

Understanding the role of spontaneous volunteers in disaster: The case study of the World Trade Centre on 9/11

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ATTESTATION OF AUTHORSHIP

"I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person nor material which to a substantial extent has been accepted for the qualification of any degree or diploma at a university or other institution of higher learning, except where due acknowledgement is made in the acknowledgements."



Signed: _____ Date: November 10, 2016

Helen Perrie White

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ABSTRACT

The number of disasters is increasing every year, which means that the amount of people responding to disasters is increasing every year. The onset of spontaneous volunteers at a disaster stricken area is inevitable – they are motivated, well-meaning individuals who want to help. To date, there is very limited research on the convergence of spontaneous volunteers following a disaster. This is interesting considering they have been present at disasters throughout history and can pose as a resource or another obstacle for emergency personnel as well as the affected community. This topic is relevant because of the lack of literature and because of their potential to be a functional and reliable resource in times of disaster. Throughout this case study, this dissertation explores the significance, roles, and benefits of spontaneous volunteers, explores the drawbacks of spontaneous volunteers, and identifies the implications of current policies and practices geared towards disaster management. The present study relies on the literature systematically reviewed on 9/11 at the World Trade Centre. The thematic analysis conducted was based on reoccurring patterns throughout the literature. The findings indicate that spontaneous volunteers are motivated to converge to a disaster stricken area to assist in any way that they can, and many of them won't let down until they are assigned to participate in the response. The locals of an affected area (many of them who become spontaneous volunteers) possess knowledge about their community that is significant to emergency/disaster personnel. The study concludes that while spontaneous volunteers can be accompanied with drawbacks, they are a necessary and relied upon resource that response agencies need to include in their policies and guidelines in order to better utilise them. There is a need for a shift of approach in disaster management plans to incorporate spontaneous volunteers at a level where they are seen as a resource instead of inadequate or a burden.

Keywords: spontaneous volunteers, disaster, motivations, significance, benefits, drawbacks, community, policy

CHAPTER 1: INTRODUCTION

1.1 Overview of volunteers/Citizens in disaster response

Disasters and emergency events affect thousands of people globally every year (Coleman, 2006). Disaster is an interaction between natural events and vulnerable humans (Chester & Duncan, 2010). Disaster and emergency management relates to the organisation and management of resources and responsibilities for dealing with all humanitarian aspects of emergencies (Coppola, 2015). Disaster and emergency management aims to decrease the effects that disasters and emergencies pose on people through mitigation, preparedness, response and recovery (Coppola, 2015).

When a disaster strikes, there are many people who volunteer and may play a vital role in the disaster response process. Indeed, different studies suggest that without the efforts of volunteers, immediate response and long-term recovery would not proceed at the pace it does, nor would it have as high of a success rate (Orloff, 2011). Citizens responding spontaneously to help in the aftermath of a disaster was first documented back in the 17th century. One example is the Great Chicago Fire of 1871, where nearly 20,000 buildings and seventy-three miles of street were devastated (Orloff, 2011). In response to this event, architects, citizens, and firemen volunteered to work nonstop to rebuild the city. Meanwhile, other cities from around the world sent supplies, money, and even books (Orloff, 2011). Due to the efforts of these volunteering citizens, 300,000 buildings were built in just three months. More recently, immediately following the blast of the 1995 Oklahoma City bombing, fire, emergency medical, law enforcement personnel, along with voluntary organisation workers, and many civilians entered the bombed structure in a massive search and rescue efforts. In some instances, human chains were formed to accommodate the safe and rapid removal of victims, as they were located (Oklahoma OEM, 1995). The Compassion Centre, established by volunteers within seven hours following the impact, provided essential information services, mental health counselling, and comfort to grieving family members (Orloff, 2011). These examples reflect how volunteers and spontaneous volunteers have taken immediate actions after a disaster. With the number of disasters on the rise (United Nations Environment Program, 2014; Whittaker, McLennan, & Handmer, 2015), the onset of spontaneous volunteers is inevitable. Disasters are often accompanied by the large influx of different types of volunteers, and much of the time, many of them are mismanaged or not used at all (Atsumi & Goltz, 2014). There is a gap in disaster management plans and a very limited amount of research on not only volunteers, but even more importantly, spontaneous volunteers. Moreover, in disaster, spontaneous volunteers may be valuable resources to respond to such events. However, researchers and emergency managers tend to start their focus on spontaneous volunteers once an emergency or disaster has already begun making it much more difficult to efficiently integrate them in disaster response and recovery (Whittaker et al., 2015). Furthermore, there has been very limited research done on the role of spontaneous volunteers during and after disaster to date. This

study aims to fill this gap by contributing to a better understanding the role and significance of spontaneous volunteers in disaster and how their efforts contribute towards the affected communities and emergency response agencies after a disaster transpires.

This chapter will provide some background information on volunteers in emergencies or disaster. It will distinguish between the different types of volunteers and explain why their differences are important to emergency response agencies. The main focus of this study is on volunteering in the United States of America, so a background of the nation's emergency management agency and its framework is given along with an introduction to the major event of this study, which is the terrorist attacks on the World Trade Centre on 9/11. The United States was chosen as the location of this study due to their being such an incredible response rate to disasters ever since 9/11. For example, the American Red Cross had never witnessed that many spontaneous volunteers converged to the scene of a disaster prior to that event (Lowe & Fothergill, 2003; Steffan & Fothergill, 2009). Ever since 9/11, spontaneous volunteers have added an element that disaster management in the USA is adjusting to. The chapter will then provide a background on volunteers, the goal of this study, and the research question along with the objectives of this study.

1.2 Types of volunteers

During and after a disastrous event occurs, there are many different types of people who respond and at different times. Many of these people are volunteers. Not only are there different levels of volunteerism, there are also categories of the types of people that choose to volunteer. Therefore, it is important to understand the different types of volunteers since this may have implications for managing such volunteers in the different phases following disasters. The sub-sections below distinguish between two broad categories of volunteers, including the affiliated and unaffiliated volunteers.

1.2.1 Affiliated volunteers

During and after a disaster, the affiliated volunteers generally participate in formal volunteering actions. These are attached to a recognised voluntary agency that has formally trained them for disaster response. The affiliated volunteers are invited by that agency to become involved with a specific scenario (FEMA Student Manual, n.d.). Affiliated volunteers contribute with their unpaid time to the activities of the organisations or established entities that they are associated with (Lee & Brudney, 2012). These organisations provide the necessary training, skills, and information to their volunteers prior to the occurrence of a disaster. This preparation allows them to be a significant resource during and after disaster because they possess proper information about disaster management, have an understanding of the existing tools and disaster management procedures, received adequate training, and have relevant knowledge to effectively contribute to disaster response and recovery (Barsky, Trainor, Torres, & Benigno, 2007). More specifically, there are volunteers that are put on assigned tasks within the incident command system. Notably, this category also includes the *recruited volunteers*, who are

personally requested to assist by the incident command system due to their unique and needed skills (Fernandez, Barbera, & van Dorp, 2006a).

1.2.2 Unaffiliated volunteers

Unaffiliated volunteers are those who volunteer in an informal way. This group of people is not attached to a recognised agency and the people often have no formal training in emergency response, nor are they officially invited to become involved. Nonetheless, unaffiliated volunteers are motivated by a sudden desire to help others in times of disaster or emergency (FEMA, n.d.). Unaffiliated volunteers assist directly with the situation, but without being part of a formal organisation (Lee & Brudney, 2012). Unaffiliated volunteers are also known as spontaneous volunteers who genuinely want to help and thus represent resources potentially useful to disaster management agencies. Informal volunteers might participate individually or as part of a group both on a short-term or long-term basis (Whittaker et al., 2015). Typically, these volunteers are from the devastated area because the natural response for the majority of citizens of a devastated area is to see what they can do to help (Orloff, 2011).

1.2.2.1 Defining spontaneous volunteers

There are numerous and conflicting definitions of what a spontaneous volunteer is (Fernandez et al., 2006a; Cottrell, 2010; Whittaker et al., 2015) For the purposes of this study, a spontaneous volunteer will combine definitions of 'spontaneous volunteer', 'emergent volunteer', and 'convergent volunteer'. Cottrell (2010) simply defines 'spontaneous' volunteers as "those who seek to contribute on impulse – people who offer assistance following a disaster and who are not previously affiliated with recognised volunteer agencies and may or may not have relevant training, skills, or experience" (p. 3). Emergent and convergent volunteers are simply those who converge on an emergency area, or emerge to assist (Barraket, Keast, Newton, Walters, & James, 2013). These types of volunteers include survivors and people in close proximity to the disaster site that begin to assist right away. These people are involved first in the disaster response before emergency personnel arrives, and then continue to assist. For example, in the 1976 Tangshan earthquake in China, 300,000 people survived and crawled out of the debris, immediately forming rescue teams that ended up saving 80 per cent of people buried in the debris (Whittaker et al., 2015). Since the main focus of this study is on *spontaneous volunteers*, therefore they will be described in more detail in Chapter 2, which will review the existing literature.

1.3 Existing Disaster Volunteer Management Systems (USA)

1.3.1 Federal Emergency Management Agency (FEMA)

In 1979, President Jimmy Carter was responsible for creating the USA's first comprehensive federal emergency response plan. He signed an executive order creating the Federal Emergency Management agency (FEMA), and its primary purpose was to, and is to this day, coordinate the response to a disaster that has occurred in the United States, and immerses the resources of local and state authorities. FEMA was an independent agency from 1979-2003 and

in 1993 President Bill Clinton elevated the agency to cabinet rank. However President George W. Bush did not continue this. Instead, President Bush placed FEMA under the Department of Homeland Security, where it still remains. This is significant because many experts believe that FEMA should have remained as an independent agency (Gheytanchi et al., 2007).

1.3.2 National Response Framework (NRF)

FEMA is responsible for implementing the National Response Framework (NRF), formerly known as the National Response Plan (NRP). Within the United States, the responsibility for natural disaster planning and response follows a chain of progression in which responsibility first falls on local governments. Once the local government has exhausted its resources, it progresses to the county, then to the state and federal levels. In the event of a large-scale emergency, the Department of Homeland Security assumes primary responsibility for ensuring that emergency response professionals are prepared (Bosley, 2009).

Currently, the NRF places states and local government with the responsibility for dealing with spontaneous volunteer management and identifies certain supporting roles and functions of the federal government (Rivera & Wood, 2016). Under the NRF, the Volunteer and Donations Management Support Annex assigns primary responsibility for spontaneous volunteers and donations management planning to state, local, and tribal governments in coordination with national and local voluntary organisations in disaster (Rivera & Wood, 2016). According to FEMA, there should be a previously developed collective effort devised among government organisations, voluntary agencies, faith-based organisations, the private sector, and the media to make volunteer management more orderly and productive in disaster response activities (Alexander, 2010). A report done by the Department of Homeland Security after Hurricane Katrina found that thousands of faith-based organisations and non-government organisations (NGOs) were often the primary provider of a range of services. Many of the organisations were local, so they relied on the knowledge of the local communities, demonstrated best practices (like partnering with NGOs and other faith-based organisations), in order to provide needed services and to maintain family/community unity in the shelters (Orloff, 2011). This emphasises what FEMA is emphasising about building previously developed efforts.

