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Traumatic loss and transformative life experiences: The lived experience of Green Cross traumatologists deployed to the New York City World Trade Center disaster

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Traumatic Loss and Transformative Life Experiences: The Lived Experience of Green Cross Traumatologists Deployed To the New York City World Trade Center Disaster

by

Carron C. Cherrie

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy
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Keywords: Compassion Fatigue, Disaster Mental Health, Traumatic Stress, Occupational Health and Safety, Disaster Deployment

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DEDICATION

This dissertation is dedicated to the Green Cross Traumatologists who provided disaster mental health services to employees of the New York City World Trade Center and to families and staff of the union SEIU 32BJ. These individuals along with other Americans stepped forward in an unprecedented time of need to help the survivors and families of those who perished on September 11, 2001. There courage, compassion and caring serve to remind us of the goodwill of ordinary people responding to extraordinary events.

“To live in hearts we leave behind is not to die”
Thomas Campbell

SEIU 32BJ Union Memorial
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TRAUMATIC LOSS AND TRANSFORMATIVE LIFE EXPERIENCES: THE LIVED EXPERIENCE OF GREEN CROSS TRAUMATOLOGISTS DEPLOYED TO THE NEW YORK CITY WORLD TRADE CENTER DISASTER

Carron C. Cherrie

ABSTRACT

This exploratory study examines the lived experience of Green Cross traumatologists deployed to the New York City World Trade Center disaster. The deployment took place five days after the terrorist attacks on September 11, 2001. The author was a member of a ten member advance team that provided crisis stabilization services to an international union in Lower Manhattan. Disaster Mental Health Services and community outreach were provided for a month. The purpose of the study was to describe in an anthropologically holistic perspective the lived experience of traumatologists, who as Americans were also affected by the terrorist disaster. Thirty-one traumatologists participated in the study. Ethnographic methods included participant observation and informal interviews during the first week of the deployment. In-depth interviews were conducted after deployment and ranged from one to three hours in length. Interviews were audio taped, transcribed and analyzed with the assistance of N-vivo software. The author’s story is among the narratives. Narratives of lived experience reflect the continuity of life and give meaning to experience within a cultural context. Findings reveal the shared meaning attributed to lived experience in a disaster environment, cultural continuity and change and impact
of disaster deployment on the health and safety of the helper. Recommendations for future research, policy and training are offered.
CHAPTER I.
INTRODUCTION

The tragic events of September 11th 2001 left an indelible mark on our society affecting the lives of most Americans who witnessed the use of airliners as weapons of mass destruction. Domestic terrorism resulted in collective loss, social suffering and heightened public awareness of future vulnerability. On that day, assumptions about safety and security were shattered as the events unfolded causing shock and confusion across the country.

The date marks a symbolic day of remembrance of collective loss and represents a shift in American worldview about homeland security and international terrorism. The destructive force of mass violence that occurred on September 11th 2001 became a pressing social issue at home and internationally. Everyday Americans must confront existing national vulnerability to politically motivated terrorism. The intensification of international terrorism has caused a striking shift in American foreign and domestic policy, altering American worldview. Presently domestic terrorism is one of the greatest threats to our society.

In the aftermath of 9-11, the population most affected by the disaster was at greatest risk for stress responses. On that day, activation of Green Cross Traumatologists began for deployment to the heart of NYC, 12 blocks north of the
smoldering remains of the “twins,” the north and south towers of the World Trade Center, an American icon.

Traumatologists are specialized mental health professionals who deploy as crisis response teams in the immediate aftermath of a humanitarian crisis. The Green Cross Projects deploys traumatologists nationally and internationally to work within communities responding to disaster. The services provided include assessment, crisis stabilization, defusing, debriefing, and referral of high risk cases to community mental health services. The intensity of exposure to another person’s trauma places traumatologists at high risk for secondary traumatic stress, or compassion fatigue.

My participation in the Green Cross Projects deployment as a field traumatologist and member of the advance team provided me with the lived experience necessary to understand and write about deployment activities. Documenting the events in writing served as both an academic exercise as well as a healing process.

The historical anthropological literature describes the issues that arise when a disaster occurs and disrupts human communities. Despite the fact that much can be learned about cultural continuity and change in the midst of disaster, anthropological research interest has historically focused on “normal daily life” rather than the life experience of disruption and devastation (Oliver-Smith and Hoffman 2002).

However, since September 11, 2001 more applied anthropological research is being conducted both nationally and internationally in the aftermath of disasters. Disasters are considered to be process events that occur as a result of a destructive agent and a vulnerable population. Events that occur through human intentionality
such as terrorism are excluded from the definition of disaster (Oliver-Smith and Hoffman 2002). This study considers the outcome of the terrorist attacks on New York City a disaster. In addition, the focus of the study is on the lived experience of a small cadre of specialized mental health professionals who as Americans are personally impacted by the terrorist event and professionally impacted through their intervention with disaster survivors. Delving into the human social realm with a detailed “emic” focus on life events in an environment undergoing forced change and adaptation highlights the complexity of human-environment interaction, social interconnection and adaptability to altered social spaces.

Understanding the compassion stress that occurs during a disaster deployment can both further our knowledge of susceptibility to compassion fatigue and illuminate ways to mitigate the effects of compassion stress. This information may also be useful to policy makers and program planners for the recruitment, training, and mobilization of a “deployment ready” cadre of mental health service providers.

