study show that this is also the case in Finland. In addition, there was variation between various client groups' and size of the service units' preparedness in the private institutional care and sheltered housing services (Article IV). As shown in the results, only less than one third of the large municipal service areas had agreed with the private service producers on service continuity in case of disasters, and the percentage was even lower in the small areas (Article III). This can lead to a situation in which some vulnerable people cared for by private service producers will not get services during disasters, for example, housing or their daily meal services, because of lack of preparedness. This would result in human suffering, but also in an insurmountable workload for the public services, for example, during long lasting power cuts caused by heavy storms. This study highlights the previous finding that defining an acceptable quality of services, in this case continuity, in procurement has proven to be a complex task and that there might not be enough competence in the municipalities' social work for this task (Topo 2011). The large social service areas seem to have more expertise on disaster management issues, like in procurement, than the small ones. This is a lesson to be considered in the forthcoming new social and health care service structures in Finland. It is anticipated that the private service providers will produce a vital share of the social and health care services in the future in Finland due to our new legislation.

In addition to reducing disaster vulnerability, social workers have important role in increasing the resilience of individuals and the society as a whole. As pre-disaster planning increases adaptive resilience and ability to respond and recover, it is vital that organizations complete their preparedness plans (Drabek & McEntire 2003; Tierney 2014, 208-209). The results of this study show that in Finland the municipal social services show some inherent resilience, since it has completed preparedness plans at least in general level in 84

percent of the service areas, regardless of their size (Article II and III). One reason why large social service areas were found to be more resilient and adaptive than the small ones in Finland, was that they had more recent and better updated preparedness plan documents. (Article III). It is argued that improvisation, flexibility, and adaptive resilience are needed in implementing the plans. (Drabek & McEntire 2003; Tierney 2014, 208-209.)

Only 19 percent of the private institutional care and sheltered housing services had preparedness or continuity plans (Article IV) and the municipal social work and services were not well enough bridged with the private social services (Article II and III). Thus, while majority of the public social service areas show resilience in terms of preparedness planning, the private social care units might not be resilient enough to meet disasters. Social workers as disaster management stakeholders should stress bridging to private social services in their future roles. Pre-disaster social capital and networks have been found to enable quick response and recovery in hazardous situations (Blanke & McGrady 2012).

At the same time, a question can be raised whether better planning, or planning at all, results in better response and resilience to disasters. Clarke is one of the scholars who have raised the question of fantasy planning (Clarke 1999). It is argued that preparedness plan documents do not guarantee proper response, especially if they are not disseminated well in the organizations (Boin & McConnell 2007; Clarke 1999; Drennan et al. 2015, 132-155). Some of the documents of this study can be regarded as symbolic, especially the ones that have not been reviewed for years. However, there are previous studies undertaken in Finland that support the importance of having documented preparedness plans. A survey study of psychosocial support preparedness in Finland showed that if crisis support in mass casualty accidents was noted in the preparedness plans of the municipalities, the actual preparedness, in this case existence of a crisis support group, was better than in cases where it was not noted in the plans (Hynninen & Upanne 2006, 26).

Redundancy is an important feature of adaptive resilience. It deals with substitution of resources with alternative ones in cases where, for example, some vital resource, like a facility or electricity, is lost when disaster strikes. Redundancy increases adaptive resilience when options to act on are scarce. (Tierney 2014, 168-169.) Support from volunteer organizations is a measure of redundancy in social work as some of their interventions can be completed by volunteers. The international research review showed that one of the various tasks of disaster social work is to facilitate and support the work of civic organizations. Support for NGOs to ensure efficient aid as well as guidance and coordination of the voluntary actions were used as social investment interventions in disasters internationally (Article I). This is also the case in Finland, where the public social work shows redundancy in that they can rely on support from the volunteer organizations and the Church in their expanding tasks, although the support is formally agreed (Articles II and III).

Resourcefulness as a feature of adaptive resilience consists of quick mobilization of resources and identification of the problem at hand. Improvisation and flexibility in actions taken and in emerging organizations and networks show also adaptive resilience in disasters. (Tierney 2014, 168-207.) Preparing alarming systems and pre-designed ways to activate response were found to be challenging for social work in Finland as well as in other countries (Articles I, II and III). The procedures to activate response are commonly not in place in the Finnish social work, which impacts on the ability of the overall disaster management system to cooperate with social work in the very beginning of the disaster, even if the partners considered it important. Poor linking can lead to situations where social workers are ignored in actual emergencies resulting in neglect of the needs of those affected. Emergencies tend to lead to prioritization of tasks in society. During a so-called emergency consensus, certain tasks like search and rescue, emergency medical services and caring for the victims are prioritized and, for example, education and other non-critical tasks can be set aside. (Dynes 2006.) Concerning emergency consensus, it is vital that social work profession gets its voice heard, because it has the expertise and understanding of the measures used in identifying and caring for the most vulnerable.

As noted previously, identification of the problem indicates resourceful resilience in disasters (Tierney 2014, 168-207). Situational awareness is the basis of identification of problems and solving them. Information of social work target groups' vulnerabilities and resiliency, adequacy of response and recovery system and organization, form part of the information that should be shared during disasters (Alston 2013). In the Finnish preparedness plan documents measures for increasing awareness of the disaster situation as a support measure for the management were often not noted, and there was a significant difference between large and small service areas in favor of the large ones. (Article II and III.) This is a major deficiency, since effective response relies on timely and accurate information (Danso & Gillespie 2010).

In summary, the concept of disaster vulnerability highlights social work's role in caring, empowering and advocating for the most vulnerable as part of disaster management. The concept of resilience enlightens firstly the importance of social work preparedness in building inherent and adaptive resilience and secondly, the importance of adopting bonding, bridging and linking social capital into disaster related practices of social work.

## 7.2 Practical implications

When a disaster strikes, familiarity of the roles of various actors in multiorganizational network is vital for the emergent disaster management organization to be able to work well. In addition, pre-designed roles are important in disasters because of time constraints. It is important to know what has been the plan and when and how to depart from the pre-designed preparedness plan. (Tierney 2014, 208-224.) Social work's role in disasters is not always clear for social

workers themselves or other disaster management actors (Dominelli 2012) and therefore, this is an important question for social work practice and training. Currently, disaster management is not included in the curriculum of social work in the universities in Finland. In order to improve social workers' knowledge and practical skills in disaster management systematic training is needed. There is a need for general disaster social work training in the Masters level and in addition for specialized training focusing on emergency social services and disaster management. This would raise the profile of social work among other disaster management actors and finally benefit social workers' clients and other persons affected by disasters.

The results of this study show that the roles of disaster social work in the preparedness plans are very consistent and uniform across Finland as the same roles were noted in nearly all plans. The roles included taking care of the continuity of the daily tasks and the extending disaster specific roles of arranging shelter, food and clothing for the affected. Another central result is that social work's roles relating to bridging and linking to other disaster management actors are weaker. It is anticipated that deriving from the poor bridging and linking, the role of social work might not be evident for the other disaster management actors, as Dominelli (2012) argues. Joint training and exercises with other disaster management actors including the private and volunteer sectors would highlight social work's central role in disaster management.

Concerning disaster social work interventions, social and human investments, political empowerment and economic participation, outline the role of social work in disaster management internationally. As resilience safeguards us in disasters and social capital increases both inherent and adaptive resilience, it is important to complement disaster social work interventions with bonding, bridging and linking social capital. Ersing and Loeffler (2008) argue that bonding, bridging and linking are inherent part of social work practice, thus active enhancing of social capital should be a central focus of each disaster social work intervention. Secondly, social work's interventions should focus not only on the continuity of the services and on the clients in their social and ecological environment but also on their own organization of social work. Disaster specific multiorganizational networking should be central in social work's interventions as well as support for the management of social work's own organization, recognizing horizontal and vertical networking in disaster social work. This means, firstly, good 24/7 alarming systems, secondly, sharing of situational picture with the peers, the management, and overall disaster management structures, and thirdly, well planned and implemented sharing of information with the public and those affected by disasters. Taking care of those who care, social workers themselves, is also an essential role of social work in disasters (Gibson & Iwaniec 2003; Hickson & Lehmann 2014).

Social workers' political empowerment interventions aim at improving the conditions and marginal status of vulnerable people and communities (Elliott 2010). As noted earlier, half of the international studies in the review noted political empowerment interventions of social work in actual disasters, and many

called for empowerment and advocacy in their recommendations for social work. (Article I.) At the same time, the Finnish disaster preparedness planning of social work is lacking explicit references to empowerment of clients or communities or even advocacy. One of the recommenders in the international research reviewed is Margaret Alston (2013), who points out that social workers must be part of leadership teams and inform policy development on gender as a critical factor in vulnerability, ensure women's safety for example in shelters, advocate for better equality in resource distribution, point out social implications of climate change and advocate for transformative change of inequalities after disasters. Also in Finland family and peer violence as well as other safety and security issues should be kept in mind while preparing for and responding to disasters.

Social workers have been involved in organizing removal of environmental threats to health and wellbeing very early in the professions history (Zakour 1996). However, there is still a huge gap between mainstream social work and structural macro-level social work and, for example, involving ecocritical perspectives in social work (Närhi & Matthies 2016). As global warming and other global and local human induced phenomena increase the number and magnitude of disasters (IPCC, 2007) and affect the wellbeing of people, social workers should consider ways to take a greater role in disaster management. Raising the question of disaster impacts on vulnerable populations in disaster management platforms could be a good start in this.

In Finland, disaster social work needs to be upgraded in many aspects. There is a need for further training, preparedness plans should be completed better, the plans should be disseminated in own organization and bridging and linking to other disaster management actors should be facilitated. Social workers, through their daily work, know community and individual vulnerabilities and their location and this knowledge should feed for the planning processes as well as for response and recovery tasks (Gillespie 2010, 11-13). In some parts of Finland there are signs of improvement in disaster preparedness, for example in the way how clients in home care services are protected and taken care of in case of disasters. New legislation on emergency social services is also raising hope of improvement in the field of responding to minor incidents and major disasters in the Finnish regions and municipalities. Regarding idle social capital (Aldrich 2012), there is a clear role for social work, who deliver resources and aid to the affected, to take care of the needs and rights of marginalized or other vulnerable groups who might be left out of aid (Zakour & Gillespie 2013, 13).

As better disaster risk governance and recognition of all stakeholders and their roles are elements aiming to strengthen disaster management capacities of nations (Aitsi-Selmi et al. 2015) social workers should take advantage of these global goals and strengthen its role as vital partner of disaster management. As part of disaster management, social work can play an important role in reducing disaster vulnerability and increasing the resilience of societies.

### 7.3 Strengths and limits of the study

The relevance of social work in disaster management is far larger than this study can reveal. Social work and the welfare state in general has a major role in the reduction of vulnerability, having impact on the root causes, dynamic pressures and unsafe conditions. This study reveals only partly the wide role of social work and the sector in general in reducing vulnerabilities to disasters and building resilience of societies: On one hand from the Finnish perspectives of municipal social services' preparedness plans and private institutional care and residential services' preparedness and on the other, research found in international journals on social work's post-disaster actions. One of the inclusion criteria of the research review was English language. This must be kept in mind while considering the role of disaster social work internationally. Important research might have been excluded for instance from the Spanish speaking world.

However, as the data consists of both pre- and post-disaster actions of social work and social services in general, all the various data give insights on the role of social work in disasters, which is broader than only one of the data sets could have revealed. In addition, combining the data sets opens some new windows to look through and understand how social work can contribute to reduction of vulnerability and increase of resilience of people.

As noted earlier, preparedness plan documents describe the status of preparedness of a specific organization at a certain point (Perry & Lindell 2003; Drennan et al. 2015, 133). The data presented here only reflects the contents of local level social services' preparedness plans, not the actual abilities to respond in disaster situations, and the evaluation of actual performance is limited. Further research is needed to explore how well the plans work in practice. Some of the preparedness elements were noted very well in the documents, for example training. The notation, however, does not indicate in any way how many staff members have received training or how often training or exercises have been conducted in the organizations. This should be studied further. In any case, preparedness plans provide good insight to and evaluation data for studying social work's role and contribution to disaster management.

In regard to evaluating how symbolic (Clarke 1999) the planning is, further measurement is needed. Some of the documents of this study can be rather symbolic, especially those plans that have not been reviewed for years. Nevertheless, the roles of disaster social work can be derived from the plans. Deficiencies are also real, even though the level of planning can be far worse than the documents reveal. At the same time, some organizations can be very flexible in an actual crisis and perform better than what could be anticipated reading the documents. Regarding the private social care units' preparedness planning, I do argue that the status of preparedness as shown by the survey is quite real. Preparedness planning is not obligatory for the private social services, so the

responders of the survey do not have much to lose even if they give a truthful answer to the existence of a preparedness or continuity plan in the units.

In general, preparedness as part of disaster management has been studied less than response, recovery or mitigation of disasters (Dynes 1988). This was the first time that research-based information on preparedness planning in local level social work in Finland was obtained, and to my knowledge the first study that used comprehensive data of one country. The data represents the whole population of Finnish municipalities as well as private institutional care and sheltered housing services and is therefore externally valid. The study of the private social care units is the first comprehensive study that explores disaster preparedness of private institutional care and sheltered housing services in Finland. The response percentage of the survey was good (60%), and the data represents well the whole population of these services in Finland. Response rates to surveys on disasters have been found to be better than to non-disaster related questionnaires. In addition, research accessibility to policy documents has been greater than in non-disaster sociological studies. This increases the reliability and validity of disaster related studies. (Dynes 1988.)

This study explored only some elements of private service providers' preparedness and did not consider all dependencies on the critical infrastructure. Existing international research provides information mainly on evacuation planning of nursing homes, but research on private institutional and residential care services' preparedness for other client groups and in general is limited.

## **7.4 Recommendations for further research**

As this study reveals only part of the reality of disaster social work, further studies are needed. This study has used mainly pre-disaster empirical material as the data, which can only partly predict what is the outcome of social work practice in actual disasters. It would be important to study also post-disasters what is the role of social work, how does social work bridge and link with other disaster management actors in actual disaster situations, and how do the preparedness plans facilitate actions in disasters. There are studies on community reactions, psychosocial support and recovery of mass shootings in Finland (Haravuori & Suomalainen & Turunen & Berg & Murtonen & Marttunen 2012; Murtonen & Suomalainen & Haravuori & Marttunen 2011; Oksanen & Räsänen & Nurmi & Lindström 2010; Turunen 2014), for example, but no research that would have been conducted from the perspective of social work.

Preparedness and continuity planning of private institutional care and sheltered housing services formed one data set of this study. In the future, it would be important to assess disaster preparedness of social care units of the public sector as well. In addition, to get a wider picture of preparedness and response to heavy storms and other hazards, deeper studies on collaboration and flow of information between various actors, like the telecommunication and electricity companies, is needed.



This study increases our knowledge base on the status of preparedness in Finland. The results can be generalized across other Nordic welfare states, because the service structure is somewhat similar (Social Protection in the Nordic Countries, 2015/2016 2017, 16-17). It is, therefore, recommended that disaster preparedness of social work would be studied in other countries and compared with the results of this study. The Finnish experiences can be used as a reference point, while studying other countries' preparedness planning of social work and social services.

The responsibility to arrange social and health care services will be transferred from the municipalities to the 18 regions in Finland in 2020. It is recommended that the role of social work in disaster management is assessed after the reform. This study can be used as a baseline in studying the impacts of the reform on preparedness of social work and social services.

## YHTEENVETO

Kriisit ja katastrofit vaikuttavat merkittävästi sosiaalityön asiakkaiden elämään. Suurimmat vaikutukset kohdistuvat usein henkilöihin, perheisiin ja yhteisöihin, joiden kriisinsietokyky on muita heikompi ja joilla on muita vähemmän sosiaalista pääomaa. (Gillespie 2010; Sanders et al. 2003.) Sosiaalityötä tehdään ihmisten kanssa paikallisella tasolla, jossa katastrofit ja häiriötilanteet ensimmäisenä kohdataan. Lisäksi sosiaalityössä arvioidaan päivittäin kriisien vaikutuksia ihmisten elämään, järjestetään asumisen palveluita ja kriisitilanteissa tilapäismaoitusta, ohjataan ja neuvotaan apua tarvitsevia sekä ennaltaehkäistään ja lievitetään sosiaalisia ongelmia. Siksi sosiaalityön tulisi olla kiinteästi mukana varautumisessa häiriötilanteisiin ja linkittyä läheisesti muiden turvallisuusviranomaisten kanssa. Tutkimukseni kohteena on sosiaalityön rooli Suomessa varauduttaessa häiriötilanteisiin. Tarkastelen roolia Suomen lisäksi myös suhteessa kansainväliseen katastrofisosiaalityön keskusteluun.

Katastrofeista käytetään Suomessa usein termiä häiriötilanne. Se on vaikiintunut käsite, jota käytetään mm. Yhteiskunnan turallisuusstrategiassa (Ministry of Defense 2011). Tämän vuoksi käytän katastrofin lisäksi käsitettä häiriötilanne tässä suomenkielisessä yhteenvedossa. Sosiaalityön ymmärrän tutkimuksessani laajasti sosiaalialan ammattilaisten tekemäksi työksi, jota tehdään julkisella, yksityisellä tai vapaaehtoissektorilla erilaisilla sosiaalialan koulutus- taustoilla. Tässä tutkimuksessa sosiaalityöllä tarkoitetaan paitsi laillistetun sosiaalityöntekijän tekemää ammatillista työtä, myös laajemmin sosiaalipalvelujen kehittämistä ja sosiaalipalveluissa tehtävää työtä, jota viitoittavat sosiaalityön peruseriaatteet ihmisoikeuksien edistämisestä ja yhteiskunnallisesta oikeudenmukaisuudesta. Sosiaalipalvelut ovat sosiaalityölle myös väline ja menetelmä tukea ja edistää ihmisten hyvinvointia. Lisäksi sosiaalipalvelut ovat työn organisatorinen konteksti. (Kröger 2004.) Katastrofisosiaalityöllä tarkoitan sosiaalityötä ennaltaehkäistäessä ja varauduttaessa häiriötilanteisiin, akuuteissa katastrofitilanteissa tehtävää työtä sekä jälkihuoltoa ja toipumisen edistämistä.

Varautuminen perustuu Suomessa valmiuslakiin. Kaikkien viranomaisten tulee valmiussuunnitelmin ennakkoon suunnitella, miten ne hoitavat tehtävänsä häiriötilanteissa. (Ministry of Defense 2011.) YK:n katastrofiriskien toimintaohjelma, josta sovittiin Japanin Sendaissa vuonna 2015, tukee eri maiden varautumista häiriötilanteisiin ja katastrofiriskien vähentämistä (Aitsi-Selmi et al. 2015).

Katastrofisosiaalityön jäsenän Doreen Elliottin (2010) mallin mukaisesti neljään interventioon: sosiaaliset ja inhimilliset investoinnit sekä taloudellista osallistumista ja poliittista osallistamista lisäävät interventiot. Sosiaalisen investoinnin interventioilla lisätään ihmisten osallisuutta ja toimintakykyä. Katastrofitilanteissa sosiaalityön tulisi kartoittaa eri väestöryhmien tarpeet ja saattaa apu perille erityisesti haavoittuvimmalle väestönosalle tai kulttuurisille vähemmistöille, jotka muuten saattavat jäädä huomioimatta avustustoiminnassa. Vapaaehtoisten sekä viranomaisten koulutus ovat myös sosiaalisia investointeja, joiden avulla lisätään yhteistä sosiaalista pääomaa. Sosiaalityön toimenpitein

edistetään yhteiskunnan jäsenten osallistumista taloudellisesti mielekkääseen toimintaan esimerkiksi tukemalla työhön paluuta tai edistämällä työllistymistä. Nämä ovat taloudellisen osallistamisen interventioita. Poliittinen voimaannuttaminen edustaa rakenteellista sosiaalityötä. Interventiolla vaikutetaan haavoittuvassa asemassa olevien ihmisryhmien asemaan paitsi vaikuttamalla yhteistyöverkostoissa myös asiakkaita osallistavan työtteen keinoin. Inhimillisen investoinnin interventiot ovat tavanomaisimpia sosiaalityön tehtäviä katastrofitilanteissa. Psykososiaalinen tuki on tästä hyvä esimerkki. Haavoittuvuuden, kriisinsietokyvyn ja sosiaalisen pääoman merkityksen ymmärtäminen katastrofien ennaltaehkäisyssä, niihin vastaamisessa ja toipumisessa valottavat sosiaalityön roolia varautumisessa ja linkittävät sosiaalityön laajempaan katastrofitutkimukseen.

Tutkimukseni pohjautuu kolmeen eri aineistoon. Sosiaalityön roolia ja tehtäviä varautumisessa kansainvälisesti tutkin systemaattisen integroivan kirjallisuuskatsauksen avulla. Kirjallisuuskatsauksessa selvitin, mitä aikaisempi kansainvälinen tutkimus kertoo sosiaalityön roolista ja tehtävistä katastrofitilanteissa ja mitä suosituksia sosiaalityön kehittämiseksi on annettu. Tutkimusmenetelmänä käytin integroivaa kirjallisuuskatsausta, jonka oleellisiksi kirjallisuustyypeiksi määrittelin kansainvälisten tieteellisten julkaisujen vertaisarvioitua tutkimusartikkelit. Sosiaalityön roolia Suomessa tutkin käyttäen aineistona kuntien ja kuntayhtymien sosiaalitoimen valmiussuunnitelma-asiakirjoja (N=255). Valmiussuunnitelmadokumentit kattavat 84 prosenttia Manner-Suomen kuntien sosiaalitoimen valmiussuunnitelmista. Valmiussuunnitelmadokumenttien avulla sain tietoa siitä, mikä on suunniteltu olevan sosiaalityön rooli häiriötilanteissa. Varautumisella ja valmiussuunnitelulla on tärkeä tehtävä haavoittuvuuden ja katastrofien vaikutusten minimoimisessa sekä kriisinsietokyvyn edistämässä. Yksityisille sosiaalihuollon laitos- ja asumispalveluita tuottaville yksiköille tehty kyselyaineisto täydentää kuvaa sosiaalityön roolista häiriötilanteissa. Palveluntuottajille tehtiin kysely loppuvuonna 2013 Suomea kohdanneiden talvimyrskyjen jälkeen. Kysely lähetettiin 1326 vastaajalle ja vastauksia saatiin 797. Vastausprosentti oli 60. Kyselyssä selvitettiin myrskyjen ja muiden häiriötilanteiden vaikutusta palveluyksiköiden toimintaan ja niiden varautumista häiriötilanteisiin.