In the United States, there are a variety of states that have volunteer management plans, which guide their respective jurisdictions. In some states like Florida, California, and Ohio, responsibility for the management of general and spontaneous volunteers is assigned to a specific organisation (Fernandez, Barbera, & van Dorp, 2006b). In addition to federal agencies, states and local regions are required to adopt the National Incident Management System (NIMS), where the goal is for government organisations and private organisations to be able to work together throughout different phases of a disaster (Rivera & Wood, 2016). NIMS provides a common, flexible framework within which government and private entities at all levels can work together to manage domestic incidents of any magnitude (Townsend, 2006). However, the task of spontaneous volunteers is only given outlying attention within NIMS as part of resource management. These federal disaster response structures have a number of flaws within the current framework. Rivera and Wood (2016) highlight three weaknesses:

- The identification and incorporation of volunteer resources by local authorities;
- The safe channelling and assignment of spontaneous volunteers;
- The prioritisation of response needs and skills and their delegation to volunteers.

1.4 Aim of the study

Spontaneous volunteers might play a variety of roles in the response and recovery of disasters. They may provide assistance as individuals, usually in the early stages of a disaster, for instance in search and rescue activities (Whittaker et al., 2015). They can serve as an immediate source of information for emergency agencies based on the town amenities and cultural standpoints (Orloff, 2011; Rivera & Wood, 2016). Spontaneous volunteers place themselves at the use of an organisation only once a disaster has occurred. These volunteers tend to choose to either: help an ordinary disaster organisation, formally create an improvised organisation for dealing with the specific situation, or carry out disaster-related tasks within a loose, informal network (Whittaker et al., 2015). Other tasks that might be performed by these volunteers include: debris clearing, collecting food, supplies and money, and providing shelter (Barsky et al., 2007).

While they represent as significant resources because they volunteer their time and can provide a wide variety of skills, spontaneous volunteers may also represent barriers or pose difficulties to emergency management organisations and their personnel. For example, their desire to help does not often coincide with their ability to be integrated into the response setting (Kendra & Wachtendorf, 2002). The arrival of so many volunteers in the aftermath of a disaster can create challenges for the emergency officials, tasked with delegating roles and responsibilities. As a result, emergency agencies may be forced to use their valuable time to handle the onset of volunteers instead of performing their other important tasks.

This study aims to better understand the role and importance of spontaneous volunteers in disaster as well as the challenges that they pose to emergency and disaster management organisations.

1.5 Research Question and Objectives of this Study

Traditionally, researchers and emergency managers tend to start their focus on spontaneous volunteers once an emergency or disaster has already begun (Whittaker et al., 2015). Yet, effective disaster management requires pre-planning that integrates spontaneous volunteers (Orloff, 2011), which means that having prior knowledge about spontaneous volunteers is crucial for that process. Within this framework, this study aims to explore to what extent spontaneous volunteers can contribute to improved or successful disaster management. In order to address this research question, this study focuses on the following objectives:

- To understand the role, significance, and potential benefits of spontaneous volunteers in disaster response

- To explore the potential drawbacks of spontaneous volunteers in disaster response and the difficulties they may pose to disaster management
- To identify the implications for policies and practices geared towards disaster management

To address both the research question and these objectives, this study will review the existing policy documents from key emergency and disaster agencies in the US. The present study will use the 9/11 terrorist attacks on the World Trade Centre in the United States as a case study. The event of 9/11 is used because this is the first time in history that so many people spontaneously volunteered and is the most documented event. Since this disaster, there has been an increase of people who spontaneously volunteer and there are limited policies on how to involve them. There is much to be learned about spontaneous volunteer management from this event to better use spontaneous volunteers in disaster management. Moreover, the United States was chosen as a focus of this study due to the more recent massive convergent patterns of the spontaneous volunteers in disaster and the country is in great need of improved policies and reports in emergency response.

1.6 Dissertation Outline

Chapter 1 has introduced the concept of volunteering, defining the different types of volunteers, with a particular focus on spontaneous volunteers. Then, it has given a background on existing volunteer systems. Furthermore, the aims and objectives of this study have been explained alongside with the rationale for undertaking this research. Chapter 2 will critically review the academic literature pertaining to the convergence of spontaneous volunteers during and after a disaster, their motivations behind the convergence, and the overall benefits and risks associated with spontaneous volunteers. Chapter 3 will explain the qualitative methods used in this study, including how the data was collected and analysed. Chapter 4 will present the findings of this study in order to address the objectives set in this introduction chapter. Chapter 5 will discuss the significance of the findings made in Chapter 4 and discuss these in relation with the existing literature. Implications from this study and related limitations will then be discussed, along with recommendations for future research.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter examines the management of volunteers, and more specifically, spontaneous volunteers and their roles during and after a disaster or an emergency. The first part of this chapter gives a background on disaster management and identifies why people come together to volunteer in times of disaster. The second part of the chapter discusses the motivations of spontaneous volunteers in detail. Then, how government organisations (GOs) and nongovernment organisations (NGOs) handle spontaneous volunteers is discussed, followed by the benefits and drawbacks that might come along with them.

2.2 Disaster Management

Disasters have affected humans since the beginning of time. As a result, societies continue to attempt to decrease their exposure to disasters. Disaster management is a practice that deals with rare and often times unexpected events (Hollnagel, 2014). The reduction of impact to life, property, and the environment are the primary motivators that guide disaster management (Coppola, 2015). There is a relationship between the degree of community acceptance to disaster management planning and the degree to which they experience disasters – the more a community is experienced to disaster, the greater its interest is in disaster management (Pearce, 2003). Disaster management covers issues in all phases of the disaster cycle: mitigation, preparedness, response, and recovery. Successful and effective disaster management plans are driven by implementing core components in each of the phases of a disaster. Disaster management as a practice and as a profession is consistently growing and improving – such development and adaption is driven by the contemporary needs of government and NGOs to be able to best assist citizens in times of disaster (Coppola, 2015). Central to disaster management is addressing the needs of the local disaster victims. During disaster, providing those affected with adequate material, food, shelter, emotional support and other resources is essential to effective disaster management (Coppola, 2015). Traditionally, disaster management has been very top-down with government agencies tending to make decisions and take actions without including many local community members before, during, and after a disaster strikes. In turn, different scholars and practitioners increasingly emphasise the need for a shift in approach, towards a more bottom-up approach that consists of more integration of local community members (including those who are affected) in the decision making process, and actions related to disaster management. In such a bottom-up approach, local community resources are taken into account, including their knowledge and skills. This can help disaster management agencies make the decisions that are best suited for the area prone or affected by a disaster, since this approach is also based on the social, cultural and economic specificities, and resources that exist and are available at the local community level.

In times of disaster, the large influx of spontaneous volunteers who are ready and willing to help is inevitable. Disasters may have major impact on human society, both physically and

emotionally. Immediate response and long-term recovery would not be able to move at the pace that it does in disastrous events without the efforts of volunteers (Orloff, 2011). Government and non-government organisations have been repeatedly ill prepared for the onset of large numbers of spontaneous volunteers and many times volunteers have been turned away (Orloff, 2011; Jarret, 2013). Part of being ill prepared correlates with the inaccurate assumptions of how people behave after a disaster strikes.

2.2.1 Disaster myths

Most people have the preconceived notion that individuals who have just undergone a disaster struck area lose the ability to act in an orderly fashion (Fischer, 1998). Local communities are seen as experiencing disasters as victims only and not as proactive volunteers (Brennan, Barnett, & Flint, 2005). People presume that the moment opportunity strikes in a tightly policed civilisation, humans will presumably become beasts (Hari, 2011). It is believed that people will hysterically breakdown (Quarantelli & Dynes, 1972), break out in panicked flight from the disaster area, act selfishly, be stunned into inaction (Quarantelli, 2008), and will be unable to function until professional help arrives (Gordon, 2006). People are believed to put their needs in front of others, even if it means trampling over them to do so. These beliefs are based on generations of subjective hearsay and reaffirmation – they are not grounded in a sound and consistent body of observations about the world (Wisner, Gaillard, & Kelman, 2008). Yet, decades of research have provided no such evidence of these actions; in fact, the research contradicts them entirely (Quarantelli & Dynes, 1972; Perry & Lindell, 2003; Auf der Heide, 2004). If disasters unleash anything, it is not the senseless and irrational being in humans, but the altruistic. For instance, following the 1985 Mexico City earthquake, the majority of the 500 survivors pulled from the rubble were rescued by spontaneous volunteers (Fernandez et al, 2006b). Instead of fleeing the scene, people risked themselves to save the lives of others. Following 9/11, over 40,000 unsolicited volunteers arrived at Ground Zero in New York wanting to help in any way possible (Lowe & Fothergill, 2003).

Much disaster response is weakened by a failure to properly grasp what is involved in a disaster (Trainor, Aguirre, & Bolton, 2008). As a result of people seen as helpless and passive after a disaster strikes, emergency agencies appoint a number of activities or tasks based on the distorted perceptions (Trainor et al., 2008; Drury, Novelli, & Stott, 2013). According to Arnold (2006) and Trainor et al. (2008), agencies prompt policies and actions that waste or improperly use/distribute resources that could be better used elsewhere. Engaging in unnecessary tasks can complicate emergency response and recovery by providing people with what they do not need. In turn, it is increasingly recognised that local people should be integrated to a greater extent within the disaster response and recovery actions (Wisner, 2004).

Emergency managers should formulate more protocols to involve surrounding the survivors who want to volunteer their help, as they are the first responders to the scene before emergency personnel show up (Brennan et al., 2005; United Nations Volunteers, 2011). Drury et al. (2013) says that by presuming a dysfunctional or helpless public and restricting information and/or excluding them from participating in their own protection, results in mistrust and prevention of collectively making progress in the response and recovery phases. Emergency agencies do not

take survivors' capacities into account, which is an important aspect and is further discussed in a later section.

2.3 Why do People Volunteer?

This section explores why different types of volunteers choose to volunteer in general or after a disaster. There is little research on crisis volunteering, however there is a vast body of literature on motivations for volunteering in general (Aguirre & Bolton, 2013). There are various types of motivations and reasons behind why people choose to volunteer. In fact, for some, it is not a choice, but more of an instinct because they are survivors of the disaster themselves. These are the emergent volunteers, who are spontaneous volunteers (Fernandez et al., 2006a; Orloff, 2011). Knowing why people volunteer can enhance the recruitment and continued involvement of volunteers in organisations, especially given the trend of episodic (short-term) volunteering (Cottrell, 2010; Shye, 2010, Aguirre & Bolton, 2013). The more affiliated volunteers prior to a disaster, the better. Those who are affiliated with an organisation possess proper knowledge, training, skills, and preparations when responding to a disaster. Registration of volunteers prior to an incident can help to catalogue personnel with relevant skills to be called upon in an emergency (Fernandez et al., 2006a).

