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Enhancing Public Resilience: A Community Approach

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Abstract – The overall aim of the paper is to explore two key areas in crisis management: (a) The role of local communities in crisis preparedness and response, and (b) How to involve the citizens in this task. Specifically we ask: What areas are important to develop in order for public resilience to be enhanced? The study has a broad scope and utilizes a novel design since it takes four stakeholder perspectives into consideration: The perspectives of municipal safety coordinators, members of voluntary organizations, semiorganized individuals, and nonorganized individuals. In total 33 in-depth interviews were undertaken in three different Swedish municipalities. Seven major themes related to enhanced public resilience were developed in the analytic process: (a) Collaboration: Formal and informal practices, (b) Specific competences and general abilities, (c) Collective efforts and individual self help, (d) Education and empowerment, (e) Traditional communication versus digital media, (f) Individual motivation and involvement, and (g) Generation and age. From these themes four policy-level recommendations aimed for civil servants and similar public authority representatives. The recommendations consist of four key words, or “The four In:s; Inclusive, Interested, Insistent, and Inventive”. The study is part of an extensive research project, Public Empowerment Policies for Crisis Management, funded as part of the European Community’s Seventh Framework Program.

Keywords – *public empowerment, crisis management, resilience, community, collaboration*

1. Introduction

Risks, crises, and disasters are prevented and managed by professional crisis managers, authorities and governments. However, as Berger and Neuhaus (1996:152) conclude in their well known book *To empower people*, individuals and communities, not the state, are best situated to answer how public resilience can be enhanced in order to cope with risks and manage crises and disasters. By turning towards a community approach in which every individual is regarded as an asset with resilience capabilities that can be actively used in a crisis situation, we can better prepare for and manage different types of crises in the future.

This paper reports research on how to empower the public to undertake a more active role during societal crises and emergencies. The overall aim of the paper is to explore two key areas in crisis management: (a) The role of local communities in crisis preparedness and response, and (b) How to involve the citizens in this task.

The study has a broad scope and utilizes a novel design since it takes four stakeholder perspectives into consideration: The perspectives of municipal safety coordinators (or similar role), members of voluntary organizations, semi-organized individuals, and non-organized individuals. These four perspectives are integrated in the study, which is reflected in the selection of informants and in the presentation of results. Our findings result from an extensive research project, Public Empowerment Policies for Crisis Management¹.

The background of the present study is a call by the European Council for increased action at Community level to prevent disasters and mitigate their impacts. In response to the call, a Community approach on the prevention of natural and manmade disasters was recently launched. According to the Community approach, awareness raising of the general public can contribute to disaster prevention [COM(2009)82]. Likewise, the European Security Research and Innovation Forum (ESRIF) states that European citizens should be regarded as a decisive and integral

¹The research project Public Empowerment Policies for Crisis Management has identified best practices for community approaches to crisis resilience and suggested directions for future research and implementation, for more information see <http://crisiscommunication.fi/pep/about-the-project>. The project has been funded as part of the European Community’s Seventh Framework Program (FP7/2012–2015) under grant agreement number 284927.

active part in any future crisis management solution. Every individual has his or her own resilience capabilities that need to be enforced and deployed in a crisis situation (ESRIF Final Report 2009:112). European policy on enhancing public resilience thus informs the visions of and actions taken by civic organizations focusing on risk- and crisis management on the local level. The Swedish Civil Defence League, for example, states in an information booklet that the nation presently has a crisis management system in which: "Everybody in society should be mentally and practically prepared for unexpected situations that may arise" (Swedish Civil Defence League 2004:5). A viable way of moving forward towards increased public engagement in situations of crisis and disaster is thus formally recognizing the value of local volunteer efforts (United Nations 2005). Regulatory frameworks must encourage volunteerism by empowering people with formal roles during and in the aftermath of disasters.

2. Analytical Framework and Previous Research

The analytical framework employed in this research is constructed by a fusion of sociological disaster research and risk perception- and communication theory. Key concepts within these streams will be addressed in the following sections.

As mentioned above, the aim of the study is twofold: First, we explore the role of local communities in crisis preparedness and response, and second, we work out suggestions on how to involve citizens in this task. The two objectives join under the umbrella concept of community approach. In this paper, community approaches refer to ways in which citizens and groups might be included in the management of crises and thus facilitate more effective crisis management. Consequently, community approaches attempt to engage the full capacity of the civil and nonprofit sectors, including voluntary organizations and the general public.

2.1. Prosocial behaviour in disaster

Following from the introduction above, the designing of a community approach presuppose that people are prone to display prosocial behavior, that is, they are willing to help one another in situations of crisis and disaster. As noted by Bierhoff (2002), prosocial behavior is embedded in spatial environments and influenced by cultural factors that predict its likelihood on a community level. The community as a unit of analysis thus becomes crucial for understanding citizen involvement in responding to societal needs (Linnell, 2013).

