

SPONTANEOUS VOLUNTEERING DURING THE UTØYA TERROR ATTACKS – A DOCUMENT STUDY

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During the terrorist attacks in Norway 22th of July 2011, 77 persons was killed and many more injured. The attacks led to massive, multifaceted efforts of civil society, especially concerning the attacks at Utøya, for example - nearby civilians took part in dangerous rescue missions in private boats and more than 250 youths was taken care of in an ad hoc rescue center at a nearby camping. Most of the post-catastrophic research and investigations on the terror attacks have focused on the efforts of the official first responders and their respective authorities, and to a lesser degree highlighting the role of response from community and bystanders. As part of the ENGAGE project, we conduct a document study to shed light on civil society contributions to societal resilience during the terror attacks at Utøya. Based on academic literature investigation reports, newspaper articles and autobiographical books, we represent the Utøya terror attacks from what is known regarding helpers. We emphasize four domains of analysis, where we identify and discuss i) characteristics of the academic literature on the Utøya attacks, ii) a typology of actors, ii) volunteer coping actions, and iii) contextual factors. The findings show a dynamic and autonomous nature of spontaneous volunteering, influenced by contextual factors like degree of trust in formal response organizations, spatial proximity, professional and local knowledge.

Keywords: volunteer, terror, crisis management, resilience, Utøya.

1. Introduction

Voluntary assistance from the citizens - both by affiliated and non-affiliated volunteers - was significant during and the terrorist attack at Utøya island. The officially appointed investigation commission acknowledged that more lives had been lost if civilians had not taken spontaneous action and helped rescuing victims from the island during the attack, providing crucial information to the official emergency responders and assisting transporting the SWAT team to the island (Gjørv, 2012). The tremendous efforts by the bystanders and local community might reflect that despite the early experimental studies on the bystander effect – which indicated that humans tend to hesitate volunteer interventions – we indeed do act when faced with an acute situation (Philpot et al., 2019). The spontaneous volunteering during and after the Utøya attack could be further be seen as a kind of community resilience – meaning here the citizens' ability to self-organize and adapt (Shaw et al. 2014) – which may be crucial when faced by major disasters. By striving to identify the prerequisites for community resilience, it could be possible to obtain knowledge that may have generic significance for disaster preparedness planning.

According to Lowe, S., & Fothergill, A. (2003), researchers have documented the important role of voluntary citizens and organizations in disaster since the early 1950s. Even though volunteers have been acknowledged in the literature as important for the emergency response during major disasters, there has been a limited number of articles that analyse this contribution (Lowe & Fothergill 2003, Gurunget al. 2019). The academic literature on spontaneous non-affiliated volunteers has, according to Harris et al. (2017), predominately been oriented towards the performance of critical activities such as search and rescue and first aid immediately after events. Further, the research has addressed topics such as e.g. volunteer typologies Gurung et al. 2019, motivational drivers for volunteerism, (Gurung et al. 2019, Miller 2020), strategies and methods by governmental bodies and formal emergency response organisations for managing volunteers (Fernandez et al. 2006, Harris et al. 2017), post-traumatic stress and harm for volunteers (Thormar et al. 2014), and potential ethical conflicts and management concerns when volunteers are involved (Sigman, 2018).

Some authors have addressed the "Janus face" of spontaneous volunteering. For instance, Fernandes et al. (2006) described two main risks associated with spontaneous volunteers. This involves: 1) The failure of

formal emergency organizations to utilize volunteers, and 2) potential loss of life, property, and reputation.

In this paper we will especially address *volunteer typologies* and *contextual factors* influencing unaffiliated volunteerism in the specific case of the Utøya terror attack. We are focusing on the behaviour and the contributions of the spontaneous volunteers (impulsive and unplanned volunteering) who were present or converged to the disaster area *during* and *immediately after* the terror attack at Utøya island. By contextual factors we mean elements that influences volunteerism in a particular crisis situation. The elements could be present or associated with individuals, community and/or society.

In order to explore these topics, the following research questions (RQ) has been formulated:

- *RQ1: What is the role of volunteers in the academic literature on the Utøya terror attack?*
- *RQ2: How did volunteers contribute to coping actions for the Utøya terror attack?*
- *RQ3: Which contextual factors to contributed volunteer actions?*

1.1. Synopsis of the attack

After setting of a car bomb in the middle of Oslo the 22nd of July 2011, killing 8 people and injuring 209, the perpetrator moved to an island for a second attack. At 17.21 the perpetrator started the shooting at Utøya island, where the youth wing of the Norwegian Labour Party held their annual summer camp. Armed with a pistol and a semi-automatic rifle, he shot and killed 69 and injured 33 (gunshot wounds) of the camp participants.