2.3.1 Motivations for all Volunteers

Aguirre and Bolton (2013) claim that the little research that has been done on the motivations of crisis volunteers has found that volunteers have altruistic and egoistic motivations. The literature indicates that there are three categories of motivation: altruism, personal fulfilment, and personal growth (Aguirre & Bolton, 2013). More specifically, a couple of studies done in Australia, FEMA's Volunteer Management in Disaster training manual, and Fernandez et al. (2006b) have listed different reasons as to why people are inclined to volunteer. Although altruism is a strong motivator, disaster volunteers may have other motivations, and they often volunteer for more than one reason (Fernandez et al., 2006b). *Table 1* categorises the key motivations for volunteering spontaneously:

Table 1: The main motivations to volunteer

Altruistic behaviour	Personal fulfilment	Personal growth	Other reasons
<ul style="list-style-type: none"> • Feeling the need to do something • Some sincerely want to give back to society or to be part of a cause • Some do it for religious or faith based reasons 	<ul style="list-style-type: none"> • Enhance self-esteem • Help cope with inner anxieties and conflicts • Ensure family and friends are safe 	<ul style="list-style-type: none"> • To develop and practice particular skills • Develop new relationships • Networking with people • To gain experience to benefit their career 	<ul style="list-style-type: none"> • Broad and constant media attention • Proximity to the affected area

Source: adapted from FEMA; Zappala, 2000; Fernandez et al., 2006b; Cottrell, 2010; Aguirre & Bolton, 2013

Table 1 has four headings as the main motivators to volunteer: altruistic behaviour, personal fulfilment, personal growth, and other reasons. They are the main reasons people choose to volunteer. 'Altruistic behaviour' consists of the help that people want to give with personal gain not being a motivator. 'Personal fulfilment' is the want to help others while also helping one self emotionally. 'Personal growth' as a motivator is a bit more selfish because one is doing it for their personal benefit over anything else. 'Other reasons' are important aspects of motivation to volunteer, but do not fit in the other three categories.

[2.3.1.1 Social capital as a factor for volunteering](#)

Researchers use the concepts of social and human capital to attempt to explain why people volunteer. Social and human capital are different to one another, however, they are porous concepts and they often overlap. Social capital is defined by Bourdieu (1986, p. 248) as "the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalised relationships of mutual acquaintance or recognition". Social capital is anticipated as resources of individuals and groups rooted in social relationships, which are influenced by their location in a social network (Lee & Brudney, 2012). It is developed through networks of trust and common values that people have with one another – it is formed from communities, families, neighbourhoods, and organisations (Putnam, 2001; Brown & Ferris, 2007). Social networks provide financial (such as loans for property repair) and nonfinancial resources (such as search and rescue, emotional support, and information) – isolated individuals with few social ties are less likely to be rescued or receive assistance from others (Aldrich & Meyer, 2014). Through his research, Putnam (2001) found that social connectedness is a far better predictor of altruistic human behaviours, versus the attributes associated with human capital.

Lee and Brudney (2012) discuss how social capital increases the likelihood of volunteering in at least three different ways. First, volunteering results in people performing acts of kindness and assistance to one another collectively. They argue that the benefits of volunteering outweigh the costs of participation. Second, volunteering is an expression of identity, a sensation of being connected to those who will benefit from one's hard work. Last, social capital increases the chances of volunteer participation because the more social ties an individual has, the more likely he or she is exposed to people who are already volunteering, and asked to join them (Lee & Brudney, 2012). Social networks affect people's involvement in volunteering, so it is an important link for emergency management personnel and other organisations to consider in order to progress volunteer participation.

Aldrich and Meyer (2014) discuss previous research that has built up a strong body of evidence about the role of social cohesion and networks during and after a disaster. They take a different approach than Lee and Brudney (2012) to explore the benefits of social capital. Aldrich and Meyer (2014) address two relevant types of social capital: bonding social capital and bridging social capital. Bonding social capital (the most common form of social network), describes the connections among individuals who are emotionally close, such as family, friends, or neighbours, thus resulting in them having tight bonds to a particular group. Those with deeper

reservoirs of bonding social capital allow individuals to receive warnings, undertake disaster preparation, locate shelter and supplies, and obtain immediate aid and initial recovery assistance (Hawkins and Maurer, 2010). Bonding social capital can reduce individuals' likelihood of seeking formal aid during a disaster, and increase the likelihood of engaging in emergent social action to respond to disaster victims' needs. The higher levels of bonding social capital can equate in greater trust among people and more widely shared norms among community residents (Aldrich and Meyer, 2014).

Bridging social capital describes those who are loosely connected that span social groups, such as class or race, or organisation involvement. These connections are more likely to assist individuals advance in society (Aldrich & Meyer, 2014). The involvement in bridging social capital often comes from parent-teacher associations, political organisations, sports and other interest clubs, and educational and religious groups. Bridging social capital has been shown to provide similar benefits to bonding social capital in disaster context, as it does in daily life (Hawkins and Maurer, 2010). Association with social organisations provide a connection to an organisation, which in turn can provide support through institutional channels (Aldrich & Meyer, 2014).

[2.4.1.2 Human capital as a factor for volunteering](#)

Social capital stems from interactions among people, while human capital is an individual attribute (Coleman, 1988). Human capital suggests that education is a factor to increase one's awareness of social problems, simultaneously increasing one's empathy for others (Michel, 2007). Research findings show that higher levels of human capital are associated positively with volunteering (Lee & Brudney, 2012). People who believe it is their personal responsibility to help those in need are more likely to volunteer, and they also contribute more hours than people who do not believe it is their personal responsibility to help those in need (Michel, 2007). People who volunteer are likely to be above average in both education and income. Education is the strongest and most consistent predictor of volunteerism (Michel, 2007). Lee and Brudney (2012) not only agree with this, they say the recent developments in volunteer administration increase the likelihood that those with higher levels of human capital will be asked to volunteer formally by organisations. Volunteer recruitment is likely to be done by volunteer administrators and coordinators in non-profit and public organisations (McCurley, 2005); these officials look for a link between volunteers and specific jobs or positions. There is an increasing professionalization of volunteer work. Instead of broadcasting general calls for volunteers, the non-profit sector of organisations is recruiting volunteers with specific skills and backgrounds (McCurley, 2005). For example, those with legal, medical, and accounting backgrounds have increased (Lee & Brudney, 2012).

2.5 Spontaneous Volunteers

Individuals' instinct to emerge spontaneously in the aftermath of a disaster is not something new and documentation exhibits this throughout history (Whittaker et al., 2015). Spontaneous volunteers can be a significant resource to survivors and emergency responders as they might

save lives, but they are often ineffectively used, which in turn can create health, security, and safety problems (Fernandez et al., 2006b). Spontaneous volunteers often self-deploy to assist in any way that they can in an emergency situation. They act independently outside of the official emergency management coordination system of the disaster-impacted authority (Rivera & Wood, 2016). They can be the first responders, since they are generally local residents and neighbours living in the affected area (United Nations Volunteers, 2011). There are also the spontaneous volunteers who are not from the impacted area. Yet, these spontaneous volunteers can arrive at any time during the response or recovery phases of a disaster. These characteristics differ from the volunteers who are affiliated with an agency or organisation and make decisions based on direction or professional training (Lee & Brudney, 2012).

2.5.1 Collective/Emergent Behaviour

Researchers have tossed around the term “convergence” since disaster research commenced about 100 years ago – since the Halifax explosion in 1917 (Quarantelli, 1995). It is defined as a process of mass informal movement of people, messages, information, and equipment towards or into a disaster affected area (Fernandez et al., 2006a; Whittaker et al., 2015). Historically, the convergence of volunteers has tended to be proportional to the size of the disaster and the scale of impact and losses (Rivera & Woods, 2016).

Enrico Quarantelli, one of the first authors of disaster science research, introduced the concept of emergent behaviour during a disaster or crisis. Quarantelli (1995 p. 3) said “disasters are events where there is extensive elementary collective behaviour in that much of what occurs is new and different from everyday behaviour.” Crises and disasters are an irregular occurrence so they are an exemplar setting for collective behaviour because people can gather a consensus of opinion about what needs to be done (Fernandez et al., 2006b). People’s actions are not based on their traditional or conventional norms, but rather new ones that arise in a disaster scenario. New structure, new social order, and new norms are created collectively and as a natural reaction to a disaster (Quarantelli, 1995). These new forms of behaviours are defined as emergent behaviour. More recently researched, some sociologists believe that collective behaviour results from a sense of uncertainty about the scenario combined with the deep need to act and more likely to occur when formal response organisations do not meet the needs of the disaster victims (Fernandez et al., 2006b).

2.5.2 Benefits

It is suggested that spontaneous volunteers provide a variety of benefits to their neighbours, communities, and the emergency response agencies. Many survivors of disasters have been saved by spontaneous volunteers that responded immediately to the situation (Jarret, 2013). Spontaneous volunteers that emerge from disaster have an understanding of what the current issues are, and they are quickly able to organise themselves to accommodate what the local needs are. Whittaker et al. (2015) refer to this as ‘real time.’ Nobody knows the area geographically and communally better than the local people living there themselves, so they are potentially a great resource for emergency personnel and other organisations once they arrive on sight. To be as efficient and successful as possible during disaster response, knowledge and

resources that are immediately available are essential to the most effective disaster response. This includes anywhere from the local language and culture to those that require immediate help. Knowledge of the local area is one of the resources that volunteers have. These resources are capacities that volunteers possess.

The concept of capacity reflects the increased recognition of people's aptitude and competence to deal with natural hazards and overcome disasters. Capacities refer to the resources and assets that people possess to resist, cope with and recover from disaster shocks they experience (Gaillard, 2010; Wisner et al., 2008). Capacities tend to be ingrained in resources which are unique to the community and which depend on traditional knowledge, indigenous technologies and skills and cohesive networks. *Figure 1* provides a helpful visual.

Figure 1: Circle of Capacities Model (Wisner, Gaillard, & Kelman, 2011)

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These local citizens offering their information have the cultural understanding of the affected area that outside emergency responders do not necessarily have. They also have the ability to connect to local resources that are immediately available, both material and human (Orloff, 2011). People at the local level are best to identify their immediate response needs and contribute to local decision making for the future. They provide valuable insight into community needs, bringing trust and human touch to affected families as a part of the healing process. The

combination of the local people with those who possess the necessary skills can be rather effective when mobilised quickly (United Nations Volunteers, 2011).

The residents in the affected community are vital for providing a sense of connection, and decreasing the isolation and abandonment that is frequently felt by some in times of disaster (Brennan et al., 2005). As well as helping others, some believe that taking part in volunteering is helpful to the victims themselves (Fernandez et al., 2006b). Fernandez et al. (2006b) states that it can provide a meaningful distraction, reduce stress, facilitate the healing process, provide for an outlet of anger or sadness, and empower victims with hope and confidence in their coping process.

Economically, volunteers are quite valuable as they reduce the costs of actual labour. Without them, this labour would need to be paid for. They also contribute financially by speeding up the overall recovery process. The more quickly a community is able to get up and running, the sooner residents will begin earning an income again, businesses will operate again, and the community will stop incurring recovery costs (Coppola, 2015). Also, disaster-affected people generally have a great need for community services such as food and shelter, counselling, distribution of relief supplies, information, and others. These tasks can easily be performed by volunteers, which relieves the response agencies.