Statement of the Problem

The events of September 11\textsuperscript{th} resulted in shattering American assumptions about homeland security and personal safety. Americans are reminded daily of vulnerabilities to future terrorist attacks. The terrorist attacks on September 11,2001 prompted the unprecedented need for specially trained mental health service personnel to deploy to New York City to provide crisis intervention services to disaster-affected populations. Although local disaster mental health organizations were not prepared for the magnitude of this disaster, many responded to the summons for help and sent mental health professionals to “ground zero.” As a member of the
Green Cross Projects, an international organization of certified traumatologists, I received a request at the last minute to be a member of the advance team who hit the ground in New York City five days after the disaster. The advance team is comprised of experienced traumatologists. One of them was not able to travel to New York that week which left one spot open and I accepted the challenge. As a Field Traumatologist my role was to provide crisis intervention services to disaster survivors at the disaster site. All of us made considerable sacrifices by leaving our homes, our families, and our jobs to travel into an unsafe environment and to provide care for disaster survivors of this national tragedy. However, when disaster strikes traumatologists and other “first responders” spring into action and do whatever is necessary to help. We left the security of our homes on the morning of September 16th to venture into unknown territory—a catastrophic mass casualty disaster at the site of the World Trade Center.

Almost forty Green Cross Projects members provided disaster mental health services and educational training for a month and a half following the terrorist attacks until outreach programs could be established in the local community to provide traumatology training programs to the local mental health professionals. In addition to the sacrifices made by traumatologists responding to the call for help, working in a disaster environment and listening to the stories of disaster survivors exposed them to immense suffering and traumatic loss.

There was no time for pre-deployment preparation, we struggled through twelve to fourteen hour workdays with no days off, and for some this was our first disaster deployment. All of these factors placed us at risk for what Dr. Charles Figley
terms “Secondary Traumatic Stress,” or “Compassion Fatigue.” In addition to the immediate risk of Compassion Fatigue, most of the traumatologists left New York City on the weekend and returned the next week to their own jobs in mental health settings. This added stress also contributed to their risk for stress responses.

In summary, disaster mental health service providers are at risk for acute and chronic stress responses that may not receive immediate attention during a disaster deployment, but that must be addressed prior to, during and following a disaster deployment to safeguard the health of the helper. The experience of those traumatologists who were exposed to the trauma and loss of disaster survivors in New York City will offer insight about how traumatologists manage their stress, as they care for the suffering and how best to sustain the helpers.

Statement of Purpose

The purpose of the study is to describe in an anthropologically holistic perspective the lived experience of traumatologists deployed to the New York City World Trade Center disaster to provide disaster mental health services and who as Americans were also personally affected by the terrorist attacks on September 11th 2001.

Significance of the Study

Descriptions of lived experience of helping professionals deployed to a catastrophic disaster are rare. This absence of voices of traumatologists is due in large part to the confidential nature of counseling and protection of client privacy. Disaster mental health service providers may be overlooked as susceptible to traumatic stress responses in their work with the traumatized. Hidden behind a
professional veneer are feelings of vulnerability. The myth that the helper is unaffected by traumatic events remains pervasive in our culture. The public needs to believe emergency responders will take charge of a crisis and provide the safety and organization so desperately needed in a disaster. In an effort to meet public expectations to provide mental health services mental health professionals often conceal and suppress feelings and needs. Helpers who deny their own needs are at more risk for traumatic stress responses.

The narratives of traumatologists offer insight about how stress affects helpers as they work with disaster survivors and live with the experience of terrorism. Understanding the stressful nature of the work done by traumatologists deployed in the New York City World Trade Center Disaster can both further our knowledge of susceptibility to compassion fatigue and illuminate ways to prevent, protect, and mitigate the effects of traumatic stress responses.

It is essential that disaster mental health service providers be fully prepared for emergency response and with adequate sources of social and emotional support while providing mental health services to disaster survivors. The study provides knew knowledge on the impact of disaster in the lives of disaster mental health service providers. The lessons learned from this disaster deployment will assist with planning and disaster preparedness and the subsequent ongoing recovery efforts in New York and across the nation. This information may be useful to policy makers for planning disaster mental health preparedness programs and training disaster mental health service providers.
CHAPTER II.

CONCEPTUAL FRAMEWORK

The theoretical framework chosen for this study makes use of cultural concepts such as “lived experience” and “cultural relativism” drawn from the work of several generations of scholars, notably Wilhelm Dilthey, Franz Boas, Melville Herskovits, Clifford Geertz, Victor Turner, and Edward Brunner.

Culture, a core concept in anthropology provides a framework for contextualizing lived experiences in a disaster environment. Culture is dynamic, context sensitive, and always-in production as part of the historical process (Brunner 1986; Herskovits 1964). The most befitting definition of culture for the study of lives disrupted by disaster is culture as a “set of acquired guidelines” that we use “to help negotiate us through interaction and the changing circumstances of life” (Angrosino 1998).

The major assumptions that underpin the study are; 1) analysis of human behavior can be understood within a social and historical context; 2) the world is knowable through the direct experience of life; 3) meaning attributed to “lived” experience is socially constructed and 4) the process and outcome of anthropological research is influenced by the relationships between study participants and researchers.

I will now review the historical underpinnings, and concepts of the theoretical framework. The theoretical foundation of “lived experience” is found in the seminal
work of Wilhelm Dilthey (1833-1911), a German philosopher. Dilthey, a pioneer in the philosophy of the human sciences, influenced the theoretical development of the social science disciplines; particularly anthropology, at a time when the predominant concern was with the physical sciences (Rickman 1988). Central to Dithey’s philosophy of the human sciences is man as a historical being (Betanzos 1988). Dilthey’s contribution to the human sciences is the concept of human knowledge acquired through lived experience. According to Dilthey, human nature is best studied from historical perspective (Rickman 1988).

Franz Boas (1858-1942) was a student in Germany at the time Dilthey was expounding his philosophy of the human sciences. Boas pioneered the concept of cultural relativism in anthropology (McGee 1996:129). Like Dilthey, Boas believed historical circumstances create culture. However, to situate “lived experience” in a historical and cultural context was not sufficient for understanding cultural phenomena. To acquire knowledge of a culture, Boas believed the anthropologist must learn the language and must live in the culture for a long period of fieldwork.