To get to the island - by a boat operated by the organizers of the camp - he pretended to be a police officer who came to inform about the recent terror attack in Oslo and protect the participants. Immediately after arriving on the island, he killed the security guard (a volunteer policeman) and the camp manager. He proceeded to move around the island, shooting and killing youngsters. The young people tried to save themselves by hiding in the woods and inside buildings or trying to swim ashore. The perpetrator lured several of the young people from their hiding places by posing as police and assuring them that the attack was over, and then executing them.

Based on emergency calls from the victims, the police-initiated rescue operations. This involved local police and national special forces, the so-called Delta force. The attempt to come to the rescue was delayed by several factors. This included e.g. insufficient knowledge of the island's location, inadequate coordination between the local police and Delta, insufficient staffing and weak communication system, focus on the safety of emergency personnel (Gjørsv 2012), and marginalization of the

operational and strategic levels of the emergency organization and inadequacies in the "knowledge-based" parts of the work (Bye et al. 2019). The Gjørsv report estimates that the police had the potential to reach the island at approximately 18.05 if the operation had been more coordinated. Instead, the first group of police arrived at the island at 18:27, and the perpetrator was captured at 18:41.

During the attack, several non-affiliated volunteers in the area (at a local camping site and nearby houses) initiated help, rescuing the youngsters trying to escape from the island. These initiatives were both spontaneous and self-organized. They used their boats to pick up survivors from the water, provided first aid medical treatment (including lifesaving care, Gjørsv 2012: 20) and transported injured survivors to nearby medical personnel or hospitals. They were willing to expose themselves to danger that the organized response personnel tried to avoid. During the rescue operation, some of the boats were shot at by the perpetrator on the island.

Some volunteers transported the police towards the island when the police boat broke down due to incorrect use. These initiatives were mainly coordinated or directly guided by the police. It is reasonable to assume that the police would have used significantly more time before they had arrived on the island if these volunteers had not participated.

Later, in the chain of events and after the capture of the perpetrator, the work of the volunteers became more affiliated with the formalized emergency response. They helped ambulance personnel and conducted tasks at the local ad-hoc emergency centre that was established at a nearby hotel (Sundvollen hotel).

The Gjørsv report praises the volunteers and claims that the consequences of the incident would have been significantly worse if they had not participated.

2. Theoretical background

2.1. Typologies of volunteers

Social behaviour among citizens in the immediate aftermath of disasters has long been an area of research among scholars (Lowe & Fothergill 2003). Among these studies several has been oriented towards citizens who are present or converge to the area of the disaster. Fritz and Mathewson (1957) divide between *external convergence* and *internal convergence*, which respectively denote those moving to the disaster area and those present, moving to a specific site. Among these they divide between (1) the returnees (victims returning to help other victims), (2) the anxious (seeking for missing affiliates; family members), (3) the helpers (individuals who take action to help victims) (4) the curious (observers of the events), and (5)

the exploiters (motivated by personal gain; e.g. looters). Further, they divide between informal or unofficial convergence, and formal or official convergence – a typology first and foremost valid for helpers and returnees. Among helpers (or volunteers) it has been common to divide between those who are affiliated to "official" non-profit or governmental organizations, providing unpaid help and services, and those who are not affiliated to any organization (Harris et al. 2017). The latter group of volunteers and their efforts has been denoted by different terms in the academic literature, including *spontaneous volunteers*, *convergent volunteers*, *unaffiliated volunteers*, and *walk-in volunteers* (Harris et al. 2017). This group of volunteers has further been divided into those who 1) operates by their own independently from any formal response, 2) those who want to cooperate with official organizations, and 3) those who spontaneously and informally organise responses together with fellow non-affiliated volunteers (Harris et al. 2017). Shaskolsky (1967) use the following taxonomy for type of activities among spontaneous volunteers: 1) help formal emergency organizations, 2) creates an ad hoc organization to deal with the disaster, 3) use pre-existing non-emergency organizations to deal with the disaster, 4) carry out tasks within a loose informal network.