2.5.3 Risks and Drawbacks

Spontaneous volunteers also come with drawbacks, affecting emergency personnel directly and survivors indirectly. Often times, it is simply the large numbers of volunteers that causes difficulties and can be overwhelming for organisations to effectively involve them (Fernandez et al., 2006b). Spontaneous volunteers are generally well motivated and sincerely want to help, but if their efforts and resources are not coordinated effectively, their presence may be counterproductive and an added strain to emergency personnel or other organisations. Well-meaning individuals who want to volunteer their help can cause roadway congestion that blocks the way of emergency vehicles. Spontaneous volunteers can actually obstruct disaster response by creating health, safety, and security issues. Arriving ill equipped requires logistical support such as food, shelter, and protective equipment (Fernandez et al., 2006a) – this can reduce the amount of resources that were meant to be distributed to others. They can distract responders from their duties and interfere with their response operations (Fernandez et al., 2006a, Lee & Brudney, 2012). Unaffiliated or spontaneous volunteers present these challenges because their desire to help does not often coincide with their ability to be integrated into the response setting (Barsky et al., 2007). Spontaneous volunteers face barriers and are hindered from fulfilling their need to help or assist and some of them may demonstrate opportunistic and sometimes even deviant behaviours in order to overcome those barriers (Lowe and Fothergill, 2003). These barriers blocking them access to the disaster site include roadblocks put up the National Guard, specific sections quarantined by police or other officials, and even other volunteers following the protocols of the officials.

The existing paradox is the people's willingness to volunteer versus the system's capacity to use them effectively. Spontaneous volunteers want to help regardless of instruction (Orloff,

2011). Also, those who participate in the response in the early phases of an incident may later be unwilling to acknowledge official response leadership. Acting independently without being authorised by a response organisation may pose safety problems for the individual, other emergency responders, and victims (Fernandez, et al., 2006b). These individuals are referred to as *rogue volunteers* (Fernandez et al., 2006a&b; Rivera and Wood, 2016). Disaster sites can be extremely hazardous, sometimes more dangerous than one would assume. Spontaneous volunteers can place themselves in a situation of risk if they participate without the approval or guidance from agencies or organisations. For example, after the Oklahoma City bombing, a nurse volunteer assisting in a search without personal protection got struck by falling debris and later died from her injuries (U.S. Department of Justice, 2000).

Some authors acknowledge that there may be consequences for the reputations of emergency agencies and organisations when there is a failure to effectively involve spontaneous volunteers. It can create a poor public perception of the disaster response (Fernandez et al., 2006b; Coppola, 2015). The costs of lost opportunities could become publicly evident, such as the inability to manage spontaneous volunteers and lives are lost as a result, or the inability to for them to benefit psychologically by volunteering (Fernandez et al., 2006b). When many people experience this feeling of being turned away when they have offered their help, it can easily cause the overall perception of the emergency personnel to be flawed and sub-standard. Coppola (2015) says that when spontaneous volunteers are well received, put to work, properly managed, and treated fairly, they are effective, and for the most part happy. Their labours and their words have a remarkable tendency to result in a more positive perception of how the overall response and recovery efforts are progressing (Coppola, 2015).

2.6 Summary

Even though there have been decades of research done on people's behaviours during and after disasters, disaster management plans still have yet to make a big change. People affected by a disaster are believed to be passive, incoherent, and therefore useless in the response. This has proven to be untrue time and time again. People become their most altruistic and are responsible for being the real first responders on the scene. It is a natural reaction for people to want to help and when they do, they become spontaneous volunteers. They save lives and are crucial for the knowledge they possess about the affected area. Spontaneous volunteers are accompanied by risks and drawbacks as well. When they show up randomly demanding to be involved in the help process, it can be overwhelming and challenging for response agencies to manage and coordinate them. Spontaneous volunteers can also pose a risk to themselves and others by being ill prepared and untrained when they arrive to the scene. Knowing what motivates people to volunteer is necessary to be able to recruit people to become a volunteer affiliated with an organisation. Using social and human capital are great ways to reach out to people and organisations. They have a more likely chance of recruiting people to volunteer.

CHAPTER 3: RESEARCH METHOD

3.1 Introduction

This chapter outlines the methodological approach of and methods used in this study. A systematic literature review on the attacks of the World Trade Centre of 9/11 was chosen as the most appropriate methodology as the aim of this study is to identify where little research, policies, guidelines, and reports have been done on the management of spontaneous volunteers. A further rationale is given in the next section (3.2) as to why this approach is being used. Section 3.3 will give a detailed background on 9/11 as well as a brief rationale for why policies and reports were researched. Section 3.4 will explain how the data was collected and what the sampling strategy was for this study. Lastly, section 3.5 will explain how the research data was analysed.

3.2 Rationale for using a Systematic Literature Review

A systematic review of extant literature, post-event industry reports and policy and guideline documents will be used to answer the research question. Systematic reviews are literature reviews that attempt to identify, assess, and integrate relevant documents in order to answer a particular research question (Petticrew & Roberts, 2006). They are considered to be a knowledge-building and theory-generating type of approach. Suggestions for practice and policy formation may be inferred from resultant concepts or theories instead of being directly taken from statistical or measured data (Finfgeld-Connett & Johnson, 2012). They are characterised by being objective, orderly, and replicable, and must be transparent to the audience (Kowalczyk & Truluck, 2013). It is a particularly powerful methodological approach, in part because it allows addressing much broader questions and avoids biases sometimes inherent in single studies (Petticrew & Roberts, 2006). A systematic literature review is one way of mapping out areas of uncertainty and identifying where little or no relevant research has been done (Petticrew & Roberts, 2006).

This method was chosen to investigate spontaneous volunteers in disasters because it is a relatively new area of enquiry. Understanding what is known about spontaneous volunteers will provide direction for further research and a basis on which spontaneous volunteers can be empirically studied. In addition, using a systematic literature review also reflects the short timeline for this study and this research was not funded, which limited resources or there being any travel involved. The documents analysed for this study are journal articles that are case studies based on interviews and observations on 9/11 at the World Trade Centre.

3.3 Rationale for Case Study 9/11

The event of 9/11 is the chosen case study to address the research question and the objectives of this study. This event was chosen because it occurred somewhat recently and although other

disasters prior to this one in United States' history had an influx of spontaneous volunteers, this event was responded to an extent the country had never seen before. 9/11 was responsible for national and local plans to be created, enhanced, and changed. The American Red Cross announced that it was the most spontaneous volunteers to respond to help in their history (Steffan & Fothergill, 2009).

3.3.1 World Trade Centre Attacks (9/11)

In September of 2001, thousands of people converged on New York City to help meet the needs of the tens of thousands of people perceived to have been injured or killed in the terrorist attacks on the World Trade Centre. Those individuals who are usually on the scene before emergency responders arrive, numbered more than ever seen in the history of the American Red Cross up to that time (Steffan & Fothergill, 2009). Since these horrific events, it was realised that there will never be a shortage of help from citizens, business organisations, and volunteer organisations (McKay, n.d.). Although major emergency incidents had occurred in the past with the onset of volunteers (affiliated or not), these terrorist attacks triggered the largest onset of volunteers the nation had ever seen and the efforts of the people have been ignited ever since.

After these terrorist attacks, the Federal government of the United States realised that additional measures were needed to guarantee operational coordination with State and local governments and took the steps to alter how it responds to emergencies, not only in general, but in regards to the convergence of spontaneous volunteers as well. Issued in 2002, President Bush called for a major plan to build a national system for incident management (Townsend, 2006).

The types of documents selected to analyse the World Trade Centre Attacks on 9/11 are journal articles based on interviews with spontaneous volunteers and spontaneous volunteer literature. Also, a couple of after occurrence reports are used to explain the implications of the need for better policies and practices.

3.4 Data collection process

When searching for information based on spontaneous volunteers and their management during the response to 9/11, the following search engines were used: Google Scholar, FEMA's resource and document library, the Department of Homeland Security document collection, and the library collection of the Disaster Research Centre at the University of Delaware. The search terms used were "spontaneous volunteers 9/11", "behaviour of spontaneous volunteers 9/11," "community response 9/11", "citizen response 9/11", "significance of spontaneous volunteers 9/11", "roles of spontaneous volunteers 9/11", "challenges with spontaneous volunteers 9/11", and "community help 9/11". Alternative words used for or with 9/11 included "World Trade Centre", "New York", and "terrorist attacks". The first two pages of search results were examined for relevant sources, and those chosen were selected for further analysis. The documents chosen from the search included journal articles and reports on the two events. Documents from September 2001 to present were used in this search. The search was done to

present date because 9/11 marks an important time in the country's recent history and is still being researched to this day.

In order to search for incident or government reports on the 9/11 case study, the website used was www.google.com. When searching for the incident reports for 9/11, there were several search terms used. The search terms used were "incident reports 9/11", "lessons learned 9/11", "government reports 9/11", "emergency management 9/11", "management of spontaneous volunteers 9/11", and "spontaneous volunteers and response agencies 9/11". Alternative words used for or with 9/11 included "World Trade Centre", "New York", and "terrorist attacks". The first two pages of results were examined for relevant sources, and those chosen were selected for further analysis.

To search for present day policies and practices on managing spontaneous volunteers in disaster, www.google.com was used as well. Through Google, there was a general search done on the guidelines and policies, as well as FEMA and non-government organisations' policies and guidelines were searched. FEMA was specifically chosen since it is the United States' government funded agency for disaster events and covers the nation as a whole. The search terms used in the general search were "management of spontaneous volunteers", "management of spontaneous volunteers in disaster", "policies for spontaneous volunteers in disasters", and "how to handle spontaneous volunteers in disasters". The term "emergencies" was replaced with the term "disasters" to ensure the best results. The search terms used for searching FEMA and non-government organisations were "management of spontaneous volunteers (in disaster) FEMA", and "policy for management of spontaneous volunteers (in disaster) FEMA". The chosen non-government organisations were the American Red Cross, OXFAM, Salvation Army, Habitat for Humanity, and Feed the Children. These organisations were chosen because they are well known nationwide for their reputations to provide and manage volumes of volunteers in the wake of disaster. Wherever the term FEMA was used in the search term, each of these non-government organisations was searched as well. The first two pages of results on Google were examined for relevant resources in regards to the general search as well as the specific organisation searches.

3.5 Method of analysis

The method of analysis used in this study was thematic analysis. Thematic analysis can be used to identify patterns of meaning across a dataset that provide an answer to the research question being addressed (Braun & Clarke, 2006). Patterns are identified through a rigorous process of data familiarisation, coding, theme development and revision; detailed below.

1. Familiarisation with the data: Reading and re-reading the data, to become intimately familiar with the content and noting down initial ideas.
2. Generating initial codes: Coding initial features of the data in a systematic fashion across all data relevant to each potential theme.
3. Searching for themes: Collating codes from the data to identify significant broader patterns of meaning.