Melville Herskovits (1895-1963), a student of Franz Boas elaborated on the anthropological theory of cultural relativism. The principle of cultural relativism, briefly stated, is as follows: “Judgments are based on experience, and experience is interpreted by each individual in terms of his own enculturation” (Herskovits 1964:49).

Cultural relativism has three different aspects; philosophical, methodological and practical. The philosophy of cultural relativism recognizes the process of human enculturation to a set of values and social norms that shape thought, guide behavior
and give life meaning. According to Herskovits (1964), we assimilate to the norms and traditions of our culture and function accordingly throughout our lifetime in a process of enculturation. Enculturation provides for cultural stability over generations. However, it also sows the seeds for cultural change and innovation.

As a methodology, cultural relativism provides a set of principles for the conduct of anthropological research that guide the investigator to describe a culture without making judgments or imposing his/her own value system. The third aspect is the practical application of these principles to solving contemporary human problems.

Applying the principles of cultural relativism to lived experience we see that lived experience will be interpreted through a cultural lens focused on a particular set of circumstances. Herskovits explains that lived experience is relative to the cultural frame of reference and gives meaning to social behavior with symbols (Herskovits 1964).

Edward Bruner and Victor Turner (1986) building on the foundational work of Dilthey and Herskovits conceived the anthropological theory of lived experience. The focus of the theory is on the culturally rooted meanings, interpretations, activities, and interactions that reflect individual and shared experience. According to Bruner (1986) the concept of human experience is best understood as an active process having a temporal dimension, or in other words, experience is “lived through.” The reality of life is lived through time, yet each person has a unique lived experience shared with others through the interpretive expression of “what happened.” Understanding “real” life occurs within a cultural context. Reflecting on life experiences, interpreting our experiences and relating our experience through
storytelling is how cultural knowledge is acquired (Ritchie 2003). Making meaning of our experiences occurs through interpersonal interaction in social groups.

Meaning is conveyed through social interaction and requires social construction and interpretation within a particular social context. This social context shapes the meaning of experiences through cultural symbols, language, behavior, and rituals (Bruner 1990).

Anthropologists have traditionally conducted their research on small-scale societies. In such settings, social interaction is carried out in small, informal primary groups such as families or neighborhoods and is based on primary, personal, face-to-face relationships (Perisco 2002). A social group, as opposed to a simple aggregation of people, has a number of distinguishing characteristics that include informal interaction on a regular basis over a period of time, sharing a sense of collective identity and sharing a number of rights by virtue of common membership. Most importantly, a social group has a degree of internal organizational structure.

The anthropologist conducting fieldwork is concerned with exploring and understanding the lived experience of others as well as their own. To understand the meaning transmitted, the anthropologist actively participates in the local cultural events under study, observes and records his/her impressions about the behavior of the group as well as his/her own experience. The analysis of the behavior and shared group symbols that give meaning to events and objects are understood by situating lived experience within a social and historical context (Makkreel 1987). It may be useful to distinguish, as Clifford Geertz (1983) does, local cultures that are setting-based from “culture writ large” which is socially encompassing and of a much longer
time span. He talks about the importance of local cultures and the locally shared meanings and interpretive vocabularies used to construct the set of acquired guidelines that direct immediate group behavior. Consistent with those ideas of Geertz, in the present study we take an “experience near” approach to gain an understanding of the deployment experience as seen through the eyes of Green Cross members.

The lived experience of the ethnographer becomes the essence of the research process in that the interaction of the ethnographer with the study participants ultimately shapes the process and outcome of the research. To use Bruner’s phrase a kind of “double consciousness” is essential for the ethnographer who participates as she/he observes and reflects. The ethnographer experiences her “self” while interacting and observing the “other” while simultaneously the “other” is experiencing her/him self and their interactions with the ethnographer. The researcher as author of the written text therefore makes a claim to moral and scientific authority (Denzin and Lincoln 2003).

The ethnographer collects personal narratives of lived experience in an effort to understand the world as seen by the “experiencing other” or emic perspective. That includes having group members describe in their own words and from their own perspective what this experience was like for them.

The ethnographer listens, reflects, and constructs an interpretation of the participants’ accounts. Every account is interpretive in that the participant highlights some events and discounts others, conveying what is most meaningful. The interpretive process always operates at two distinct levels: the participants studied
interpret their own experience in expressive forms and the ethnographer, in turn interprets these expressions (Bruner 1986).

Bruner (1986) speaks of narrative as the distinctively human penchant for storytelling. Narrative represents a powerful ordering scheme in that chronology provides coherence to the narrative, and chronological structure maintains a sense of continuity since it emphasizes order and sequence. All this is most appropriate for the study of processual events. Done right, the resulting text is a blending of multiple voices, interwoven interpretations and reflexive analysis brought forth by a collaborative interpretive process (Denzin 2003).

Angrosino (1989) refers to these personal narratives as “documents of interaction” between participants’ recounting their lived experience and the audience, including the ethnographer, or the readers of the resulting text. A personal narrative reflects the unique relationship between the narrator and audience receiving the story. Making sense of our lives entails constructing a plausible account of important events, a story that has the ring of narrative truth, regardless of whether it corresponds to a historical truth endorsed by a disinterested observer (Bruner 1986). The narrative affords the narrator an opportunity to express what is significant and vital in his/her life.
CHAPTER III.
LITERATURE REVIEW

The literature review synthesizes historic and contemporary disaster research addressing the three systems that interface in a disaster: environmental, human biological and cultural. To understand the nature of disaster it must be viewed holistically within a cultural context because the cultural context reveals the human variation in response to disruption of the physical environment and adaptation to change.

A disaster whether natural or human caused, results in vast infrastructural and ecological breakdown in the relationship between a human community and its environment. Human behavior responding to environmental disruption is variable and depends upon cultural perception and interpretation of threatening life events. How people perceive and respond to a disaster is socially constructed and therefore culture-specific.