Whittaker et al. (2015) introduce emergent volunteerism to denote new forms of volunteerism towards what the persons perceive as unmet needs (e.g. preparation for natural hazards, terror attack, or "doomsday"). They underline that emergent volunteerism may thus emerge before an actual disaster occurs (voluntary preparedness for handling and provide help during perceived disasters). They also introduce the term extended volunteerism, which denotes volunteerism by organizations or organizational members extending their activities during crisis. The term seems to be tangent to the spontaneous volunteers that Shaskolsky (1967) describes as the ones who use pre-existing non-emergency organizations to deal with the disaster. A rather new category of volunteerism is "digital volunteerism". This term involves citizens engaging in actions by providing information and/or coordinates activities, spontaneous volunteers, and organisations (Whittaker et al. 2015) digitally.

2.1. Spontaneous volunteering and contextual factors

Although somewhat limited in extent, there are some publications addressing contextual factors that may explain spontaneous volunteering when a disaster occurs. Factors that have been pointed out include e.g. lack of response from formal organizations (e.g. Quarantelli & Dynes 1977), general knowledge among citizens regarding the capacity of the formal response organisations

(governmental and non-governmental organizations) (Stalling & Quarantelli 1985), the formal organizations degree of dependency on local knowledge/indigenous knowledge and relevant resources in the area (Coles et al. 2012, McAdo et al. 2009, Haynes et al. 2015), the formal organizations' practice for involving volunteers (Harris et al. 2017), and the existing community involvement and engagement among citizens (e.g. Forbes & Zampelli 2014). Existing community involvement has been related to social/personal networks (e.g. Whittaker et al. 2017), both in terms of extent and quality and existing social capital among citizens. Legal liability in a society has also been addressed as a crucial factor that may influence the extent of volunteerism in relations to disasters. There are also some publications that address cultural factors that influence whether citizens engage in volunteerism or not. Smith et al (2015) attribute the success of the clean-up in the aftermath of a major oil spill accident in New Zealand to the values and knowledge of volunteering local Maoris. Helsoot and Ruitenber (2004) have demonstrated that cultural factors may contribute to non-response in a crisis, due to reliance on formal emergency services. A more fundamental issue related to culture is the notion of volunteerism, that may differ across cultures. The concept of volunteerism is a western cultural construct, and activities regarded as voluntary within one community/society may not be regarded as "voluntary" universally (Robinson and Williams, 2001). This factor has been used to i.e. explain behaviour and motivations for the actions taken by citizens during an disasters.

3. Method

The study is based on a combination of literature search and document studies. The literature search was conducted through search strings in Google Scholar, Scopus and Web of Science. Search strings included "Utøya", OR "22 July", and all articles identified were scanned for relevance. All articles having the Utøya terror as topic were manually coded in three parameters, *subject of study*, *phase of event* and *topic of study*, to answer RQ1.

To investigate RQ2 and RQ3, we conducted a document study based on a snowballing technique originating from academic literature and the official commission report (Gjørøv, 2012). The documents were analysed for narratives and pieces of information to shed light on actions taken and their contextual basis. The following sources became the basis of analysis:

- Newspaper articles
- Investigation reports
- Free-text questionnaire results based on the official commission report's data gathering (Gjørøv, 2012)

^a There is a distinction between local knowledge and indigenous knowledge. Local knowledge is knowledge "about" a specific area. Indigenous knowledge is more comprehensive and based on experience from living in a specific area and a specific community.

- Autobiographical books
- Academic literature search

Considering the various degrees of quality assurance, peer-review and/or fact checking inherent in these sources, the validity (newspaper articles, autobiographical books especially) might be lower. In the following presentation of the findings, quotes presented are from the free-text questionnaire results, unless stated otherwise.

4. Findings

4.1. Characteristics of the academic literature on Utøya

In total, we have identified 154 articles concerning the Utøya terror attack. *The subjects and topics* addressed are predominately the health and functionality (60 articles) of the victims and next of kin, and - in a lesser extent - the health of first responders and citizens (8 articles). Post-traumatic stress and trauma treatment are the most common topic, but psycho-social care, social functionality, physical injuries are also addressed. 26 of the articles related to post-emergency events concerns public discourses and change processes within the Norwegian society. 28 is about methods and practices applied by first responders, victims, kin and citizens. 11 of the articles represent a variety of topics, such as e.g. public risk perception, regulatory and juridical issues, the perpetrator, media communication and representations of the event.