4. Reviewing themes: Checking if the themes work in relation to the dataset, generating a thematic map of the analysis.
5. Defining and naming themes: On-going analysis to refine the specifics to each theme, and what the story of the overall analysis tells, creating clear labels for each theme.
6. Writing up: Final phase weaving everything together from the analytic narrative and data extracts and then contextualising the analysis in relation to the existing literature.

(Braun and Clarke, 2006)

Thematic analysis was chosen because the goal was to thoroughly look at the documents chosen to research this topic. It was also chosen because it was unknown what was going to come out of the literature, and concepts that are repeatedly researched must mean that they are important. The themes that were chosen for this study came from the documents that kept appearing in different contexts. Braun and Clarke (2006) say that thematic analysis is theoretically-flexible, meaning it can be used in different frameworks to answer different types of research questions.

3.6 Conclusion

A systematic literature review was the chosen methodology for this study because it was most appropriate considering the goals of the research as well as the time and economic constraints associated with a Master Dissertation. A thematic analysis was chosen as the way to analyse the data because recurring themes are significant and they need to be further looked into. The findings of the data collected will be presented in the next chapter.

CHAPTER 4: FINDINGS

4.1 Introduction

This study aims to explore the role, significance, and benefits as well as the difficulties for involving spontaneous volunteers in disaster response. It also attempts to identify the implications for the current policies and practices in place to manage spontaneous volunteers from various organisations. Lastly, the lessons learned from 9/11 will be analysed. This chapter is articulated in three sections. This chapter presents the findings from the reports and literature gathered on spontaneous volunteers with the chosen case study, the 9/11 terrorist attacks on the World Trade Centre. The results are based on a systematic literature review and thematic analysis. Each theme is represented by a section which are listed in section 4.2.

4.2 Case Study

In the course of conducting after action reports following the 9/11 terrorist attacks, there is a common theme – there is an unpredictable amount of spontaneous volunteers streamed into disaster stricken areas (Jarret, 2013). In the thematic analysis, which will be sections 4.3, 4.4, and 4.5, there are 3 themes that were used in analysing the documents. The themes are related to the objectives of this study. They are as follows:

1. Role, significance, and benefits of spontaneous volunteers in disaster
2. Impact of spontaneous volunteers in disaster
3. Challenges (for both the professional and volunteer levels and existing policies and practices) in disaster

4.2.1 Background on the World Trade Centre Attacks (9/11)

On September 11, 2001, the United States of America experienced their worst terrorist attack since Pearl Harbour in December 1941. The attacks killed almost three thousand people (Steffan & Fothergill, 2009). Thousands of people converged on New York City to help meet the needs of the tens of thousands people perceived to have been hurt or killed in World Trade Centre terrorist attack. The amount of people who converged to the disaster area to volunteer their help outnumbered more than any other event in the history of the American Red Cross up to that time (Steffan & Fothergill, 2009). One Red Cross professional that was interviewed said, “We’ve never had this many volunteers at any disaster... this is the most volunteers we’ve ever had in the history of the Red Cross” (Lowe & Fothergill, 2003, p. 294). It is difficult to estimate the exact number of spontaneous volunteers who came to help during the 9/11 relief effort in New York City. Many documents state that over 40,000 volunteers came to help (Orloff, 2011). Results indicate that the citizens of New York City had a deep desire to help, but a feeling of helplessness. Supply chains emerged at the Jacob K. Javits Centre, a convention centre on 34th Street that spans four large city blocks. The Park Avenue Armoury and Stuyvesant High School in Lower Manhattan, across the street from the former site of the twin towers, became an

important spontaneous triage site for those who needed minor medical care (Orloff, 2011). Orloff (2011) states that all of these locations had two things in common: they emerged spontaneously through the leadership of locals who lived and/or worked in the area, and they were managed by community members themselves. New York City's Office of Emergency Management was destroyed because it was housed in the World Trade Centre. In the first two weeks of the response, much of the agency's time was spent setting up a replacement command centre. This left a big gap in the disaster response that spontaneous volunteers greatly contributed to fill (Orloff, 2011).

One group of creative spontaneous volunteers was able to find a way to assist with the rescue efforts at Ground Zero once the dust had cleared immediately following the collapse of the Twin Towers (Voorhees, 2008). The way it began was by one single person asking rescue workers what they needed in order to do their job – then that one person requested the needed items from local merchants and redistributed them to the workers at Ground Zero. This process quickly grew into the creation of a temporary site in front of Pier 40 and along the Hudson River at Clarkson Street, where spontaneous volunteers supplied the rescue workers. The site was typically referred to as Clarkson or Clarkson Village. The exact number of participants is not known, but it was a 24/7 effort that carried out for three weeks by at least one thousand local residents who became spontaneous volunteers (Voorhees, 2008). This scenario and the number of spontaneous volunteers are significant because of the lack of affiliation and coordination with official and disaster relief organisations (Voorhees, 2008). It is remarkable how people can come together and make such an impact when they have had little or no training or knowledge on how to handle emergency or disaster situations. They started from the will and need to help, and turned it into an affective and necessary production. This effort was “home grown out of the needs of immediate post 9/11 attack” (Voorhees, 2008, p. 4).

As with the World Trade Centre attacks, there are very few accounts of the total number of volunteers. This is due, in part, to volunteers not being registered or necessarily recorded in a database or record keeper, which reflects the lack of coordination and guidelines in place to manage them. However, the Red Cross, which did register volunteers as they arrived at sites to help, estimated that around 50,000 people spontaneously volunteered with their organisation (Barraket et al., 2013). It is difficult to know where all of the spontaneous volunteers came from – the documents used for this study did not indicate where people came from to offer their help, however it is suggested that many of them were from or worked in the surrounding area.

4.3 Role, significance, and benefits of spontaneous volunteers in disaster

This section first looks at the elements that guided and motivated spontaneous volunteering during and immediately after disaster. It then it looks at the role, significance, and benefits of spontaneous volunteers in the immediate response of the disaster response as well as in the short-term response.

4.3.1 The motivation of volunteers

What motivates spontaneous volunteers in disasters is important information because it may help response agencies have a better understanding as to why so many people respond to a disaster the way that they do. Since there is little policy and literature on spontaneous volunteers in disaster, understanding what motivates people to help can contribute to policies and guidelines that will be implemented in the future. Lowe and Fothergill (2003) conducted a study interviewing spontaneous volunteers after the events at 9/11. They discovered that the primary motivation for volunteering amongst those interviewed was a “compelling need to help in some way, particularly a need to assist victims” (p. 298). Sharon (2004) identifies the same reasons for spontaneously volunteering. Furthermore, Lowe and Fothergill (2003) claim that many of those interviewed had “a strong desire, even an obsession to do something, anything in order to contribute something positive and find something meaningful in the midst of a disaster” (p. 298). The authors further argue that those who were successful with volunteering demonstrated a “tireless resolve to either act or be paralysed” (Lowe and Fothergill, 2003, p. 300). This proves to be true in many instances throughout disaster history around the world.

The spontaneous volunteer group, which Voorhees (2008) observed, at the Clarkson Village in front of Pier 40 along the Hudson River, took part in a variety of tasks. A few days after the response efforts began and the site was recognised by the public as a legitimate effort, truckloads of donated items began to be delivered. Some of these donations had been turned away from other traditional disaster agencies and other donations were specifically directed to this site due to news crews broadcasting the requests for much needed items (Voorhees, 2008; Steffan & Fothergill, 2009). The items were temporarily stored and then redistributed to the workers at Ground Zero. The group came up with different methods in order for the donations to be distributed in the most efficient ways possible. The Clarkson Volunteers used two methods of redistribution. The first method involved loading pick-up trucks with needed/requested items and delivering them directly to Ground Zero. The second method was a direct distribution to the workers as they either left or entered Ground Zero. Some common items that were needed by the rescue workers included hard hats, respirators, drinks, and saline solution – since these types of items were so regularly needed, small amounts were stored along the side of the road and in arms reach for the rescue workers (Voorhees, 2008). This was organised by the spontaneous volunteers of Clarkson Village. This method was a quick and efficient way for rescue workers to acquire the goods they needed without having to leave their trucks as they proceeded to Ground Zero (Steffan & Fothergill, 2009). There were small obstacles along the way that created more work for the spontaneous volunteers, but it also kept them busy with the response efforts. This includes tasks like having to match the correct types of batteries with the type of flashlights since these items arrived separately; food was often donated in large commercial sizes that had to be repackaged for individual servings; donated clothing often arrived with adult and children sizes, so they needed to be separated and sorted. Donated items were constantly being rearranged in order to get the most needed items at a specific time distributed to the workers at Ground Zero; donated food had to be kept cool; all of the donated items needed to be protected from the hot sun and rain (Voorhees, 2008).

The term Clarkson Village referred to this site as more than just its location – it identified the organisational model employed as well (Voorhees, 2008). There were stores within Clarkson Village that one might find in any town or village. For example, the kitchen where food was prepared for the Ground Zero workers also had a small café where police, fire, or construction workers could stop before or after a shift to stop and get a cup of coffee. This organisational structure followed the theme of what would be in a typical town or village by establishing a hardware store for tools, a pharmacy for medicine, men's and women's clothing departments, and linens shop for items like towels and blankets. There were not set leaders and founders of Clarkson Village, so each shop within the village developed a small group of leaders. This model turned out to be a strong paradigm for organising tasks (Voorhees, 2008). Since the spontaneous volunteers are the ones who created the model, it facilitated the spontaneous volunteers to make their own decisions to the way things should be done to organise and accomplish their tasks with little supervision.

In the first 72 hours of the disaster response, spontaneous volunteers performed a variety of other tasks for rescue workers as well as other civilians (Lowe and Fothergill, 2003; Barsky et al., 2007). Results indicate that they cheered on Ground Zero workers, showing their true American pride and unity. They gave massages to rescue workers on a break from a long shift. They also prepared, cooked, and delivered food to rescue workers. The spontaneous volunteers made beds and vacuumed rooms in the hospitals, local/temporary locations where rescue workers would stay, and at local shelters (Lowe & Fothergill, 2003; Barsky et al., 2007). As mentioned before, people were more than willing to donate blood at the request of Red Cross for those who were injured (Lowe & Fothergill, 2003). Whenever the Red Cross requested their assistance with handling their supplies, they were there. Some of the spontaneous volunteers even worked as translators (Lowe & Fothergill, 2003). Survivors and families within close proximity to the disaster flocked to a nearby hospital and were just sitting there needing to talk to somebody, so many of the spontaneous volunteers found themselves counselling those in need the best way they could. Select spontaneous volunteers, based on their jobs, helped families of the victims with the research and forms to fill out for what kind of aid and benefits they deserved (Steffan & Fothergill, 2009). Translators not only assisted families with aid forms, but they also made sure to include any important information in their local ethnic newspaper and websites (Lowe & Fothergill, 2003).

Overall, these findings highlight that spontaneous volunteers played a vital role in the disaster response. They filled a large gap in post-disaster phases because they were doing many basic yet tedious tasks that contributed to efficacy of disaster response (Sharon, 2004; Barsky, 2007). Without them, emergency responders would have to fill these roles and would not be able to focus as much on the more demanding and larger issues at hand they are trained for (Barsky et al., 2007).