Human stress responses occur cross-culturally whenever an event is seen as life threatening. Stress responses have a physiological basis. However, the severity of the human stress response is variable and dependant on individual and cultural variation. When human stress is severe enough, it can result in physiological and psychological distress that ultimately affects health. Untoward effects can seriously impact the health of a population after a large-scale disaster or humanitarian crisis.
To mitigate untoward outcomes and promote restoration, social institutions will provide disaster relief and recovery services to support redevelopment and promote community health.

Disaster Research

Historically, disaster research has focused primarily on describing human responses and social consequences of disaster phenomena. Defining and classifying disasters has been a major stumbling block. Disasters have been described in the literature as mainly isolated events with no attempt made to compare and contrast events (Abe 1976; Barton 1969; Baker 1962; Dynes 1968, 1970; Drabeck 1986; Fritz 1957; Kates 1973; Lifton 1967; Oliver-Smith 1979; Quarantelli 1976; Powell 1962; Raphael 1977).

While the vast majority of disasters occur in underdeveloped countries, the research has typically been conducted by developed nations. There is consensus that the common element of disasters is communal disruption. However, each disaster event is unique and complex. These complexities along with human variability have complicated researchers’ attempts to generalize and reduce data into taxonomic structures for the purpose of comparison. Furthermore, conflicting findings have resulted from variability in theoretical orientations, definitions, and lack of comparability of methodologies (Green 1982). Studying the psychological effects of disaster longitudinally is difficult due to a lack of funding.

An interesting aspect of disaster research is that the term ‘disaster’ and its referents have continued to be redefined over time. In the 1600’s disaster referred to severe personal ills. Eventually it took on the meaning of natural disturbances of the
physical environment beyond man's control such as earthquakes, volcanic eruptions, hurricanes, floods or what were commonly known as Acts of God (Quarantelli 1987).

In the 1980's a shift in thinking about disaster brought about the further expansion of the term as a referent for natural and human-caused disasters. Social scientists began to take a more holistic approach to the study of disaster as a manifestation of the vulnerabilities of social systems (Berren 1980; Drabek 1980). The disaster literature in the nineties focused more on the risk and vulnerability of cultural groups living in politically unstable and disaster prone physical environments. There was also more interest in the psychosocial and public health impact on populations (Chamberlin 1980; Gavalya, 1987; Green 1982; Jeffery 1982; Lima, 1987; Raphael 1986; Wilkinson 1983; Drabek 1980; Gleser 1981; Bolin 1985; Tierney 1989).

There are many definitions of disasters. The term disaster as it is used currently refers to all humanitarian crises world-wide, whatever their cause, and the actual and potential acts of human violence that cause social disruption (Blaikie 1994; Bolin 1990; Burkholder 1995; Desjarlais 1995; Eranen 1993; Green, 1996; Oliver-Smith 1996; Oliver-Smith 1999; Ursano 1994; Giel 1990; Lechat 1990; Roth 1999; Scheper-Hughes 1992; Apfel 1996; Nordstrom 1995).

Anthropologists prefer a definition that excludes those processes that result from human intentionality. An anthropological definition of disaster is

A process/event combining a potentially destructive agent/force from the natural, modified, or built environment and a population in a socially and economically produced condition of vulnerability, resulting in a perceived disruption of the customary relative satisfactions of individual and social needs for physical survival, social order, and meaning (Hoffman and Oliver-Smith 2002).
A more comprehensive definition encompassing all types of disaster is a disruption of the human ecology that the affected community cannot absorb with its own resources (Lechat 1990).

Anthropologist Anthony Oliver Smith (1999) points out that the outcome of a disaster is influenced by both macro and micro level factors. Macro level factors include the historical, political, and economic context of the disaster. Micro level factors include interpersonal linkages within the community, workplace, and family through which solidarity is expressed and assistance rendered. A holistic anthropological perspective incorporating the macro and micro level factors offers a more fruitful approach to the study of disaster. To further the field of disaster research, studies should be holistic and cross-culturally comparative. The processes occurring during each phase of a disaster should be investigated. Anthropologists have contributed an understanding of disaster as processual in nature, impacting the environment and long-term recovery of populations particularly to natural catastrophes. Results of such longitudinal anthropological studies would benefit emergency management and public health planners and policy makers.

Disaster Disrupted Environments

The major themes in the disaster literature concern human vulnerability to disruptions of the physical and social environment. The dynamic interaction between the disruption of the physical environment and social systems is the salient dimension of a disaster event. Disruption of social systems highlights anthropological themes of human adaptation and culture change.
Disasters disrupt human social organization and cause environmental destruction. As the world population grows, human vulnerability to disaster rises. Terrorism and the threat of weapons of mass destruction are primary sources of catastrophic events in the twenty-first century. As shown in Figure 2 below, world disasters include U.S. domestic terrorism, environmental destruction from recent mudslides in the Philippines; floods and hurricanes in the Caribbean and Gulf states, Asian bird flu, tsunami and the displacement of populations, war and insurgency in the Middle East, African famine and genocide, and Australian bushfires.

Figure 1. World Disasters
Historical and Theoretical Context of Disaster Research

In 1917 Samuel Prince described for the first time, human organizational responses evoked following a massive explosion when two ships collided off the coast of Nova Scotia. Prince’s work is considered the earliest empirical study by a social scientist of human responses to disaster. Later during the 1950’s a more sustained effort to study disasters and their impact ensued.

Sociologists were the first social scientists to define disaster as a social problem to be studied systematically. Literature reviews conducted over a ten-year period from 1972-1982 generated a conceptual taxonomy of terms and key insights. (Drabek 1970; Dynes 1975). The central themes included defining and classifying disasters, categorizing the phases of disaster and describing human responses to disaster at all levels of human social organization. The post disaster relief phase was a major theme with less emphasis on long-term recovery, social vulnerability and mitigation. Cross-cultural comparative research was lacking because it was deemed cost prohibitive. These early reviews were quite limited in that they excluded relevant empirical research in anthropology, psychology, political science, economics and geography.