Tutkimuksen tulosten mukaan sosiaalityön rooleina Suomessa painottuvat sosiaalisen ja inhimillisen investoinnin interventiot ja mikrotason sosiaalityö. Mikrotason sosiaalityö vahvistaa sosiaalista pääomaa yksilötasolla, yksilöiden ja perheiden hyvinvointia ja perhesuhteita sekä yhteisöllisyyttä (bonding social capital). Tämä onkin tärkeä sosiaalityön rooli, koska kriisitilanteissa läheisten ja lähiyhteisön tuki on ihmisten selviytymisen ja toipumisen kannalta merkittävässä asemassa. Valmiussuunnitelmissa korostuvat sosiaalityön päivittäisten tehtävien hoitaminen ja niiden jatkuvuus myös häiriöiden aikana.

Valmiussuunnittelu oli melko kattavasti toteutettu suurimmassa osassa Suomen kuntia, mutta suunnitelmat oli laadittu hyvin yleisellä tasolla. Poliittisen voimaannuttamisen ja taloudellisen osallistumisen interventioiden mukaiset sosiaalityön roolit olivat harvemmin esillä valmiussuunnitelmissa Suomessa,

kuten myös kansainvälisissä tutkimuksissa. Sosiaalityön tulisi paremmin varautua huomioimaan haavoittuvimpien ryhmien tarvitsema apu ja tuki häiriötilanteissa. Haavoittuvuuden käsite nostaa esiin sosiaalityön roolin etsiä haavoittuvimmat ja huolehtia eniten apua tarvitsevista katastrofien uhreista, edistää avun saajien osallistamista ja voimaannuttamista, sekä edistää avun tarvisijoiden oikeutta tukeen ja apuun. Nämä ovat kaikki sosiaalityön sisältöjä, joita tulisi kehittää osana varautumista Suomessa sekä kansainvälisesti.

Sosiaalisen pääoman vahvistaminen rakentamalla siltoja yhteisöjen ja organisaatioiden välille joko avun saajien osalta tai sosiaalityön oman organisaation osalta, sekä sosiaalityön linkittäminen muihin turvallisuusviranomaisiin oli Suomen aineistossa heikosti esillä. Sosiaalityön varautumista tulisikin kohentaa erityisesti huomioimalla työn organisoitumiseen ja viime kädessä häiriötilanteiden hallintaan liittyviä seikkoja. Sosiaalityön tulisi linkittyä paremmin muihin turvallisuustoimijoihin, jotta katastrofisosiaalityön tehtävät ja rooli selkiintyisivät myös yhteistyökumppaneille. Parannettavaa on sosiaalityön hälytysjärjestelyissä ja johdon tukemisessa tilannekuvan avulla, varautumisen huomioimisessa sopimuksissa tilattaessa palveluita yksityisiltä palveluntuottajilta, sopimuksissa vapaaehtoissektorilta saatavassa tuessa sekä tiedotuksessa ja psykososiaalisen tuen käytännöissä. Tutkimuksessa havaittiin tilastollisesti merkittäviä eroja suurten, väestöpohjaltaan yli 20 000 asukkaan alueiden, ja pienten sosiaalipalvelualueiden varautumisessa. Suuret alueet olivat varautuneet paremmin kuin pienet alueet. Yksityisten sosiaalihuollon laitos- ja asumispalveluiden osalta havaittiin, että vain viidennes yksiköistä oli tehnyt valmius- tai jatkuvuudenhallintasuunnitelman, ja että palvelujen tilaaja oli vaatinut valmiussuunnitelman tekemistä useammin suurilta kuin pieniltä palveluntuottajilta. Vanhus- ja vammaispalvelujen asumisyksiköiden valmiussuunnitelmat oli lisäksi useammin liitetty osaksi kunnan sosiaalihuollon valmiussuunnitelmaa verrattuna päihde- ja mielenterveyskuntoutujien tai lastensuojelun yksiköiden suunnitelmiin. Sosiaalityön osaamista ja muiden turvallisuustoimijoiden linkittymistä voidaan parantaa koulutuksella ja yhteisillä harjoituksilla. Osana varautumista sosiaalityö voi edistää haavoittuvuuden vähentämistä katastrofeissa ja parantaa yhteiskunnan kriisinsietokykyä.

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## ORIGINAL PUBLICATIONS

### I

#### SOSIAALITYÖ JA KATASTROFITILANTEET KANSAINVÄLISISSÄ TUTKIMUKSISSA - KIRJALLISUUSKATSAUS

[Social work and disasters in international peer reviewed journals  
- a systematic review].

by

Rapeli, Merja (2016)

In M. Jäppinen & A. Metteri & S. Ranta-Tyrkkö & P-L. Rauhala (Eds.) Sosiaalityön tutkimuksen vuosikirja 2016. Kansainvälinen sosiaalityö. Käsitteitä, käytäntöjä ja kehityskulkuja, 2. painos (pp. 248-272).

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## ABSTRACT OF THE ARTICLE I IN ENGLISH

Social work has an important role in disaster mitigation, preparedness, response and recovery, though the roles are not always known for disaster management partners, nor for social workers themselves. My aim in this study was to describe the roles and interventions planned for social work in the context of disaster management, and evaluate the recommendations given for disaster social work. Integrative literature review was applied as the research method. Disaster social work research was searched from international journals using online electronic databases. Research was chosen according to prepared inclusion criteria. The final data consisted of 30 articles of studies on disaster social work published in between January 2000 and June 2014. A theory driven content analysis was used in extracting and interpreting the articles. Doreen Elliott's (2010) Disaster social work intervention systems model was used as the theoretical framework guiding the analysing process. The results showed that social and human investments were emphasized in disaster social work though also social work tasks representing economic participation and political empowerment were found in some of the articles. There were many recommendations given to disaster social work according to the systematic review. Multi sectoral work was recommended: Social workers should widen their networks to traditional actors of disaster management, such as the police and rescue service. Social work should also develop its' community based and structural social work interventions in the context of disasters, and disaster social work should be included in the training programs. I conclude that knowledge of disaster social work is needed in social work practice in Finland and in International operations. The role of social work in disasters is very close to the tasks of day-to-day social work although more trauma and crisis counselling is needed in disasters. In addition, disaster social work is more hectic than ordinary work, management and networking with other disaster management actors is central, and the way of working needs to be more flexible than usual. Focusing on community and structural social work in disasters could result in more effective prevention, response and recovery. The aim of disaster social work should be increasing resilience of individuals and communities. Disaster social work intervention systems model was found useful in analyzing and describing social work's roles in disasters, although the model could be developed further by adding measures of disaster management into the model.

# Sosiaalityö ja katastrofitilanteet kansainvälisissä tutkimuksissa – kirjallisuuskatsaus

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*Merja Rapeli*

## Johdanto

Monet katastrofit kuten luonnononnettomuudet ja epidemiat eivät tunne valtioiden rajoja, eikä esimerkiksi globaalista katastrofista tarvitse hakea kaukaa. Kaakkois-Aasian maanjäristys ja sitä seuranneet tsunamit vuonna 2004 ulottivat vaikutuksensa Intian, Sri-Lankan, Indonesian ja Somalian lisäksi useihin muihin maihin. Tsunamissa kuoli tai katosi 179 ja loukkaantui 250 suomalaista henkilöä, ja katastrofi käynnisti mittavat auttamistoimet myös Suomessa (Onnettomuustutkintakeskus 2005).

Kansainväliseen sosiaalityön keskusteluun on viime vuosina noussut sosiaalityön rooli ja tehtävät katastrofitilanteisiin varautumisessa, niiden akuutissa hoitamisessa ja jälkihoidossa. Useiden tutkijoiden mukaan sosiaalityöllä tulisi ja voisi olla aiempaa vahvempi rooli katastrofityössä sekä poliittisella, strategisella että käytännön tasolla niin kansallisesti kuin kansainvälisestikin. (Chou 2003; Mathbor 2007; Thomas & Healy 2010; Elliott 2010; Dominelli 2012, 2-3.) Sosiaalityön peruslähtökohdat, kuten ihmisten selviytymisen tukeminen, muutoksen edistäminen sekä ekologinen lähestymistapa antavat hyvät lähtökohdat

katastrofityölle (Zakour 1996). Ekologisessa lähestymistavassa ihminen huomioidaan osana sosioekonomista ja luonnon elinympäristöä työn kohdentuessa yksilötyön lisäksi rakenteelliseen työhön (Matthies & Närhi 2014).

Tässä artikkelissa paikannan katastrofisosiaalityön roolin ja tehtävät osaksi toisaalta monisektorista varautumisen toimijakenttää ja toisaalta osaksi kansallista ja kansainvälistä sosiaalityötä. Tutkimusmenetelmänä on integroiva kirjallisuuskatsaus. Kansainvälisiin tutkimusartikkeleihin pohjautuen kuvailen, mitä tehtäviä ja interventioita sosiaalityöllä on ollut eri katastrofitilanteissa. Tuon myös esiin, mitä suosituksia katastrofisosiaalityön kehittämiseksi on annettu. Artikkelini tarkoituksena on tuottaa käytännön työn ja opetuksen käyttöön tietoa varautumisesta katastrofeihin ja häiriötilanteisiin. Katsauksen tulokset olen analysoinut Doreen Elliottin (2010) katastrofisosiaalityön interventiomallin mukaisesti. Malli on kehitetty sosiaalityön opetuksen tarpeisiin jäsentämään sosiaalityön tehtäväkenttää katastrofitilanteissa.

Katastrofisosiaalityöllä tarkoitan tässä artikkelissa sosiaalityötä ennaltaehkäisytässä tai varauduttaessa häiriötilanteisiin, akuuteissa katastrofitilanteissa tehtävää työtä sekä jälkihuoltoa. Katastrofeista käytetään Suomessa viranomaistoiminnassa termiä häiriötilanne (Valtioneuvoston periaatepäätös 16.12.2010 ja 5.12.2012). Selkeyden vuoksi käytän tässä artikkelissa termiä katastrofitilanne, jonka englanninkielinen vastine on usein disaster, crisis tai catastrophe. Sosiaalityön ymmärrän tässä laajasti sosiaalialan ammattilaisten tekemäksi työksi, jota tehdään julkisella, yksityisellä tai vapaaehtoisella erilaisilla sosiaalialan koulutustaustoilla (Mizrahi & Davis 2008, 37).

### Varautuminen ja katastrofit sosiaalityön kontekstina

Katastrofit ovat olleet osa ihmiskunnan historiaa aina, mutta viime aikoina niiden vaikutukset ihmisiin ja omaisuuteen ovat lisääntyneet (Tierney 2014, 125–159). Luonnonmullistusten, sotien ja konfliktien rinnalle on tullut uusia uhkia, jotka vaikuttavat elinympäristöön ja sitä kautta ihmisiin ja yhteisöihin (Quarantelli et al. 2007). Ilmastonmuutoksen seurauksena sään ääri-ilmiöt ja sen myötä luonnonkatastrofit, myrskyt ja tulvat sekä kuivuus lisääntyvät. Luonnonkatastrofit ja elinympäristöjen muuttuminen asuinkelvottomaksi aiheuttavat konflikteja ja vaikuttavat väestöliikkeisiin ja ihmisten sekä asuinalueiden haavoittuvuuden lisääntymiseen. (IPCC 2007; Simon 2012.) Ihmisten aiheuttamista katastrofeista terrorismiin

varautuminen on korostunut erityisesti 11.9.2001 New Yorkin terroritekojen jälkeen (Mackelprang et al. 2005; Perry & Lindell 2003; Padgett 2002).

Tulvat ja hirmumyrskyt muuttuvat katastrofeiksi silloin, kun niillä on huomattavia seurauksia ihmisten sosiaaliseen, taloudelliseen tai ekologiseen ympäristöön (IPCC 2007). Katastrofit vaikuttavat eniten jo entuudestaan heikoimmassa asemassa oleviin ihmisiin, kuten köyhiin, vanhuksiin, vammaisiin ja toisten ihmisten avusta riippuvaisiin henkilöihin (mm. Cherry & Cherry 1997; Thomas & Soliman 2002; Sanders et al. 2003; Gillespie 2010). Esimerkiksi New Orleansia vuonna 2005 koetellutta hirmumyrsky Katrinaa on kuvattu ihmisen aiheuttamaksi katastrofiksi siitä syystä, että myrskyn tuhojen laajuus ja jälleenrakennuksen puutteet kohdistuivat suurelta osin alueen köyhimpään ja huono-osaisimpaan väestönosaan aiheuttaen tuhoja, joihin olisi voitu varautua paremmin ennalta (Hawkins & Mauer 2009). Hirmumyrskyssä kuoli yli 1500 ihmistä ja kuolleista lähes 60 % oli yli 65-vuotiaita. Afro-amerikkalaisten köyhien asuinalueet kärsivät huomattavasti enemmän vahinkoja hyvätuloisten valkoisten asuinalueisiin verrattuna. (Zakour 2013.) Yksittäisten ihmisten ja väestöryhmien haavoittuvuus on riippuvaista monista tekijöistä, kuten yhteisön kulttuurista, elintavoista ja keskinäisestä tuesta (Gillespie 2010) sekä taloudellisesta, rakennetusta ja luonnon ympäristöstä (Zakour 2013).

Katastrofityötä kuvataan usein syklillä, jossa toiminnan vaiheet ovat katastrofien ennaltaehkäisy (risk reduction/mitigation), niihin varautuminen (preparedness), toiminta katastrofin aikana (response) ja jälkihuolto, jälleenrakennus sekä toipuminen (recovery) (Drennan & McConnell 2007, 25; Gillespie & Danso 2010). Haavoittuvuuden vähentäminen on keskeinen osa ennaltaehkäisyä ja riskien vähentämistä. Haavoittuvuuden arviointi on oleellinen osa myös varautumista, katastrofitilanteessa toimimista sekä jälkihuoltoa (Gillespie 2010), ja tässä sosiaalityön asiantuntemuksella voisi olla nykyistä suurempi rooli. Katastrofitilanteissa tärkeää on tehtävien ja roolien selkeys, jotta yhteistyö toimii monisektorisessä verkostossa, esimerkiksi pelastustoimen ja sosiaalityön kesken. Kaikkien osapuolten tulee tietää, mitä he ovat tekemässä ja mikä on heidän erityistehtävänsä tilanteen hoitamisessa. Tämä on yhteistoiminnan sekä sujuvan ja tarkoituksenmukaisen katastrofityön perusedellytys. (Perry & Lindell 2003.)

Tavoitteenani on tässä artikkelissa kartoittaa, minkälaisia rooleja sosiaalityöllä on katastrofitilanteissa, jotta osaisimme toimia riittävän hyvin yhteistyössä ihmisten auttamiseksi. Sosiaalityöllä on professionille ominaisia ja sen osaamista vaativia tehtäviä kaikissa katastrofityön eri vaiheissa. Tällä hetkellä roolit eivät kuitenkaan ole välttämättä selviä sen paremmin yhteistyökumppaneille kuin sosi-

aalityöntekijöille itselleen. Esimerkiksi Taiwanilla vuonna 1999 tapahtuneessa Chi-Chin maanjäristyksessä sosiaalityöntekijöistä 59 % oli mukana auttamistyössä heti katastrofin tapahduttua ja pitkään jatkuneen jälkihuollon ja jälleenrakennuksen aikana. Sosiaalityöntekijöistä kuitenkin vain 8 % oli saanut koulutusta katastrofeissa toimimiseen, eikä heidän resurssejaan osattu käyttää riittävän hyvin ja tehokkaasti. (Chou 2003.)

Varautuminen edellyttää toimia paitsi yksilöiden että yhteisöjen tasolla, myös strategisella ja poliittisella tasolla. Esimerkiksi päätöksenteko katastrofien ennaltaehkäisystä ja jäljelle jäävien riskien hyväksyttävyydestä on poliittista (Perry & Lindell 2003). Katastrofien kontekstissa sosiaalityön tulisikin olla yksilötyön lisäksi rakenteellista sosiaalityötä, jonka tavoitteena on toisaalta haavoittuvimpien ja huono-osaisten asiakkaiden asioiden ajaminen ja valtaistaminen ja toisaalta vaikuttaminen yhteiskunnallisiin rakenteisiin (Pohjola et al. 2014).

Elliottin (2010) jäsentämä katastrofisosiaalityön interventiomalli sisältää sekä yksilötyön että rakenteellisen sosiaalityön tehtäviä, ja käytänkin kyseistä mallia sosiaalityön tehtävien luokittelussa. Mallin lähtökohtana on sosiaalisen kehityksen (Social Development) viitekehys, jossa sosiaalisen hyvinvoinnin nähdään olevan kiinteässä yhteydessä taloudelliseen ja yhteiskunnalliseen kehitykseen. Sosiaalisen kehityksen kohteena ovat yksilöitä laajemmat sosiaaliset prosessit tai rakenteet. Lähestymistavan avulla voidaan tarkastella laaja-alaisesti yhteiskunnan ja sen jäsenten hyvinvoinnin edistämistä ja näkökulma soveltuu myös yhteiskuntaa kohtaavien häiriötilanteiden tarkasteluun. (Midgley 1995, 13–16.) Useat kansainväliset järjestöt, kuten Maailmanpankki ja Maailman työjärjestö, ovat soveltaneet sosiaalisen kehityksen näkökulmia omissa ohjelmissaan (Midgley 1995, 127–133).

Elliot jakaa katastrofisosiaalityön neljään interventioon: (1) sosiaaliset ja (2) inhimilliset investoinnit sekä (3) taloudellista ja (4) poliittista osallistamista lisäävät interventiot. Interventiot perustuvat sosiaalityön tavoitteina oleviin kestäväan taloudelliseen hyvinvointiin, perheiden ja yhteisöjen turvallisuuden edistämiseen, sosiaaliseen oikeudenmukaisuuteen ja ihmisoikeuksiin. Ekologinen sosiaalityö on interventioissa systeemistä, jossa ihminen nähdään osana sosiaalista ympäristöään. (Elliott 2010.)

Sosiaalisen investoinnin interventiolla luodaan rakenteita, jotka lisäävät ihmisten osallisuutta ja toimintakykyä. Katastrofitilanteissa sosiaalityön tulisi kartoittaa eri väestöryhmien tarpeet ja saattaa apu perille erityisesti haavoittuvimmalle väestönosalle tai kulttuurisille vähemmistöille, jotka muuten saattaisivat jäädä huomioimatta avustustoiminnassa. Myös vapaaehtoisten sekä

viranomaisten koulutus ovat sosiaalisia investointeja, sillä niiden avulla rakennetaan yhteistä sosiaalista pääomaa. (Elliott, 2010.) Sosiaalista pääomaa voidaan lisätä myös esimerkiksi linkittämällä eri toimijoita ja yhteisöjä keskenään sekä apua tarvitsevat avun ja palvelujen piiriin (Zakour & Harrell 2003; Mathbor 2007).

Sosiaalityön toimenpitein on mahdollista edistää yhteiskunnan jäsenten osallistumista taloudellisesti mielekkääseen toimintaan. Työllisyys ennen kriisiä ja työhön paluu mahdollisimman pian kriisien jälkeen lisäävät ihmisten hyvinvointia ja välillisesti myös koko yhteiskunnan talouden kehitystä. Taloudellisen tuen ja sosiaalisen luototuksen avulla voidaan parantaa sekä yksittäisten ihmisten että yhteisöjen hyvinvointia ja selviytymistä kriiseistä. Edellä mainitut ovat taloudellisen osallistamisen interventioita. (Elliott 2010.)

Elliottin mallissa rakenteellista sosiaalityötä edustaa poliittinen voimaannuttaminen. Interventiolla vaikutetaan haavoittuvassa asemassa olevien ihmisryhmien asemaan sekä toimimalla yhteistyöverkostoissa että asiakkaita osallistavan työotteen keinoin. Sosiaalityön interventioilla vaikutetaan avun suuntaamiseen ja rakenteisiin laajasti. Katastrofiavun ei tule olla hyväntekeväisyyttä, vaan sen tavoitteena tulee olla ihmisten voimaannuttaminen, jotta kriisitilanteiden seuraukset minimoidaan. (Elliott 2010.)

Inhimillisen investoinnin interventiot ovat tavanomaisimpia sosiaalityön tehtäviä katastrofitilanteissa. Psykososiaalisen tuen keinoin edistetään yksittäisten ihmisten ja perheiden toipumista ja toimintakykyä. Varautumisen vaiheessa tärkeää on kouluttaa sosiaalityöntekijöitä kriisityöhön ja psykososiaalisen tuen tehtäviin. (Elliott 2010.)

## Tutkimusasetelma

Artikkelini tavoitteena on kartoittaa ja kuvata, mitä sosiaalityö on ja voisi olla katastrofitilanteissa. Tutkin katastrofisosiaalityötä integroivan (Whittemore & Knafl 2005) kirjallisuuskatsauksen menetelmällä läpikäymällä systemaattisesti katastrofisosiaalityöstä tehtyjä aiempia tutkimuksia. Integroiva kirjallisuuskatsaus tutkimusmenetelmänä mahdollistaa tutkimuskohteen tarkastelun systemaattista kirjallisuuskatsausta tai meta-analyysiä monipuolisemmin, koska tarkastelun kohteeksi voidaan ottaa mukaan sekä laadullisia, määrällisiä että teoreettisia tutkimuksia (Whittemore & Knafl 2005; Salminen 2011). Integroiva kirjallisuuskatsaus on systemaattinen ja järjestelmällinen tutkimusmenetelmä, jossa tutkimus

toteutetaan ja raportoidaan vaiheittain (Salminen 2011). Katsaukseni synteesi on kuvaileva (Fink 2005, 54; Salminen 2011).

Järjestelmällisesti toteutetun kirjallisuuskatsauksen avulla on mahdollista tiivistää oleellista tietoa ja luoda kokonaiskuva laajasta tutkimusmassasta, mutta spesifistä aiheesta (Aveyard 2007, 10). Järjestelmällisyydellä tarkoitetaan sitä, että tarkasteluun valitut tutkimukset on valittu riittävän laaja-alaisesti, jotta mitään oleellisia tutkimuksia ei jää tarkastelun ulkopuolelle. Lisäksi kirjallisuushauissa noudatetaan tutkijan laatimaa protokollaa, johon on kirjattu mitä tutkimuksia hyväksytään katsaukseen ja mitkä tutkimukset jätetään sen ulkopuolelle. Koko tutkimusprosessi dokumentoidaan avoimesti siten, että toisen tutkijan on mahdollista arvioida mitä tutkimuksia synteesiin on valikoitunut sekä tarvittaessa toistaa tutkimus. (Aveyard 2007, 10-22; Fink 2005, 17; Kallio 2006.)

Tässä kirjallisuuskatsauksessa lähtökohtana ovat tutkimuskysymykset mitä tehtäviä sosiaalityölle mainitaan katastrofien kontekstissa ja mitä suosituksia katastrofisosiaalityön kehittämiseksi annetaan. Tutkimuskysymysten muotoilun jälkeen määrittelin ja identifioin oleelliseksi kirjallisuustyypiksi kansainvälisissä tieteellisissä julkaisuissa julkaistut vertaisarvioitua tutkimusartikkelit, koska halusin saada mukaan ajankohtaisia sosiaalityön tutkimuksia monenlaisista katastrofeista eri puolilta maailmaa. Tavoitteenani oli löytää tutkimuskysymysten kannalta relevantti aineisto, arvioida kriitisesti katsaukseen valikoituneiden tutkimusten laatua sekä laatia aineistosta laadullinen synteesi, joka vastaa tutkimuskysymyksiin. (Aveyard 2007, 19; Fink 2005, 4.)