Table 1. Frequency of articles by subject, by topic and by phase (N = 154)

Subject	Topic	Phase	
Authorities	Communication and media	Before crisis	24
	7	8	
First responders	representation	10 During	26
	21	10	
Media	Health and functioning	60 During and after	9
	7	60	
Perpetrator	Methods and practice	28 Aftermath	95
	22	28	
Public	Perpetrator	16	
Public/volunteers	Public discourses & changes	26	
	1	26	
Victims and next of kin	Regulations and juridical	2	
	66	2	
	Risk perception	4	
<i>n</i> = 154		<i>n</i> = 154	<i>n</i> = 154

Concerning *phases of the event*, the majority of the articles in our sample (94) deal with post-emergency aspects (61%), i.e., events and conditions that are actualized days, weeks and years after the handling of the emergency situation. 26 articles address conditions and events that occur *during* the handling emergency (the attack, the police operation and medical rescue operation

during and the next days after). Most of these, 14 articles are about methods and practice used by the first responders. In addition, 8 articles deal with conditions and incidents that take place both during the attack and afterwards, which primarily regards the public and media as subjects, and representations of the event, public discourses and methods and practice as topics. 23 articles address conditions related to events and *before* the attacks occurred. Most of these (18) concerns the perpetrator and his mental state, life story and socioeconomic aspects. The remaining articles concerns authority preparedness related to ongoing public discourses, risk perception and regulatory and juridical issues.

In summary, the literature shows that the research has been dominated by an emphasis on the consequences in the aftermath of the attack. This is predominately related to health care consumption, psychosocial consequences for victims and kin, and the need of psychosocial care. Another, topic related to consequences in the aftermath is the changes in public discourses, first and foremost related to the process of making sense out of and attributing the motive/cause of the attack (e.g. a reflection of discourses or insanity of the perpetrator). None of the identified articles are addressing issues related to *external convergent volunteers*.

Overall - considering articles concerning phase before, during and after the disaster- articles about the public and volunteers counts for 31 of the articles in our sample. Only one of these articles in our sample address the volunteers related to Utøya. This is an article analysing the practice of microblogging among citizens during the attack, and how these activities contributed to mobilization of resources, provide intelligence and coordinate activities among emergent volunteers (Perng et al. 2013).

4.2. Document studies on civilian actions

As shown above, there exist until now only one academic publication which address volunteers at Utøya, even though their efforts have been emphasised and appreciated in different reports, white papers, and non-academic books newspapers and journals. In the following we have used a limited sample of available documents (see method section) to try to identify categories of volunteers and their efforts.

4.2.3 Coping actions of volunteers during and immediately after the Utøya attack

One could distinguish between two main types of contributing actions taken by convergent volunteers engaged in rescue operations. This is rescue action taken during *during* the attack and recovery action *immediately after* the attack. The convergent volunteers during the attack – present at the island - included unaffiliated and

affiliated (medic) *returnees*. They organized hidings and evacuation from the island and carried out first aid among the victims during the attack. One of the affiliated volunteers was shot and killed whilst protecting youths. Considerable efforts were taken by spontaneous (unaffiliated) volunteers present on the landside, including local residents, cabin owners, camping tourists, and camping employees. Rescue actions taken *during* the attack included: 1) evacuating victims from the island by boat, 2) distributing life jackets and rescuing victims by boats in the water during gun fire, 3) providing physical and psychosocial first aid, 4) organizing ad hoc emergency care centre and transporting victims to hospitals and an initially ad hoc emergency centre at a nearby hotel^b These actions emerged spontaneously during the attack, before any formal emergency organizations arrived at the disaster area.

Volunteers experienced great challenges due to that the missions were considered too unsafe for first responders, here described by a volunteer at Utvika camping: *"The emergency medical communication centre requested us to leave the place and get to safety due to that the area was not security cleared. Not a single ambulance came to Utvika camping. [...] The frustration was GREAT at Utvika camping 22.7.11"* (volunteer from Utvika camping). The volunteers were undoubtedly in danger of being harmed by the perpetrator: *"I was the first 'volunteer' in boat. Was shot at directly at least on two occasions"* (volunteer rescuing by boat).

Volunteers did also provide assistance to the police and medic workers when they arrived at the area. This included 1) intelligence based on local knowledge, 2) transportation by boat, 3) first aid and psychosocial support, 4) transportation of victims to emergency centres and hospitals. The efforts taken by spontaneous volunteers contributed to a significant number of lives being saved.