Although disasters provide an exceptional opportunity for the comparative analysis of social systems and levels of hazard vulnerability, few studies have addressed these issues. The gaps in disaster research have been explained in several ways. Part of the research gap has resulted from studies of isolated disaster events. In addition there have been periods of minimal research interest or desire for extensive cross-cultural fieldwork. Sociologists approached disaster theoretically, as
a social phenomenon that occurred within a social context. Disaster disrupted societies and resulted in a variety of human and social responses. The first sociological studies were focused on individual responses to disaster; and then later, the focus shifted to groups, communities and organizational responses.

A shift in theoretical perspective occurred during the 1980’s with the growth of a more inclusive multidisciplinary approach to disaster research. A focus on the hazards inherent in the physical environment and human vulnerability to disaster became prominent. Hewitt (1983) added a geographical and ecological perspective to the discourse on hazards, pointing out the underlying assumptions upon which hazard research is based. Environmental risk and danger are socially distributed, and discrimination is within or channeled by social geography (gender, age and class; by control of land, land use) and how power and projects intervene. In support of social vulnerability theory, Hewitt concludes that the most vulnerable have the fewest options of where to live and what kind of structures to live in.

In general the field of disaster research has neglected cultural, demographic, and social class differences underpinning the degree and forms of environmental risk to which people are subject. These factors constrain peoples’ choices of action and possibilities of assistance. Most disasters today are linked to intersecting environmental models and patterns of development, but were initially the result of historical and social structural processes, such as colonialism and underdevelopment (Hoffman and Oliver-Smith 2002).

In Third World countries top-down development prevails, and social vulnerability continues to place populations at risk for disaster. Risk and
environmental hazards research is confirming low-income populations are often forced to live in dangerous areas such as floodplains or unstable hillsides. This predicament is due to the control of land by market forces that do not permit low-income groups access to safe land for residence (Blaikie 1994). Substantial improvements to disaster prone environments will only be brought about through social, political and economic change.

Social Vulnerability Theory

The theory of social vulnerability is used to analyze populations at risk in disaster prone environments. Increasingly, social vulnerability to environmental hazards is viewed as undermining adaptations to local environments, through direct government policies or political economic forces. Social inequality and consequent risk are important factors to be analyzed to determine the underlying causes of social vulnerability. Economic policies designed to enhance growth are at the same time setting in motion processes with dangerous, potentially catastrophic ecological consequences (Middleton and O’Keefe 1998; Hoffman and Oliver-Smith 2002).

Anthropological Theory

According to Anthony Oliver-Smith (1999) disaster places in stark relief the changing dynamics of human adaptation to the environment, a core tenet of anthropological theory and praxis. The imbalance between human adaptive capacity and nature’s resilience reveals the fundamental social structures and networks of relationship upon which a society is built. Theoretically, sociologists have held that disaster ultimately causes minimal social change. In contrast, anthropologists contend that the impact of disaster is adaptation to an altered environment with
significant and often sweeping ecological, social and ideological change (Hoffman and Oliver-Smith 2002).

Anthropological theory views disaster as an interaction between two elements, social vulnerability and an event involving a potentially destructive agent. The result of the interaction of these two elements is social disruption and distress. Implicit in anthropological theory is the assumption that disasters are embedded in the social structure and culture as well as in the environment (Oliver-Smith and Hoffman 1999). Anthropologists seek to uncover the underlying patterns of vulnerability and cultural responses to disaster emerging from the dynamic inter-relations of social and environmental systems (Oliver Smith and Hoffman 1999).

Environmental hazards and the resulting disasters are increasingly recognized as indicators of cultural adaptation. When environmental hazards are activated, the degree to which they bring about a disaster is an index of adaptation or maladaptation within community (Hoffman and Oliver-Smith 2002). Communities undertake immediate adaptations after impact and these initial changes can set in motion forces for broad cultural change. Cultural adaptations to disaster include innovation and persistence in memory, cultural history, worldview, symbolism, social structural flexibility, religion, and the cautionary nature of folklore and folk tales (Hoffman and Oliver-Smith 2002:9).

Anthropologists analyze cultural continuity and change from a holistic perspective. Ethnographic fieldwork has contributed significantly to increasing awareness of the protracted repercussions following disaster. Despite the underutilization of anthropological research for comparative analysis and theory
building, there are several areas where theory building is underway. The areas of theoretical focus include disaster stress and sociocultural responses to disaster, hazard risk and vulnerability, recovery and reconstruction, environmental change, development and sustainability and cultural crisis and change (Oliver-Smith 1996).

Although there is more interest in anthropological research in disaster environments, only a small group of anthropologists are considered experts in the anthropology of disaster. A leading expert in the field of disaster research, Dr. Anthony Oliver-Smith has written extensively on the anthropological approach to disaster, disaster recovery and resettlement. As a platform for studying the multidimensional nature of disaster he concludes:

“in its substantive platform, anthropology as a social science takes into its’ reckoning the three planes that interface in calamity: the environmental, the biological, and the sociocultural” (Oliver-Smith and Hoffman 1999:2).

Torry (1986) was the first anthropologist to propose that development projects include environmental impact and hazard research and planning to avoid creating greater vulnerability. His work was followed by other disaster experts who stressed the need for community participation in finding innovative approaches to disaster mitigation and linking development with reconstruction and mitigation (Middleton and O’Keefe 1998; Oliver-Smith 1990; Oliver-Smith and Goldman 1988).