4.4 Impacts of spontaneous volunteers in disaster response

Not only do spontaneous volunteers have a positive impact on the people who have been affected by a disaster, but results indicate that the experience itself may generate a positive impact on them as well. They take on tasks and situations that help other response agencies and organisations in the response.

The interview data from Lowe and Fothergill's (2003) study found that the efforts of spontaneous volunteers had positive impacts on both the local community and especially for the volunteers themselves. There were the tangible impacts, with the physical and hands on duties as well as the intangible impacts, with building community morale, emotional support, and self help (Steffan & Fothergill, 2009). The study suggests that spontaneous volunteers experienced increased feelings of interconnection, healing, self worth, and empowerment (Lowe & Fothergill, 2003). This is congruent with studies done by Fernandez et al. (2006b) and Rivera and Wood (2016). Another positive outcome was that the spontaneous volunteers found that working with new groups of different people led them to feel a sense of unity, even in a stressful situation. For example, interviewees from Lowe and Fothergill's (2003) study state how important their volunteering experience was for them and others. One said, "It was a huge kind of therapeutic process for me. It was really amazing to help all the relief workers from the human connection" (p. 304). Another one said, "Volunteering was one of the best days of my life. I wish they could have found a way to let more people help who wanted to help" (p. 304). One more said, "I experienced so much good out of this... because I was working on the positive end of the process, I was able to walk away with a stronger sense of who I am and what I can do. It made me realise that I am, along with everyone else, that we are so much stronger than I thought we were" (p. 305).

Many of those interviewed mentioned their new relationships with police officers, fire fighters, and hospital personnel (Lowe & Fothergill, 2003; Voorhees, 2008). Their volunteer work allowed most of the spontaneous volunteers to see these emergency responders in action. Many of the volunteers expressed a heightened understanding and greater appreciation of emergency responders and what they do (Steffan & Fothergill, 2009). Both the spontaneous volunteers and the emergency responders had impacts on one another. The emergency responders were taken care of by the spontaneous volunteers by having their beds made, their rooms cleaned, massages given, and their food cooked and prepared for them. The emergency responders were able to perform better because they were being taken care of properly by the spontaneous volunteers. This allowed the workers and the spontaneous volunteers to be grateful for what one another is doing to benefit a disaster. It also allowed them to share their experience and gain different perspectives of being on two different points of the spectrum in the response. One interviewee said "it was amazing to think that these are the people that dedicate their lives to running into the mouth of the fire while other people are running for their lives" (Lowe & Fothergill, 2003 p. 304).

4.5 Challenges and barriers for better integrating spontaneous volunteers in disaster response

Although spontaneous volunteers seemed to play a key role during and after 9/11 terrorist attacks, findings indicate that there were challenges present not only for emergency responders, but also for the spontaneous volunteers themselves. Both groups were challenged with management and the coordination of producing an effective response. This section will look at both of those. The challenges faced by the emergency responders are linked to there being little policies in place, and this will come later in this section.

Despite large numbers of people wanting to volunteer, and to help, few other official outlets for those who wanted to help existed to participate in the response (Voorhees, 2008). Few official requests for volunteers were made, one of which was a call by the Red Cross to donate blood. Due to the lack of requests for help, this resulted in people who wished to help finding their own ways of doing so. Voorhees (2008) identified challenges at the site, one of which was maintaining the safety of those not affiliated with an organisation. Although nothing was written down, rules and procedures were made by those who were seen as the leaders to ensure safety and efficiency of tasks. It was a challenge to spread the rules, but after some time, hundreds of spontaneous volunteers were coming a day to help out – for the most part there was little need to enforce the rules, as most spontaneous volunteers were more than willing to cooperate with their fellow volunteers.

A second challenge that Voorhees (2008) recognised was an issue with leadership roles – at times the hierarchy was challenged when volunteers from a previous shift returned only to find a new volunteer in charge of the tasks they had previously been directing. Because the leaders were replaced so readily, the leadership hierarchy did not have much of a chance to develop into a stable structure. A third challenge identified was that of having organised communication among others in the group as well as emergency agencies and organisations. Whether it was a lack of a schedule, or people working outside of their assigned tasks, limited communication channels or cultural barriers, Voorhees (2008) and Orloff (2011) say it was remarkable they were able to work as efficiently as they did.

Lowe and Fothergill (2008) identify challenges that spontaneous volunteers faced following the event. Although many of the spontaneous volunteers were able to assist, there were many others that faced a variety of barriers enforced by the police and other response agencies that prevented them from serving. Some even displayed opportunistic and occasionally improper behaviour in order to permeate those barriers. For example, one interviewee admitted telling a response official that he was not leaving because there had to be something he could do. A handful of other spontaneous volunteers admitted breaking rules and cutting in line to register with an organisation so that they could provide help (Steffan & Fothergill, 2009). Similarly, spontaneous volunteers interviewed by Sharon (2004) recalled, “a lot of people wanted to jump in and make their own solutions and disregard authority” (p. 18). The interviewees of Sharon’s study also expressed that they often felt when people said, ‘I want to help’, that sometimes there was more emphasis on the ‘I’, than the ‘help’ (p. 18).

Findings indicate that for some agencies involved with disaster response, spontaneous volunteers could have very negative impacts, thus presenting disaster management challenges very difficult to overcome (Orloff, 2011). For example, a clinical director of an organisation described the convergence of spontaneous volunteers after the World Trade Centre attacks as 'destructive' (Sharon, 2004, p. 18). He claimed that the spontaneous volunteers who flocked to the Family Assistance Centre, an area devoted to caring for the family members of the missing and killed, were highly troublesome and disorderly because they interrupted counselling services in order to accommodate their needs.

The spontaneous volunteers interviewed by Lowe and Fothergill's (2003) study explained being frustrated with the long lines to register to be able to help and acknowledged uncoordinated leadership, disorganised lists, and unclear information about what to do immediately after the attacks. Steffan and Fothergill's (2009) study revealed the same issues. The motivation and the burning desire to help proved to be irresistible. Sharon (2004) says that after growing tired of watching television, being turned away from volunteer centres, and having their feeding sites (to rescue workers and other volunteers) shut down by the health department, these frustrated individuals took matters into their own hands. They began to toss random things at the rescue workers like socks, cigarettes, shirts, water, and sandwiches and anything else they could think of. The majority of these gifts remained unused or uneaten, eventually attracting rats and thus creating an additional health hazard and yet another task to complete.

Another challenge the spontaneous volunteers faced were the difficulties that the spontaneous volunteers had offering their useful skills to response agencies because the agencies were so overwhelmed. Other spontaneous volunteers had trouble with coping that their skills might not be of use in those circumstances. An interviewee from Lowe and Fothergill's (2003) study had gone to Harvard Business School, but she was disappointed when she came to the realisation that her assets were not useful after a disaster. She said, "For the first time, I really feel like my accomplishments don't mean anything. Sure, I went to the best business school in the world, but what does that do in a crisis"? (p. 302). Like this interviewee, other spontaneous volunteers also felt incompetent about their skills and backgrounds during the response and recovery of 9/11. This reflects the lack of policies and guidelines to have a chance to use the available resources and skills that spontaneous volunteers provide.

4.5.2 Challenges with existing policies, practices, and guidelines

Fifteen years have passed since the 9/11 terrorist attacks on the World Trade Centre, meaning that many disasters have occurred since then. Many of the documents based on this event as well as others have continuously discussed the challenges of managing spontaneous volunteers in times of disaster. Despite a thorough search of the literature and review of documents available to the public, there were only a few relevant documents on managing spontaneous volunteers from FEMA and Red Cross. They were very vague, non-specific, and were not detailed. For example, instead of providing detailed steps to take on spontaneous volunteers it states, "... agencies should identify appropriate roles for spontaneous volunteers in advance and determine how they will be supervised", or "develop relationships and exchange information among first responders, emergency management personnel, and voluntary

organisation staff'. While these are concrete steps, nowhere does it mention how these steps should be carried out. There seems to be a great deal of assumptions when looking at the policies and guidelines. Also, when searching for policies and guidelines, many times volunteer handbooks and policies for the actual volunteers showed up (which provide very basic instructions and agreements), instead of direction for the actual organisation or those in charge.

Table 2 summarises the data gathered.

Table 2: Summarising the Findings

	Findings	When? Response – Recovery	Documents analysed
Role/significance & Impact	<ul style="list-style-type: none"> • Performs various tedious tasks • Builds community morale • Provides self empowerment • Builds positive relationship between citizens and government/ organisations • Motivation to help others • Knowledge of surrounding area • Work long hours • Cultural understanding • Quick to respond 	Spontaneous volunteers are present the most during the immediate response phase to the intermediate response phase – those who remain through the response phase usually join an organisation and keep volunteering from there	Voorhees, 2008; Lowe & Fothergill, 2003; Sharon, 2004; Orloff, 2011
Challenges (emergency responders level)	<ul style="list-style-type: none"> • The amount of people converging on scene to offer their help • Burning desire SVs have to do something causing chaos • Lack of training • Maintaining levels of safety • SVs breaking barriers and rules just to try to help 	These challenges occur during the immediate response phase. By the time the intermediate response/recovery phase has hit, there are methods and efficient production in place	Voorhees, 2008; Lowe & Fothergill, 2003; Sharon, 2004
Challenges (volunteer level)	<ul style="list-style-type: none"> • Not many official outlets for those who want to help – SVs feeling the need to break rules and barriers to offer their services • Issues of leadership and delegation (amongst each other) • Communication lines 	These challenges can occur during all times because roles are always shifting and people are always leaving and arriving	Voorhees, 2008; Lowe & Fothergill, 2003; Sharon, 2004
Spontaneous volunteers-related policies	<ul style="list-style-type: none"> • Lack of policies in place on SVs • Lack of guidelines as to how to handle SVs 	N/A	Orloff, 2011; FEMA

SV = spontaneous volunteer

4.6 Summarising the findings

There was little literature found, despite the thorough searches. There were only a few studies found that were qualitative interview-based research on the 9/11 terrorist attacks to the World Trade Centre. This is remarkable given the number of news articles, videos, and eyewitness accounts of spontaneous volunteering produced after the event. It would seem that despite the large numbers of spontaneous volunteers involved in responding to 9/11, they remain largely invisible in academic literature. Spontaneous volunteers have the potential to perform a variety of tasks if delegated to them by emergency response agencies. Spontaneous volunteers are vital for the local and indigenous knowledge they possess as well as community morale.

However, they are accompanied by drawbacks and risks as well. They can shift the focus of response agencies because they arrived ill prepared and can endanger themselves and others by self-deploying. These key findings will be discussed in the last chapter, Chapter 5. *Table 2* summarises the data.