Tutkimusartikkelien valintakriteerit katsaukseni olivat seuraavat: vertaisarvioinnin läpi käynyt tutkimusartikkeli, joka käsittelee katastrofisosiaalityötä tapausesimerkein ja joka on empiirisiin havaintoihin perustuva primääritutkimus tai toimintamallin kuvaus. Katastrofitilanteista rajasin sotaa koskevat tutkimukset kirjallisuuskatsauksen ulkopuolelle, koska olin kiinnostunut normaaliolojen häiriötilanteista. Vuosi 2001 on New Yorkin 9/11 terroritekojen vuoksi vedenjakaja katastrofitutkimuksessa (Mackelprang et al. 2005; Padgett 2002; Perry & Lindell 2003), ja siksi hain tutkimuksia, jotka on julkaistu vuoden 2000 jälkeen. Haku ulottui elokuuhun 2014. Lisäksi valintakriteerinä oli, että tutkimus on julkaistu englannin kielellä.

Hain artikkeleita ASSIA-tietokannasta sekä Social Sciences Collection -yhdistelmätietokannasta, josta sisällytettiin hakuun Social Services Abstracts, Sociological Abstracts ja Worldwide Political Science Abstracts -tietokannat. Tutkimuskysymykset sekä toteuttamani koehaut ohjasivat hakusanojen valintaa, johon

sain apua myös informaattikolta. Käytin seuraavia hakusanoja eri kombinaatioissa: (social work) AND (disaster OR catastrophe) AND (case OR field study); (social care) AND (disaster OR catastrophe) AND (tasks OR roles) tai AND (occupational roles). Haun tuloksena löysin yhteensä 59 kriteerini täyttävää artikkelia.

Tietokantahakujen yhteydessä jotkut julkaisut tarjosivat automaattisesti lisäpalveluna viitteitä, jotka käsittelevät haettavaa artikkelia koskevaa aihepiiriä. Kävin kaikki nämä viitteet läpi sekä myös kaikkien löydettyjen artikkeleiden lähdeluettelot hakien uusia aiemmin tunnistamattomia artikkeleita (Aveyard 2007, 68–69; Petticrew & Roberts 2006, 121). Näillä tavoin löysin lisää yhteensä 29 saatavilla olevaa artikkelia, joten lopputuloksena tässä vaiheessa minulla oli 88 artikkelia. Seuraavaksi luin löydettyjen artikkeleiden abstraktit arvioiden täyttävätkö artikkelit sisäänottokriteerit ja vastaavatko ne tutkimuskysymyksiin. Tällä perusteella 35 artikkelia jäi vielä tarkemman tarkastelun piiriin.

Kolmas vaihe artikkeleiden käsittelyssä oli niiden laadun kriittinen arviointi. Tämä ei ole integroivassa kirjallisuuskatsauksessa suoraviivainen prosessi, koska artikkeleiden tutkimusasetelmat edustavat monenlaisia lähestymistapoja (Whitemore & Knafel 2005). Lähtökohtanani arvioinnissa oli kriteerit (CASP), jotka sisältävät menetelmän tieteellisten tutkimusten luotettavuuden arviointiin. Erityisesti kvalitatiivisia tutkimuksia lukiessa havaitsin, että osasta artikkeleista oli vaikea löytää tietoa tutkimuksessa käytetystä menetelmästä tai siitä, miten tutkimuksen johtopäätöksiin oli tultu. Pyrin arvioimaan tutkimuksia kriittisesti, mutta huomioin kuitenkin, että katsaukseni kannalta on tärkeää löytää tutkimuksia, joissa selvästi kuvataan sosiaalityön tehtäviä tai annetaan suosituksia niiden sisällöstä katastrofitilanteissa. Huomioin, että tutkimusten sisältö ja tulokset voivat olla arvokkaita, vaikka ne eivät vastaisi sitä menetelmätaustaa, mitä niiden väitettiin tutkimuksessa noudattavan (Sandelowski & Baroso 2003). Lopullisesta analyysistä ja yhteenvedosta jätin pois 5 artikkelia, joissa ei kuvattu sitä, miten tutkimuksen johtopäätöksiin oli tultu (CASP), koska olin kiinnostunut sosiaalityön tehtävien lisäksi annetuista suosituksista ja johtopäätöksistä. Artikkeleiden laadun arvioinnin jälkeen jäljelle jäi 30 tutkimusta tai toimintamallin kuvausta (liite 1).



## Tulokset

### *Katsaukseen valitut tutkimukset ja tutkimusten luokittelu*

Kirjallisuuskatsauksen kriteerit täytti 30 artikkelia, joista laadin synteesiä varten useita taulukoita analyysin tueksi (Petticrew & Roberts 2006, 165). Artikkeleiden julkaisutiedot ja tutkimuspaikka, käsitellyt katastrofitilanteet, käytetyt tutkimusmenetelmät ja tutkimusten tarkoitus on kuvattu liitteessä 1. Artikkeleissa kuvatut katastrofisosiaalityön tehtävät on kuvattu tulosluvun ensimmäisessä osassa, ja ne on tiivistetty taulukkoon 1. Suositukset on kuvattu tulosluvun viimeisessä alaluvussa. Tulosluvussa katsauksen artikkeleihin viitataan liitteen 1 numeroinnilla.

Katsaukseen hyväksytyistä 30 tutkimuksesta tai toimintamallin kuvauksesta 11 oli menetelmiltään kvalitatiivisia tutkimuksia, yksi oli kvantitatiivisia menetelmiä käyttävä ja yksi teoreettinen tutkimus. Kuusi tutkimusta oli tehty mixed methods -menetelmiä käyttäen. Yksitoista artikkelia oli katastrofitapauksiin perustuvia toimintamallin kuvauksia, joiden lähtökohtana oli empiirinen toiminnan kuvaus katastrofitilanteessa.

Puolet artikkeleista käsitteli katastrofeja länsimaisesta näkökulmasta: esimerkiksi USA:n hirmumyrskyjä ja 9/11 terroritekoja tai Australian pensaspaloja. Loput artikkelit käsitelivät Aasiassa tapahtuneita katastrofeja, muun muassa Kiinassa ja Taiwanissa tapahtuneita maanjäristyksiä. Sosiaalityö katastrofitilanteissa ei näytä vaihtelevan niinkään sen mukaan mikä katastrofi on ollut kyseessä, vaan työn tekemisen kontekstin mukaan. Sairaalassa ja uhrintunnistuksen tukena tehtävä työ on erilaista kuin sosiaalityö ihmisten kodeissa, joissa osa työtä voi olla esimerkiksi huolehtia siitä, että ihmisten lisäksi kotieläimet tulevat ruokituiksi.

Suurin osa artikkeleista käsitteli sosiaalityötä katastrofitilanteessa osana kansallista toimintamallia ja järjestelmää, mutta osassa artikkeleista oli selvä yhteys kansainväliseen sosiaalityöhön. Sosiaalityötä ja sen tutkimusta toteutettiin kansainvälisessä kontekstissa (artikkeli 2), tai tutkimuksen kohteena oli kansainvälinen sosiaalityö tai humanitäärinen apu (8, 9). Sosiaalityöllä oli selkeä kansalliset rajat ylittävä kansainvälinen yhteys Kaakkois-Aasian tsunamia käsitelleessä artikkelissa (19) sekä Balin pommi-iskua kuvanneessa tutkimuksessa (22). Kansainvälisen sosiaalityön ulottuvuus löytyi myös Jerusalemin sosiaalityötä kuvaavassa artikkelissa (25), jossa sosiaalityössä on varauduttu muiden maiden kansalaisten auttamiseen terroritilanteissa. Kiinan Wenchuan maanjäristystä käsittelevässä tutkimuksessa

sosiaalityön tiimi muodostui Manner-Kiinan sosiaalityöntekijöitä laajemmasta kokoonpanosta (24).

Artikkeliaineisto on maantieteellisesti melko kattava. Katsauksen rajoitteena on kuitenkin hakukriteerinä käytetty englannin kieli. Esimerkiksi Latinalaista Amerikkaa ja Venäjää koskevia artikkeleita ei asettamillani hakuehdoilla löytynyt.

### *Sosiaalityön tehtävien kuvaukset katastrofitilanteissa*

Artikkeleiden sisältöjen analysoinnissa ja luokittelussa sovelsin teorialähtöistä sisällönanalyysiä (Tuomi & Sarajärvi 2009, 113–124), jota ohjasi Elliottin (2010) katastrofisosiaalityön interventiomalli. Analyysissä etsin artikkeleista lauseita, jotka vastaavat tutkimuskysymyksiini. Luokittelin ja tiivistin sosiaalityötä katastrofitilanteissa kuvaavat maininnat edellä kuvatun katastrofisosiaalityön interventiomallin (Elliott 2010) pohjalta laadittuihin luokkiin: sosiaalisiin investointeihin, taloudelliseen osallistamiseen, poliittiseen voimaannuttamiseen ja inhimillisiin investointeihin.

Sosiaalinen investointi	Taloudellinen osallistaminen	Poliittinen voimaannuttaminen	Inhimillinen investointi	
<ul style="list-style-type: none"> <li>• kotikäynnit ja jalkautuminen</li> <li>• autettavien tarpeiden kartoitus</li> <li>• ohjaus avun piiriin ja jatkohoittoon</li> <li>• erityisryhmien avun tarpeen huomiointi</li> <li>• tilapäismajoituksen ja asumisen järjestäminen</li> <li>• ruokatarvikkeiden ja vaatteiden jakaminen</li> <li>• käytännön apu</li> <li>• tiedon jakaminen</li> <li>• katastrofille altistuneiden turvallisuuden varmistaminen</li> </ul>	<ul style="list-style-type: none"> <li>• yhteisöjen jälleenrakennuksen ja kehittämisen tukeminen</li> <li>• yhteisöille tiedotus</li> <li>• ryhmätömlinta</li> <li>• järjestöjen ja muiden organisaatioiden tukeminen, jotta apu on tehokasta</li> <li>• vapaaehtoisten auttamistoimien ohjaus, tuki ja koordinaatio</li> </ul>	<ul style="list-style-type: none"> <li>• taloudellinen tuki</li> <li>• työnhaun tukeminen</li> <li>• vakuutus-korvauksien ja tukien hakemisessa avustaminen</li> <li>• lahjoittajien avun kanavoiminen</li> <li>• toimeentulon lähteiden kehittäminen yhteisöjen kanssa</li> <li>• mikrolainojen edistäminen</li> </ul>	<ul style="list-style-type: none"> <li>• avun saajien aktivoiminen ja tuki etujen ajamiseen</li> <li>• päätöksenteon ja johdon tuki, jotta haavoittuvimpien väestöosien avun ja tuen tarve huomioidaan</li> <li>• vaikuttaminen avun saamisen ehtoihin, jotta eniten apua tarvitsevat saavat tukea</li> <li>• konfliktien välittäminen yhteisöjen ja hallinnon välillä</li> <li>• koordinaatio ja johtaminen</li> <li>• moniammatillinen yhteistyö</li> </ul>	<ul style="list-style-type: none"> <li>• psyko-sosiaalinen tuki</li> <li>• traumatyö</li> <li>• surutyö</li> <li>• perheiden yhdistäminen</li> <li>• tuki uhrin-tunnistuksessa</li> <li>• tuki hautajais-järjestelyissä</li> <li>• auttava puhelin psykososiaalisen tuen välineenä</li> </ul>

**Taulukko 1.** Artikkeleissa kuvatut sosiaalityön tehtävät katastrofitilanteissa Elliottin (2010) jäsentelyn mukaan luokiteltuina

*Sosiaalinen investointi*

Kirjallisuuskatsauksen artikkeleissa sosiaaliseen investointiin liittyvät interventiot mainitaan 70 %:ssa (21:ssä) artikkeleista. Luokittelin tähän luokkaan ne tehtävät, jotka liittyivät avun tarvitsijoiden identifiointiin, avun ulottamiseen haavoittuvimmille väestöryhmille sekä yhteisöjen tukemiseen. Interventioina mainittiin hyvin perinteisiä ja meille Suomessa tuttuja päivittäisen sosiaalityön tehtäviä: jalkautuminen ja kotikäynnit, autettavien tarpeiden kartoitus, ohjaus avun piiriin ja jatkohoitoon sekä erityisryhmien avun tarpeen huomioiminen (artikkelit 1, 3, 6, 7, 9, 13, 16, 18, 19, 23, 25, 26, 27, 28, 29, 30). Myös perustarpeista huolehtimiseen liittyvät tehtävät luokittelin sosiaalisiksi investoinneiksi, koska niillä tuetaan ihmisten toimintakykyä. Näitä tehtäviä olivat tilapäismajoituksen ja asumisen järjestäminen, ruokatarvikkeiden ja vaatteiden jakaminen, käytännön apu, tiedon jakaminen ja katastrofille altistuneiden turvallisuuden varmistaminen (1, 4, 7, 9, 13, 16, 18, 19, 22, 23, 28, 29, 30). Yhteisöjen jälleenrakennuksen ja kehittämisen tukeminen, yhteisöille tiedotus ja ryhmätoiminta mainittiin sosiaalityön tehtävinä (3, 4, 5, 9, 16, 17, 18, 19, 26, 29). Sosiaalityön tehtäväksi mainittiin myös järjestöjen ja muiden organisaatioiden tukeminen, jotta apu on tehokasta, sekä vapaaehtoisten auttamistoimien ohjaus, tuki ja koordinointi (1, 9, 18, 22). Katastrofitilanteissa sosiaalityön opetuksen tehtäväksi nähtiin kapasiteetin rakentaminen yhteistyössä katastrofialueen sosiaalityön koulujen kanssa (11).

*Taloudellinen osallistaminen*

Taloudellisen osallistamisen interventioita mainittiin kolmasosassa (10) artikkeleista. Sosiaalityön interventioita olivat taloudellinen tuki ja työnhaun tukeminen (artikkelit 4, 7, 9, 18). Sosiaalityöntekijät auttoivat katastrofin uhreja vakuutuskorvauksien ja tukien hakemisessa (4, 13, 16). Katastrofitilanteille on tyypillistä, että ulkopuoliset yhteisöt ja yksittäiset ihmiset haluavat osallistua auttamistoimiin esimerkiksi lahjoittamalla rahaa ja tarvikkeita uhreille. Sosiaalityön tehtäväksi nähtiin lahjoittajien ja muun ulkopuolisen avun kanavoiminen (1, 13, 29). Australiassa järjestöjen tehtävänä oli hallinnoida alueellista katastrofirahastoa (28). Kiinassa tapahtuneen Wenchuan maanjäristyksen jälleenrakennuksen aikana sosiaalityön tehtävänä oli toimeentulon lähteiden kehittäminen yhteisöjen kanssa sekä mikro-lainojen edistäminen (26, 29).

*Poliittinen voimaannuttaminen*

Poliittisen voimaannuttamisen interventioita mainittiin lähes puolessa (14/30) katsauksen artikkeleista. Artikkeleissa mainittiin yksilön ja yhteisöjen tasolla sekä hallinnollisella ja poliittisella työskentelyn tasolla toteutettuja interventioita. Yksilötasolla poliittinen voimaannuttaminen oli avun saajien aktivoimista ja tukea, jotta avun tarvitsijat saivat palveluja, joihin heillä on oikeus (artikkelit 4, 6, 13, 25). Yhteisöjen ja organisaatioiden tasolla tuettiin päätöksentekoa ja johtoa, jotta haavoittuvimpien väestönosien avun ja tuen tarve ja esimerkiksi sukupuolinäkökulma tulivat huomioitua riittävän hyvin (4, 3, 13). Sosiaalityö oli myös edistänyt paikallisyhteisön aktivoitumista vastustamaan asuinalueensa ympäristön saastumista. Tässä työssä syntyneet yhteisön rakenteet edistivät maanjäristyksen auttamistoimia ja selviämistä katastrofista (5).

Hallinnollisella ja poliittisella makrotasolla interventiona oli vaikuttaminen avun saamisen ehtojen muutoksiin tilanteissa, joissa avustuskriteerit eivät vastanneet eniten apua tarvitsevien tarpeita (4, 6, 9, 29). Sosiaalityöntekijät toimivat katastrofitilanteissa konfliktien välittäjinä perheiden, paikallisten yhteisöjen ja hallinnon välillä (4, 18, 29). Eri sektorien välinen yhteistyö (3, 9, 13, 14, 28) ja tilanteen koordinaatio ja johtaminen (4, 16, 29, 30) olivat sosiaalityön tehtävinä ja luokittelin myös nämä osaksi poliittisen voimaannuttamisen interventiota.

*Inhimillinen investointi*

Inhimillisen investoinnin interventioita mainittiin lähes yhtä paljon kuin sosiaalisen investoinnin interventioita. Mainintoja oli 20 artikkelissa 30:stä. Psykososiaalinen tuki onkin ehkä vahvimmin ymmärretty osaksi katastrofisosiaalityötä. Osana psykososiaalista tukea tutkimuksissa mainittiin traumatyö ja surutyö (artikkelit 3, 4, 6, 7, 8, 9, 13, 14, 16, 18, 22, 23, 27, 28, 29, 30). Katastrofeihin liittyy yleensä kuolonuhreja ja sosiaalityön tehtäväksi mainittiinkin tuki uhrintunnistuksessa ammattilaisille ja läheisille sekä tuki hautajaisjärjestelyissä (1, 9, 14, 24, 27). Tehtävänä mainittiin myös perheiden yhdistäminen (23, 25), psykososiaalinen tuki yhteisöille (26), sekä auttava puhelin tuen välineenä (9, 19, 22, 23, 27, 30).

*Katastrofisosiaalityön kehittämiseen liittyvät suositukset*

Suosituksia katastrofisosiaalityölle oli kirjattu kaikkiin katsauksen artikkeleihin. Niiden analysointi oli prosessina teoriaohjaava (Tuomi & Sarajärvi 2009, 117). Aloitin analyysin pelkistämällä ja kirjaamalla artikkeleissa ilmaistut suosituslauseet taulukkoon. Tämän jälkeen ryhmittelin suosituslauseet kuuteen pääluokkaan ja nimesin luokat seuraavasti: yhteistyö eri sektoreiden kesken, haavoittuvimpien avun tarpeen esiin nostaminen, kulttuuri- ja sukupuolisensitiivisyys, työn yhteisöllinen fokuoiminen, psykososiaalinen tuki uhreille ja auttajille sekä sosiaalityön opetus. Kyseiset kuusi suositusluokkaa sovitin Elliottin (2010) katastrofisosiaalityön interventiomallin mukaisiin yläluokkiin. (Tuomi & Sarajärvi 2009, 108–124.)

Artikkeleissa suositeltiin monisektorista yhteistyötä, koska sen avulla muun muassa lisätään tilanneymmärrystä. Yhteistyötä pidettiin tärkeänä esimerkiksi poliisiin ja pelastustoimen kanssa. Katastrofitilanteen taustatiedosta ja tilanteen kehitysnäkymistä on hyötyä asiakkaita autettaessa. Tätä tietoa saa usein juuri yhteistyökumppaneilta. Australian pensaspalotilanteessa osa sosiaalityöntekijöistä toimi yksin pitkien etäisyyksien päässä oman työalueensa ulkopuolella ja heillä oli työssään selkeä tarve laajemmalle tilanneymmärrykselle (artikkeli 16). Myös vieraalla maaperällä oman maan tsunamiuhreja autettaessa kriittiseksi tekijäksi havaittiin tiedon kulku oman organisaation ja yleisjohtajaorganisaation välillä (23). Työn organisointia ja työkäytäntöjä suositeltiin kehitettäväksi niin, että sosiaalityön ammattilaisia voidaan hälyttää ja rekrytoida nopeasti tehtävälle myös päivystysaikoina iltaisin ja viikonloppuisin (13, 24).

Katastrofityössä ammattikuntien roolien selkeyden tärkeys korostuu. Australian pensaspalojen traumapotilaita hoidettaessa potilaiden ympärillä oli normaalia enemmän lääkintähenkilökuntaa joista osa teki myös sosiaalityölle kuuluvia tehtäviä. Sosiaalityön tulikin muistuttaa muita ammattilaisia omasta roolistaan. Moniammatillista hoidon konsultointitiimiä käytettiin mm. arvioitaessa uhrien psykofysiologista tilaa vastata median haastatteluihin. Roolien määrittämisen lisäksi tärkeäksi nähtiin sosiaalityön roolien jakaminen oman ammattikunnan sisällä. Sosiaalityön työnohjauksellinen tukeminen nähtiin hyväksi erottaa sosiaalityön tilannejohtamisesta akuutin katastrofin aikana. (13.)

Kaiken kaikkiaan artikkeleiden viesti on, että sosiaalityöllä on mahdollisuus tuoda lisäarvoa yleiseen katastrofityöhön, kun se verkottuu muiden toimijoiden kanssa. Katastrofityössä tulisi varmistaa, että valtakunnalliset valmiussuunnitelmat kohtaavat paikallisten ihmisten tarpeet (1). Australiaa koskevissa tutkimuksissa

havaittiin, että sosiaalityön tulisi olla mukana eri toimijoiden yhteistyössä heti katastrofitilanteen alusta lähtien ja yhteistyön tulisi jatkua jälkihuollon ja jälleenrakennuksen aikana (28). Esimerkiksi kuivuuden sosiaalisten ja terveydellisten vaikutusten lieventämiseen tarvitaan hyvin monen sektorin tukea. Tutkimuksen mukaan sosiaalityön roolin tulisi olla nykyistä suurempi katastrofien psykososiaalisten vaikutusten arvioinnissa. (2.)

Sosiaalityön yhteistyö muiden sektorien kanssa on osa Elliottin (2010) nimeämää poliittisen voimaannuttamisen interventiota, jonka tarkoituksena on katastrofitilanteissa tuoda muiden toimijoiden tietoon autettavien tarpeita. Taiwanissa maanjäristyksen jälkeen osa avun tarvisijoista oli tyytymättömiä avun riittävyteen ja osoitti vihansa sosiaalityöntekijöitä kohtaan. Katastrofityössä haasteena olivat eettiset seikat, kun yhteiskunnan tarjoama tuki ja ohjelmat eivät vastanneet avun tarvisijoiden tarpeita riittävän hyvin. Sosiaalityöntekijöiden kykyä rakenteelliseen analyysiin tulisikin kehittää, jotta tunnistetaan paremmin auttamisrakenteiden puutteet. (9.) Tämä havaittiin myös Katrina-hirmumyrskyä, Balin terroritekoja sekä Australian myrskyjä ja tsunamiapua koskevissa tutkimuksissa. Sosiaalityön tulisi tunnistaa ja tuoda esiin haavoittuvimpien avun tarve, vaikuttaa avun saamisen ehtoihin sekä pyrkiä varmistamaan, että auttamiseen on riittävästi resursseja ja että tuki on riittävän pitkäkestoista. (1, 6, 7, 21, 23, 27, 28.) Kehitysmaan kontekstissa tulee ymmärtää, miten lainsäädäntö ja kehitysohjelmat linkittyvät vallitsevien syrjivien olosuhteiden ylläpitämiseen (4).