Anthropologists beginning with the historical research of Torry (1979) have argued that studies of the disaster environment neglect a cross-cultural comparative analysis. There is lack of cross cultural evidence of human universals in response to disaster, and yet few comparative studies exist. In addition, insufficient attention has been given to the phases of disaster particularly pre-impact studies and
reconstruction. Anthropologists have also criticized the serious delays in humanitarian aid, dangerous disaster environments and poor decision-making in relation to local recovery efforts. According to Hoffman and Oliver-Smith (2002), disasters facilitate the study of human sociability by exposing the basic social organizational forms and behavioral tenets of a society under duress. Disasters display and articulate the linkages between the local community and larger social structures (Hoffman and Oliver-Smith 2002). The relationships existing between national, state, local and regional areas are measured as formal and informal agreements and alliances which are called upon to mobilize resources and support in stressful conditions.

Disasters provide a unique view of a society’s capacities for resistance or resilience in the face of disruption. Disasters unmask the nature of a society’s social structure, including the resilience of its members, of kinship ties and other alliances. Unity and dissension are revealed, and cohesion and conflicts of social units are evident. The distribution of power is witnessed in the allocation of resources for disaster relief and reconstruction.

Finally, disasters uncover social ideology. Societal perceptions of human vulnerability, mortality, health and safety risks are all basic features of cultural worldview. Concerns about social justice, altruism, and existentialism become more prominent.
Social Institutional Responses

Catastrophic events have far-reaching effects on social infrastructure. Disruption of life ways, vital resources, and services cause significant change in social system operations and behavior. Community disaster response may be organized and effective or disorganized and in some cases, nonexistent. Human resources are diverted from routine work functions to disaster relief operations. Disaster survivors may experience displacement from home and/or workplace. Extensive property damage causes strain on economic resources. Damage to public works will impact public safety and public health. Impromptu and deeply rooted customs and rituals are carried out in mourning. Stories are told and new words enter language as expressions of the uniqueness of the traumatic event.

Disaster Recovery

Disaster recovery, the long-term process of community restoration is a problem-solving process that includes not only planning for reconstruction and return to economic solvency, but also sustaining community health. Inequities in the distribution of social and material resources can adversely affect disaster recovery and community health.

The pattern of disaster response has certain common features that include the social structure, technology, and cultural values. At a global level most humanitarian crises occur in poor, overpopulated Third World countries where governments do not have at their disposal the social and economic capital to adequately manage emergency disaster rescue and relief operations. Seventy-eight percent of disaster
related deaths occur in underdeveloped nations where yet emergency management systems are inadequate or nonexistent (Middleton 1999).

The 9-11 disaster posed unprecedented and unique challenges to the U.S. emergency management infrastructure. However, unlike less developed nations, the U.S. has the social and economic capital as well as the technology to build a defensive infrastructure for mitigation of disaster threats and provision for relief and recovery operations to its citizenry. The scope of involvement of American social institutions includes such activities as emergency preparedness, hazard mitigation, public alert systems, public health, rescue, relief, and recovery responses.

In contrast, regions of the world such as the humanitarian crisis in the Darfur region of Sudan in Africa combine poverty, social instability, and civil war with negligible emergency management systems to make even providing basic humanitarian relief ineffectual. The devastation left by the Indian Ocean tsunami caused massive loss of life and displacement of populations. The United Nations has often taken the lead in working with Third World nations most affected by humanitarian crises in attempting to find ways to mitigate widespread human suffering.

Two case studies poignantly illustrate the complexity of disaster recovery and the need for disaster preparedness. The collapse of the Teton Dam in Idaho and the Buffalo Creek dam in West Virginia in 1976, exemplify how critical social and economic capital are for disaster recovery. Both communities suffered extensive social disruption, property damage, and material loss with threats to public health (Erikson 1976; Gleser 1981; Lifton 1976; Titchener 1976). In the case of the Teton
Dam collapse, the combined efforts of local community leaders, the Mormon Church, FEMA, and many volunteers contributed to the successful recovery of the community (Golec 1983). Community members expressed that life was different in some ways, but that the disaster had brought the community together. It was the social relations both primary (family, kin, neighbors, friends, co-workers) and secondary (institutional) that formed the interconnecting linkages between the complex arrangement of local, state and federal resources; on the one hand, and the recovery of the community on the other. Golec (1983:270) argues it is the interconnectedness, which in part sustains the sense of a collective struggle, and thus promotes recovery. In the case of the Teton Dam recovery, the progress toward recovery depended primarily upon the availability of social and material capital.

In contrast, after the Buffalo Creek flood disaster many people experienced social isolation and alienation, combined with an increased need for vigilance and family cohesion. In 1972 a slag dam gave way in Buffalo Creek, West Virginia. The disaster caused the death of 125 people and left nearly five thousand homeless. The Buffalo Creek disaster gained wide publicity as one of the most traumatic disasters for a community in the United States. Erikson (1976) describes the community trauma as both individual and collective; “The threads of the social fabric had snapped” (Erikson 1976:303). The displacement and relocation of survivors to refugee camps separated kin, and the long distances between camps led to a disintegration of family and community ties. Grief over the loss of relatives, friends, possessions, and belongings was a common experience. Erikson (1976) has vividly described what he calls “loss of communality” in his study of the Buffalo Creek
disaster. These two case studies illustrate polar extremes in the adaptability of communities after disaster.

Significant social changes often occur during disaster recovery and cause conflict and strain on community resources. After the Exxon Valdez oil spill, there was a considerable decline in traditional social relations with family members, friends, neighbors, and co-workers. According to Palinkas (1993) there was a decline in subsistence production and distribution activities. Overall, there was a decline in perceived health status and an increase in the number of medical conditions verified by a physician. In addition, there were reports of increased rates of generalized anxiety disorder, posttraumatic stress, depression; as well as problems associated with drinking, drug abuse, and domestic violence increased.

Organizational interventions including emergency management and disaster relief may be critical for supporting the recovery of the community. A community with a disaster plan will be more resilient and effective in recovery efforts than a community without a plan. Public awareness campaigns and educational initiatives to inform populations at risk about disaster preparedness, evacuation and support services may mitigate stress.