CHAPTER 5: DISCUSSION

5.1 Introduction

During and after disasters, local people often spontaneously volunteer to help those affected by such events. It is suggested that spontaneous volunteers represent valuable resources and that involving them in disaster response and recovery may contribute to an improved disaster management (Orloff, 2011). Spontaneous volunteers have the potential to be useful after a disaster. It is significant because it could change the ways emergency professionals respond to a disaster in a more efficient a way. Yet, little attention has been paid to spontaneous volunteers and how to involve them in the actions aimed at managing disasters. Within this framework, the objectives of this study were to explore the role, significance, and benefits of spontaneous volunteers in disaster, to investigate the implications for current disaster policies and practices, and to explore the drawbacks and barriers for involving spontaneous volunteers in policies and actions geared towards disaster response. This chapter will summarise the findings from Chapter 4 by confronting them with the existing literature. The first part will address the objectives and then interpret what the findings mean. This includes the significance and benefits of spontaneous volunteers in section 5.2, drawbacks and barriers of spontaneous volunteers in disaster in section 5.3, and then implications for policies in disaster management in section 5.4. The chapter wraps up the study with the conclusion, limitations of the study, and recommendations for future research on spontaneous volunteers.

5.2 Significance and benefits of spontaneous volunteers in disaster management

People are believed to react to disaster situations much differently than they actually do (Perry & Lindell, 2003). It is believed that people are psychologically impaired, act disorderly, break out in panic flight from the disaster scene, act in a selfish manner, and are unable to function until help arrives (Gordon, 2006; Quarantelli, 2008). Decades of research have provided no such evidence of this behaviour (Auf der Heide, 2004). Numerous studies have found that when disaster strikes, rates of altruistic behaviour almost always increase and people usually act quickly and calmly to overcome such event (Hunt et al., 2014). Rather than being passive and weak which is often portrayed in the media and most scientific reports, local people are usually quite active in responding to disaster and display mechanisms to deal with both the immediate and the longer-term difficulties faced. Individuals often emerge spontaneously to help in any way they can in the aftermath of a disaster – this phenomenon is not new and it is inevitable. A few of these individuals who respond are already associated with a volunteer organisation, but most individuals who respond are not, making them a spontaneous volunteer.

Focusing on the terrorist attacks of 9/11, the present study indicated that immediately after this event, a large flow of people flocked towards the World Trade Centre to offer their services and to help in any way they could. Such people included 9/11 survivors, people from the immediate area, and elsewhere as well. Results indicate that at least 40,000 volunteers came to help in any they could (Orloff, 2011). This is significant to disaster management because the current

plans in place for emergency personnel are aimed at managing what is assumed how people will react versus how they actually do. If this was different, the disaster management response could be more efficient.

There are a variety of benefits that were associated with spontaneous volunteers. Findings showed that spontaneous volunteers provided both tangible and intangible impacts on local communities and emergency personnel. Tangible duties included doing a variety of tedious and necessary tasks to assist those at ground zero – their tasks included handling and sorting donations, making beds, cleaning, preparing and cooking food, as well as other every day tasks that needed to be completed (Lowe & Fothergill, 2003; Barsky, 2007; Voorhees, 2008; Steffan & Fothergill, 2009). What resulted from their intangible impacts is just as important to disaster management, if not more. Spontaneous volunteers who have emerged from the 9/11 disaster had an understanding of what the local issues were, and were quickly able to organise themselves to accommodate what the locals needs were (Whittaker et al., 2015). This intangible quality is crucial for emergency personnel because they are unfamiliar with the area and its customs (Hunt et al., 2014). At the World Trade Centre, the Office of Emergency Management for New York City was located in one of the destroyed World Trade Centre buildings and the community emerged to help in any way that they could (Orloff, 2011). It took some time for local disaster agencies to respond, and in the meantime, spontaneous volunteers were not just going to let the time pass while they are waiting on site to be told what to do. They were making sure the right supplies were being transferred to Ground Zero as well as performing other tedious tasks that needed to be done. Results further indicate that they organised the donated goods, sorted them, and made sure they were at the right place at the right time (Lowe & Fothergill, 2003; Voorhees, 2008).

These findings match with other studies done elsewhere. For example, citizens in New Zealand played a vital role in spontaneously volunteering to the Rena Oil Spill of 2011. The Māori people, who are the indigenous people of New Zealand, were a significant help to emergency personnel because of their ancestral knowledge of tribal lands, and possess communication and social networks that aided in the oil spill recovery (Hunt et al., 2014). These elements emphasise that nobody knows the disaster stricken area better than the civilians themselves who live in the area (Whittaker et al., 2015). Those who want to assist their town and the professionals on their way to help are the spontaneous volunteers. They are a great resource both geographically and communally for emergency personnel – they can assist with language barriers to those who require immediate help. In addition, they have great local knowledge and understand local cultural context, which is key to efficient disaster management (United Nations Volunteers, 2011; Hunt et al., 2014).

The present study shows that after 9/11 a group of spontaneous volunteers emerged. This group had knowledge such as how and where to get supplies needed at Ground Zero because the group members from the area knew where to get the goods that were needed to help with the disaster management. This group quickly turned into a spontaneous volunteer village and became a huge 'working machine'. The spontaneous volunteers developed their own rules, regulations, and methods (Sharon, 2004; Voorhees, 2008). They also turned their site into a

village with clothing departments, a café, and pharmacy. These actions and behaviours reflect the capacities of spontaneous volunteers. Capacities are what people possess in relation to their area – resources, assets, and the ability to be able to efficiently help emergency personnel (Gaillard, 2010; Wisner et al., 2008). Capacities depend on traditional or local knowledge, indigenous technologies (and skills), and cohesive/social networks. As the case study of 9/11 acknowledges, local knowledge is a valuable resource that may be very significant in disaster response. Disaster management plans are not using the local knowledge enough. In disaster management, those who ignore this are missing out on a useful resource and are risking having a negative relationship with the local community members who have been affected. While emergency personnel possess a lot of expertise, they do not have the knowledge of an area that the locals do.

Members of a community are vital for more than just being a source of information; they are a social resource for the community. They are vital for each other to provide a sense of connection with one another, decreasing the isolation and abandonment of those who have found themselves without family or friends (Brennan et al., 2005; United Nations Volunteers, 2011). Lowe and Fothergill (2003) interviewed spontaneous volunteers who volunteered after the terrorist attacks and found that the spontaneous volunteers had positive impacts on the local community and especially for their personal experiences. This is congruent with other studies (Sharon, 2004; Fernandez et al., 2006b; Voorhees, 2008; Steffan & Fothergill, 2009; Hunt et al., 2014). Victims who became spontaneous volunteers and worked together were able to cope with the reality of the situation more positively and with more hope. Being able to help others in that type of situation gave them feelings of interconnection and loyalty with emergency personnel as well as other spontaneous volunteers. Also, there was a relationship built between the emergency personnel and the spontaneous volunteers. Not only are citizens who become spontaneous volunteers a great resource for emergency personnel, a relationship between the community and the government (or another related entity) is defined and trust builds from there (Hunt et al., 2014). There is a higher level of acceptance from the citizens of an affected community when there is trust built with emergency personnel organisations (Fernandez, 2006b; Orloff, 2011).

Overall, the findings show that the volunteers have capacities that are valuable. Emergency/disaster managers should take them into account because they may be beneficial to responding to a disaster efficiently and thoughtfully. However, spontaneous volunteers are accompanied with drawbacks and negative aspects as well.

5.3 Drawbacks and barriers of spontaneous volunteers in disaster management

Although spontaneous volunteers are a vital resource, there are also a variety of drawbacks associating them with converging during and after a disaster. These drawbacks may affect emergency personnel, survivors, and other fellow spontaneous volunteers. Spontaneous volunteers sincerely want to help and are motivated to do so, but if their efforts are not managed effectively, their presence can be counterproductive as well as an added strain to emergency

personnel or other organisations (Fernandez et al., 2006b; Whittaker et al., 2015). These spontaneous volunteers who want to help can cause roadway congestion and prevent emergency vehicles from getting through to the disaster site. They can hinder disaster response by creating health, safety, and security issues. Arriving without response essentials requires logistical support, such as, food, shelter, and protective gear (Fernandez et al., 2006a). This needed support can reduce the attention that was meant for others.

Multiple studies have highlighted similar findings. Typically, spontaneous volunteers respond to problems that are immediately visible to them. This can result in self-assignment and can lead to problems of misdistribution or misconcentration of aid and/or duplication of resources (Fernandez et al., 2006b). Rivera and Wood (2016) agree and add that some spontaneous volunteers even do this deliberately. Also, some spontaneous volunteers that fill roles early in an incident become unwilling to take direction from emergency response leaders later on (Rivera & Wood, 2016). These individuals are referred to as *rogue volunteers* (Fernandez et al., 2006a&b; Rivera & Wood, 2016). Disaster sites can be very hazardous and spontaneous volunteers can place themselves at risk for injury, or even death, without the proper approval or guidance from response agencies or organisations.

During the immediate response to 9/11, there were very few outlets for spontaneous volunteers to help, which led to some of them to behaving improperly by breaking barriers or intruding on sites where unofficial workers were not welcome due to safety hazards and protocols they were unfamiliar to (Lowe & Fothergill, 2003; Sharon, 2004). Barriers blocking them from the disaster site can include roadblocks, sections being quarantined, or even just other volunteers following protocols of the officials. Voorhees (2008) identified a challenge among a spontaneously emerged volunteer group from the disaster site at the World Trade Centre, which was maintaining the safety of those who were not affiliated with an organisation. Another difficult task was maintaining consistent leadership roles in the group. Leadership roles were constantly shifting around, making communication difficult between each other and emergency response agencies and organisations (Voorhees, 2008).

The ability of being able to manage the onset of so many affiliated and spontaneous volunteers has repeatedly been a challenge. Governments and agencies worldwide are increasingly recognising the opportunities and challenges posed by informal volunteers. Indeed, many have developed strategies and resources for engaging and managing them; however, organisational culture risks and liabilities remain significant barriers to greater involvement of informal volunteers in emergency and disaster management (Whittaker et al., 2015). Although new strategies are slowly being implemented, finding gaps and improvements for the policies, and the after occurrence reports are crucial to utilising spontaneous volunteers successfully.

When there is a failure to involve spontaneous volunteers, there can be consequences for the reputations of the emergency agencies and organisations. Spontaneous volunteers are a near free resource, so people cannot help but make negative judgments about agencies and organisations when they do not use a potentially valuable and free resource. This is why coordination and preparedness on how to handle these volunteers is required.

5.4 Implications for disaster management policies and practices: The need for a shift in approach

Both scholarly articles and after action reports on 9/11 at the World Trade Centre talk about the lessons learned from the incident and what needs improvement for the future, more specifically, the convergence of people or spontaneous volunteers to the disaster area. Some opinions differ from one another, and some lessons learned go into more detail than others. But first, the National Response Framework is discussed.

5.4.1 *Current spontaneous volunteer management policies*

The National Response Framework (NRF) was introduced in Chapter 1. Under the NRF, the primary responsibility for spontaneous volunteers to state, local, and tribal governments in coordination with national and local voluntary organisations in disaster (Rivera & Wood, 2016). According to FEMA, there should be previously developed effort through different types of organisations and the media to make volunteer management more orderly and productive in disaster response activities (Alexander, 2010). Although FEMA is making suggestions of value, they are simply just suggestions. A detailed framework of how to tackle this idea is what is missing.