Regarding individual- and collective response efforts, it is crucial that we recognize the misconceptions continually reproduced by means of news- and popular media. For example, more than five decades of studying human response to disasters has taught us that people rarely panic or give way to criminal activity. As noted by Quarantelli (1993:4), "*Prosocial rather than antisocial behaviour is a dominant characteristic of the emergency time period. If disasters unleash anything, it is not the criminal in us but*

the altruistic". People are unlikely to cause harm to others as they reach for safety and may even put their own lives at risk to help others (Clarke 2002:21). Accordingly, most citizens respond constructively to various threats by bringing as much information and as many resources as they can to bear on the problem of how to cope with an incident. All in all, behaviour in the disaster response period is generally prosocial as well as rational (Perry & Lindell 2003:50).

It is well established that those affected by a disaster often initiate such activities as emergency first aid, and search and rescue, rather than passively await intervention by governmental authorities. It is also well known that non-victims in the disaster impact area engage in helping behaviour directed at victims (Perry & Lindell 2003:52). However, as noted by Quarantelli (1993:9), many dedicated volunteers with a wide variety of skills are not necessarily an organizational resource. In fact, Quarantelli states, "*in the absence of very good prior planning of who will use volunteers, where they will be sent, how they will be supervised, when they will be used, and so on - in the absence of such detailed planning, the sheer presence of masses of individual volunteers will simply create another disaster related organizational problem*". Accordingly, the aim of the present project is to develop strategies for harnessing the willingness to help, but to do so in a systematic manner.

2.2. Framing the community approach

A community approach serves the purpose of maintaining and strengthening societal security. Societal security is a much debated concept which has been defined by Burgess (2012:8) as "*protection from crises caused by intentional and unintentional human acts, natural hazards and technical failures [which] depend heavily on the cultural and even moral facility of people*". It also means that society is not just the passive object of security (i.e. that what is to be protected) but also an active producer of security (i.e. that what protects). Accordingly the notions of security and resilience share some basic characteristics. The concept of resilience has been defined in many ways. Aguirre (2006:1) defines resilience as "*physical, biological, personality, social and cultural systems' capability to effectively absorb, respond, and recover from an internally or externally induced set of extraordinary demands*". Community resilience, then, entails the ongoing and developing capacity of the community to account for its vulnerabilities and develop capabilities that aid that community (Chandra et al. 2011:9). The Scottish Government, for example, defines community resilience as "*communities and individuals harnessing local resources and expertise to help themselves in an emergency, in a way that complements the response of the emergency services*" (Scottish Government 2013:4). Twigg (2009) suggests that community resilience should be understood through broad definitions and proposes an application of the concept as the capacity to (a) Anticipate, minimize and absorb potential stresses or destructive forces through adaptation or resistance, (b) Manage or maintain certain basic functions and structures dur-

ing disastrous events, and (c) Recover or “bounce back” after an event (Twigg 2009:8). In a comprehensive literature review on community resilience, Magis (2010:406) concluded that (a) communities can develop resilience strategically via collective action, (b) that community resilience is facilitated through developing and engaging diverse resources from throughout the community, (c) That community members can be active agents in the development of community resilience, and (d) That resilience is developed through engagement of the community’s resources, i.e. taking action and not just developing the community’s capacity. Consequently, the public’s individual and collective efforts to enhance community resilience is understood here as the ambition to maintain and strengthen societal security.

Like resilience, the concept of *community* has been defined in many ways. In this paper the community is seen as a potential producer of security, hence our attention is focused on efforts aimed at enhancing community resilience. There are different kinds of communities, including communities of place, interest, belief, and circumstance, which can exist both geographically and virtually (e.g. FEMA 2011; UK Cabinet Office 2011, Johansson & Linnell 2012). Communities are innately dynamic: people may join together for common goals and separate again once these have been achieved (Twigg 2009). In conventional emergency management, the concept of community has often referred to groups of people living in the same area or close to the same risks (Twigg 2009:9; McAslan 2011:6; Scottish Government 2013:5). This location oriented definition overlooks significant dimensions of community, which are to do with values, activities and structures (Twigg 2009:9). It also ignores the reality that disasters do not respect jurisdictions (NRC 2011:14). Accordingly, for the purpose of working out suggestions on how to enhance public participation in emergency preparedness and response, a broad conceptualization of community will be used which take into account the above definitions.

2.3. Previous research and the specific aim of the present study

In previous risk research the heterogeneity of the general public, regarding how people perceive and respond to risks and crises, have been pinpointed. Perception, assessment and knowledge of risks and crises in communities are influenced by individuals’ relationship with their physical and social environment (Brunsma, Overfelt & Picou 2007). Especially positional factors such as age and gender (see e.g. Olofsson & Rashid 2011; Olofsson & Öhman 2007; Zinn & Pierce 2002), and situational factors such as education, place of residence and having children (see e.g. Slovic 2000; Lindell & Perry 1992; Wall 2014) have been studied. Accordingly, in the preparation phase, before an emergency situation, crisis or disaster, it is important to map different perceptions and opinions in communities and social groups, in order to be prepared to adapt crisis communication to diverse stakeholders during a crisis, when immediate information is needed to avoid severe

damage or harm and allow protection (Heath & O’Hair 2009). Values of personal responsibility and community involvement need to be included in mitigation strategies.