Population health is invariably at risk in a disaster. Crowding in shelters and refugee camps, exposure to bacteria from contaminated water and food, and absence of adequate sanitation increase the risk of infectious disease. Lechat (1990) summarizes the objectives of the public health system as to 1) prevent mortality; 2) provide care for casualties; 3) manage basic needs for food, water, and sanitation; 4) prevent disaster-related morbidity; 5) ensure restoration of community health; 6)
reestablish health services; and 7) introduce services aimed at mitigation of disaster (preparedness education and vaccinations).

Lessons learned from the terrorist attacks on September 11, 2001 included the need to strengthen the U.S. Public Health infrastructure. The public health infrastructure must expand its workforce, research, and public education. In 2000, in an effort to prepare more public health professionals to respond to emerging public health threats, the Centers for Disease Control (CDC) established seven schools of public health across the country in a partnership with universities. What is evident after 9-11 is the need to prepare the entire public health care system to respond in a coordinated manner to facilitate partnerships with other emergency response organizations.

Disaster Mental Health Research

There have been systematic studies of the psychological consequences of disasters done primarily in the United States since the 1940’s. The most widely known civilian disaster study is the Coconut Grove nightclub fire in Boston in 1942 that claimed the lives of 491 persons. Since the 1970’s however, diverse literature, mainly of U.S. and Australian work, has been published (Danieli 1996; Norris 1992).

Barriers inherent in the research process have stymied disaster mental health research at times. Some of the barriers include the excessive delays caused by human subject regulations and gaining entry through contacts with local authorities. These types of delays curtail early data collection. Another major detriment is the extraordinary challenge of implementing a sound methodology in the chaos of the post disaster environment. Different measurement tools including self-report
questionnaires, telephone, and web-based surveys have been used with varying success.

Except for cases of posttraumatic stress disorder, the ideal time to study mental health effects is immediately after the event, which is unlikely because of the constraints placed on research studies by academic internal review boards and other research regulating agencies. Another limitation is a lack of funding to extend such research longitudinally to study mental health outcomes over time. Finally, there is the question of ethics. Is it ethical for researchers to approach disaster survivors at a time when they are most vulnerable and trying to manage their lives under dire circumstances?

There is often such a rush to determine causality and identify psychiatric illness that the general distress suffered by the majority of the population is overlooked. The study findings may distort the range of responses of the affected population. In contrast, rapid assessment techniques and anthropological fieldwork using participant observation and key informant interviews provide a holistic and inclusive approach to disaster mental health research.

Human Responses to Disaster

An extensive literature exists on human responses during the immediate post-disaster period. The distress suffered in a disaster is becoming a more prominent theme addressing the experience of survivors as well as relief workers (Ahearn 1981; Baisden 1981; Fullerton 1992 Harvey 1996; Lima 1986; Raphael 1986; Raphael 1977; Rubonis 1991; Shore 1986; Sheperd 1990; Taylor 1989; Ursano 1995). A central theme of the literature is the variation in human responses to disaster. The
initial impact of a disaster is the phase of maximum, direct, and unavoidable stress (Giel 1990). Generally, in the immediate aftermath of a large-scale disaster such as occurred on September 11th 2001, most people will show signs of emotional and psychological stress. The motivating emotion is fear which is a basic human response to life threat and initiates survival-oriented behaviors (Goltz et al 1992). The most common emotional responses reported are feeling stunned, dazed and in disbelief. Extreme emotional responses such as panic rarely occur. September 11 is a good example of how people behave in the immediate aftermath of a disaster. After the initial shock, people begin to search for safety. Chaos and social disruption ensues causing social instability. Once local authorities have the chaos under control, most people will behave in a rational and helpful manner rather than in a dysfunctional manner. After 9-11 people joined forces in an effort to search for survivors.

Collective mourning rituals unite a society in the expression of loss and search for meaning in a disaster. Grief is a normal process that subsides with time. It is the permanence of loss rather than the witnessing of a disaster that causes social suffering (Giel 1990; Harvey 2002). Public grief in New York City was expressed through the creation of memorials at fire and police stations, on street corners and in parks, where people gathered to hold vigils around a memorial site blanketed with candles pictures, poems, and letters.

*Human Stress*

The human stress response consists of biological, psychological, and socio-cultural components. The term *stress* in its current usage was introduced into the health sciences in 1926 by physician Hans Selye and refers to a nonspecific
physiological response of the body to any demand (Selye 1974). Stress is a source of disruption in the orderly functioning of the body. Seyle chose the term *stressor* to refer to any stimulus that triggers the stress response. Stressors that elicit a stress response are highly variable and depend on the human body’s physiological response, the external environment, and the interpretation of the stressor by the individual. Stress responses are part of human adaptation and an innate preservation mechanism; however severe and prolonged stress responses can also result in disease and death (Selye 1974).

Selye further distinguishes stress as constructive or destructive. The constructive form of stress (*eustress*) is a positive motivating force that when optimal can improve the quality of life. In contrast, the destructive form of stress (*distress*) is negative, excessive and can be debilitating. Each individual has an optimal stress level for well-being, which when exceeded can become deleterious to health. Variation in human responses to stress is related to genetic, biological, physiological, behavioral, and cultural factors.

Selye was mainly concerned with the effect of physical stressors on the functioning of the human body such as extremes in environmental temperature, infectious disease and other biological threats to human life. Implicit in this model is the notion that stress occurs when change is required to regain equilibrium (Selye 1974).

A major limitation of previous research on human stress is the separation of physiological factors from the social environment. Selye’s stress model fails to account for the dynamic process of social change, an intrinsic aspect of social life.
Two examples of the continuous integrated nature of change come from the writings of anthropologists. Turnbull (1983) describes how life cycle transitions proceed through continuous eventful change, and Torry (1978) discusses change as longitudinal in traditional social systems exposed to outside pressures for advanced technological development and modernization (Torry 1978; Turnbull 1983).