The efforts in the first phase of the attack were conducted by both individuals operating by themselves and individuals that informally organised responses together with fellow non-affiliated volunteers. An especially interesting example of this is the rescuing of victims by individuals, and eventually, "organized" help from residents at Utvika camping. One of the first to rescue victims by boat described a rescue mission with an automatic "flow", despite no prior training or coordination: *"Very quickly, a kind of private/informal rescue apparatus is established, with both camping members and local inhabitants. [...] At the dock, everything is still going on in an impressively calm and controlled way"* (Juvet & Juvet, 2012). The camping society seemed to influence the effectiveness of the rescue missions, both by the material resources at the site, but also having the social support of friends, as stated by a volunteer when collaborating with a fellow camper: *"I feel safe for the first time in a long time,*

I am not alone anymore", as opposed to later: *"... even though I have to others [to help] in the boat, I suddenly feel alone again. I don't know them, not the way I know Allan"* (Juvet & Juvet, 2012). Many tasks were initially based on ad hoc organizations and - to some extent - the use pre-existing non-emergency organizations (camping employees, employees at a nearby hotel). When the formal emergency organizations arrived at the site, some spontaneous volunteers provided their assistance. However, the majority of the spontaneous volunteers continued performing their task, independently and uncoordinated with the formal emergency organizations.

In the immediately aftermath of the attack (after the perpetrator has been captured) both convergent non-affiliated and affiliated volunteers showed up at official emergency centres offering services like psychosocial support and administrating the registering of victims. In addition, affiliated volunteers took part in the recovery phase directed by the organizations, serving as resources for specific tasks according to formal emergency plans. This included transportation between the land side and the island, and search for injured and dead. Unaffiliated volunteering, providing help in the recovery phase were increasingly based on external convergence, i.e. individuals that travelled to the area with the intention to offer their help. Several of them had a professional background that they considered relevant to handle with the victims. This included e.g. physician, nurses, psychologists, psychiatrists priests, imams etc. One example from the narrations of a boat-owner accompanied by a (former) ambulance driver showed the importance of professional support in the volunteer response. The ambulance driver uses techniques to collaborate with a distressed and paralyzed person – that at the same time needs to cooperate. Consequently, the boat-owner described; *"Even though I don't know him, it feels like I have known him all my life"* (Juvet & Juvet, 2012).

As briefly described above, the actions taken by volunteers during the attack were primarily taken by individuals operating alone or by individuals that informally organised responses together with fellow non-affiliated volunteers. In terms of coordination, there were several emergent informal emergency organisations operating independently and decoupled from each other. Coordination between spatially distributed volunteers were in some extent provided by phone calls, text messages and micro blogging.

When the formal emergency organization arrived in the area, the informal organization continued their work independently and uncoordinated with the formal efforts. They continued for example to perform tasks that the formal organizations did not provide, either due to lack of resources or due to formal emergency plan and procedures. The latter was primary related to safety procedures among formal emergency organization. While medical personnel and the police stayed safe zones and awaited rescue efforts, volunteers continued performing their tasks. Several of the volunteers operated within firing ranges, and some where shoot at (e.g. rescuer operating from boat). The voluntary efforts were gradually coordinated by

^b This hotel was later formally defined and used as the main formal emergency centre. The hotel did have this function according to the local formal emergency plan, but the initial use seems to have been initiated by spontaneous volunteers.

formal emergency preparedness organizations. The initiative for this coordination was in the beginning primarily taken by volunteers. Campers made phone calls to emergency services alerting about the situation as well as offering boat resources. Later, some volunteers took initiative to offer their boats to the police when they arrived in the area. For example, one helper provided the DELTA-team with a boat, explained its use, and indicated directions, which eventually led to the capturing of the perpetrator.

4.2.4 Triggers for volunteering

Some of the non-academical documents describing the efforts of volunteers addresses why they became engaged as helpers during the attack. Some of the volunteers played a very active role in the emergency response, claim that they reacted immediately realized that there was an attack going on at the island. Sources for information were radio and TV, news, or calls from acquaintances that had followed the news. Some reacted due to their observation of what regarded as abnormal activities and noise at the island, eventually in combination with the information from the news on the bombing in Oslo. Different volunteers' sensemaking processes relied on a combination of different information. One of the first volunteers who went towards the island with his boat has explained that he was following the TV news regarding the bomb blast in Oslo when he heard noise from the island, recognizing the sound as gunshots. Others claim that they reacted when they saw youngsters starting to swim from the island. Some of them have claimed that they until then thought the noise from the island was due to firecrackers, considering that the labour party youth camp often was noisy. Some of the cabin owners became involved in the rescue operations when victims swimming from the island came ashore and contacted them. Documents and news stories indicate that the first volunteers left shore in boats approx. 30 minutes after the attack started. It is unclear why the response started 30 minutes after the first shots, considering the claims of immediate response, whether it relates to travel time from the cabins and camping, gunshot sounds being muted by forest or wind direction, or other causes. A local residential, not in immediate proximity to the island - a cabin owner north of the island was the first to respond to the Utøya shootings. The local resident was informed by a friend by telephone, and the cabin owner reacted when recognized the gunshots. Differences in information and sensemaking contributed to a variation in terms when different distributed volunteers acted. The first one who reacted was not necessarily closest to the island. As the rescue operations evolved more volunteers joined in either due to direct request from persons already involved, or by new info from the television, radio, and social media.