Kulttuurisensitiivisyys sosiaalityössä sekä avun saajien ja yhteisöjen osallistaminen nähtiin tärkeinä (26). Myös sukupuolinäkökulma tulisi huomioida työssä (2, 3, 22). Katrina- myrskyn takia evakuoituja afroamerikkalaisia tutkittaessa todettiin, että auttajien ja autettavien kulttuuri omassa maassa työskennellessä saattaa olla hyvin erilainen (6, 7). Vieraassa kulttuurissa työskennellessä kulttuurisensitiivisyys tulisi erityisesti huomioida (11). Arvioidessaan humanitaarista katastrofiapua Sri Lankassa Dominelli havaitsi, että ihmiset haluavat avun olevan paikallisiin tarpeisiin vastaavaa, kulttuurisesti relevanttia ja avun saajien itse päättämää ja kontrolloimaa. Paikallisen kulttuurin havainnointi sekä kielen ja perinteiden kunnioitus edistävät voimaannuttavaa auttamisprosessia, jossa olennaista on naisten ja lasten kuuleminen. (12.) Myös Australian katastrofeja tutkittaessa todettiin, että ihmisten tulee voida itse osallistua toipumista ja jälleenrakennusta koskevaan päätöksentekoon (28).

Katastrofisosiaalityön fokuksen tulisi olla yksilötyön lisäksi yhteisöissä. Näin todettiin Australian kuivuutta, Aasian lukuisia maanjäristyksiä ja USA:n hirmumyrskyä koskevissa tutkimuksissa (1, 2, 5, 6, 9, 26). Kiinan Wenchuan maanjäristystä kuvaavassa tutkimuksessa toisaalta todettiin, että sosiaalityön lähestymistapa oli lähtökohdiltaan yhteisöt huomioivaa ja siksi työntekijät pääsivät hyvin osaksi yhteisöjä ja auttaminen onnistui asiakkaita kuullen. (29.) Tyynenmeren alueella sosiaalityö on läheisesti yhteydessä sosiaaliseen kehitykseen, jossa yhdistyvät sosiaalisten tavoitteiden lisäksi poliittiset ja taloudelliset päämäärät. Viitekehys nähtiin hyödylliseksi yhteisöjen kokonaisvaltaisessa kehittämisessä kamppailussa yhtäältä ympäristön saastumisen ja toisaalta katastrofin jälkiseurausten kanssa. (5.) Yksi tutkimuksen rooleista katastrofitilanteissa voisi olla tiedon välittäminen siitä, mitä ihmisten ja yhteisöjen kriisinsietokyvystä jo tiedetään. Tätä tietoa tulisi soveltaa yhdessä sosiaalityöntekijöiden kanssa käytännön työmenetelmien kehittämiseen. (25.)

Tutkimuksessa, jossa selvitettiin New Orleansin asukkaiden evakuoitumista ja elämän uudelleen rakentamista hirmumyrskyn jälkeen havaittiin, että lähes kaikki tutkitut hyötyivät jonkin tasoisesta sosiaalisesta pääomasta katastrofin aikana ja sen jälkeen. Läheisiin ja naapurustoon liittyvä sosiaalinen pääoma oli erityisen tärkeää matalan tulotason asukkailla. Sosiaalityön avulla voidaan edesauttaa asiakkaiden omien resurssien ja sosiaalisen pääoman käyttämistä vaikeissa tilanteissa, sekä tunnistaa ja linkittää toisiinsa katastrofialueen yhteisöt ja ulkopuoliset auttajatahot. (15.) Katastrofin jälkeen tulisi edistää sosiaalisen pääoman uudelleen rakentamista yhteisöissä esimerkiksi perheiden yhdistämisen avulla (1).

Psykososiaalista tukea, kriisityötä ja surutyötä pidettiin tärkeänä osana katastrofisosiaalityötä (2, 28). Tukea tulisi suunnata siten, että esimerkiksi taloudellista apua antavissa organisaatioissa katastrofin uhrin voidaan ohjata myös psykososiaalisen tuen piiriin. Tämä tukisi myös niitä organisaatioita, joissa ei ole psykososiaalisen tuen osaamista ja kykyä kohdata kriisin kokeneita ihmisiä. (2.) Toisaalta psyykkinen tuki voi olla prioriteettilistalla melko alhaalla, jos hengissä selviämisen kannalta tärkeitä perustarpeita ei ole tyydytetty. Katrina-hirmumyrskyn uhrin joutuivat kokemaan useita stressitekijöitä, jotka liittyvät perustarpeiden tyydyttämiseen, asumiseen, perheen yhdistämiseen ja sosiaalisiin suhteisiin. (21.) Taiwanin maanjäristystä käsittelevässä tutkimuksessa todettiin, että hengellisyys on tärkeä osa posttraumaattista kasvua kollektiivisissa kulttuureissa ja tämä tulisi huomioida sosiaalityössä tukemalla hengellisten johtajien työtä. Hengellisyyttä

korostavien tutkijoiden mukaan sosiaalityön tulisi keskittyä vähemmän materiaaliseen ja enemmän juuri hengelliseen tukeen. (20.)

Sosiaalityöntekijöiden valmennusta katastrofityöhön ja opetuksen kehittämistä pidettiin tärkeänä useassa artikkelissa (9, 10, 14, 16, 18, 29, 30). Toisaalta todettiin, että sosiaalityön peruskoulutus antaa nykyiselläänkin hyvät lähtökohdat työlle, koska arkisosaalityön ja katastrofiosiaalityön kesken on paljon yhtäläisyyksiä. (16, 24). Katastrofitilanteet ovat kuitenkin usein arkityötä kaoottisempia ja sisältävät enemmän trauma- ja surutyötä (29).

Sosiaalityön opetusta antavan yliopiston ja paikallisten järjestöjen kanssa tehtävä yhteistyö voi mahdollistaa opetuksen ja katastrofiavun yhteensovittamisen (8). Työn onnistumisen kannalta tärkeää on, että oppilaitoksen johto on sitoutunut siihen, että opettajat ja opiskelijat osallistuvat katastrofityöhön osana opetusta (4, 8). Katastrofitilanteet voivat toimia motivoivina tekijöinä oppimiselle ja tätä tulisi opetuksessa ja tutkimuksessa käyttää hyödyksi (29).

Sijaistraumatisoitumista käsiteltiin terroritekoja, lento-onnettomuustilannetta ja pensaspaloja käsitelleissä tutkimuksissa. Sijaistraumatisoituminen tulisi käydä läpi osana sosiaalityön opetusta (10, 14) ja se tulisi huomioida myös katastrofitilanteiden aikana (16). Työntekijöiden omasta hyvinvoinnista tulisi huolehtia. Syöminen, lepo, normaalit rutiinit sekä ammatillinen ja tiimin tuki ovat tärkeitä työntekijöiden jaksamiselle ja kyvyille auttaa muita. (13.) Israelin terroritekoja käsitelleissä tutkimuksissa todettiin, että mahdollisuus auttaa muita tukee myös omaa selviytymistä. Sosiaalityön ja vapaaehtoisten sekä muiden ammattilaisten tiivis tiimityö ja yhteistyö ovat työtä tukevia elementtejä. (19.) Sosiaalityöntekijät ovat myös itse usein osa katastrofin kohdannutta yhteisöä eikä heidän tulisi olla työtehtävissä ennen kuin he ovat varmistaneet, että heidän omat läheisensä ovat turvassa (30).

Kansallisen ja kansainvälisen sosiaalityön yhteys tuli ilmi useista artikkeleista. (23, 27, 30). Dominelli (11, 12) ja Alston (3) käsitelivät artikkeleissaan selkeästi kansainvälistä sosiaalityötä ja humanitääristä apua. Dominellin mukaan humanitaarisen avun tulisi parantaa autettavien elämän laatua akuutissa katastrofitilanteessa ja jälleenrakennuksen aikana ja pitkän tähtäimen kehitystavoitteiden tulisi olla lähtökohdana kaikessa humanitaarisessa avussa heti alusta pitäen (12).



## Pohdinta

Artikkelini tavoitteena oli selvittää, mitä tehtäviä ja interventioita sosiaalityöllä on ollut katastrofitilanteissa ja mitä suosituksia katastrofityön kehittämiseksi on annettu kansainvälisissä tutkimuksissa. Elliottin (2010) jäsentämistä katastrofisosiaalityön interventioista sosiaalisen ja inhimillisen investoinnin interventiot painottuvat katsauksen valituissa artikkeleissa, kun taas poliittinen voimaannuttaminen ja erityisesti taloudellisen osallistumisen tukeminen saavat vähemmän huomiota. Sen sijaan suosituksissa nostetaan poliittisen voimaannuttamisen ja rakenteellisen sosiaalityön elementtejä vahvasti esiin.

Elliottin (2010) katastrofisosiaalityön interventioiden tavoitteena oleva hyvinvoinnin edistäminen yksilöiden ja yhteisöjen voimaannuttamisen keinoin sekä sosiaalinen oikeudenmukaisuus ja ihmisoikeudet ovat artikkeleissa hyvin esillä. Kestävä taloudellinen hyvinvointi ja perheiden ja yhteisöjen turvallisuuden lisääminen ovat artikkeleissa implisiittisesti läsnä. Sosiaalityön tehtäviä kuvattiin sekä yksilöiden ja yhteisöjen kanssa tehtävänä työnä että rakenteellisena poliittisella ja strategisella tasolla tehtävänä työnä. Sosiaalityön ekologinen näkökulma ihmisestä osana ympäristöään, kulttuurisensitiivisyys sekä asiakkaiden kuuleminen ja osallistaminen olivat useaa artikkelia yhdistävä teema tai loppupäätelmä.

Inhimillinen investointi ja siihen luettava psykososiaalinen tuki, traumatyö ja surutyö ovat yksi osa katastrofisosiaalityötä. Psykososiaalinen tuki on tärkeä osa sosiaalityötä (Alston 2007; Rowlands 2013), mutta katastrofitilanteissa mielenterveyspalveluiksi mielletyt palvelut voivat olla vaikeasti lähestyttävissä (Kulkarni et al. 2008) ja yhteisöjen keskinäinen tuki nousee tärkeäksi asiaksi. Toisaalta myös auttamistehtävissä olevien oma hyvinvointi katastrofitilanteissa oli artikkeleissa tärkeänä asiana esillä.

Sosiaalisen investoinnin interventioina ovat ihmisten avun tarpeen havaitseminen ja avun ulottaminen haavoittuvimmille ryhmille sekä perustarpeista huolehtiminen. Osa katastrofitilanteiden avusta on suoraa perustarpeisiin kohdistuvaa materiaalista tukea, kuten esimerkiksi evakuoitujen henkilöiden muonitukseen tai asumiseen liittyviä järjestelyjä. Nämä ovat myös osa humanitäärisen avun tehtäviä.

Taloudellisen osallistamisen interventioita mainitaan artikkeleissa vähiten. Voikin kysyä, kuinka paljon sosiaalityön kohderyhmänä oleville yhteiskunnan heikompiosaisille ylipäätään suunnataan taloudellista tukea katastrofitilanteissa, saavatko nämä väestöryhmät riittävästi tukea esimerkiksi työllistymiseen tai ovatko he oikeutettuja korvauksiin. Australian kuivuuden sosiaalisia ja taloudellisia

vaikutuksia selvittäneessä tutkimuksessa havaittiin, että taloudellinen tuki kuivuudesta kärsiville maaseudun kotitalouksille oli riittämätöntä, tuen hakuprosessi oli monimutkaista ja leimaavaa, tukea oli tarjolla fyysisesti kaukana yhteisöistä ja osa avun tarvitsijoista joutui turvautumaan hyväntekeväisyysapuun. Taloudellinen ahdinko lisäsi erityisesti maaseudun vanhusten ja lasten työmäärää. (Alston 2007.)

Vaikka artikkeleista vain osa kuvaa eksplisiittisesti kansainvälistä sosiaalityötä, on katastrofityössä hyvin usein kansainvälisen sosiaalityön elementtejä. Katastrofisosiaalityön tehtävät sisältävät samoja toimintoja eri puolilla maailmaa. Sosiaalityö osana humanitääristä apua toimii kansainvälisellä kentällä, jolloin toimijat ovat useasta eri maasta. Katastrofisosiaalityön interventiot ja sosiaalityön holistinen työote antavat hyvät lähtökohdat humanitäärisen avun tehtäviin.

Katastrofisosiaalityön opetuksen kehittäminen oli monessa artikkelissa esitetty suositus. Vaikka sosiaalityö on perustaltaan kriisityötä jossa asiakkaiden arjen katastrofit ovat joka päivä läsnä, tulisi opetukseen sisällyttää myös erityisesti katastrofityötä koskevia osia. Katastrofitilanteet ovat yleensä normaalityötä kaotuisempia ja tilanteissa toimiminen vaatii perustietoja myös muiden toimijoiden rooleista. Katastrofitilanteissa toimijakenttä eroaa sosiaalityön tavanomaisesta yhteistyöverkostosta ja toimijoiden määrä lisääntyy. Johdon ja koordinaation roolit korostuvat ja toisaalta tilanteen johto tarvitsee tietoa tilanteesta päätöksenteon ja tiedotuksen tueksi.

Kirjallisuuskatsauksen viitekehyksenä ja artikkeleiden analysoinnin tukena käyttämäni katastrofisosiaalityön interventiomalli on käyttökelpoinen jäsentämään sosiaalityön tehtäviä ja rooleja. Mallissa huomioidaan katastrofityön sykli, sekä toiminta rakenteellisesti sosiaalityön eri tasoilla. Mallista kuitenkin puuttuu operatiivisten tilanteiden hallinnan ja johtamisen kannalta keskeisiä tehtäviä, kuten tilanneymmärryksen luominen ja tiedottaminen sekä esimerkiksi hälytysjärjestelmien organisointi. Hälytysjärjestelyt ja sosiaalityön saaminen akuutissa tilanteessa mukaan auttamistoimiin nähtiinkin ongelmina (13, 24). Nämä ovat haasteita myös suomalaisessa sosiaalityössä, jossa katastrofi- ja kriisitilanteisiin varautuminen eivät useinkaan ole osa arjen sosiaalityön jatkumoa. Esimerkiksi äkilliset kriisitilanteet, kuten onnettomuudet, tulipalot tai äkilliset kuolemantapaukset kuuluvat tehtäviin vain 19 prosentissa sosiaalipäivystyksistä Suomessa. Valmiussuunnitelman mukaisena ensimmäisenä hälytyspisteenä toimii vain 16 prosenttia sosiaalipäivystyksistä. (Reissell et al. 2012.)

Elliottin interventiomallia on mahdollista edelleen kehittää esimerkiksi sisällyttämällä johtamiseen ja hälytysjärjestelyihin liittyviä asioita poliittisen

voimaannuttamisen interventioon. Johtaminen voidaan nähdä keinoksi tuoda sosiaalityön missio haavoittuvimpien auttamisesta osaksi monisektorista varautumisen yhteistyötä ja tilanteiden hallintaa. Varautuminen on sisällytetty mallin kaikkiin interventioihin, mutta varautumisen sisältöjä tulisi konkretisoida.

## Johtopäätökset

Katastrofisosiaalityön osaaminen on tärkeä osa sosiaalityön ammattitaitoa sekä meillä Suomessa että kansainvälisissä tehtävissä. Käytännössä sosiaalityön tehtävät katastrofitilanteissa eivät kovinkaan paljoa eroa normaaliolojen sosiaalityöstä, mutta asiakastyö sisältää usein tavallista enemmän trauma- ja surutyötä. Lisäksi katastrofitilanteissa toiminta on nopeampaa ja usein kaotista. Tilanteen raportointi, johtaminen sekä sektorien välinen yhteistyö nousevat keskeiseen asemaan. Katastrofitilanteissa työn tekemisen tapaa tulee muuttaa joustavaksi, jotta pystytään vastaamaan nopeasti esiin nouseviin tarpeisiin.

Sosiaalityön kohdentaminen aiempaa enemmän yksilötyön lisäksi yhteistyöhön ja rakenteelliseen sosiaalityöhön voisi tuoda vaikuttavuutta ennaltaehkäisyyn, auttamistoimiin katastrofeissa ja jälkihuoltoon. Katastrofisosiaalityön tavoitteena tulisi olla ihmisten ja yhteisöjen kriisinsietokyvyn kasvattaminen. Suomen kontekstissa sosiaalityön ja kansalaisjärjestöjen tiiviimpi yhteistyö voisi olla hedelmällistä esimerkiksi juuri yhteistyön kehittämisessä.

Katastrofisosiaalityön sisällyttäminen sosiaalityöntekijöiden opetukseen on tärkeää, jotta työntekijöiden osaamista ja resursseja osataan käyttää tehokkaasti myös katastrofitilanteissa. Asiakkaiden ja avun saajien kannalta tärkeää on, että työntekijät osaavat auttaa ja toimia mahdollisimman hyvin ja että heillä on tarvittavat tiedot ja menetelmät työhön. Katastrofitilanteet ovat usein tilanteita, joissa avun saajien ja asiakkaiden lisäksi työntekijät jakavat saman traumaattisen todellisuuden. Tämä asettaa vaatimuksia sekä sosiaalityön että sen johdon opetukselle ja valmennukselle.

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## Liite 1

*Systemaattisen kirjallisuuskatsauksen artikkelit*

Viite nro	Tutkimukseen valikoitunut artikkeli	Tutkimuksen paikka, aika ja katastrofi	Tutkimusmetodi ja aineisto	Tutkimuskysymykset tai tutkimuksen tarkoitus
1	Aghabakhshi, Habib & Gregor, Claire (2007) Learning the lessons of Bam: The role of social capital. <i>International Social Work</i> 50 (3), 347-356.	Iran, 2003, Bamin maanjäristys	Kvalitatiivinen tutkimus. Haastattelut ja kenttämuistiinpanot	Sosiaalisen pääoman vaikutukset katastrofiapuun
2	Alston, M. (2007) 'It's Really Not Easy to Get Help': Services to Drought-Affected Families. <i>Australian Social Work</i> 60 (4), 421-435.	Australia, 2003, kuivuus maaseudulla	Kvalitatiivinen. 120 syvähaastattelua ja fokusryhmähaastatteluja, kuivuuden kohdanneet ihmiset; maatilalliset, pienyritykset, palveluntuottajat	Kuivuuden vaikutukset maaseudun ihmisten hyvinvointiin.
3	Alston, M. (2013) Environmental Social Work: Accounting for Gender in Climate Disasters. <i>Australian Social Work</i> 66 (2), 218-233.	Bangladesh tulvat ja muut tutkimukset	Teoreettinen artikkeli, joka nojaa empiiriseen tutkimukseen	Gender-näkökulma sosiaalityön teoriassa ja liittyen katastrofien sosiaalisiin seurauksiin.
4	Andharia, J (2002) Institutional Response to Disasters: Changing Contours of the Role of an Academic Institution. <i>The Indian Journal of Social Work</i> 63 (2), 293-312.	Intia, 1971-1997, kuivuus, hirmumyrskyt, tulvat, levottomuudet, maanjäristykset	Toimintamallin kuvaus perustuen empiiriseen kokemukseen	Sosiaalityön opetuksen rooli ja sen kehittyminen katastrofiavussa.
5	Araki, Chiharu (2013) Earthquake and Disaster Response in the Japanese Community: A Strengths and Community Perspective. <i>Journal of Social Work in Disability &amp; Rehabilitation</i> , 12 (1-2), 39-47.	Japani, 1995, Hanshin Awaji maanjäristys	Toimintamallin kuvaus perustuen kirjallisiin lähteisiin	Miten sosiaalityö voi tukea yhteisön kapasiteetin rakentamista, jotta se on käytettävissä katastrofitilanteissa.
6	Bell, Holly (2008) Case Management with Displaced Survivors of Hurricane Katrina: A Case Study of One Host Community. <i>Journal of Social Service Research</i> 34 (3), 15-27.	USA, 2005, Hirmumyrsky Katrina	Kvalitatiivinen, haastattelut, havainnointi, dokumentit. Sosiaaliohjaajien ja vapaaehtoisten tutkiminen	Sosiaaliohjauksen toteutus evakuoitujen keskuudessa.
7	Bell, Holly & Madden, Elissa & Borah, Elisa V. & Lein, Laura & Beausoleil, Julie (2010) Case Management with Hurricane Katrina Survivors: Perspectives of Case Managers and Supervisors. <i>Journal of Social Service Research</i> 36 (3), 216-229.	USA, 2005, Hirmumyrsky Katrina	Toimintamallin kuvaus	Sosiaaliohjaajien ja esimiesten kuvaus evakuoitujen tarpeista sekä työn onnistumisista ja epäonnistumisista