The literature does not go very deep into the mapping of different types of communities or social groups and their preferences concerning spokespersons and message content, which is why this could be further investigated in order to meet the goal of enhancing community resilience. One example is that rural residents might need information that includes not only their own safety but also that of their livestock, which represents important economic and personal value to them. New residents might not be aware of special conditions in the area, warning systems and emergency procedures. For example the risk of natural disasters such as volcanic eruptions, earthquakes, hurricanes, and flooding or information and procedures in case of emergency, such as where recommended shelters are situated. Minority communities (such as racial and ethnic communities) are more vulnerable during crises, and display lower trust in authorities and officials (Brunsma, Overfelt & Picou 2007; Olofsson 2007). Some authors in the reviewed literature emphasize that focus should be on people and what people can do, instead of what risks and hazards they might face (Burns & Slovic 2012). A major part of the literature stresses the importance of using pre-existing or established networks (i.e. families, workplaces, associations, organizations, congregations, etc.) when reaching out to people (FEMA 2011; López-Marrero & Tschakert 2011). People prefer to participate in collective efforts through the groups and institutions in which they normally participate, rather than through forms of collaboration created specifically for crisis and disaster management (NRC 2011; Chandra et al. 2010). Thus, collaboration between different actors should occur prior to an actual event, and the matter of collaboration does not have to focus on crisis or disaster per se (Schoch-Spana et al. 2007). Many of the existing organizations, groups and networks based on collective needs and interests could be accentuated as potential actors in crisis and disaster preparedness and response. People and networks within specific interest groups or professions with no previous connection to crisis management could be in possession of skills or material resources well needed in crisis and disaster preparedness and response (Aguirre 2006).

However, there are still few studies that clarify in depth how community approaches can enhance public empowerment as well as crisis management. A major part of the available literature comes from the US, while contributions from the EU are still modest (Johansson & Linnell 2012). A tentative conclusion, therefore, is that empirical research on how to include the public in collaboration on crisis and emergency management in a European context is needed.

The present study was founded on the assumption that “the public” is neither representing a static nor homogeneous population of individuals. Rather, we need to consider different perspectives depending on previous individual experiences, and success factors, which can be part of the recommendations on how to connect with community needs and how to activate and utilize efforts within

the community. In a wide sense, the objective is to explore the interface between local authorities and voluntary initiatives in order to identify key enablers for enhancing public resilience. In other words, the study is about mapping the state of collaboration between local authorities and the voluntary organized, as well as nonorganized, public. Specifically we ask: What areas are important to develop in order for public resilience to be enhanced?

3. The Swedish Crisis Management Policy Context

The authors of the present study found the Swedish crisis management policy context to be particularly suited for this research since national regulations, as will be demonstrated, stress individual responsibility, as well as various forms of collaboration, for preparing and handling societal crises.

According to the government bill on societal safety and preparedness (Government bill, 2001/02:158), the Swedish system for crisis management is built on the principles of *responsibility*, similarity, and proximity. The principle of responsibility states that those who are responsible for an activity during normal conditions are also responsible during an extraordinary event (e.g. health, education, geriatric care, and so on). The principle of *similarity* states that an activity, as far as possible, should be performed the same way whether during an extraordinary event or during normal conditions. The principle of *proximity*, finally, states that a crisis ought to be managed where it occurs and by the nearest affected and responsible individuals or organizations. Thus, primary responsibility for managing a specific crisis is decidedly within the affected local community or municipality.

The Act on municipality and county council action before and during extraordinary events (Act, 2006:544) states that local and county councils shall reduce vulnerabilities and cultivate sufficient capacity for handling extraordinary events during peacetime. As local and county council resources are often very limited, this act provides a good basis for engaging the general public and the voluntary sector in order to coproduce safety and security.

The Act on civil protection (Act, 2003:778) states that individuals are primarily responsible for protecting their own life and property. As an individual citizen, you are supposed to be aware of, and prepare for, the fact that accidents and crises might occur and affect your everyday routines. In addition, you are supposed to be aware that societal resources during extraordinary events must be primarily directed to groups incapable of taking care themselves. Finally, you are supposed to provide for your basic needs regarding water, food and shelter, during the first phase of a crisis.

Recent government bills have emphasized the necessity of collaboration in order to maintain societal safety. The importance of the voluntary sector in collaborative efforts is emphasized in the government bill on collaboration during crisis (Government bill, 2005/06:133) and the bill on strengthened crisis preparedness (Government bill, 2007/08:92). Accordingly, voluntary engagement is cru-

cial for “society’s capacity to protect the lives and health of the population, the functionality of society and its ability to maintain basic values” (Government bill, 2007/08:92, p. 27).

4. Methodology

The following sections will present how informants were identified, how many were interviewed, how the interview guide was developed and tested, it will discuss interview ethics and describe how the interview data were analyzed.