In addition to the convergent volunteers there were several citizens *converging* to the area (*external convergence* and *internal convergence*) that did not take part in the rescue activities. These converging citizens could, with reference to Fritz and Mathewson (1957), be typified as curious and anxious. Among the curious ones, there were some filming the events. Several of the *curious*

bystanders at the camping site was eventually involved in the rescue operations when they were commanded to join in by some of the guest that were among the first informal responders. There were eventually also some "external convergences" represented by friends and family members of youngsters at the island.

5. Discussion

5.1. Role of volunteers in the academic literature

Within our sample of 154 peer reviewed academic publication there were only 31 articles addressing citizens in relation to the Utøya attack. The majority of these articles address topics such as public discourse and media coverage. Only one article addressing unaffiliated volunteers, although other documents accentuate their efforts were crucial for saving the life of a considerable numbers of victims, as well as supporting the police in their operation to catch the perpetrator.

5.2 Characteristics of the volunteer actions at Utøya

Our review of a sample of non-academic documents (investigation reports, evaluation reports, books, and newspaper articles). Shows a significant variety of voluntary contribution. In our analysis - based on theory - we have made distinctions between *affiliated* and *unaffiliated* volunteers. Except for a medic team with affiliated volunteers present on the island, the volunteering during the attack and in the immediate aftermath of the capture of the perpetrator was dominated by unaffiliated volunteers in the proximity of the island. These first responders among these volunteers seems to have been local residents, cabin owner, and campers, that by their own or together with some close relations (first and foremost dyadic such as e.g. spouses, friend etc.) made decisions by themselves - without any request or interaction with formal emergency organizations - to intervene in the situation. As the victims were brought or arrived (by swimming themselves) to the shore side, loosely informal network emerged, constituting several independent informal emergency organizations providing first aid, psychosocial support and transportation to informal and formal emergency centre and hospitals. The apparently most extended informal organization emerged at the camping site. This informal organization was extended by the incorporation of the pre-existing non-emergency organizations (e.g. the formal camping organization), and a nearby hotel. On the arrival of the formal emergency organization (police, ambulances, medical personnel) the informal organization continued to operate independently and to some extents do not obey orders to comply with the official emergency preparedness organization. The volunteers continued to perform tasks that the formal emergency organizations did not initiate due to their procedures and considerations regarding their own safety. Eventually more coordination between formal and informal organizations emerged, and several volunteers started to help the formal emergency organization up-on their requests (boat transportation).

Overall, numerous volunteers operated autonomously and detached from the formal response organizations (Police, special forces, fire department, ambulances etc.). Spatial proximity partly explains this high presence of coping actions by citizens, since many of the unaffiliated volunteers carried out autonomous rescue operations before the governmental rescue organizations were able to reach the area. Some of these activities were informally and spontaneously coordinated with other volunteers. When police and medical personnel were present in the area, several volunteers still carried out rescue operations in parallel and detached from the formalized efforts.

Our findings show that the typology of volunteerism is of a dynamic nature with regards to different aspects of the event as well as time. The findings show that some individuals and groups change categories during the event, and as new forms of organization emerge. Consequently, it is difficult to operate with mutually exclusive or static categories of volunteers. Further, as a general category, we may introduce the term, professional volunteerism to describe the volunteers who apply relevant professional competence whilst volunteering. We see a group that is affiliated with formal organizations (from health workers to camping reception personnel), but in the specific case they operate as spontaneous volunteers, some operated independently from formal organizations (including those they were affiliated with), and some were helpers for formal organizations. Further, some of them were -by serendipity- present in the area, which means that they could be denoted as internal convergent volunteers. Some travelled to the area (to help formal organizations taking care victims) and could be classified as external convergent volunteers.

5.3. Contextual factors contributing to volunteer actions

Based on existing representations of the Utøya attack, there are several factors which seems to elements that influences the quality of the volunteerism. The relatively fast response – resulting in rescue operations before the arrival of formal emergency organizations – could obviously be attributed to *spatial proximity* and topographical aspects. Information about the first attack in Oslo and observations of unusual activity on the island, seems to have contributed to an *alertness* among public citizens. This might explain both the outcome of the volunteers sensemaking, and probably also the willingness to act on this knowledge.