Viite nro	Tutkimukseen valikoitunut artikkeli	Tutkimuksen paikka, aika ja katastrofi	Tutkimusmetodi ja aineisto	Tutkimuskysymykset tai tutkimuksen tarkoitus
8	Bliss, Donna L. & Meehan, Julie (2008) Blueprint for Creating a Social Work-Centered Disaster Relief Initiative. <i>Journal of Social Service Research</i> 34 (3), 73–85.	USA, 2005, Hirmumyrsky Katrina	Kvalitatiivinen työskentelyprosessia kuvaileva tutkimus. Opiskelijoiden arvioinnit ja reflektoinnit sekä autettujen haastattelut	Sosiaalityön koulun ja paikallisen järjestön katastrofivasteen kehittäminen.
9	Chou, Yueh-Ching (2003) Social Workers Involvement in Taiwan's 1999 Earthquake Disaster Aid: Implications for Social Work Education. <i>Social Work &amp; Society</i> 1 (1), 14–36.	Taiwan, 1999, maanjäristys	Mixed methods, survey, haastattelut, dokumenttianalyysi, fokusryhmät	Katastrofisosiaalityön tehtävien kuvaus ja opetussuunnitelman kehittäminen
10	Colarossi, Lisa & Berlin, Scott & Harold, Rena D. & Heyman, Janna (2007) Social Work Students' Experiences and Training Needs After the September 11, 2001 Terrorist Attacks. <i>Journal of Teaching in Social Work</i> 27 (3-4), 137–155.	USA, NYC, 9/11 2011 terroriteot	Survey, kvantitutkimus (N 765) sosiaalityön opiskelijat	Opiskelijoiden työkokemusten, saadun erityiskoulutuksen ja tuen kuvaus ja arviointi
11	Dominelli, Lena (2013) Empowering Disaster-Affected Communities for Long-Term Reconstruction: Intervening in Sri Lanka After the Tsunami. <i>Journal of Social Work in Disability &amp; Rehabilitation</i> 12 (1-2), 48–66.	Sri Lanka, 2004, maanjäristys ja tsunami	Toimintamallin kuvaus ja arviointi	Koulujen yhteistyöhankkeen kuvaus tarkoituksena linkittää katastrofialueen sosiaalityön koulutus kaukaisempien alueiden kouluihin
12	Dominelli, Lena (2014) Internationalizing professional practices: The place of social work in the international arena. <i>International Social Work</i> 57 (3), 258–267.	Sri Lanka, 2004, maanjäristys ja tsunami	Etnografinen tutkimus, aineistona kenttämuistiinpanot, 368 syvähaastattelua ja verkkosurvey, 10 fokusryhmähaastattelua	Ovatko jotkin humanitaarisen avun mallit ja käytännöt parempia kuin toiset
13	Du Plooy, Leah & Harms, Louise & Muir, Kellie & Martin, Belinda & Ingliss, Stephanie (2014) 'Black Saturday' and its Aftermath: Reflecting on Postdisaster Social Work Interventions in an Australian Trauma Hospital. <i>Australian Social Work</i> 67 (2), 274–284.	Australia, 2009, pensaspalot	Sosiaalityön kriittinen reflektointi, tematisointi ja analysointi	Työn reflektointi, dokumentointi ja kuvaus.
14	Gibson, Marion & Iwaniec, Dorota (2003) An Empirical Study into the Psychosocial Reactions of Staff Working as Helpers to those Affected in the Aftermath of two Traumatic Incidents. <i>British Journal of Social Work</i> 33, 851–870.	Iso-Britannia, 1989, Kegworthin lento-onnettomuus ja Pohjois-Irlannin pommiräjähdykset	Survey, kirjallisuuskatsaus, lomakekysely, haastattelut	Katastrofiauttamisen psykososiaaliset vaikutukset auttajaryhmiin

Viite nro	Tutkimukseen valikoitunut artikkeli	Tutkimuksen paikka, aika ja katastrofi	Tutkimusmetodi ja aineisto	Tutkimuskysymykset tai tutkimuksen tarkoitus
15	Hawkins, Robert L. & Mauer, Kathrine (2009) Bonding, Bridging and Linking: How Social Capital Operated in New Orleans following Hurricane Katrina. <i>British Journal of Social Work</i> 40, 1777–1793.	USA, 2005, Hirmu-myrsky Katrina	Etnografinen tutkimus, pitkittäistutkimus, 2 haastattelua samoille henkilöille, (N 40)	Miten erilaisen taloudellisen ja etnisen taustan omaavat käyttävät sosiaalista pääomaansa. Sosiaalinen pääoman vaikutukset evakuoitumiseen, palaamiseen ja jälleenrakennukseen
16	Hickson, Helen & Lehmann, Jennifer (2014) Exploring Social Workers' Experiences of Working with Bushfire-Affected Families. <i>Australian Social Work</i> 67 (2), 256–273.	Australia, 2009, pensaspalot	Mixed methods, online survey ja kuusi puolistrukturoitua haastattelua, narratiivinen analyysi	Eroaako sosiaalityön rooli katastrofitilanteissa normaalisosiaalityön tehtävistä ja mitä taitoja tarvitaan katastrofiavussa.
17	Huang, Yunong & Wong, Hung (2013) Effects of social group work with survivors of the Wenchuan earthquake in a transitional community. <i>Health and Social Care in the Community</i> 21 (3), 327–337.	Kiina, 2008, Wenchuan maanjäristys	Kvalitatiivinen tutkimus Fokusryhmähaastattelut ja syvähaastattelut	Selviytyneille suunnatun harrastuksellisen ryhmätoiminnan vaikutukset
18	Huimin, Bian & Kenan, Wei & Hua, Feng & Qiongwen, Zhang (2009) A study of social workers' involvement in the relief and reconstruction efforts following the 5.12 Wenchuan earthquake. <i>China Journal of Social Work</i> 2 (3), 211–219.	Kiina, 2008, Wenchuan maanjäristys	Mixed methods, survey ja haastattelut	Sosiaalityön tehtävien tehokkuuden selvittäminen katastrofitilanteen jälkeen
19	Itzhaky, Haya & York, Alan S. (2005) The role of the social worker in the face of terrorism: Israeli community-based experience. <i>Social Work</i> 50 (2), 141–149.	Israel, 2004, terrori-hyökkäykset	Kirjallisuuskatsaus, sosiaalityöntekijöiden, vapaaehtoisten ja asiakkaiden kertomukset. Havainnointi, sekä puolistrukturoitu ja strukturoimaton haastattelu	Yhteisölähtöisen interventiomallin kuvaus terrorismitilanteessa, sosiaalityön roolit ja arviointi
20	Jang, Li-ju & LaMendola, Walter F. (2007) Social Work in Natural Disasters: The Case of Spirituality and Post-traumatic Growth. <i>Advances in Social Work</i> 8 (2), 305–316.	Taiwan, 1999, maanjäristys	Mixed methods, survey ja syvähaastattelut	Vaikuttaako hengellisyys postraumaattiseen kasvuun ja sen merkitys sosiaalityölle
21	Kulkarni, Shanti & Bell, Holly & Beausoleil, Julie & Lein, Laura & Angel, R Ronald J. & Mason, Johnnie H. (2008) When the Floods of Compassion are not Enough: A Nation's and a City's Response to the Evacuees of Hurricane Katrina. <i>Smith College Studies in Social Work</i> 78 (4), 399–425.	USA, 2005, Hirmu-myrsky Katrina	Etnografinen tutkimus. Havainnointi, kenttähaastattelujen muistiinpanot.	Evakuoitujen toiminnan ja aloitteellisuuden kuvaus



Viite nro	Tutkimukseen valikoitunut artikkeli	Tutkimuksen paikka, aika ja katastrofi	Tutkimusmetodi ja aineisto	Tutkimuskysymykset tai tutkimuksen tarkoitus
22	Leung, Terry T. F. & Wong, Hung (2005) Community Reactions to the SARS Crisis in Hong Kong: Analysis of a Time-Limited Counseling Hotline. <i>Journal of Human Behavior in the Social Environment</i> 12 (1), 1–22.	Hong Kong, 2003, SARS-epidemia	Kvanti- ja kvalitatiivinen tutkimus, puhelinduistienpanojen sisällönanalyysi	Kriisin aikana puhelimeen soittaneiden huolien, ongelmien ja avun tarpeen analysointi
23	Manning, Caroline & Millar, Stewart & Newton, Tania & Webb, Sharon (2006) After the Wave - The Centrelink Social Work Response Offshore. <i>Journal of Social Work in Disability &amp; Rehabilitation</i> 5 (3-4), 81–95.	Australia, 2004, Aasian tsunami	Toimintamallin kuvaus	Australian sosiaalityön toimet Aasiassa
24	Newhill, Christina E. & Sites, Edward W. (2000) Identifying Human Remains Following an Air Disaster. <i>Social Work in Health Care</i> 31 (4), 85–105.	Iso-Britannia, 1994, Pittsburgin lento-onnettomuus	Toimintamallin kuvaus	Sosiaalityö toimijana uhrintunnistus-tehtävissä
25	Padgett, Deborah K. (2002) Social work research on disasters in the aftermath of the September 11 tragedy: Reflections from New York City. <i>Social Work Research</i> 26 (3), 185–193.	USA, NYC, 9/11 2001 terroriteot	Toimintamallin kuvaus. Tutkimusmetodologiaan liittyvä puheenvuoro	Huomioita katastrofiososiaalityön tutkimukseen ja sosiaalityöhön liittyen
26	Pei, Yuxin & Zhang, Heqing & Ku, Ben H.B. (2009) Guangzhou social workers in Yingxiu: a case study of social work intervention in the aftermath of the Sichuan 5.12 earthquake in China. <i>China Journal of Social Work</i> 2 (3), 151–163.	Kiina, 2008, Guangzhoun maanjäristys	Toimintamallin kuvaus, etnografinen työote.	Katastrofiososiaalityön tehtävien kehittäminen käytännössä
27	Pockett, Rosalie (2006) Learning from Each Other: The Social Work Role as an Integrated Part of the Hospital Disaster Response. <i>Social Work in Health Care</i> 43 (2-3), 131–149.	Australia Bali 2002 terroriteko ja Thredbo 1997 maanvyöry	Toimintamallin kuvaus	Sairaalasosiaalityö katastrofitilanteissa ja uhrintunnistuksen tukena perustuen kahteen tapaukseen.
28	Rowlands, Allison (2013) Disaster Recovery Management in Australia and the Contribution of Social Work. <i>Journal of Social Work in Disability &amp; Rehabilitation</i> 12 (1-2), 19–38.	Australia, 2007, tulvat ja myrsky	Toimintamallin kuvaus	Katastrofiososiaalityön paikantaminen
29	Wang, Xiyang & Lum, Terry Y. (2013) Role of the Professional Helper in Disaster Intervention: Examples from the Wenchuan Earthquake in China. <i>Journal of Social Work in Disability &amp; Rehabilitation</i> 12 (1-2), 116-129.	Kiina, 2008, Wenchuan maanjäristys	Kvalitatiivinen. Sosiaalityöntekijöiden henkilökohtaiset kokemukset, haastattelut ja fokusryhmät	Sosiaalityön tehtävien kuvaus liittyen evakointiin ja tilapäiseen asuttamiseen

Viite nro	Tutkimukseen valikoitunut artikkeli	Tutkimuksen paikka, aika ja katastrofi	Tutkimusmetodi ja aineisto	Tutkimuskysymykset tai tutkimuksen tarkoitus
30	Yanay, Uri & Benjamin, Sharon (2005) The role of social workers in disasters. The Jerusalem experience. International Social Work 48 (3), 263-276.	Israel, 2004, terroriteot	Toimintamallin kuvaus	Katastrofisosiaalityön rooli

## II

### **SOCIAL CAPITAL IN SOCIAL WORK DISASTER PREPARED- NESS PLANS: THE CASE OF FINLAND**

by

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## **Social capital in social work disaster preparedness plans: the case of Finland**

### **Abstract**

The aim of this study was to find out what can be learned from Finnish social work preparedness to develop future interventions and use of social capital in disasters. The data consisted of municipalities' social sector's disaster preparedness plan documents. Quantitative content analysis was used as the research method. The analysis was based on the concept of social capital and its forms of bonding, bridging and linking. The results show that micro level social work and bonding social capital were emphasized. Bridging and linking social work to disaster-related structures should be developed and social capital enhanced pre and post disasters.

### **Key words**

social work, social capital, disaster, preparedness plan, intervention

### **Introduction**

Storms, floods and other hazards are regarded as disasters when they have great consequences on social, economic or ecological environments that affect people. Global warming increases the amount of disasters in the world, thus the impacts also become greater. (IPCC, 2007.)

Consequences of disasters are the worst for people who in normal life are also more vulnerable, and often already involved with social work and services: children, disabled persons, the elderly and minorities of the society (Cherry and Cherry, 1997; Gillespie, 2010; Sanders et al., 2003; Thomas and Soliman, 2002). Social work has been an active part of disaster mitigation, preparedness, response and recovery, but many scholars have argued that social work as a profession should take a greater role in disaster management, both nationally and internationally. A more active role would enhance not only recovery of the affected but also social development in the long run (Elliott, 2010; Mathbor, 2007; Thomas and Healy, 2010). In alleviating disaster consequences, social workers most often concentrate on micro level interventions, supporting individuals and families, which is important, but social work should also contribute to raising consciousness about the root causes of vulnerability to disasters (Dominelli, 2012: 2–3, 50, 67–8). In addition, social workers are urged to focus more on whole-community response (Alston, 2007; Chou, 2003).

Resilience and social capital safeguard people and communities in disasters (Tierney, 2014: 185–196) and social workers are argued to be important actors in both building the resilience and enhancing social capital of individuals and communities (Hawkins and Maurer, 2010; Mathbor, 2007). Social Capital is essential in creation of human capital, as well as in functioning of social structures. It exists in relations between individuals and networks facilitating productive activity. (Coleman, 1990.) The concept of social capital is in this study used as representing valuable social networks between individuals, groups or organizations, which take the forms of bonding, bridging and linking. Enhancing social capital is here seen as an objective of social work but it is also used to describe social workers' own networks, which differs from the original way of understanding social capital as referring to civil society networks and reciprocity, and involvement in civic organizations (Putnam, 2000: 20-24). Social relations inside a homogenous group are called bonding social capital, and bridging refers to relations with 'the others', external assets and information (Putnam, 2000). Bonding social capital plays an important psychological role in building resiliency, though bridging is also vital in response to and recovery from disasters in providing access to resources (Hawkins and Maurer, 2010). The third form of social capital, linking, refers to "norms of respect and networks of trusting relationships between people who are interacting across explicit, formal or institutionalized power or authority gradients in society" (Szreter and Woolcock, 2004).

Social capital bridges individual action and social structures together, and thus is important for social work practice. Bonding, bridging and linking as forms of social capital, play an important role in aiding people to prepare for and act during a disaster and to recover after it. The role of social work can be to enhance people's capabilities of using their connections and resources, their positive social capital, as a survival mechanism. (Hawkins and Maurer, 2010.) At the same time, social capital is embedded in forms of leadership and activism among public workers and officials themselves, and structures of service delivery (Szreter and Woolcock, 2004), thus building resilience of social work practitioners themselves.

In disaster situations social capital is less affected by hazards than human and physical capital. It is quickly repaired and it provides resources for accomplishing critical emergency tasks (Dynes, 2006). Consequently, it should be considered, whether enhancing social capital should be the main objective of social work interventions in disasters. However, the importance of social capital is not always recognized in social work practice or disaster risk reduction. (Ersing and Loeffler, 2008.) The role of social capital was not taken into account and used as an asset, for example, in the recovery process after the Iranian 2014 earthquake (Alipour et al. 2015). Furthermore, to my

knowledge, there are no comprehensive studies on what kind of plans there are to develop social capital during and after disasters. The purpose of this study was to find out what can be learned internationally from Finnish social work preparedness plans to develop social work practice in the use of social capital while responding to future disasters. The specific research questions in this study were: Which roles and interventions are planned for social work in disasters in Finland, and which forms of social capital are emphasized in the interventions? The hypothesis was that micro level social work interventions and bonding social capital are emphasized more than cooperation or management roles, referred to here as linking. This was because micro level interventions dominate ordinary social work in the western world (Dominelli, 2012: 20, Pohjola, 2011).

## **Data and Methods**

In order to answer the research questions, all Finnish preparedness plans of social work and social services were reviewed. The study permission was obtained from the Ministry of Social Affairs and Health. In Finland, the municipalities are responsible for social services. Each service sector of the municipality prepares a subplan, which is attached to the general local level preparedness plan. The documents were gathered through state regional authorities, which have the role of supervising and monitoring preparedness planning. Even after requesting several times, 16 percent of the documents were not sent to the regional authorities; it is, thus, assumed that these municipalities have not completed their duty of preparedness planning. The data consisted of 255 of all 302 Finnish municipalities' social service disaster preparedness plan documents. The documents were collected during the end of 2013 and the beginning of 2014.

### *Coding scheme*

Quantitative content analysis was applied as the initial research method. The method was deductive, and the coding scheme was determined before the coding began. Manifest contents of the document texts were coded. (White and Marsh, 2006.) The unit of analysis that was coded was a phrase, or a sentence, excluding titles. Phrases and sentences were coded into a coding scheme developed by the author and based on critical elements, or categories, of preparedness planning (Neuendorf, 2002: 95–96; Perry and Lindell, 2003, McConnell and Drennan, 2006). There were altogether 103 variables in the coding scheme, of which 20 concerned background information, such as year of the plan review, name of the rescue service and police service areas, name of the municipality in

question, etc. The categories, into which the 103 coded variables were coded, are generic and can be applied in any sector preparedness planning. They are 1) roles of the sector (social work in this study), 2) cooperation partners, 3) management related tasks or structures, such as alarming procedures, 4) risk assessment, 5) training and exercises. The results concerning risk assessment, consisting of 16 coded variables, are not included in this article. Finally, the categories of the coding scheme were deducted from the guidelines of preparedness planning given by the Ministry of Social Affairs and Health (Ministry of Social Affairs and Health, 2008) and the Finnish Security Strategy (Ministry of Defence, 2011). The aim of the initial coding was to create comprehensive data of the manifest contents of the documents.

The category of roles in the coding scheme consisted of variables describing day-to-day roles in Finnish social work, such as child protection, financial assistance, care for the disabled, elderly care, home care and rehabilitation of persons with substance use disorders. It also consisted of roles that are anticipated in the Finnish guidelines (Ministry of Social Affairs and Health, 2008) to extend during disasters, such as providing shelter, securing nutrition, clothing, guidance for the affected, identification of the most vulnerable, establishing a hot line and psychosocial support. The category of cooperation consisted of the following variables: basic and specialized health care, police, rescue service, private social service producers, the Church, volunteers in general, the Red Cross, and agreements with volunteer organizations. Cooperation with private social service providers was measured by studying, whether there was mentioning of securing the continuity of privately purchased services in the documents. In the category of cooperation, there were also various other cooperation partners that were being searched in the documents, such as electricity and water supply agencies and private bus companies. These were not included in the final analysis, because cooperation with these partners depends on the administrative structure of the municipality. These cooperation partners were expected to have been noted in the preparedness sub plans of other sectors instead of the social sector. Joint exercises and training of own staff was one of the categories in this study. Finally, the category of management consisted of the following variables: Management of own staff, taking part in a joint municipal management team, financing the preparedness and response measures, procedures to gather situational picture of the event, information to the public, web-based information, use of social media, and alarming procedures during office and off hours. Variables coded were based on a dichotomy: The variable was, or was not, explicitly noted in the document.

### *Operationalization of social capital*

Because social capital is vital in disaster situations, the concept was used as a theoretical framework in analyzing the emphasis of social work interventions prepared. The final analysis of the data was based on conceptualization of forms of social capital (Dynes, 2006; Hawkins and Maurer, 2010; Mathbor, 2007; Szreter and Woolcock, 2004). The operationalization is summarized in table 1.

Table 1. Operationalization of Social Capital

Form of Social Capital	SW <sup>1</sup> Role or Connection	SW <sup>1</sup> Aims
Bonding	Micro level day-to-day and extended roles Management of SW <sup>1</sup>	Supporting homophilus networks
Bridging	NGOs <sup>2</sup> and the Church Health care Private social services Financing DM <sup>3</sup> Training	Connecting to outreaching or expanding social systems or close partners
Linking	Police, Rescue services Civil protection The public Municipal management Exercises	Linking to emerging disaster specific structures

1 = Social Work; 2 = Nongovernmental Organization; 3 = Disaster Management

Day-to-day social work supports individual and family resilience and clients' homophilous networks, and thus it was regarded as bonding social capital (see Hawkins and Maurer, 2010). In addition, social work's disaster-specific extended roles, such as providing food, shelter, nutrition and psychosocial support for the affected, as well as guidance and a hot line as a measure of psychosocial support, were regarded as representing bonding social capital. Social work micro level interventions, such as child protection, support social relations within families. Management of own team strengthens relationships within social service units among various social work professionals, and it enhances bonding social capital in this way. (see Dynes, 2006; Szreter and Woolcock, 2004). At the same time, gaining situational awareness supports social work management and was regarded here as complementing the measuring of bonding social capital.



Bridging as a form of social capital connects outreaching or expanding social systems or communities with each other (Dynes, 2006; Mathbor, 2007). Bridging in this study referred to social capital which connects volunteer action and the Church to support social work interventions, or strengthens relationships to social work's close partner, the health services, or private social service providers. Social work's disaster-related training also represented bridging, as well as secured finances for disaster management actions. Agreements with the volunteer organizations represented a deeper analysis of bridging social capital.

In this study, linking social work to rescue and police services and civil protection was regarded as linking to emerging disaster specific structures. Social work joining municipal management structures, existence of alarming systems, information to the public, and exercises, as well as noting social media and web based information in the preparedness plans, were also regarded as linking social capital. The concept of civil protection in Finland refers to interventions in conflict or a war-like event.

The categories and variables were regrouped into tables to illustrate which forms of social capital were emphasized in the documents. Descriptive statistics were employed. Frequencies of variables were used to quantitatively measure and describe the emphasis of social work interventions as well as forms of social capital.

### *Reliability*

Reliability of the data was ensured by creating clear definitions and instructions in the coding scheme (White and Marsh, 2006; Neuendorf, 2002: 112). That was important, because the coding process lasted several months with two persons coding the data. The author coded 70 percent and a research assistant 30 percent of the documents. The author also went through all the documents coded by the assistant, in order to find deviances in the coding. Few deviances were found, and recoding was done by the author to ensure consistency within the data interpretation. The author and the research assistant agreed on nearly all (99%) of the cases.

## Results

Most of the municipal social service areas had completed their duty of preparedness planning. The regional authorities received preparedness plans from 84 percent of the municipalities. The length mode of the documents was 18 pages, ranging from 4 to 230 pages, and 77 percent of the documents were written or updated during the past three years, between 2011–2013.

### *Bonding social capital*

Social work's day-to-day roles, i.e. variables representing bonding social capital, were all noticed in very high frequency in the preparedness plans. Only substance abuse rehabilitation as social work's ordinary task, and clothing as an extended task, was mentioned more seldom than other ordinary tasks in the documents. (Table 2.)

Variables that describe more in depth the implementation of preparedness plans scored significantly lower. Taking care of the most vulnerable is urged in the Finnish guidelines (Ministry of Social Affairs and Health, 2008), and this variable in the data was chosen to describe more extensively, whether social work had planned to assess the situation and focus their actions on those most in need. Only in half (51%) of the plans, at least one special group was mentioned as important to be given particular attention to during disasters. Special groups mentioned were, for example, children, the elderly and immigrants. (Table 2.)

In emergencies, there is an increasing need for guidance, which was described here as a measure, and as a deeper analysis of psychosocial support along with a hotline. In less than half (46%) of the plans, social work had prepared for extending needs of guidance, and in one fourth (27%) of the plans a hotline was mentioned as a social work measure. Management of social work's own services scored high, but gathering a situational picture of the disaster to support management was noted in only 37 percent of the plans. (Table 2.)