4.1. Locating informants

In the Swedish policy context, as can be noted under the acts above (Act, 2006:544; Act, 2003:778), the possibilities for the general public to engage in societal crisis management is manifold. However, what is expressed in governmental policy as “preferred” ways of functioning is often a viable starting point for investigation and problematization of actual practices. In the present study we are specifically interested in the involvement of the civil sector during societal crises. We are focusing on the interface between bottom-up approaches of the engaged public, the varying level and activities of organizing crisis preparedness and management, and the top-down approaches of traditional emergency and crisis management professionals.

In order to analyse possibilities of increasing public resilience during crises, we performed interviews with municipal safety coordinators and individuals that are organized, semiorganized and nonorganized in respect to organizations volunteering during crises. In total, 33 in-depth interviews were undertaken, with representatives of the four social actors at community level:

- Representatives of local community or municipality level (safety coordinator or similar posts in the municipality);
- Members of voluntary organizations (dealing with basic forms of societal crisis management, e.g. Civil Defence Organizations);
- Semiorganized individuals (engaged in non-traditional forms of organization, i.e. networks etc. e.g. Missing People); and
- Nonorganized individuals (individuals with no known involvement in organized crisis management)

A basic criterion when locating informants was that some form of basic organization of voluntary forces was needed, because, as is often the case, local authorities and municipalities do not collaborate with individual volunteers, but with voluntary organizations. In addition, the fourth category of nonorganized informants was included in order to provide important input on aspects of motivation and potential involvement.

In order to obtain maximum variation in our informants’ views and experiences, participants were recruited from three regions in Sweden, all of them with specific

demographic and geographic challenges, which can represent not only Sweden and the Nordic countries, but also different other regions throughout Europe: The most southern region of Sweden is rather densely populated and vulnerable due to its flat topography and relative inexperience with extreme winter conditions. The middle area around Stockholm is very densely populated, yet, because of its key position in terms of administrative influence on the rest of the country, collaboration between societal actors in this region is somewhat more professional when compared to the other regions. The sparsely populated northern region of Sweden is characterized by its mountains and its inland climate. Due to extreme atmospheric conditions, especially during the winter, people are relatively experienced in weather-related precautions.

4.2. Interview guide and research ethics

The questions constituting the interview guide were developed by the authors. Four sets of partly overlapping guides were gradually developed as to comply with the various categories of interviewees (i.e. municipal safety coordinators, members of voluntary organizations, semiorganized individuals, and nonorganized individuals). The themes covered by the four interviewee categories were basically the same, but the order and formulation of the questions differed slightly. Some examples of crisis preparedness and management themes covered in the guides are (a) Individual responsibility (e.g. to engage, to act, and to be prepared), (b) Preparedness (e.g. education, training and exercises), (c) Collaboration (between the general public, voluntary organizations, and public authorities/local councils), (d) Communication (mainly between voluntary organizations and public authorities/local councils), (e) The role of civil society (e.g. should we expect civil society to be more involved, or involved in alternative ways?), and (f) real-life experiences (e.g. good and bad examples of collaboration, communication, etc.). The guides were semi-structured, which meant that the interviews were performed as conversations, where the order of questions could change and follow-up questions were posed when the situation so demanded.

Safety coordinators working in municipalities in the three regions were contacted and asked if they were interested in participating in an interview study concerning civil involvement in societal crisis management. Representatives of voluntary organizations dealing with societal crisis management (e.g. the Swedish Civil Defence League and the Women's Voluntary Defence Organization) were also contacted and asked to circulate our inquiry in their networks. Gradually, members of different regional and local sections of these organizations contacted the research group and volunteered to participate. All proposals to participate were considered by the researchers in order to reach the goal of maximum variation in order to analyze a number of differing perspectives.

Direct inquiries were made to key people dealing with the setting up, education, and training of Voluntary Resource Groups. Such groups function as a local and re-

gional community resource commissioned by the local municipality. Voluntary Resource Groups are made up of ordinary citizens who want to make a contribution and support their local community when resources are limited. Hence, they are summoned during times of crisis and emergencies to perform specific tasks. These tasks include for example managing convergence of spontaneous volunteers, securing access to food, water and shelter, and assisting professionals by performing low skill tasks. Education and training is financed by the Swedish Civil Contingencies Agency (MSB), while practical activities are operated by the local municipality and the Swedish Civil Defence League.

Semiorganized individuals, like members of Missing People network, SMS-lifesavers, and the Voluntary Mountain Rescuers were contacted through spokespeople or contact persons of these networks and associations. The procedure of securing research ethics followed the same steps as described above, that is, the official contact person circulated the inquiry in the network so that only those who wanted to participate replied to the research group.

The strategy for locating informants was as a mix of theoretical sampling (Corbin & Strauss 2008), purposive sampling (Jupp 2006), and snowball sampling strategies (Atkinson & Flint 2004). Striving for efficiency, direct contacts were made (when possible) with members and representatives of voluntary organizations in geographical proximity to the local communities where contacts with safety coordinators had already been established.