In the United States, there are a variety of states that have volunteer management plans. In states like Florida, California, and Ohio (states that are quite familiar with natural disasters), responsibility for the management of all types of volunteers is assigned to a specific organisation. States and local regions are required to adopt the National Incident Management System (NIMS), where the goal is for government organisations and the private sector to be able to work with one another throughout different phases of a disaster (Rivera & Wood, 2016). NIMS provides a common, yet flexible framework allowing government and private entities at all levels to manage disasters (Townsend, 2006). Other than this, there is very little information on current policies and practices on managing spontaneous volunteers.

5.4.2 *More coordination for spontaneous volunteers*

Voorhees (2008) argues that spontaneous volunteer groups are a significant resource and they are desperately needed in most circumstances; so, he claims, it is up to the professionals to quickly assess the role that is most appropriate for the spontaneous group. Since emergency managers and response agencies are likely to appear on the scene well after a spontaneous organisation has been established, Voorhees (2008) states that it is important for the emergency manager to be able to identify the organisational components that will enable a successful integration of the spontaneous volunteer group with the overall disaster recovery effort. In order for the emergency personnel to maintain a positive relationship with the spontaneously emerged volunteer groups, it is important not to undermine current practices and preparedness activities that they have put in place or have already been developed before disaster personnel have arrived. Emergency managers should expect and be prepared for the altruistic citizens to be drawn to disasters both from the inside and outside the disaster area to help. It is likely that most spontaneous volunteer organisations develop their own kind of

organisational model – it is advantageous for the incoming emergency manager to understand the existing model and Voorhees (2008) says that they should continue to use it. A new model might be more efficient, but reorganising in the midst of a crisis situation would create confusion among the volunteers. Disaster management plans need to understand the view of the local people who spontaneously volunteer when they arrive to a disaster site. Emergency personnel need to consider how and why these spontaneously emerged groups are functioning because of their knowledge of the area. Instead of response agencies coming in and trying to take over, they should be integrating their disaster resources and skills with the locals who have already established a framework. This is a bottom-up approach and should be considered for disaster response plans.

Linking into the communication structures in a spontaneous volunteer group is challenging because of the temporary nature of the organisational structures. People are not volunteering long enough or they are switching jobs and it is hard to get a communication structure in place. For example, results from Voorhees (2008) indicate that when volunteers at Pier 40 were asked who was in charge of the operation, they would either respond that they didn't know or would indicate the person who was training them, who was more than likely not in charge. This emphasises that it is essential for official emergency management professionals to be able to communicate with spontaneous volunteer groups during a time of disaster, so it is important for them to learn how to identify communication channels. For instance, defining who to call about certain situations – people tend to be allocated to certain duties, so the channels should make it clear whom to call whom in a given scenario. These communication channels are typically dependent on impermanent volunteers who may or may not be on site at any given time, multiple channels of communication are best utilised with the volunteers that spend the most time at a given site (Voorhees, 2008). For example, policies might include for the disaster management plan to include a store of cell phones or other communication devices that can be distributed to volunteers who are the gateway to the communication channels of spontaneous volunteer groups.

Social capital consists of individuals or groups that pose as resources because of their location and ties they have to the community (Lee & Brudney, 2012). It is formed from communities, families, neighbourhoods, and organisations (Putnam, 2001; Brown & Ferris, 2007). Being apart of social networks can provide financial and nonfinancial resources – those who are more isolated and have fewer social connections are less likely to be rescued or cared for by others (Aldrich & Meyer, 2014). Social capital increases the chances of people taking part in volunteering (Lee & Brudney, 2012). On the other hand, there is human capital, which suggests that education is an element to increase a person's awareness of social problems, enabling them to understand empathy for others (Michel, 2007). Research shows that higher levels of human capital is linked positively with volunteer (Lee & Brudney, 2012). In fact, Michel (2007) says that education is the strongest predictor to those who will volunteer. Disaster management plans and policies should consider these factors in order to progress the participation of volunteers. Instead of making a general call for volunteers, there should be specific target

groups for recruitment (McCurley, 2005). For instance, response agencies should be reaching out to community organisations (like sports clubs) and schools.

Sharon (2004) discusses three themes that his research on the World Trade Centre attacks on 9/11 revealed: the need to train the volunteers, the need for sites to register spontaneous volunteers, and most importantly, the need to have a coordinated message addressing spontaneous volunteers from the moment a disaster strikes. These are congruent with the findings of this study – those interviewed in 9/11 studies (Lowe & Fothergill, 2003; Sharon, 2004; Voorhees, 2008; Steffan & Fothergill, 2009) consistently mentioned how unorganised the response agencies were and how challenging it was to find information. In the 2007 oil spill of the coast of South Korea, response agencies were completely overwhelmed by thousands of spontaneous volunteers. Their lack of coordination and poor infrastructure resulted in unclear responsibilities, substandard organisation of resources, and even harm to the spontaneous volunteers (Hunt et al., 2014). Sharon (2004) suggests that there should be separate registration facilities for professional and non-professional spontaneous volunteers as a way to improve the coordination of spontaneous volunteers. Multiple people interviewed from Sharon's (2004) study expressed concern about the media dispersing false information to the public in regards to where people could respond to help. Their studies, and this study as well, suggested for future disasters that media personnel should have special training by FEMA or another type of emergency response agency to educate them that they can create a secondary disaster and to provide them with accurate information about spontaneous volunteers. With that being said, there should be better communication, better use of, and better coordination with stakeholders, such as the media.

According to the Arlington County Conference Report (2002), management of spontaneous volunteers who responded to an incident scene was an issue that was of utmost concern to volunteer agencies. The report suggests that a regionally adopted response plan to remove this action of well-intended public and professional volunteers needs to be developed. This report suggests that rapid media coverage of events is responsible for spontaneous volunteers responding to an incident scene, so jurisdictions should have plans in place on actions they will implement to reduce this distraction of well-intended public and professional citizens (Arlington County, 2002). This contradicts other suggestions and with all of the information present in this study, this idea would not go over well. The arrival of spontaneous volunteers is inevitable and they are a free resource, so instead of making an effort to detour these good-willing people, it is suggested here that disaster and emergency managers should make good use of them.

5.4.1 Recommendations for future disaster management

The findings of this study can provide some insight for emergency/disaster management plans with integrating spontaneous volunteers into future policy. Spontaneous volunteers represent valuable resources. Hence, including them in disaster response and recovery would lead to significant disaster management outcomes, including with better cohesive relationships between disaster affected local citizens and large government and nongovernment corporations. A great way to ensure the best disaster management plans are made is to incorporate what is called a social license to operate. "Social license generally refers to a local

community's acceptance or approval of a company's project or on-going presence in an area. It is increasingly recognized by various stakeholders and communities as a prerequisite to development" (Yates & Horvath, 2013, p. 1). This type of idea involves the members of the community and allows them to participate in decisions to be made about their town in case of a disaster. This process is done outside of formal permitting and the goal is to "maintain social capital within the context of trust-based relationships". Not only would this idea build positive relationships, it would also be rather comforting for the locals to take part on the decision making for their own community.

5.7 Conclusion

Research shows that in the aftermath of disasters, an influx of people, ranging from professional responders to spontaneous volunteers, wishes to aid the response in any way possible. This study investigated the extent to which spontaneous volunteers can contribute to improved or successful disaster management. The objectives of the study were answered by using the terrorist attacks at the World Trade Centre on 9/11 case study. The objectives of this study were: to understand the role, significance, and benefits of spontaneous volunteers in disaster response, to explore the potential drawbacks of spontaneous volunteers in disaster response and the difficulties they may pose to disaster management, and to identify the implications for policies and practices geared towards disaster management. This topic has clearly only recently been getting some attention in the scholarly sense, and there is still much to learn.

This study found that spontaneous volunteers are more valuable than they are an issue. They play a large of a role in supplying emergency personnel with information about their community to ensure efficiency and comfort, achieving tedious tasks, community bonding and healing, and being the real first responders to a disaster event. Yes, they are accompanied with drawbacks, like their lack of training and resources and at times working independently. However, the drawbacks can be partially attributed to the lack of policies for spontaneous volunteers in disaster management plans.

There is a great need to include volunteers, especially spontaneous volunteers in disaster management. This study justifies that there should be policies and practices put into place in order to best utilise a potentially valuable resource. It emphasises the reasons why coordination is indispensable. Spontaneous volunteers arrive to a disaster stricken area with good intentions and the motivation to help wherever is needed. They are willing to work for hours on end performing tedious tasks with no expectations of payment. This study illustrates the reasons why there is a need for policies in disaster management incorporating spontaneous volunteers and a need for further research as well.

5.5 Limitations of this study

There are a variety of limitations to this study – some is in the lack of research, while others are circumstantial. First, it would have been preferential to have been able to interview a variety of

people who had spontaneously volunteered. However, the timeline and lack of financial resources did not allow such methodological approach. Had interviews been conducted, the information gathered could have been (for example) only been from the last five years, making it more relatable for current disaster management plans. Technology and disaster management have both evolved significantly since 2001.

Second, there was a limited amount of literature on spontaneous volunteers, both in the United States, and globally. Originally, the goal of this study was to use both 9/11 (September 11, 2001) and Hurricane Katrina (August, 2005) as the chosen case studies to compare and contrast the management and coordination of spontaneous volunteers. 9/11 was the event where the most spontaneous volunteers have ever converged to a disaster area and Hurricane Katrina was one of the most significant natural-hazard related disasters in the USA's history. It therefore seemed appropriate for this study to use these two case studies. However, after months of thorough research, there was so little literature and reports found to include information on spontaneous volunteers in relation to Hurricane Katrina. This is remarkable because the reports and literature associating 9/11 and spontaneous volunteers all mentioned how ill prepared response agencies were for the onset of spontaneous volunteers. Hurricane Katrina occurred four years later, so it was surprising that no research could be found. This is also surprising because the convergence of spontaneous volunteers after a disaster is not something new – in fact, it has been a continuous issue. However, it re-emphasizes the relevance of the topic, as there is a real gap in the existing disaster literature.

A substantial limitation would be the lack of policies found on the management and coordination of spontaneous volunteers. With the convergence of spontaneous volunteers at disasters being a continuous problem for response agencies and emergency personnel, it was astonishing that there was so little to find – it was opposite to the expectation.

5.6 Recommendations for future research

Little research has been done on spontaneous volunteers in all sorts of respects. There is some literature on volunteers who belong to an organisation prior to a disaster, but that information is not necessarily relevant to spontaneous volunteers. The literature that does exist on spontaneous volunteers is mainly associated with disaster response – disaster recovery, which typically begins three to six months after a disaster, is important to be informed about as well. Research should also be done on the impact of spontaneous volunteers on communities and organisations in a long-term sense – if their effect on communities and organisations is revealed, it could influence the changes in future disaster management plans. Lastly, there should be more research that gathers insight from disaster affected local people, spontaneous volunteers, and organisations based off of interviews and first-hand observations. What is missing is research that critically investigates the outlook and perceptions of organisations that host volunteers, and how those organisations view the detriments and benefits of using volunteers is mostly non-existent. The more relevant information gathered on the effects of

spontaneous volunteers, the more they can be integrated successfully into disaster management plans.

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