The *availability of relevant equipment* (boats, life jackets, first aid equipment, blankets etc.) was crucial for the operations. *Social bonds* between various communities (between campers, between victims and volunteers, between local residents, between hotel personal, between police and the local community authorities) were important for the emergence of ad-hoc informal emergency organizations, and efficient coordination.

Experience-based local knowledge was crucial for rapid access to key resources and to provide formal organizations with resources, knowledge and intelligence.

The presence -by serendipity- of persons with *professional knowledge* relevant for handling the crisis was important for the efficiency of the response. The *lack of coordination* and independency between individuals and groups of volunteers and formal emergency organizations contributed to fast response and redundancy in the ability to perform crucial rescue operations. In addition, the *reluctance to submit to the command of the formal organizations* and lack of obedience to orders contributed to fast response and efficient rescue operations.

Table 2. Contextual factors contributing to volunteer actions.

<ul style="list-style-type: none"> • Spatial proximity • Community alertness • Availability of relevant equipment • Social bonds • Lack of coordination • Reluctance to submit to the command of the formal organizations • Presence of individuals inclined to act
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Based on our data we are not able to discuss the motivation behind the volunteers' engagement in the actions. We have only been able to map different types of actions and interactions during the evolving events. Further, we have also limited information about the curious individuals who *did not take* initiative to join the rescue operations (both those led by formal emergency organization and those carried out informally). However, the presence of both by-standing curious and spontaneous volunteers, indicates that there probably are factors related to the individuals (e.g. personality, previous experiences, profession, social bonds and expectations) that are important in terms of spontaneous volunteering and that the presence of "potential spontaneous volunteers" in the proximity of the event may represent an important contextual factor, admittedly quite banal.

In the Utøya case, the spontaneous volunteers have been highlighted as "heroes who saved the day", when the efforts of some of the formal organizations failed in several areas (Bye et al. 2019). However, as pointed out in the academic literature, spontaneous volunteering during dangerous situations and disasters represents several dilemmas. Hypothetically, several of volunteers could have been killed or wounded by the perpetrator when performing their tasks, and/or performed tasks that would harm the victims, or even hampered and delayed the formal operations. Further, non-professional volunteerism may also represent a dilemma in terms of exposing civilian for situations that may enhance post -traumatic reactions. If the outcome of the action taken by several volunteers had led not successful in terms of rescuing the victims, several of the contextual factors contributed to the volunteers' actions could also be considered as problematic

in an emergency. Factors such as e.g. *Lack of coordination*, and *reluctance to submit to the command of the formal organizations*, could be represented as contextual factors that could be used to explain negative outcomes of an emergency situation.

6. Conclusion & Further study

We may briefly conclude our findings and discussion as follows; (1) there has been little effort on volunteerism in research, (2) there was a massive mobilizing of volunteers at Utøya, including individuals and groups, and their operation was largely autonomous and detached from formal response, (3) a volunteer typology is dynamic of nature, and it is not straightforward to categorize efforts into one category, (4) contextual factors like spatial proximity, local knowledge, social bonds and reluctance to submit to the command of the formal organizations influenced the volunteer efforts.

Further studies on the Utøya terror should a) further investigate the motivation behind the volunteers' engagement in the actions, and b) further determine the extent of the rescue missions. Related to crisis management, we propose investigating further how the identified contextual factors, as well as the dynamic and multifaceted nature of volunteerism, implicate the design and operation of crisis management models.

Acknowledgement

This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement N° 882850, through the project ENGAGE.