4.3. Analysis

Recorded interviews were transcribed by two hired research assistants. The amount and form of transcription depends on such factors as the nature of the material and the purpose of the investigation (Kvale 2007). In this study, we are primarily interested in factual matters, that is, the interview content. We are less focused on the structural, linguistic and interactional aspects of the interview conversation. Therefore, recorded interviews were transcribed following the conventions of basic transcription of conversational content. This means that the interviews are transcribed verbatim, from beginning to end. Contextual sounds and occurrences influencing the interviews are briefly described, and pauses and accentuations are noted, while voice quality (e.g. tone and pitch) and dialect are not. The goal of such transcription, as stated by Bloom (1993), is to selectively reduce the data in a way that preserves the possibility of different analyses and interpretations. In other words, the goal is to provide "lean transcriptions" that allow for "rich interpretations" (Bloom 1993).

Analysis of the transcribed interviews was undertaken in a collective manner by the research group, employing the approach of qualitative content analysis. This approach is generally used to interpret meaning from the content of text based data and, hence, adhere to the naturalistic paradigm (Hsieh & Shannon 2005:1277). A guiding analytical question concerned what factors might enable a community approach in which the general public can

take part in the management of societal crises, and what are the challenges of such an approach? In addition, the analytical work immersed and emphasized three general aspects in the material, namely the organization, communication and motivation underlying and supporting the possible existence of such an approach.

The analysis involved what Hsieh and Shannon (2005:1279) refer to as conventional content analysis. Practicing such an analysis means avoiding the use of pre-determined categories and instead allowing the categories and names of categories to flow from the data. This procedure is described by Mayring (2000) as inductive category development and it is employed by the analyst in order to allow new insights to emerge. In order to secure intersubjective understanding within the research group, a workshop on text based analysis was arranged. In addition, the researchers took part in each other's respective analysis. Subsequently, parts of the transcribed interviews were translated by the research group, from Swedish to English.

Seven major themes were developed in the analytic process. These are presented in the next section. The presentation of themes below does not adhere to any particular order. Following the presentation of results, the analytical themes are summarized in Table 1.

5. The Major Results

A general observation is that the scope and depth of collaboration between public and municipal emergency actors and voluntary organizations differ a lot depending on population density, size of local community and geographical characteristics. These factors seem to impact the degree of collaboration between professional actors and voluntary organizations, as well as the kind of material resources available. For example, small communities tend to lack resources when it comes to implementation of new communication channels. There are also more general differences. In the northern region, for example, collaboration in crisis and emergencies seems to a lesser extent to be based on voluntary forces specifically aimed at handling emergencies. In this area voluntary resources are often based on private-public collaboration, like haulage contractors and leasing companies for snow vehicles etc.

The major results show that there are particular areas that are important for enhancing public resilience. These areas are (in no specific order): (a) Formal and informal practices in collaborative efforts, (b) General abilities and specific competences, (c) Dynamics between collective efforts and individual self help, (d) Aspects of education and empowerment, (e) Traditional communication versus digital media, (f) Individual motives, and (g) Age and generations (see Table 1). In the following, each theme will be briefly explained. In addition, we identify a number of challenges and opportunities in each area.

Table 1: Major themes developed in the analysis

Themes	Short description
(a) Collaboration: formal and informal practices	Degree of task formalization between the public and municipal representative
(b) Specific competences and general abilities	Dynamics between public authorities' needs and volunteers' expectations
(c) Collective efforts and individual self help	Primary role of volunteers as resource or burden for professional actors
(d) Education and empowerment	The importance of accessible training in societal emergency preparedness
(e) Traditional communication versus digital media	The importance (for all relevant actors) of adapting to the digital landscape
(f) Individual motivation and involvement	Reasons for- and barriers to becoming part of voluntary crisis management
(g) Generation and age	Interviewee reflections on advantages and disadvantages with various ages

The theme of formal and informal practices (a) describes the degree of formalization in collaborative efforts between the voluntary public and municipal safety coordinators. Formal and informal ways of collaboration can thus be understood as endpoints on a scale, where most interaction between the municipality and the voluntary public occurs somewhere inbetween. Formal collaboration, in this material, means that the tasks handed over to voluntary groups are predefined and that collaborative efforts between the municipality and the voluntary public are planned, regulated and contractual. For example, one municipal safety coordinator states in the interview:

At present they [a Voluntary Resource Group] have received two projects from us to work with. I attended one of their meetings where we brought up the example of water security. And then they got an assignment to get back to me, at the municipality, and tell me what could be their contribution in this area. (10K:5)

The safety coordinator quoted above has made sure to establish a close relationship with a few key persons in his municipality's Voluntary Resource Group. The Resource Group is thus invited to take part in municipal emergency exercises and the members of the group are included on a municipal mailing list pertaining to issues of local community safety and security. However, this positive example of collaboration between municipality and voluntary organization is an exception in the present study. Instead, several safety coordinators in our interview data rely on informal collaboration, which implies that issues of insurance and economic compensation are not solved beforehand and that collaborative efforts are expected to arise ad hoc during a crisis.