### *Bridging social capital*

Variables representing bridging social capital were regarded as less important than bonding interventions in the preparedness plans. Only bridging with basic health care (94%) and the Church (90%) scored high in the documents. Cooperation with volunteer organizations and the Church were

both regarded as bridging, thus, this networking supports social work to extend and expand tasks directly. In only seven percent of the plans was there proof of an agreement on cooperation with volunteer organizations. This was a variable that was chosen to describe more in depth the implementation of the plan. Cooperation with private social service providers was measured by studying, whether securing the continuity of privately purchased services was taken into account in the documents. In less than one fifth (17%) of the plans, the social service area had agreed on contingency planning when purchasing services from the private sector. The way to finance preparedness planning and response was taken into account in less than half (47%) of the plans, representing quite a low level of bridging social work to financial structures of the municipality. (Table 3.)

### *Linking Social Capital*

Social work interventions representing linking social capital were also noticed in lower frequency than bonding variables in the preparedness plans. Only linking with the rescue service (91%) and general information to the public as an important measure (98%) scored high in the documents. With a closer look at the information techniques, it was found that information on a public website was regarded important in only 28 percent, and the use of social media as an information channel in only eight percent of the plans. Disaster-related exercises are usually organized jointly, and exercises indicate the level of cooperation with disaster-specific structures. Joint exercises were noticed in only 66 percent of the preparedness plans. Alarming systems describe how well social work can be activated to respond in crisis and disasters. In only 55 percent of the preparedness plans, were there clear alarming systems defined for office hours and in 66 percent for off hours. (Table 4.)

**Table 2.**

Frequencies of Variables Representing Bonding Social Capital, Categories of Preparedness Planning and Social Work Interventions

N=255

Form of Social Capital Category	Variable	Yes, Noted in the Document
Bonding		
Ordinary role		
	Home care	98%
	Financial assistance	96%
	Care for the disabled	94%
	Child protection	93%
	Elderly care	92%
	Rehab for substance use	78%
	Identification of the most vulnerable	51%
Extended role		
	Psychosocial support	97%
	Providing shelter	95%
	Securing nutrition	93%
	Providing clothing	86%
	Guidance for the affected	48%
	Establishing a hot line	27%
Management		
	Own services	96%
	Situational awareness	37%

**Table 3.**

Frequencies of Variables Representing Bridging Social Capital, Categories of Preparedness Planning and Social Work Interventions

N=255

Form of Social Capital Category	Variable	Yes, Noted in the Document
Bridging		
Cooperation		
	Basic health care	94%
	The Church	90%
	Volunteers in general	85%
	Red Cross	81%
	Special health care	54%
	Private social services	17%
	Agreements with NGOs	7%
Management		
	Finances of preparedness secured	47%
Training		
	Staff training	82%

**Table 4.**

Frequencies of Variables Representing Linking Social Capital, Categories of Preparedness Planning and Social Work Interventions

N=255

Form of Social Capital Category	Variable	Yes, Noted in the Document
Linking		
	Extended role	
	Support to Rescue service	66%
	Support to Civil protection	34%
	Cooperation	
	Rescue service	91%
	Police service	80%
	Management	
	Public information	98%
	Joining municipal management	75%
	Alarming, off hours	66%
	Alarming, office hours	55%
	Web info	28%
	Social media	8%
	Exercises	
	Joint exercises	66%

## Discussion

The results of this study were consistent with the hypothesis that micro level social work interventions and bonding social capital are emphasized more than cooperation or management roles. Finnish social sector preparedness had deficiencies especially in bridging to the private social sector actors and in supporting management and decision-making with situational picture, alarming

systems and information to the public. Social workers were not linked adequately to the local level disaster management actors. Poor linking can lead to situations where social workers are ignored in actual emergencies resulting in neglect of the needs of those affected.

Social work was prepared for taking care of its ordinary roles and existing clients during disasters. This was anticipated, as ‘individualized approaches to social problems’ are common in many Western countries (Dominelli, 2012: 20). This is also the case in Finland (Pohjola, 2011). Social workers’ role of supporting clients’ bonding networks while disasters occur is vital, though it is not enough for sustainable recovery. Close relations with family members and next of kin play a significant role in maintaining and building up resilience of individuals (Bhandari, 2014), but bridging and linking social capital is also needed in post disaster recovery (Aldrich, 2014: 164). Bonding social capital can in worst cases lead to discrimination of weak groups in allotment of disaster related aid (Aldrich, 2014: 163–164), hence, social workers should be prepared to look after possible emerging vulnerable groups. In regard to psychosocial support, less than half of the plans mentioned guidance for the affected or setting up a hotline as a measure. (Table 2.) It is known that the need for psychosocial support exceeds normal capacity in crisis and disasters (Bourque et al., 2007). A hotline has been a useful way to organize guidance and support during disasters (Leung and Wong, 2005; Manning et al., 2006; Rowlands, 2013), hence these functions should be better taken into account in the preparedness plans in order to strengthen support for clients’ bonding relationships.

There was more variation in the variable frequencies of bridging social capital (Table 3). While one third of the social work services are privately produced in Finland (Arajärvi and Väyrynen, 2011), bridging social capital was still not created between public and private sectors to ensure good relationships in case of disasters. The private service production was seldom included in the preparedness plans, and continuity of the services was not secured by agreements by the public service purchaser. This is a major deficiency, if the situation in Finland is comparable to the United States, where it was found that public and voluntary organizations were better prepared for disasters than their private counterparts (Chikoto et al., 2012). If the service provider in Finland was not able to continue providing the services during a disaster, it would create a risk for the municipality as service purchaser and clients as service users. That can result in human suffering that could be prevented. This should be studied more thoroughly in the future.

At the same time, bridging was quite well planned in psychosocial support: The Church's and voluntary organizations' main tasks in disasters are to support social work in organizing psychosocial support in Finland. Volunteer services and the Church can be crucial in the first response and in restoring social capital of the affected, when official social services are remote or overburdened. These resources supporting social work were well recognized in the preparedness plans studied, yet the support was mainly taken for granted and not agreed about on paper. Also, bridging to the basic health care services scored high. (Table 3.)

The range of variable frequencies varied the most in linking social capital. Management and cooperation variables were easily found in the documents, but these functions were also referred to on a very general level. As new tasks and new structures are needed in emergencies, and these emergent organizations link parts of community structures together (Dynes, 2006), it is vital for actors to be prepared for alarming and exchanging disaster specific information among the organizations. Finnish social sector preparedness had deficiencies in supporting management and decision-making with situational picture, alarming systems and information to the public. (Tables 2 and 4.) These functions are needed especially when linking to wider disaster management networks. Situational awareness supports disaster management in deriving information of the ongoing situation from various actors, often mainly from own staff. It is the basis on which decisions are made (Busby and Witucki-Brown, 2011).

Emergencies lead to prioritization of tasks in society. During a so-called emergency consensus, certain tasks like search and rescue, emergency medical services and caring for the victims are prioritized and, for example, education and other non-critical tasks can be set aside. (Dynes, 2006.) In regard to emergency consensus, it is vital that the social work profession gets its voice heard, because it has the expertise and measures used in identifying and caring for the most vulnerable. Linking social capital, as well as bonding described earlier, can also lead to ignorance of the needs of the most vulnerable populations and aid distribution only for those with more power and more social capital (Aldrich, 2012: 117–127; Bhandari, 2014). I argue that social work's expertise should be situated in the joint disaster management coordination bodies to avoid its tasks being set aside until the situation normalizes. The findings of this study indicate that even when social work was prepared for the management roles, basic supporting functions of management were often forgotten in the written plans. Strengthening social work-related management structures, such as better linking to local level general management bodies, as well as emphasizing new information channels



to the public, should be developed. Also, social work support to, and care of other disaster management personnel as an extended role in disasters should be better recognized.

*Social capital brings added value to preparedness planning*

The analysis shows that the day-to-day roles of social work have been regarded as the most important to be recognized in the preparedness plan documents. Preparedness planning is a process, and the goal should not be a written document but a flexible organization able to respond in various crises and disasters (Drennan et al., 2015: 139–141). In order to be flexible in response, the plan should not include only the roles of the actor but also measures that enable activation of the response with a clear alarming system. Situational picture should be secured and the importance of needs assessment and connection to other actors should be recognized. The measures that enable activation of the plan and linking to other actors are vital. In addition, the plans should be trained and exercised in cooperation with other disaster management actors.

Social work's underlying aims and goals were not very well reflected in the plans, as the plans were very technical in general. This may be due to the guidelines given by the Ministry (Ministry of Social Affairs and Health, 2008). The concept of social capital provides a possibility for widening the technical approach of preparedness planning to better include the objective and mission of social work in the disaster management process. I recommend that enhancing social capital should be added to the future social work preparedness planning guidelines as an objective. The concept of social capital could bring added value to social work preparedness planning in emphasizing the objectives of social work and focusing the interventions on building and restoring resilience of individuals as well as local communities. Community work and participation of the affected in planning response and recovery actions were not noted in the Finnish social work's preparedness plans. This is a major deficiency. Social capital is a vital element of community resilience and it should be incorporated into disaster management programs (Alipour, 2015; Bhandari, 2014). Linking to disaster management partners widely would enable social work to influence risk reduction and mitigation of harm to the most vulnerable populations more effectively, although assessment of the most vulnerable populations should also be planned.

### *Generalizability of the results and limitations*

In this article, social work preparedness was studied in Finland. The results can, however, be used for developing disaster social work also in other countries. Preparedness planning is mandatory for public services on all organizational levels in Finland, according to emergency powers legislation. The geopolitical location between the East and the West, and involvement in the World Wars, has probably resulted in a strong emphasis on preparedness planning in the country (see Tervasmäki, 1983:29). This was indicated by the fact that 84 percent of the local level social services had completed their preparedness plans.

The data was used to study contents of preparedness plans, not the implementation of the plans in actual disaster situations, hence, the performance of social work in disasters remains a question. This is a limitation of this study, however, preparedness plans are important for adequate response when disasters strike (Perry and Lindell, 2003). Social work involvement in preparedness planning has seldom been addressed by researchers. This was the first time that research-based information on preparedness planning in community level social work and social services in Finland was obtained, and to my knowledge the first study that used comprehensive data of one country. The data represents the whole population of Finnish municipalities and is therefore externally valid. The Finnish experiences can be used as a reference point, while studying other countries' preparedness planning.

Community organizations carry most of the burden of disaster response (Dynes, 2006). In this study, social service organizations represented community organizations, because they are situated on the local level. While preparedness plans in community level social work have not been studied, there are some studies concerning the role of social work in hospital organizations. Scharoun and Dziegielewski (2004) describe studies on preparedness of emergency departments in the United States, and conclude that few hospitals were truly prepared, especially for assisting people during and after a bioterrorist attack. Cyganik (2003) studied preparedness of Arlington hospital after September 11 attacks, and discovered that social work was not involved in the disaster committee of the hospital, and its role was not defined in the preparedness plan.

### *Social capital and tsunami response as an example of implementation*

The South East Asian tsunami in 2004 serves as an example of how social work was responding and enhancing social capital in Finland. In the disaster, 179 Finnish residents were killed, 250 were injured, and approximately 1400 people received psychosocial support after the event. The disaster actuated a mass evacuation operation from Thailand to Finland, as was the case for many other countries in the Western world. (Accident Investigation Board, 2005: III, 97.)

In the Finnish operation, a massive medical evacuation model was created on a very short notice in cooperation with local, regional and state level authorities from social and health care services, police, rescue service, disaster victim identification, Finnish Red Cross, Voluntary Rescue Service and the Church. There were in total 17 evacuation flights from Thailand during a six-day period to evacuate Finnish and some other Nordic victims to Finland. Rapid employment of the evacuation task and working alarming systems, better arrangement of situation awareness to enable good management, and agreements with the volunteer organizations were all recommended for state level authorities after the Tsunami operation. (Accident Investigation Board, 2005: 161–162.) While comparing these recommendations with the weaknesses found in the social work preparedness plans in this study, one can notice that lessons learned from previous disasters need to be better disseminated to the local level to enable the starting of response interventions.

The first response at the airport was organized well, but there were deficiencies in organizing long-term psychosocial support for those in need. The most vulnerable group was returning children who had lost one or both of their parents. Professional social work had the duty to find new homes for the children, enhance bonding social capital among extended families, and bridge the families to long-term support in their local communities. One of the recommendations after the Tsunami operation in Finland was that measures that can be seen as supporting bridging social capital should be emphasized in child and adolescents' care: Individuals and communities, such as day care centers and schools, should also be supported (Accident Investigation Board, 2005: 161–162).

The roles of the Ministry of Social Affairs and Health, social work at the airport and in the municipalities, and social security issues were well recognized in the investigation report of the disaster (Accident Investigation Board, 2005). This reflects the fact that social services and social security issues were in an acute situation in an equal position among the other disaster management tasks and partners in Finland. Social work should, indeed, continue its work to be recognized as an

important partner in disaster management in building resilience and restoring social capital of the affected people and local communities.

## **Conclusions**

Systematic study on community level social work disaster risk reduction and preparedness planning is still lacking, and this study starts filling the gap. This study showed that social work and the social sector in general had fulfilled their duty of preparedness planning in Finland. This article gives an example of how social capital can be integrated into policy practice. Bonding, bridging and linking as forms of social capital were used to conceptualize social work roles in disaster preparedness plans. Individual micro level social work and bonding social capital were emphasized in the interventions planned. Social work was not well linked to the local level disaster management bodies, where the knowledge of social work would be of use in prevention as well as in preparation and responding to disasters. The preparedness plans were made on a very general level. The major remaining question is: How well can very general level planning be implemented in real life disaster situations? My conclusion, therefore, is that bridging and linking social work to disaster-related structures should be developed already in the preparedness phase of disaster management. I suggest that enhancing social capital should be used as an objective of disaster social work in developing disaster preparedness, practice and training.

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### III

#### **ASSESSMENT OF SOCIAL SERVICES' DISASTER RISK MANAGEMENT: CASE FINLAND.**

by

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## **Assessment of Social Services' Disaster Risk Management: Case Finland**

### **Abstract**

Local actors are crucial in disaster risk management thus their capacities should be assessed periodically. In this study, the often forgotten local social services' preparedness was assessed because the sector plays an important role in pre- and post-disaster actions. The specific aim was to study how social service areas of various sizes were prepared for disasters in Finland. Quantitative document analysis was used and the level of preparedness plans was analyzed using Emergency Management Program Measurement. The results showed that disaster risk management capacity varied significantly between large and small service areas. Larger areas were better prepared for supporting management, and had better procedures to activate their response, modern public information and deeper cooperation with the private sector, civil society and volunteers. The differences between the service areas might derive from the fact that large areas have more resources allocated to disaster risk management.

### **Introduction**

Better disaster risk governance, capacity assessment, accountability and recognition of all stakeholders are elements aiming to strengthen disaster risk management capacities of nations. These are components of the Sendai Framework for Disaster Risk Reduction (Sendai Framework:16) approved by nations at the United Nations World Conference in March 2015. In addition to the Sendai Framework, scarce resources and continuous reforms in organizations urge for performance evaluation and sustained program development (Henstra, 2010). At the same time, the 'new crisis universe', and unstable contexts (Lagadec, 2007) should motivate all stakeholders to progress and interlink in their risk reduction processes. This article focuses on capacity assessment of local level disaster risk management and social workers' as important stakeholders in the process.

Social workers' roles in connection with disasters are unclear in many societies, and they are quite seldom recognized as important stakeholders of disaster risk reduction. However, they work closely with and aim to improve the lives of vulnerable populations. (Alston, 2007; Dominelli, 2012: 20, 50-51.) Social workers are most often employed in the local level social services and are closely connected to the community level vulnerabilities. Community level organizations carry most of the burden of disaster response (Dynes, 2006; Henstra, 2010; Alexander, 2015), and therefore the consequences of various emergencies and crises are encountered in the daily tasks of social workers. Social workers have concrete service linkages, for example, with the rescue services and the police in search and rescue, damage assessment, emergency communication, evacuation and referral, because these response services deal with the needs of the victims in disasters (Danso and Gillespie, 2010).

There are plenty of examples of social work involvement in disaster response and recovery in both the developing and the developed world: Australian drought (Alston, 2007) and bushfires (Du Plooy et al, 2014; Hickson and Lehman, 2014), Hurricane Katrina in the United States (Bell et al, 2010), earthquake in Iran (Aghabakhsi and Gregor, 2007) and the SARS Crisis in Hong Kong (Leung and Wong, 2005) are examples of scenes for social work disaster response. Even though there are plenty of examples of disaster social work and guidelines for preparedness (e.g. Scharoun

and Dziegielewski, 2004; Wodarski 2004; Rowlands, 2007, 2013), their involvement in preparedness planning is still unclear and poorly studied.

Finland has a long tradition of preparedness planning (see Tervasmäki, 1983: 29; Kolbe, 2011: 14-15) that has continued uninterrupted after the cold war. It, therefore, provides a useful case to study the level of disaster risk reduction. At local level, the Finnish municipalities' preparedness plans consist of a general plan and subplans for each service sector; for example, land use, building, and social services. The aim of this study was to assess local level disaster risk governance from the perspective of social work in Finnish municipalities using written preparedness plans as the data. In Finland, the municipalities govern disaster risk reduction in the local level and social services form one sector of the municipalities. Social workers, on the other hand, are professionals that implement the services, link people to the services, and contribute to the policies (Pincus & Minahan 1973: 9). Henstra's (2010) Emergency Management Program Measurement was used as a tool to assess and compare the programs. The tool is described in detail later in this paper.

The specific research questions of this study are: What is the level of local social services' disaster risk management planning in Finland, and what differences are found between large and small service areas? The hypothesis was that the level of preparedness would be better in large service areas compared to small ones (Palm and Ramsell, 2007; Savoia et al, 2009; Sadiq, 2010; Chikoto et al 2013). The results can be used for focusing guidance and for planning future local level organizational structures so that they can improve disaster risk reduction.

## **Data and Methods**

### **Context of the data and independent variables: Case Finland**

Finland shares the tradition of the Nordic welfare system. Social services are mainly public, tax funded and accessible for all in need. The aim is to promote a socially sustainable society. The services are organized locally, either by a single municipality or in cooperation with other neighboring municipalities (Heinämäki, 2011: 8). Social service areas, either consisting of one or more municipalities, complete their own preparedness plans. In this study, municipalities were regarded as the unit of analysis. The total number of mainland municipalities in Finland was 304 in 2014 when the study was conducted. The data consisted of 255 municipalities' disaster preparedness subplans of social services. The length mode of the documents was 18 pages, ranging from 4 to 230. Preparedness plan documents for this study were acquired from the six regional authorities, which have the role of guiding and monitoring municipal level social services' preparedness planning.

The size of the social service area was used as an independent variable in the data analysis. It was a two-scale variable: small area consisting of under 20 000 inhabitants, and large service area consisting of more than 20 000 inhabitants. The reason for this scale was that according to the Finnish legislation (Heinämäki, 2011), primary health care and social services must be organized in service areas that consist of 20 000 or more inhabitants. The legislation is new and in this data 51 percent of the plans were completed by small municipalities and only 49 percent were completed by large municipalities, cities or social service areas which, as noted, had over 20 000 inhabitants.

### **Quantitative Content Analysis**

Quantitative content analysis of the documents was used as the research method. The method was deductive, as the coding scheme was determined before the coding began. Manifest contents of the document texts were coded. (White and Marsh, 2006.) The aim of the coding process was to create wide and comprehensive data of the document contents. The unit of the primary content analysis was a sentence or a phrase which was coded into a coding scheme developed by the author and based on key elements of preparedness planning (Neuendorf, 2002: 95-96; Perry and Lindell, 2003; McConnell and Drennan, 2006). The key elements were finally deducted from the preparedness plan guidelines given by the Ministry of Social Affairs and Health (2008) and the Finnish Security Strategy for Society (Ministry of Defense, 2011).

Variables in the coding frame were mainly dichotomous. With regard to the day-to-day functions of social work, a three-scale coding system was implemented: The service 1) was not noted in the document, 2) was noted or 3) was noted and also regarded as a service to be extended during disasters. Procedures to activate social services' response organization, existence of a program coordinator, and cooperation with the private social services were also coded using three-scale coding.

Reliability of the data was ensured by using two persons to code parts of the data. The author coded 70% and a research assistant 30% of the documents. The author also went through all the documents coded by the assistant in order to find deviances in the coding. Few deviances were found, and recoding was done by the author to ensure consistency in the data interpretation. The author and the research assistant agreed on 99% of the cases.

### **Basis of the Used Evaluation Method: Emergency Management Program Measurement (EMPM)**

Henstra (2010) has compiled various preparedness planning guidelines and standards to develop an evaluation model of local level public sector preparedness programs. In this case, his model was adapted to study social services' disaster risk management. Henstra (2010) identified 30 program elements which depict a low, medium, or high quality emergency management program. The evaluation model (EMPM) identifies 12 measures that should be included in preparing for disasters, five mitigation actions, eight response measures and five elements to measure the level of recovery actions.

The evaluation of mitigation measures was excluded from this study, since such actions of social work are dealt with in programs other than disaster risk management in Finland. In the context of social services, mitigation is implemented as a part of day-to-day social work and service production. Preventive measures are included, for example, in local level child welfare plans and action plans for the elderly. The program elements measuring the level of preparedness, response and recovery, and the elements relevant to this study, are shown in table 1.

**Table 1.** EMPM\* program elements and their relevance in this study

	EMPM program element	Relevance in this study
Preparedness	1. Emergency response plan	Relevant
	2. Review of the plan	Relevant
	3. Training	Relevant
	4. Exercises	Relevant
	5. Program committee	Relevant
	6. Emergency manager	Relevant
	7. Business engagement	Relevant
	8. Hazard identification and risk assessment	Relevant: Two elements used instead of one
	9. Planning for people with special needs	Relevant: SW <sup>1</sup> core tasks. Vulnerability assessment added
	10. Critical infrastructure protection	Not relevant. Mandatory, hence not included in the preparedness plan documents
	11. Emergency management noted in the legislation	Not relevant. Mandatory for all public services
	12. Mutual aid agreements with neighboring communities	Not relevant. Agreements cover wider cooperation than disaster risk reduction
Response	1. Volunteer management	1.-2. Relevant, hence merged to: NGO <sup>2</sup> engagement. Support of the Church added.
	2. Community emergency response teams	
	3. Incident operations center	3.-4. Merged to measure Incident management. Planning for activation of SW <sup>1</sup> response added.
	4. Incident management system	
	5. Emergency shelter arrangements	Relevant
	6. Emergency public information	Relevant
	7. Evacuation plan	Not relevant, because task of rescue services
	8. Search and rescue	Not relevant. Search is task of the <u>police and rescue of rescue services</u>
Recovery	1. Recovery plan	Not relevant. Part of the preparedness plans
	2. Continuity of operations planning	Relevant: Planning for people with special needs in preparedness phase
	3. Damage assessment	Relevant: Vulnerability assessment planning in preparedness phase
	4. Debris management	Not relevant
	5. Rehabilitation	Relevant: Psychosocial support

Note. \* Henstra (2010); 1) Social Work; 2) Nongovernmental organization.