References

- Bye, R. J., Almklov, P., Antonsen, S., Nyheim, O. M., Aalberg, A. L., & Johnsen, S. O. (2019). The institutional context of crisis. A study of the police response during the 22 July terror attacks in Norway. *Safety science*, 111, 67-79.
- Coles, J. B., Zhuang, J., & Yates, J. (2012). Case study in disaster relief: A descriptive analysis of agency partnerships in the aftermath of the January 12th, 2010 Haitian earthquake. *Socio-Economic Planning Sciences*, 46(1), 67-77.
- Fernandez, L. S., Barbera, J. A., & Van Dorp, J. R. (2006). Strategies for managing volunteers during incident response: A systems approach. *Homeland Security Affairs*, 2(3).
- Forbes, K. F., & Zampelli, E. M. (2014). Volunteerism: The influences of social, religious, and human capital. *Nonprofit and Voluntary Sector Quarterly*, 43(2), 227-253.
- Fritz, C. E., & Mathewson, J. H. (1957). Convergence behavior in disasters: A problem in social control (No. 9). National Academy of Sciences-National Research Council.
- Gurung, S., Wali, N., Simmons, O., & Georgeou, N. (2019). The emergence of volunteerism in a post-disaster context: A systematic scoping study literature review. *Third Sector Review*, 25(2), 57-89.
- Gjørsv, A. B. (2012). Rapport fra 22. juli-kommisjonen. Norges Offentlige Utredninger, 14 (2012).
- Harris, M., Shaw, D., Scully, J., Smith, C. M., & Hieke, G. (2017). The involvement/exclusion paradox of spontaneous volunteering: New lessons and theory from winter flood episodes in England. *Nonprofit and Voluntary Sector Quarterly*, 46(2), 352-371.
- Haynes, K., Bird, D., & Carson D.B. (2015) Indigenous experiences and responses to Cyclone Tracy. In Palutikof, Boulter, Barnett, and Rissik (Eds.), *Applied Studies in Climate Adaptation*, Wiley Blackwell, Oxford, 297-306
- Helsloot, I. and Ruitenber, A. (2004) Citizen response to disasters: A survey of literature and some practical implications. *Journal of Contingencies and Crisis Management*, 12(3), 98-111
- Juvet, B., & Juvet, M. (2012). Med livet som innsats: Historien om en redningsaksjon på Utøya 22.juli 2011. Gyldendal.
- Lowe, S., & Fothergill, A. (2003). A need to help: Emergent volunteer behavior after September 11th. *Beyond September 11th: An account of post-disaster research*, 293-314.
- McAdoo, B. G., Moore, A., & Baumwoll, J. (2009). Indigenous knowledge and the near field population response during the 2007 Solomon Islands tsunami. *Natural Hazards*, 48(1), 73-82.
- Miller, S. (2020). Greenspace volunteering post-disaster: exploration of themes in motivation, barriers, and benefits from post-hurricane park and garden volunteers. *Journal of Environmental Planning and Management*, 63(11).
- Perng, S. Y., Büscher, M., Wood, L., Halvorsrud, R., Stiso, M., Ramirez, L., & Al-Akkad, A. (2013). Peripheral response: Microblogging during the 22/7/2011 Norway attacks. *International Journal of Information Systems for Crisis Response and Management (IJISCRAM)*, 5(1), 41-57.
- Philpot, R., Liebst, L. S., Levine, M., Bernasco, W., & Lindegaard, M. R. (2020). Would I be helped? Cross-national CCTV footage shows that intervention is the norm in public conflicts. *American Psychologist*, 75(1), 66.
- Quarantelli, E.L., & Dynes, R.R. (1977). Response to Social Crisis and Disaster. *Annual Review of Sociology*, 3, 23-49
- Robinson, D. and Williams, T. (2001) Social capital and voluntary activity: giving and sharing in Māori and non-Māori society. *Soc. Policy J. N. Z.* 17 (2001) 52-71.
- Shaskolsky, L. (1967). Volunteerism in disaster situations. Working paper. The Ohio State University.
- Shaw, D., Scully, J., & Hart, T. (2014). The paradox of social resilience: How cognitive strategies and coping mechanisms attenuate and accentuate resilience. *Global Environmental Change*, 25, 194-203.
- Sigman, R. K. (2018). Ethical dilemmas presented by convergent volunteers during emergency response. *Journal of business continuity & emergency planning*, 12(1), 56-62.
- Stallings, R. A., & Quarantelli, E. L. (1985). Emergent citizen groups and emergency management. *Public administration review*, 45, 93-100.
- Smith, K., Hamerton, H., Hunt, S., Sargisson, R.J. (2015) Local volunteers respond to the Rena oil spill in Maketū, New Zealand. *New Zealand Journal of Social Sciences*. Volume 11 (1), Online.
- Thormar, S. B., Gersons, B. P., Juen, B., Djakababa, M. N., Karlsson, T., & Olff, M. (2014). The impact of disaster work on community volunteers: The role of peri-traumatic distress, level of personal affectedness, sleep quality and resource loss, on post-traumatic stress disorder symptoms and subjective health. *Journal of Anxiety Disorders*, 28(8), 971-977.
- Whittaker, J., McLennan, B., & Handmer, J. (2015). A review of informal volunteerism in emergencies and disasters: Definition, opportunities and challenges. *International journal of disaster risk reduction*, 13, 358-368.