Specific competences and general abilities (b) describes the dynamics between municipal safety coordinators'

needs and voluntary organizations' expectations regarding tasks and assignments that can be managed by others than the municipality itself. Voluntary organizations could adjust their activities to the predefined needs expressed by the safety coordinator while also, by themselves, identify various areas where they could serve as an important resource during times of societal strain. One member of a Voluntary Resource Group, for example, talked about the possibility of such groups to temporarily supplement professional actors in situations of a prolonged crisis:

What I talk about here is endurance, not just those rather limited situations like fires and the like, but also completely different situations, when there is a prolonged crisis. (...) Imagine then if the municipality could supplement with people from the voluntary resource groups, then you would increase endurance within the municipal management, or child-care, or elderly-care. (6F:7)

The dynamics between collective efforts and individual self help (c) describes different understandings of what could be the most appropriate and efficient task for the voluntary public to carry out in times of crisis. Collective efforts and individual self help can be understood as endpoints on a scale, where most tasks exercised by voluntary groups occur somewhere in between. That is, during a crisis people tend to both manage themselves in order not to restrain professional crisis managers but also engage in collective efforts in order to facilitate the work of professional actors. For example, one representative of a voluntary organization says the following on the dynamics between individual self help and collective efforts:

Primarily you have to make sure to manage yourself as far as possible, and act in a way that doesn't restrain those responsible for managing the crisis or emergency or whatever it could be. Then there are always those who, in addition to managing themselves have the capacity to help others, primarily your close family of course, but often also significantly wider circuits than that. (3F:1)

Accordingly, moving from individual self help to collective efforts means directing ones resources as to help not just the people in the immediate vicinity but also to help people you don't know before. Collective efforts are thus performed through various organizational forms, from traditional civil defence organizations to contemporary network organizations like Missing People. Individual self help is often taught within these organizations as part of general crisis preparedness abilities.

One way of elevating the voluntary public to the level of professional actors is to make sure people are educated and properly trained. This theme, here called aspects of education and empowerment (d), highlights interviewee statements in the present material regarding the importance of education and training. Two interviewees, the

first a member of a voluntary organization and the second a semiorganized individual, emphasise the individual self-development, or process of empowerment, made possible through education and training in societal crisis management:

You get to learn a lot about your own local community and you get to learn about, well, these practical things, and then also how you approach people in different situations and so on. (1F:3)

If I would happen to be on site during a traffic accident or something like that, I would just jump right in because I know what to do, so with this background many of us would surely come forward and help since we have the training. (24S:2)

Education in issues concerning societal crisis management is an integral part of most voluntary organizations included in the present material. However, in the interviews we have been specifically attentive to informant accounts regarding alternative and novel ways of conveying information to the voluntary public. We thus return to this issue in the suggestions for further research below.

In the following theme, *traditional communication versus digital media (e)*, interviews with safety coordinators, organized volunteers, and semiorganized individuals reflect the transformation process of communication before and during critical events; from traditional communication channels and ways of contact, into the new digital landscape of communication characterized by a multitude of digital communication platforms such as mobile phones, internet web pages, and social media. Interviewees' perceptions reflect the dynamic tensions of opportunities and challenges in traditional and new communication forms.

Individual motivation for getting involved is an essential theme in the material (f). The interviewees talk about, on the one hand, their own drive to engage in voluntary crisis management and on the other hand, about other people's motives for becoming active. Interviewees stress the difficulty of getting formally involved in traditional voluntary organizations. This is partly due to oldfashioned communication patterns and the interviewees' perception of voluntary organizations as bureaucratic and unwieldy.

The last theme, called *generation and age (g)*, is different compared to the other themes since it reflect discussions about an individual characteristic, namely age. Age is a central theme in the material. When the interviewees, regardless of whether they are civil servants, organized volunteers or nonorganized individuals, talk about age, their choice of words often highlights age from a functionalist perspective: young people are emphasized as capable and strong while older people are described as no longer in possession of power or influence. Furthermore, young people are described as difficult to reach and involve as volunteers since they are perceived as busy with family and work.

6. Conclusion

The aim of this study was to explore the interface between local authorities and voluntary initiatives where the engaged public might be able to support professional actors. Seven major areas have been identified; Collaboration: formal and informal practices, General ability and specific competence, Dynamics between collective efforts and individual self help, Aspects of education and empowerment, Traditional communication versus digital media, Individual motivation and involvement, and Age and generations. In this section we present some concluding thoughts along with suggestions for further research. We then bring this paper to an end with a few policy-level recommendations aimed for civil servants (like municipal safety coordinators) and similar public authority representatives. The idea is that these easy-to-use guidelines will provide an efficient tool in when creating appropriate platforms for interorganizational and intersectorial collaboration.