### **Adaptation of the EMPM Tool**

The final analysis of the data was based on adaptation of the EMPM tool. There were two kinds of variables used: 1. Dichotomous, giving either low or high quality scores for the planning, and 2. three-scale measurements scoring planning either low, medium or high quality. The types of variables used in this study are depicted in table 2.

**Table 2.** Types of variables used in the study

	Dichotomous variable	Three-scale variable	Summary variable
Preparedness	Preparedness plan	Program coordinator	National hazard identification
	Plan review	Business engagement	Local hazard identification
	Training		Special needs planning
	Exercises		Vulnerability assessment
	Program committee		
Response	Support of the Church	NGO* engagement	Activation of response planned
		Incident management	Emergency shelter arrangements
		Public information	
Recovery		Psychosocial support	

Note. \* Nongovernmental organization.

Nongovernmental organizations' (NGO) engagement measurement consisted of one dichotomous variable (NGO's not noted or noted) depicting low or medium level preparedness, and a written agreement on NGO support for social work depicted high level preparedness. In measuring the level of program coordination and private sector business engagement, an original three-scale variable was used. The level of incident management, public information and psychosocial support were each measured with a construction of three separate dichotomous variables.

Summary variables were created for five program elements: Two variables of risk assessment, special needs planning, procedures to activate social services' response organization, and emergency shelter arrangements. A three-scale summary variable was constructed of national level and local level risks to assess the level of planning. Four national risks: 1. pandemics, 2. nuclear power plant accident, 3. mass influx of asylum seekers and 4. military pressure or war were the elements of the variable. The summary variable was internally consistent (Cronbach's alfa *0,601*) and the scale was as follows: National hazard assessment was 1. not noted in the plan, 2. inadequately noted, if only one to two national level hazards were named in the plan, and 3. well noted, if three to four hazards were named in the plan.

A summary variable depicting local level risk assessment was constructed of five internally consistent elements (Cronbach's alfa *0,677*): Disruptions in 1. electricity and 2. water supply, 3. ICT disruptions, 4. mass accidents and 5. a fire in a service home or institutional care. Disruptions in electricity and water supply are most often caused by heavy storms in Finland, where other natural hazards occur very seldom (Ministry of the Interior, 2016). The scale of the sum variable was divided into three: Risk assessment was completed 1. poorly, if only three out of the five possible local risks were named, 2. inadequately completed, if four out of five were named, and 3. well completed, if all the five risks were named in the plan.

Identification of social workers' continuing and expanding roles was measured with a three-scale summary variable. The variable was used to measure how well special needs planning was noted in the documents. The variable was constructed of six social work tasks (Cronbach's alfa *0,818*): 1. social assistance, 2. substance abuse rehab, 3. home care services, 4. elderly care, 5. care for the disabled and 6. child protection. The variable got three values: Special needs planning was regarded as 1. poorly noted, when only five or less of the aforementioned tasks were named in the plan, 2. adequately noted, when all the six tasks were named, and at least one of the tasks was anticipated to expand during disasters, and 3. well noted, when all the six tasks were named and more than one of the tasks was anticipated to expand during a disaster situation.

To measure the level of social services' procedures to activate their response organization, a fourth summary variable was constructed of three variables (Cronbach's alfa *0,792*), which were 1. naming of social emergency services as a task of the organization, 2. activation procedures defined for regular working hours, and 3. activation procedures defined for off hours' response. The summary variable was defined to get three qualitatively different values: 1. activation procedures were not noted in the plan at all, 2. activation procedures were noted inadequately, and 3. well defined activation system existed consisting of emergency social services, as well as regular working hours and off time hours' activation procedures of response.

Emergency shelter arrangements were studied creating the fifth summary variable, which consisted of five variables (Cronbach's alfa *0,722*): Provision of 1. shelter, 2. food and 3. clothing for the affected, 4. preparedness to give shelter for evacuees from other service areas and 5.



designation of specific shelter locations. The summary variable got three values: 1. none of the shelter arrangements were noted, 2. basic level shelter arrangements existed, in case one to three of the measures were named, and 3. well planned arrangements, in case four to five measures were noted in the plans.

### **Statistical Analysis**

The data was analyzed using SPSS Statistics, version 22 (IBM). Mainly descriptive statistics, such as comparison of means and crosstabs, were used in analyzing the data. In testing the hypothesis, Pearson chi-square ( $\chi^2$ ) analyses were conducted to test for differences by the size of the service areas. Significance was set at  $p < .05$ . In creating the summary variables, the consistency of the variables was tested with Cronbach's alpha to ensure reliability of the variables. Reliability was set at 0.60.

### **Results**

The results show that 84 percent of the Finnish municipalities, regardless of their size, had completed their duty of preparedness planning as part of disaster risk management. In assessing preparedness, seven measures out of eleven scored a high level and were noted better in large service areas compared to small ones (Table 3.). The differences were statistically significant in the preparedness plan review, while 88 percent ( $p < .001$ ) of the large service areas scored a high level compared to small areas' 67 percent. It was also more common for large service areas to have a high level of planning in program coordination, program committees, local hazard identification, planning of vulnerability assessment and business engagement. No significant differences were found between the small and large areas in special needs planning, national level hazard and risk assessment, disaster preparedness training or exercises. (Table 3.)

Statistically significant differences were also found in planning for response and recovery, in which large service areas more often scored a high level in six of seven measures (Table 4.). Arrangement for emergency shelter was the only program element in which small service areas got the same scores as the large ones. Incident management, procedures to activate response, support of the Church and NGOs, public information and psychosocial support all got higher scores more often in the large areas' planning compared to the small ones. (Table 4.)

**Table 3.** Program elements noted in municipal social services' preparedness plans in Finland describing level of preparedness (N=255)

Program element	Area Size	Level of preparedness planning		
		Low	Medium	High
1. Emergency response plan <sup>1</sup>		<u>No plan</u>		<u>Plan developed</u>
	Small	16% ns		84% ns
	Large	16%		84%
2. Plan review (last 3 years)		<u>Not reviewed</u>		<u>Reviewed</u>
	Small	33%***		67%***
	Large	12%		88%
3. Training		<u>Not noted</u>		<u>Noted</u>
	Small	18% ns		82% ns
	Large	19%		81%
4. Exercises		<u>Not noted</u>		<u>Noted</u>
	Small	34% ns		66% ns
	Large	34%		66%
5. Program committee		<u>Not noted</u>		<u>Noted</u>
	Small	84%***		16%***
	Large	50%		50%
6. Emergency manager		<u>Not noted</u>	<u>Noted, from outside of own organization</u>	<u>Noted, from own organization</u>
	Small	84%***	12%***	4%***
	Large	57%	2%	41%
7. Business engagement		<u>Not noted</u>	<u>Plan to note in the future</u>	<u>Continuity mgmnt agreed upon</u>
	Small	68%**	21%**	12%**
	Large	59%	14%	27%
8. Nation wide hazard identification		<u>Not noted</u>	<u>Inadequately noted</u>	<u>Well noted</u>
	Small	6% ns	36% ns	58% ns
	Large	6%	28%	66%
9. Local hazards identification		<u>Poorly noted</u>	<u>Inadequately noted</u>	<u>Well noted</u>
	Small	40%***	26%***	34%***
	Large	10%	19%	71%
10. Special needs planning		<u>Poorly noted</u>	<u>Adequately noted</u>	<u>Well noted</u>
	Small	11% ns	17% ns	72% ns
	Large	14%	23%	63%
11. Vulnerability assessment		<u>Not noted</u>	<u>Adequately noted</u>	<u>Well noted</u>
	Small	57%*	11%*	32%*
	Large	40%	15%	45%

Note: 1) N=304. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ ; ns = Not statistically significant; Program elements 1- = Dichotomous variables; 6-7 = Measurements consisting of three scale variables; 8-11 = Summary variables.

**Table 4.** Program elements noted in municipal social services' preparedness plans in Finland describing level of response and recovery planning (N=255)

Program element	Area Size	Level of preparedness planning		
		Low	Medium	High
1. Support of the Church		<u>Not noted</u>		<u>Yes, noted</u>
	Small	14%*		86%*
	Large	6%		94%
2. NGO <sup>1</sup> engagement		<u>Not noted</u>	<u>Noted</u>	<u>Agreed upon</u>
	Small	16% ns	84% ns	5%**
	Large	18%	82%	18%
3. Incident management		<u>Own organization management noted</u>	<u>Part in joint management body (EOC)<sup>2</sup></u>	<u>Situational awareness noted</u>
	Small	92%**	72% ns	24%**
	Large	100%	78%	51%
4. Response activation		<u>Not noted</u>	<u>Inadequately noted</u>	<u>Well noted</u>
	Small	45%***	44%***	11%***
	Large	33%	33%	34%
5. Emergency shelter arrangements		<u>Not noted</u>	<u>Adequately noted</u>	<u>Well noted</u>
	Small	2% ns	10% ns	88% ns
	Large	2%	20%	78%
6. Public information		<u>Importance noted</u>	<u>Web information noted</u>	<u>Social media noted</u>
	Small	97% ns	18%***	2%***
	Large	98%	38%	14%
7. Psycho-social support		<u>Importance noted</u>	<u>Guidance for the affected noted</u>	<u>Help line noted</u>
	Small	95% ns	39%*	20%**
	Large	97%	52%	34%

Note: \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ ; ns = Not statistically significant;

1) NGO = Nongovernmental organization. 2) EOC = Emergency operations center.

Program elements 1 = Dichotomous variable; 2 = Measurement consisting of one dichotomous variable (NGO's not noted/noted) and one separate variable; 3, 6-7 = Measurement consisting of three separate dichotomous variables; 4-5 = Three-scale summary variables.

## Discussion

### Better Disaster Risk Management in Large Service Areas

This study showed that in Finland large social service areas had better disaster risk management procedures documented in preparedness plans than small areas, which was consistent with the hypothesis. Larger organizations are in several studies found to be better prepared for disasters (Palm and Ramsell, 2007; Savoia et al, 2009; Sadiq, 2010; Chikoto et al 2013). For example, in a study of public health emergency preparedness in the United States, it was found that local health departments serving large populations had better emergency preparedness than their smaller counterparts (Savoia et al, 2009). Key emergency management stakeholders of five Swedish municipalities pointed out in interviews that larger municipalities had better resources to organize emergency management. Small municipality actors of the same study expressed fear of cooperating with other municipalities, preferring not to become dependent on other actors. (Palm and Ramsell, 2007.)

Organizations should take into consideration their objectives and key targets as a starting point while preparing their continuity planning (ISO 22301). In this study, there was a statistically significant difference found in favor of the large service areas in how social workers' key mission, assisting a vulnerable population, was taken into account in the planning. The focus of social workers' response in disasters should be on assisting the most vulnerable of the affected, keeping in mind the principles of social work: social justice, human rights, collective responsibility and respect for diversities (Minahan and Pincus, 1977; Zakour, 1997; Global Definition of the Social Work Profession, 2014).

Hazard identification and risk assessment are core elements of disaster risk management and should be included in the preparedness plans (McEntire and Myers, 2004; Henstra, 2010). Finland has not faced big national level disasters since the World Wars, although hazards, such as mass shootings, are unfortunately not unknown to the country. This study showed that the national level risks were evenly named in the preparedness plans of service areas of different sizes, but the local level risk assessment was on a higher level in the large areas. The rescue authorities provide regional and local level risk assessments for the municipalities' service sectors in Finland. The social services are thereafter supposed to assess the risks from their perspective (Ministry of Social Affairs and Health, 2008). The risks regarded in this study as local are likely to be realized, i.e. electricity, water supply, and ICT disruptions, mass accidents and fires in service homes or institutional care. Storms that cause power cuts, which are hazardous especially in winter, have attacked the local communities recently. It would have been appropriate for the social services to have noted these hazards in each one of the preparedness plans, since response to smaller scale emergencies builds capacity to respond to large scale incidents.

Preparedness plan documents do not guarantee proper response, especially if they are fantasy documents that are not absorbed in the organization's culture (Boin and McConnell, 2007; Clarke, 1999; Drennan et.al, 2015: 132-155). Some of the documents of this study can be regarded as symbolic, especially those plans that have not been reviewed for years. However, there are some previous reports from Finland that support some of the findings of this paper as well as the importance of having documented preparedness plans. A survey study of psychosocial support preparedness in Finland showed that when crisis support in mass casualty accidents was noted in the preparedness plans of the municipalities, the actual preparedness, in this case existence of a

crisis support group, was better than when it was not noted in the plans (Hynninen and Upanne, 2006: 26).

Public-private social services' cooperation in preparedness has also been studied earlier, and the results support this study. A survey of the private institutional care and sheltered housing services showed that preparedness planning was a requirement agreed on with only 11 percent of the public social service areas (Rapeli et.al, 2016). This study showed that 12 percent of the small and 27 percent of the large service areas noted in their documents that preparedness planning had been agreed on, while purchasing services from the private sector, which include also wider range of services than housing and institutional care.

### **Is the Level of Preparedness Adequate?**

Social services, as well as medical care, are particularly important to disaster risk management (Danso and Gillespie, 2010), thus, the sector should be part of local level preparedness planning. Social services seem to consider disaster risk management as an important task, since a large majority of service areas in Finland had completed their preparedness plans, regardless of their size. The results, though, show that the planning was done on a very general level, and one can ask whether the overall level of preparedness was adequate. Vulnerability analysis, as an example of an important task for social work, was named in only three-fifths of the large areas' programs. Deficiencies in the level of planning were found in support for management, alarming systems, agreeing with volunteers on their support, public information and implementation of psychosocial support, regardless of the size of the service area.

Management is a core activity of disaster risk reduction (Perry and Lindell, 2003; McConnell and Drennan, 2006; Drennan et al, 2015: 119). In the Finnish context, the lead agency of disaster response depends on the situation, and most often these duties lie in the rescue services or the police (Ministry of Defense, 2011). Social workers' general management duties were well recognized in the disaster preparedness plans. At the same time, measures for increasing awareness of the disaster situation as support for the management, was not noted well in the plans. This is a major deficiency, since effective response relies on timely and accurate information (Danso and Gillespie, 2010). Also, modern public information channels - the web and social media - were inadequately noted.

Adequately planned procedures to activate response is a prerequisite for efficient deployment on the tasks. Mobilization of social workers for crisis tasks has been seen as a serious challenge (Newhill and Sites, 2000). This was the case also in Finland where only one third of the large service areas had defined the procedures well, and approximately only one tenth of the small service areas had defined it well. Previous report show that there are also real deficiencies, for example in activation of crisis help in case of mass casualty accidents in Finland (Hynninen and Upanne, 2006: 43).

Psychosocial support is very often seen as one of the most important roles of social workers in disasters (Alston, 2007; Rowlands, 2013). In Finland, psychosocial support is understood to consist of both trauma and bereavement counseling, but it can also include, for example, family reunions, providing information and ensuring safety of the affected. In the Finnish preparedness plans, psychosocial support was recognized exceptionally well, but the measures for implementing the support were noted inadequately. Guidance and help lines are measures to implement support for the affected (i.e. Leung and Wong, 2005; Yanay and Benjamin, 2005), but they were not adequately

recognized in the plans, and the level varied according to the size of the service areas in favor of the large ones.

### **Resources as a Prerequisite for Adequate Preparedness**

In Finland, there is an ongoing political debate on local level resources and the size and structure of service areas and municipalities (Kokko et al, 2009; Government Communications Department, 2015). When it comes to disaster risk management, it is known that local level actors are the first to act in emergencies (Alexander, 2015), thus, the responsibilities should not be set on a very high level in organizational structures. This would favor small jurisdictions to be given responsibility of disaster risk management. At the same time, large jurisdictions have more resources and expertise to handle large scale disasters (Danso and Gillespie, 2010).

More human resources allocated for disaster risk management can be the reason for the main outcome of this study: Large service areas were better prepared than their smaller counterparts. Resources are a prerequisite for an adequate level of preparedness (Drennan et.al., 2015: 141), but unfortunately financial resources allocated for preparedness could not be derived from the data of this study. At the same time, coordination is an essential feature of high quality performance in preparedness (Clarke, 1999: 56; Danso and Gillespie, 2010; Henstra, 2010) and an indication of human resources being allocated for the planning process. Coordination of preparedness activities enhances information sharing within an organization and with other organizations, thus, it builds the capacity to respond adequately (Danso and Gillespie, 2010). In this study, significant statistical variation was found for the existence of a preparedness coordinator within an organization in favor of large service areas.

Many resources and more personnel, but perhaps also a higher level of staff turnover, can explain why larger organizations rely on formalized written preparedness planning. Smaller organizations can possibly rely more on personal relationships in risk assessment and management. (Perry and Lindell, 2003.) This can be the case, but the results of this study tend not to support this argument. Connections and coordination with civil society, with private and volunteer organizations, for example, were recognized less frequently in the small areas' planning compared to the large ones.

### **Volunteers and the Private Sector as a Resource**

Emergent organizations and the public, even the victims, usually take initiative to care for the affected in disasters (McEntire, 2007). With scarce and diminishing resources, the public services should be prepared for involving these resources in disaster risk reduction actions. Social workers working in close contact with the affected people and communities represent the services which can also deploy volunteers as well as nongovernmental and faith based organizations to complement official services. Agreements on volunteer support differentiate the large and small service areas in favor of the large ones in the Finnish social services' disaster risk management. During disasters, the coordination of existing and emerging volunteers is essential, and this should be planned and agreed on before the crises (Ministry of Social Affairs and Health, 2008). The Finnish Red Cross (FRC) and Voluntary Rescue Service are the most often named organizations in the Finnish social services' preparedness plans.

Compared to volunteer organizations, cooperation with the private sector was not recognized well enough in the plans. This is a major deficiency, since the private sector has been found to be less prepared for hazards than public or voluntary organizations (Chikoto et al. 2013). In Finland,

social service areas can purchase a part of their services from the private sector, and approximately 30 percent of the services are privately produced (Arajärvi and Väyrynen, 2011). Private organizations do not have a legal obligation of continuity or preparedness planning in Finland, thus, the public services have been urged to agree with the service producers on continuity planning while purchasing services for their clients (Ministry of Social Affairs and Health, 2008). As shown in the results, only less than one third of the large service areas had agreed with the service producers on service continuity in case of disruptions, and the percentage is even lower for the small areas. This can lead to a situation in which those vulnerable people, who are cared for by private service producers, will not get the services during disasters, for example, housing or their daily meal services, because of a lack of preparedness. This would result in an even bigger workload for the public services, for example, during long lasting power cuts caused by heavy storms.

### **Limitations of the Study**

Written preparedness plans describe the status of preparedness of a specific organization at a certain point, but preparedness planning should be a continuous process in organizations. (Perry and Lindell, 2003; Drennan et al, 2015: 133.) The data presented here only reflects the contents of local level social services' preparedness plans, not the actual abilities to respond in disaster situations. Nevertheless, preparedness plans provide good insight to and evaluation data for assessing one element of disaster risk management.

As the data consists of only the written preparedness plan documents, the evaluation of actual performance is limited. Further studies are needed to explore how well the plans work in practice. In this study, some of the elements scored high, training, for example, which was noted well in the documents. The notation, however, does not indicate in any way how many staff members have received training or how often training or exercises have been conducted. This should be studied further. Nonetheless, this study can provide a basis for further studies on local level preparedness planning in Finland and for comparisons with other countries. The data represents all 304 mainland municipalities in Finland, and is, thus, externally valid.

Henstra's (2010) EMPM tool was used as a method to assess the preparedness plans. Even though the tool has been developed for multiagency preparedness planning of local level public organizations, most of the elements were appropriate for a single sector evaluation. Most of the measurements of the tool were also found in the preparedness plan guidelines for social services (Ministry of Social Affairs and Health, 2008) and in the Security Strategy for Society (Ministry of Defense, 2011), thus, the model was anticipated to be well applicable to the Finnish context. In regard to evaluating how symbolic (Clarke, 1999) the planning is, further measurement is needed.

### **Conclusions**

Social workers and social services in general are vital actors in disaster risk reduction, since their functions aim to find and support the most vulnerable and the worst affected people in disasters. For this reason, they must be involved in each level of disaster risk management and governance. One measure for strengthening the disaster risk governance is to find out what can be developed further in the local level preparedness planning. This study showed that the level of preparedness planning documents was higher in large service areas compared to small ones. Yet, the supporting functions for management, procedures to activate response, modern public information and deeper cooperation with the private sector, civil society and volunteers still need developing even in the

large service areas. The results of this study can be used as a baseline for developing disaster risk management in Finland, but also in other countries, as the data represents all preparedness plans of a single sector in one country.

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## **IV**

### **DISASTER PREPAREDNESS OF PRIVATE SOCIAL SERVICES: CASE FINLAND.**

by

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## Disaster Preparedness of Private Social Services: Case Finland

### Abstract:

**Purpose** – This paper explores the level of disaster preparedness of institutional care and sheltered housing services provided by the private sector in Finland. **Design/methodology/approach** – A web-based questionnaire was completed by businesses producing institutional care and sheltered housing services in Finland. They answered questions on disaster preparedness, impacts of recent hazards, measures taken during the hazards, and connections to disaster risk management actors and relatives of their residents during the hazards. **Findings** – The study showed that only 19 percent of the private service providers had a disaster preparedness plan, and only 11 percent reported that it was a requirement agreed on with the service purchaser. The size of the unit predicted only partly the differences in the level of preparedness. The major impacts of storms were on energy supply, leading to disruptions in the daily activities of the services. **Practical implications** – The most vulnerable to disasters are people dependent on others, which include those receiving social services. Consequently, this study recommends that preparedness planning should be legally mandated requirement for all social service providers. In addition, the local governments' service purchasers should include private services in their disaster preparedness activities.

**Originality/value** – Private businesses are increasingly involved in producing social services in Finland, hence their preparedness to face hazards and connection with disaster risk management partners is vital. This study increases knowledge of private institutional care and sheltered housing services' disaster preparedness, which has seldom been the focus of studies.

Key words: hazard, disaster preparedness, private businesses, social services, institutional care, sheltered housing

### Introduction

Global warming increases the number and severity of disasters, and thus the consequences of the phenomenon on social, economic and ecological environments will be greater than before. The impacts of disasters on public and private organizations, and not least on the wellbeing of the population, are inevitable. (IPCC, 2007.) Disasters impact those people most severely who in ordinary life are more vulnerable (Cherry and Cherry, 1997; Gillespie, 2010; Sanders *et al.*, 2003; Thomas and Soliman, 2002). We, therefore, need information about how these population groups have been protected in case of disasters. Social workers and the social sector in general provide services for the most vulnerable populations (Alston, 2007; Dominelli, 2012: 20, 50-51) and usually operate on the local level. At the same time, local level actors are the first to act in disasters (Dynes, 2006; Henstra, 2010; Alexander, 2015) and are therefore important stakeholders of disaster risk reduction and management.