From the perspective of safety coordinators and local authorities, there are some obstacles for developing the public/municipal emergency organization, i.e. voluntary forces are superfluous, and some public/municipal safety coordinators hesitate because organizing the voluntary forces takes too much time and energy. From the perspective of the voluntary sector, many members might be frustrated because of bad communication. Local voluntary organizations need to know what they can do for their community, but the council is often reluctant to hand out relevant tasks. In order to receive funding, local voluntary organizations are meant to be carrying out regular training exercises according to specific scenarios. Most voluntary organizations express a need to carry out these exercises together with public/municipal safety coordinators and local emergency management actors, but collaborative exercises are, at the time of the study, practically nonexistent.

Previous research has shown that people and networks with no professional connection to crisis management can be in possession of skills or other resources needed for societal preparedness and response (Aguirre 2006). However, an important conclusion from our results is that enhancing community resilience is not easily achieved, and it requires a substantial amount of resources in terms of money, time and knowledge from the part of public authorities and responsible organizations. One example is the importance of knowledge about the imperatives of the heterogeneity of communities and how physical and social environment as well as positional factors such as age and gender and situational factors such as education, place of residence and having children have on community resilience and vulnerability (cf. Brunsmma, Overfelt & Picou 2007; Olofsson & Öhman 2007; Wall 2014).

According to existing literature, important partnerships ought to be formed among groups that interact with a given population on a daily basis (Magis 2010; Quarantelli 1993). Scout troops, sports clubs, home-school organizations and faith-based and disability communities are

just a few examples of networks where relationships can be built (FEMA 2011; López-Marrero & Tschakert 2011). Thus, all members of the community should be part of the emergency management team, including social and community service groups and institutions, faith-based and disability groups, academia, professional associations, and the private and nonprofit sectors. Identifying the critical points of contact for all constituencies in the community makes communication and outreach most effective (NRC 2011; Chandra et al. 2010). Hence, during the preparation phase, public authorities need to map their communities and possible social groups, in order to be prepared to involve volunteers during a crisis (cf. Heath & O'Hair 2009). However, as can be discerned in the present study, there is often a certain gap between normative text (e.g. policy documents, instructions, vision statements, etc.) and descriptive accounts of actual practice. National policy might very well stress the importance of inter-organizational and inter-sectorial collaboration on the local level; however in reality municipal representatives might experience low or even nonexistent incentives for including the (organized) voluntary public in collaborative efforts on societal crisis management.

7. Suggestions for Further Research

The suggestions for future research are structured as to correspond with the presentation of research themes in section 5.1. Thence, the first suggestion pertains to formal and informal practices of collaboration: There is definitely a need for further organizational studies on the intersection between municipals, professionals and the voluntary public. Also, there is a need of developing new forms of common training exercises in ways that are not experienced as burdensome on part of the municipality.

Regarding the second theme, specific competences and general abilities, both municipal safety coordinators and members of voluntary organizations express the possibility of, and need for, the voluntary public to be active in a wider spectrum of societal service. For this to work, further investigation ought to be carried out in two areas particularly: On the one hand, the present and potential use of ICT as a tool for recruitment, development and maintenance of the voluntary public, and on the other, the intersection of municipal representatives and the voluntary public. How should an appropriate social platform be designed for these actors to optimize the possible exchange?

A suggestion for further research regarding collective efforts and individual self help is to explore the possibilities and develop new ways of converging and integrating basic crisis management and self help in the everyday activities and routines of people. Previous research show that people tend to become involved in already existing and available networks rather than entering into or creating new networks and organizations for the purpose of maintaining societal safety and security.

The present study provides no exhaustive description of the present status for educational efforts pertaining to societal crisis management. We thus have some indica-

tions that courses in emergency preparedness and in the Swedish crisis management system are taught within the framework of popular education. We know that emergency preparedness is taught within traditional voluntary organizations, like the Swedish Civil Defence League and the Women's Voluntary Defence Organization. However, these are just fragments in a wider puzzle of educational strategies. Therefore, a suggestion for further research is to provide a more complete picture of the educational and empowering efforts presently going on throughout Sweden and in the rest of Europe.

Due to the importance of preparing for and supporting public empowerment during crises in order to mitigate severe consequences and increase resilience, we suggest that future research in the field of traditional communication versus digital media should continue to study the communication technology development and its use in crisis communication by non-organized, semi-organized, and organized individuals as well as by public authorities and municipalities. Personal networks are important in crisis communication, and new technology supports personal communication in these networks. New possibilities are created to reach out to, and gather people, as well as disseminate information not only by authorities, but by individuals themselves. For example, groups of individuals can easily self-organize different activities through social media such as Facebook. However, previous research on the different resources and habits of citizens in a heterogeneous society characterized by multi-ethnicity, social and educational gaps and the ability to use new communication technology, shows that municipalities are not fully aware of nor using these new possibilities. Moreover, new and hitherto unknown challenges may arise that demand preparation. It is thus also important to continue to study the role of safety coordinators, who prepare for and manage crisis communication in the digital networked society.

Suggestions for further research about individual motivations and involvement include a deeper understanding of how different organizational forms interact with volunteer involvement. There is also a need to acquire more knowledge about how various degrees of formalization influence on the individual's will to commit to volunteer crisis management.