Public services, private businesses and not-for-profit actors are very much interlinked in the social sector (Drennan *et al.*, 2015, 8). The service sector is also very dependent on critical infrastructure (Turoff *et al.*, 2016). Lessons learned from Hyogo Framework for Action, urge governments and the public sector to collaborate more closely with the private sector and civil society to reduce disaster risks and build more resilient societies (Sendai Framework for Disaster Risk Reduction 2015-2030, 2015). Public-private pre- and post-disaster partnerships enhance community resilience in many ways. Pre-disaster social capital and networks enable quick response and recovery in hazardous situations (Blanke and McGrady, 2012).

The importance of private sector preparedness and public-private partnerships is acknowledged globally on a high level (Sendai Framework for Disaster Risk Reduction 2015-2030, 2015). In previous studies, however, the private sector has been found to have taken less mitigation and preparedness measures compared to the public services (Castle, 2008; Chicoto, 2012; Dahlhamer and D'Souza, 1997). In regard to social services, there are still few studies conducted in Finland or other Nordic countries on how businesses in this field have prepared for disasters. Research on nursing homes in the United States have found that disaster preparedness plans in these services are limited in scope and do not meet the needs of their residents (Claver *et.al.*, 2013).

The aim of this study is to explore the level of preparedness and continuity planning of private social services in Finland and study how the services are linked to the disaster risk management, local government and other relevant actors. It is important to evaluate how the service providers' resilience to face hazards could be developed. Disaster preparedness planning and measures taken in an actual hazardous event are reviewed through a survey to the private service providers of institutional care and sheltered housing.

## Case Finland

Finland shares the Nordic tradition of a welfare system, which is based on universalism, where all citizens in need are entitled to basic social security and services. Social and health care services are mainly financed by taxes and administered by the local authorities. (Social Protection in the Nordic Countries 2013/2014, 2014:266; Kautto *et.al.*, 2001: 6.) Institutional care and sheltered housing are part of social services in Finland, and the main client groups are elderly people, people with disabilities, people with mental problems and/or substance abuse, and children and youth under child protection (Institutional care and housing services in social care 2014, 2015: 1-11).

The majority of elderly people and people with disabilities live in their own homes, and those dependent on outside care receive regular assistance in their homes or live in institutional or residential housing. Housing designed to meet the needs of vulnerable people can, for example, be nursing homes, serviced flats, collective housing and housing in which special care is provided. Children that cannot live with their biological parents live mainly either in foster care or in small units in institutional care. (Social Protection in the Nordic Countries 2013/2014, 2015: 68, 158, 184.) The private sector provides a significant share of sheltered housing, and the share varies by service. Nearly 90 percent of the services for mental health rehabilitation clients, and nearly half of the services provided for the elderly in sheltered housing, are units of private businesses or not-for-profit service providers. (Institutional care and housing services in social care 2014, 2015: 1-11) In this study, private institutional care and sheltered housing services refer to housing in which assistance is provided 24/7 or part-time and which are provided by private enterprises or not-for-profit organizations.

Finland has a long tradition of preparedness planning and a model of comprehensive security, in which all the sectors of society are urged to cooperate in preparing for disasters (see Kolbe, 2011; Tervasmäki, 1983). All authorities and the public sector in general have to prepare for disasters according to the emergency powers legislation (Ministry of Defense, 2011). The private social services do not, however, have a legally binding obligation for preparedness or business continuity planning, and the service providers are only required to have fire safety and rescue plans and plans for quality supervision. The municipalities are guided to agree on the continuity of the services while purchasing social services from the private sector (Ministry of Social Affairs and Health,

2008), but only 17 percent of the public social service areas have agreed on it according to the preparedness plan documents (Rapeli, 2016).

In regard to hazards and risks, Finland has rarely been affected by weather phenomena causing significant damage. In the summer of 2010, there were severe storms that hit Central and Eastern Finland in particular. The storms caused significant damage to the built environment, and institutional care and residential service units were less prepared for power cuts than, for instance, the hospitals (Tutkintaselostus S2/2010Y 2010, 2010: 8). The end of 2011 and 2013 also saw exceptionally severe storms. The winter storms of 2013, which are followed in this study, were characterized by strong winds. The storms caused power cuts and disruptions in mobile phone services and internet connections in wide areas of Finland. (Finnish Meteorological Institution, 2013a and 2013b; Viestintävirasto, 2013.) More than 400 000 clients of energy suppliers were cut off, and the storm caused more than 24 million euro costs for the power companies (Finnish Energy, 2014).

## Data and Methods

The Finnish Ministry of Social Affairs and Health initiated a survey targeted at the private social sector after heavy storms in 2013, in order to gain more information of the hazard impacts. An invitation with an internet link to a web-based questionnaire was sent to all private social sector organizations providing institutional care and sheltered housing services in Finland. The organizations provide care for various client groups: children and youth in 24/7 child protection services, people with mental or functional disabilities, clients with mental problems or alcohol/narcotic dependencies, and the elderly. The invitation was sent to 1326 service providers, which had either one or more service units. The email addresses of the respondents were provided by the Finnish National Supervisory Authority for Welfare and Health. The survey was sent in the spring of 2014, some months after three heavy storms had struck Finland in November and December 2013. Two reminders were sent to ensure wide response to the survey.

The specific research questions of this study were: 1. How were the private service providers of institutional care and sheltered housing prepared for hazards? 2. What kind of measures were taken after the heavy storms in 2013 or other recent hazards? 3. How were the organizations linked to disaster risk management actors and relatives of their clients with regard to hazardous situations and preparedness planning?

The questionnaire consisted of 29 closed and 15 open-ended questions, and they addressed the following topics: (1) general business information; (2) disaster preparedness activities undertaken by the businesses; (3) disaster risk reduction cooperation among businesses and the local government; (4) impacts of the storms or other previous hazards on the service units; (5) whether the service units were forced to evacuate or consider evacuation of their clients as a result of the hazards; (6) sources of assistance utilized following the hazards; and (7) reliance on and cooperation with volunteer organizations or relatives of their clients pre and post hazards.

The survey received altogether 797 answers, the response percentage being 60. The data represents private social care units from all parts of Finland, and they represent all the client sectors evenly in line with the whole population. This was secured from the Valveri register of private social and health care service providers in Finland. Institutional care and sheltered housing units for the elderly represent 35 percent of the data. Service providers for clients with mental problems represent 14 percent, services for disabled persons 12 percent, units for children 11 percent and units for persons

with dependencies 5 percent of the data used in this study. The rest of the data falls into the category of other housing services. This category provided an open-ended question, and the respondents named their units as representing various specialized services, such as rehabilitation care units for war veterans. The size of the unit was also asked in the questionnaire. Medium size units with 16-49 clients represent 40 percent of the data, and units with 5-15 clients 39 percent of the data. Very small units with only 1-5 clients represent only 3 percent, and large units with more than 50 clients represent 18 percent of the data. Most of the medium-size or large units provided services for the elderly (40%). The small units, with 5-15 clients, were most often service units for the disabled persons (47%), but also for children, of which 81% were small units.

### **Analysis of the closed and open-ended questions**

SPSS version 22 (IBM) descriptive statistics were used to analyze the data. Mainly frequencies of the variables and crosstabs were used to describe disaster preparedness of the service providers, impacts of hazards on the service units and response measures taken due to hazards. Comparison of two proportions was conducted to test for differences and Pearson Chi-Square ( $\chi^2$ ) to test the association between categorical variables. Multivariate logistic regression models were used to analyze differences in background factors, such as the number of residents, type of unit, and planning for contingencies. Significance was set at  $p < .05$ . The answers to the open-ended questions were categorized, counted, and mainly used to understand the structured answers more specifically.

### **Results**

#### *Preparedness of the units*

Only one fifth (19 %) of the respondents stated that their unit had completed a preparedness plan, and seven percent did not know, whether they had such a plan. Preparedness planning was a requirement agreed on with the service purchaser in only 11 percent of the units, and ten percent reported that their preparedness plans had been attached to the public social service areas' plan. At the same time, fire safety and rescue planning was completed in all of the units, and more than 90 percent had completed a building evacuation plan. Despite the low percentage of businesses completing a preparedness or continuity plan, some measures had been taken to prepare for hazards. (Table 1.)



Table 1. Frequencies of preparedness measures taken pre-disaster in small, medium-sized and large units and significant differences between small and large private institutional care and sheltered housing service units

N=770

Measure	Frequency of preparedness measure taken		
	Small units ≤15 clients	Medium-sized 16-49 clients	Large units ≥50 clients
<b>Preparedness planning</b>			
Disaster preparedness or continuity plan completed	17%	20%	21% <sup>ns</sup>
Planning for contingencies a requirement from the service purchaser/local govt <sup>1</sup>	9%	11%	17% <sup>*</sup>
Unit's continuity plan attached to the service purchasers' preparedness plan	9%	10%	14% <sup>*</sup>
Fire safety and rescue plan completed	100% <sup>ns</sup>	100%	100% <sup>ns</sup>
Building evacuation plan completed	91% <sup>ns</sup>	91%	91% <sup>ns</sup>
Evacuation shelter planned	79 % <sup>ns</sup>	79%	77% <sup>ns</sup>
Crisis communication plan completed	26 %	40%	47% <sup>***</sup>
<b>Staff preparedness</b>			
Preparedness exercises	31 % <sup>ns</sup>	36%	41% <sup>ns</sup>
Preparedness training for the staff	80 %	83%	89% <sup>*</sup>
Plan for recruitment of extra staff	70 % <sup>ns</sup>	66%	64% <sup>ns</sup>
<b>Material preparedness</b>			
Alternative power supply e.g. power aggregates in the unit	24 % <sup>ns</sup>	29%	24% <sup>ns</sup>
Medicine and medical equipment stocking	68 % <sup>***</sup>	63%	53%
Stock of food supplies	79 % <sup>**</sup>	69%	67%
Battery radios in use	87 % <sup>ns</sup>	84%	85% <sup>ns</sup>
Flashlights and extra batteries in stock	99 % <sup>ns</sup>	98%	98% <sup>ns</sup>

Note: 1 = government; ns = No statistically significant difference between small and large units; \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ .

The results show that the units that had completed a preparedness plan had more often a plan for evacuation shelter ( $p < .001$ ), for crisis communication ( $p < .001$ ) and for recruitment of extra staff ( $p < .001$ ), as well as preparedness training ( $p < .001$ ) and exercises ( $p < .001$ ) for their staff when compared with the units that had not completed preparedness plans. In addition, if the unit's preparedness plan was attached to the municipal plan the units' power supply was prioritized by the local power company more often ( $p < .001$ ) than if the plan was completed but there was no such preparedness collaboration with the municipal social service purchaser, or if the preparedness plan was not completed at all.

Differences in planning were compared between small and large units and between the type of clients the units serve. Both extremes in size, units of 15 residents and under and units of more than 50 residents, were compared and the results were analyzed using comparison of two proportions test (Table 1). No significant difference was found between small and large units when comparing whether they had completed preparedness or continuity plans. It was, however, found that large units were required more frequently than small units to do preparedness planning, and the plans of

the large units were more often attached to the service purchasers' / local governments' preparedness plans ( $p < .05$ ). The size of the unit was also a significant factor when looking at preparedness in crisis communication ( $p < .001$ ) and training of staff ( $p < .01$ ) which were better planned in the large units. The small units were significantly better prepared in medicine and medical equipment stocking ( $p < .001$ ) and stocking of food ( $p < .01$ ).

Multivariate logistic regression models were used to analyze whether either, client type, the unit size, or some other variable explained the level of preparedness. It was found that requirement from the service purchaser / local government was a significant factor in whether preparedness planning was completed in the units, and thus, the client type of the unit did not have an explanatory role in this preparedness measure. When comparing preparedness measures between the units serving different client groups, it was found that preparedness and continuity plans of the services for the elderly (Odds ratio (OR) 3.262 95% Confidence interval (CI) [1.693, 6.286]) and the disabled persons (OR 1.853 95% CI [0.936, 3.669]) were more often attached to the local government plans than services for clients with mental health problems, children or persons with alcohol problems or other dependencies.

The client type was also a factor in whether the unit had any alternative power supply. The units for the elderly were more often prepared with power aggregates (OR 2.042 95 % CI [1.289, 3.240]). Small units were better prepared in stocking medicines, but when unit types were compared, it was found that service units for persons with alcohol problems or other dependencies (OR 0.596 95% CI [0.394, 0.900]) were the poorest prepared in medicine stocking.

Only 15 per cent of the units had agreed on support with partners in case of disasters. Most often support was agreed on with the local Church or the Red Cross. Also, the local rescue services and private security businesses were mentioned in the open-ended responses.

#### *Impacts of the storms and other hazards*

The findings show that the storms had had impacts on the daily activities of nearly one fourth (23 %) of the private institutional care and sheltered housing services, and the major impacts had been on energy supply (Table 2).

Table 2. Frequencies of hazard impacts on the private institutional care and sheltered housing services

N=692

Impact	Frequency
Power cuts	52 %
Water supply disruptions	16 %
Disruptions in waste care logistics	7 %
No impact on the units' functioning	69 %

Impacts of the power cuts were described in an open ended question. In many cases, the power shortage affected heating of the unit, the supply of fresh or warm water, lighting, locking and facility security systems, the use of mobile phones, the use of lifts, and supply of food for the

clients. Some of the units had a possibility to use aggregates for reserve energy, and a few units (14 in total) had to evacuate their clients due to power cuts because the facilities were getting cold. (Table 3).

Table 3. Frequencies of measures taken by the private institutional care and sheltered housing services in an actual hazard situation.

N=713

Measure	Frequency
Adjustments in serving meals	31 %
Use of power aggregates	11 %
Preparing for evacuation	7 %
Executing evacuation	2%
Fresh water supply from outside	6 %
Support from the local government	2 %
Support from clients' families	2 %
Support from the volunteers	2 %

The clients were most often evacuated to the homes of their relatives. Children and youngsters of child protection institutions had prolonged holidays with their biological families, but also hotels and other facilities were used to shelter the evacuees. Only a few of the elderly persons had to be hospitalized due to the hazards.

Less than two percent of the units had asked for help and assistance from the relatives of their clients, and about two percent had asked assistance from the local government. Assistance from the local government was mainly given by the rescue services which cleared trees cut by the storm and checked the fire alarm systems. The volunteer sector was also very seldom involved in assistance during the hazards, as only two percent noted volunteers in their responses.

Only 33 per cent of the businesses took actions to improve their preparedness after the hazards. Those who had improved their preparedness had taken measures such as updating rescue plans, training the personnel, taking care of psychosocial support, purchasing aggregates and flashlights, repairing facilities and clearing trees nearby the buildings. No one mentioned better linking to disaster management partners or relatives of their clients as an improvement measure after the storms.

#### *Wish for better guidance*

One fourth of the respondents answered the open-ended section 'Wishes to the Ministry of Social Affairs and Health to enhance the private institutional care and sheltered housing businesses' preparedness'. The respondents urged clear guidance for preparedness planning, joint trainings with local government, closer cooperation with the municipal service purchaser, and better flow of information between the public and private sectors. The smaller businesses were especially concerned about the costs of preparedness measures.

## Discussion

Heavy storms and other hazards have had significant impacts on almost one fourth of the private institutional care and sheltered housing services in Finland. The results of this study also show that only a few of the businesses had prepared for hazards with written preparedness or continuity plans. Businesses in the social sector are in rapid growth, as the personnel numbers of private social services have risen more rapidly compared to the corresponding public services in Finland (Health and social services personnel 2013, 2015: 47), and the Finnish Government's plan of major structural changes aims to increase the share of the private sector even more (Press release 300/2016). This development calls for better focus on preparedness and continuity planning, both in the public and the private services targeted at people dependent on others' care, hence risks and vulnerabilities can be reduced with conscious actions (Tierney, 2014: 11-15). The clients of institutional care and sheltered housing are people with special needs, which make them more vulnerable for hazardous situations (Alexander and Sagramola, 2014; Dosa *et.al.*, 2010; Seale, 2010; Thomas and Soliman, 2002).

It has been found in previous studies that preparedness measures taken in the private sector are on lower level than they are in the public or voluntary sector organizations (Castle, 2008; Chikoto, 2013). The size of organization has also been found to be a significant predictor of disaster preparedness. Larger organizations are better prepared than their smaller counterparts. (Dahlhamer and D'Souza, 1997; Sadiq, 2010.) This study partly confirms the finding that business size is a predictor of better preparedness, but we found also other dependencies. It was found that local government had set preparedness planning as a requirement more often for the large than for the small service units and the plans of the large units were more often attached to the service purchasers' / local governments' preparedness plans ( $p < .05$ ). The results also show that large units serving elderly people and people with disabilities were better connected to the preparedness of local governments than the units serving people with mental health problems, alcohol or other dependencies or units targeted at children and youth. Preparedness planning should be done in all sizes of service units but preparedness should also be adjusted to the units' own requirements in order to meet varying needs of their vulnerable residents (Claver *et.al.*, 2013).

The results of this study show that the units with a written preparedness plan had taken additional preparedness measures more often than the ones without such a plan. In addition, it seems that active cooperation with the municipality enhances better preparedness concerning dependencies on critical infrastructure. The local power company had prioritized power supply more often for those units whose preparedness plan was attached to the local municipality's planning. Collaboration between the public and private sector actors could be further enhanced with sharing an IT-enabled planning environment (Canós *et.al.*, 2013) that in Finland is already in use in the public social and health care services.

Private institutional care and sheltered housing services complied well with the safety norms, as all of the units reported to have completed fire safety and rescue plans. The units were also well equipped with, for example, battery radios and flashlights, but these are not enough in an actual emergency. A study conducted by the Finnish National Supervisory Authority for Welfare and Health found that 97 per cent of the private institutional care and sheltered housing services had completed quality supervision plans (Omavalvonnän toteutumisen yksityisissä sosiaalihuollon palveluissa, 2013). At the same time, our study found that preparedness and continuity plans were completed in only 19 per cent of the units and this had been a requirement for only 11 per cent of the service providers. We argue that the reason for the difference in planning is that rescue and fire

safety plans, as well as quality supervision plans, are legal requirements for private social service units. Consequently, it should be considered whether preparedness and continuity planning should also be a legally binding requirement for all social service providers in Finland. In addition, the local government should require preparedness planning of the services that they contract with, and work in close contact with the service units to develop local resiliency. A vast majority of nursing homes had completed risk analysis and had planned detailed evacuation procedures in the United States, where evacuation planning is a legal requirement for the units (Castle, 2008).

This study shows that few of the units had agreed on support from volunteer organizations, the Church, private security businesses or the local government and in an actual hazard situation they very seldom seek assistance from outside. Previous research suggests that nursing homes should be better linked to the authorities and the rescue services (Brown *et.al.*, 2007). Also, residents' contacts with their family and other social support should be restored during hazards (Claver *et.al.*, 2013). Emergency and preparedness planning of residential services for vulnerable populations is at its best an iterative process, and planning should be completed beyond what is required by licensing or accrediting authorities. Linking emergency preparedness plan with the authorities, communicating well with the families of the clients and planning for alternative facilities in case of evacuation were some of the lessons learnt from a Texas-based residential service producer in case of two hurricanes. (Seale, 2010).

The supply of energy seems to be one of the weakest points in private institutional care and sheltered housing services' disaster preparedness in Finland, as well as in other countries, while sheltering in place during hazards (Hyer *et.al.*, 2009). In Finland only 26 percent of the units have power aggregates, while 91 percent of the nursing homes in the United States have prepared for hazards with generators (Castle, 2008). Power cuts can lead to disruptions in heating and cooling as well as security systems of the units and may also have other severe impacts on vital activities of the units. In order to improve the resilience of the care units, the businesses should be better prepared and purchase aggregates or other alternative sources of power. Prioritizing care units in restoring power should be considered in the power companies, as alternative sources of energy provide only limited help in prolonged outages.

Private institutional care and sheltered housing service producers expressed their will to link better with the public sector in disaster preparedness. The public sector shares the wish for better public-private partnership but the wish still awaits actions. According to the Finnish Safety Investigation Authority, the local governments indicated a need for continuous contact between the municipalities' technical services and various public and private nursing homes and other social services after the summer storms of 2010 (Tutkintaselostus S2/2010Y, 2010: 8, 47.) In previous studies, it has been found that the public in general also needs and requires better public sector leadership pre and post disasters. Public sector leaders should coordinate the response efforts effectively and cooperate horizontally with the private and third sectors. (Kapucu *et al.*, 2010.)

Dahlhamer and D'Souza (1997) have suggested recommendations to improve the low level of preparedness in businesses, because they do not prepare for disasters voluntarily. Some of the recommendations can be shared here. Since education and awareness programs may not be enough, developing a preparedness plan should be mandated for the private sector. Also, yearly exercises should be conducted, but these should be implemented in close cooperation with other local level actors and critical infrastructure service providers. Local authorities should actively build linkages to the private businesses and enhance their preparedness in a collaborative manner. There could also be incentives offered to induce disaster preparedness, such as regarding completed preparedness plans as quality factors in the purchasing process of the services. Since small businesses face greater

obstacles in preparing for disasters, they could therefore be considered special populations of businesses that need to be targeted with special incentives by public service purchasers.

### **Limitations and generalizability**

This study is the first comprehensive study that explores disaster preparedness of private institutional care and sheltered housing services in Finland. The response percentage of the survey was good (60%), and the data represents well the whole population of these services in Finland. However, it would also be important to assess disaster preparedness of the same services produced in the public sector. In addition, to get a wider picture of preparedness and response to heavy storms and other hazards, deeper studies on collaboration and flow of information between various actors is needed (Turner 1976; Turoff *et.al.* 2016). This study explored several elements of private service providers' preparedness, although, did not consider all dependencies on the critical infrastructure.

Existing international research provides information mainly on evacuation planning of nursing homes, but research on private institutional and residential care services' preparedness for other client groups and in general is limited. This study increases our knowledge base on the status of preparedness in Finland. The results can be generalized across other Nordic welfare states, because the service structure is somewhat similar (Social Protection in the Nordic Countries, 2013/2014, 2014:266).

### **Conclusion**

While the share of private social services is increasing in Finland and other countries as well, more attention should be given to the disaster preparedness and the services' dependency on critical infrastructure, such as power supply and IT-services. Fire safety and rescue planning is not sufficient to prepare for major hazards. It should be considered whether preparedness and continuity planning should also be a legally binding requirement for all social service providers, since their clients consist of vulnerable populations. Completing preparedness and continuity plans, and better connections to the local government and the next of kin of the clients in the services, would both improve the overall resilience of the businesses and local communities. Better public sector leadership is needed in disaster risk management. In addition to the services provided for the elderly and the disabled, other vulnerable groups should also be considered while preparing for disasters. Local governments' social service departments should include all private service providers in their disaster risk reduction and preparedness activities, and collaboration with other disaster management actors should be intensified.

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