Last we suggest further research into how it is possible to create involvement across generations. The participants, regardless of whether they are professionals or lay people, all agree that it is important to include people of different ages in volunteer crisis management. However, the knowledge about who becomes involved in volunteer crisis management is insufficient; therefore we need statistics on a societal level describing volunteer involvement in various groups in society, not least regarding different age groups.

8. Policy-Level Recommendations

The following recommendations have been developed by the authors in response to the challenges and opportunities coming to light during the research project. The

recommendations are specifically developed for involving the public in societal crisis management and thus enhance community resilience, and aim to provide easy to use guidelines for crisis managers and other professionals working in local organisations. The guide consists of four key words, or "The four In:s; Inclusive, Interested, Insistent, and Inventive". The four In:s are first presented in detail and then summarized in an accessible way.

8.1. *Inclusive*

Following the wide variety of tasks pertaining to societal safety, there are at present great opportunities for converging the various resources and competences. This means that heterogeneity regarding such as gender, age and life stages, education, and socioeconomic status should be understood as an opportunity when it comes to improved crisis management. People do have a drive to participate in voluntary groups, however the lack of common exercises complicate the relation between the municipal authority and the voluntary organization. Hence a major opportunity for municipal safety coordinators and similar posts would be to start recognizing this and include the organized voluntary public in preparedness exercises programmes. The rapid technology development also brings new means to include and communicate with various publics and communication networks. However, not all citizens use new digital media, and thus, gaps in knowledge may emerge in a case of crisis. Therefore, it is important to adapt crisis communication according to diverse needs and preferences in order to include different groups, such as young, elderly, natives, immigrants, urban and rural inhabitants.

8.2. *Interested*

Municipal representatives along with other local authorities and professionals (e.g. police, rescue services and medical care) are in position of, and would certainly benefit from, reinforcing people's feeling of belonging and thereby boosting the collective responsibility for societal safety and security. On the part of municipal safety coordinators, this could be done by inviting and visiting community groups to inform about the specific needs and vulnerabilities within the local community or jurisdiction. Enduring relations could be maintained through well considered use of social media and other ICT tools. Furthermore, by focusing on already existing volunteer groups and non governmental organizations (NGOs) in the community it is easy to locate volunteers interested in crisis management. By connecting to existing associations of people, one can also motivate these people to engage in volunteer crisis management.

8.3. *Insistent*

Both municipal safety coordinators and voluntary groups benefit from building long term connections instead of merely assuming that the crisis situation itself will somehow provoke collaborative efforts to emerge. Collabora-

tive efforts are all too often centred on specific issues and thereby restricted in terms of time. Preferably collaboration should occur in a long term perspective and involve a variety of tasks. As stated above, for the actors to stay connected and updated, an increased and well considered use of appropriate social media and other ICT tools could be further stimulated. Further, it is important to involve children and young people in volunteer crisis management to ensure continuous relations between the municipality and the public.

8.4. Inventive

Collaborative efforts often occur outside the narrow frame of traditional voluntary organizations. For example, formal contracts might hinder people to engage in volunteer crisis management. However, the growing number of network organizations, supported by social media and other ICT tools, brings opportunities to transform bureaucratic and time consuming forms of collaboration to something that better fits present forms of voluntary involvement. In addition, new ways of securing the right knowledge, skills and competences need to be developed. This means, firstly, that the threshold for voluntary individuals to become engaged needs to be lowered and secondly, that the distribution of interests, skills, resources and competencies among voluntary individuals need to be documented in an accessible yet ethically tenable way. One way for the municipal safety coordinator (or similar) to single out key individuals is to include different voluntary groups in preparedness exercises and training activities. Moreover, recruitment efforts need to be expanded. Examples of possible arenas and institutions for recruitment are the popular adult education, employment services, upper secondary schools, public buildings like town halls, libraries, and exhibition halls, education for immigrants and recent citizens, sports clubs, religious congregations, interest based and cultural associations, and workplaces. The power of grassroots initiatives, community innovation and creative improvisation thus must be facilitated by organized government agencies (e.g. Bennett 2012; Clarke 2006).

8.5. Summing up the four In's

Inclusive

- Think of community groups and citizens as a resource and act accordingly.
- Recognize heterogeneity within community groups as an asset.
- Create social spaces for collaboration and initiate common exercises.

Interested

- Invite and visit community groups in order to inform about local risks and vulnerabilities.
- Use ICT and social media interactively, responding to people's inquiries, needs, and ideas.

- Let volunteers know you need them and expect their participation during common exercises.

Insistent

- Expect from collaborative partners to be knowledgeable of relevant policy.
- Facilitate formalized structures of collaboration without specifying the tasks in detail.
- Aim at building long term relations with key people in organizations and community groups.

Inventive

- Be creative and explorative in using ICT and social media to connect with citizens and groups.
- Be creative in finding and utilizing new arenas for recruiting citizens and groups.
- Make it easy for people to engage spontaneously in crisis management on short time contracts.

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