Currently, research effort is directed toward identification of the multiple determinants of stress. Some of the social and situational determinants identified include a person’s age, gender, socioeconomic status and education; the intensity and severity of circumstances surrounding the event; social relationships, environmental conditions; the unexpected nature of the event, and the resources available to manage the situation (Breslau 2001; Gadzella 1991; Gore 1991; Lovallo 1997; Marsella 1996; Stein 2000; Thoits 1991; Wagner 2000).

Excessive stress is a major health risk. Over the past two decades, epidemiological research on stress indicates excessive stress is the cause of adverse health outcomes (Boscarino 1997; Kinston 1974). In fact, stress has been linked to all the leading causes of death, including heart disease, cancer, lung disease, cirrhosis, accidents, and suicide (Gadzella 1991). In addition to these diseases, there are specific stress-related diseases. In an epidemiological study of military men twenty years after exposure to extreme stress during the Vietnam War, researchers found a higher lifetime prevalence of circulatory, digestive, musculoskeletal, nervous system, respiratory and infectious diseases (Boscarino 1997).

Over one-third of disaster survivors suffer from post-disaster stress (Desjarlais 1995). The severity of the stress response is classified as \textit{transitory}, disappearing
within one month and *chronic*, lasting beyond six months. The common thread is the perception of the event or experience as life threatening. Posttraumatic stress, the most severe form of stress response, has been identified in populations of disaster survivors (Danieli 1996).

In a special issue of *Mortality and Morbidity Weekly Report*, published September 11, 2002, researchers reported that stress-related illness among rescue workers at the World Trade Center disaster had risen steadily in the months after the terrorist attacks. The stress-related illness resulted from repeated exposures at the site and the increasing number of funerals and memorial services that rescue workers attended during the next 11 months. Stress-related illnesses are a critical public health challenge in the U.S., and yet few people seek mental health services (Kessler 1995). In the wake of 9-11, New Yorkers were at highest risk for stress-related illness.

*Mental Health Effects of Terrorism*

The terrorist attacks on September 11 killed approximately 3000 people in New York City alone and affected the lives of more Americans then ever before in U.S. history.

Terrorism, an act of deliberate interpersonal violence, invokes widespread fear and destabilizes human social organization. Acts of terrorism have always been part of human history, although never before with the capacity for mass destruction through the use of weapons of mass destruction (Talbott et.al., 2001). The 9-11 terrorist attacks occurred unexpectedly, and as we now know, were meant to stun, invoke fear, and cause the most death and destruction possible.
Terrorist acts are committed through the propagation of terror as the agent of social disruption and are one of the most severe disaster stressors (Ursano 2003). The social characteristics of extensive fear, distrust, loss of confidence in social institutions, unpredictability and pervasive experience of loss of safety is what distinguishes terrorism from other types of disasters (Fullerton 1992). Behavioral changes that may occur are hypervigilance to surroundings, alteration in way of life, and risk for physical and mental illness. Excessive exposure to traumatic material in the media can have adverse health affects, particularly on children. Studies done after the Oklahoma City bombing and the World Trade Center disaster indicate a rise in the general population of depression and posttraumatic stress (Galea 2002).

Recent studies of the September 11 terrorist attacks suggest that intentional human violence associated with terrorism is more likely to cause psychological trauma than other types of disasters (Schuster 2001). Epidemiological studies conducted approximately 6-8 weeks after September 11 suggest a higher prevalence of psychological trauma in Lower Manhattan resulting from proximity to the disaster, exposure to the airline crashes into the World Trade Center, and massive death and destruction at ground zero (Galea 2002).

A national study of Americans’ reactions to September 11 focused on specific exposures to the terrorist events and self-reported mental health outcomes related to those exposures. Participants included those at or near either of the major crash sites (the New York City and Washington, DC areas); those in the World Trade Center, surrounding buildings or the Pentagon; and those who had seen one of the airline crashes, collapse of the buildings, or could see smoke emanating from ground zero in
New York City or the Pentagon on September 11. Findings suggest the prevalence of post-disaster stress was higher in New York City two months after September 11 than elsewhere in the United States (Galea 2002). Estimates of a higher prevalence of psychological stress in Lower Manhattan post 9-11 pose a significant public health problem.

Psychological Trauma

Psychological trauma is a profoundly social and subjective experience. There is no definitive answer and debate continues on what constitutes psychological trauma. Most scholars in the field do agree that psychological trauma has two primary components. The first is the experience of an external event that is life threatening and/or causes harm, and the second is an individual’s subjective experience of the event. The trauma that occurs is a state of mind resulting from the shock of the event. The shock disconnects the individual from their experience of the world. Herman (1997) describes trauma as a fragmentation, of a complex integrated system of self-protection where normal connections to memory, knowledge, and emotion become detached. The trauma renders a victim helpless and overwhelmed. The individual is flooded with intense stimulation that he or she cannot control (McCann, 1990) and becomes instantly disengaged from a sense of control, connection, and meaning (Herman 1997).

Charles Figley (1995), known for his seminal work with the families of Vietnam Veterans, describes psychological trauma as an emotional state of discomfort and stress from memories of an extraordinary, catastrophic experience that shatters the survivor’s sense of invulnerability to harm. The usual response to danger
is impaired and a loss of confidence in oneself and others occurs. Trauma survivors testify to feeling fear, self-doubt, helplessness, numbness, estrangement, vulnerability, and the erosion of a sense of security (Leydesdorff 1999).

The word *trauma* is derived from the Greek word meaning injury. The original usage of the term was for medical diagnosis of physical injuries. The best known term for war-related psychological trauma is “shell-shock,” which today is known as “combat stress.”

A number of anthropologists have influenced the concept of human trauma. The most influential was William H.R. Rivers, a physician, psychologist, and anthropologist. Rivers contributed to a dramatic turn in the treatment of combat trauma. In his work with veterans, he found that severe stress led to combat trauma. His treatment included helping traumatized veterans to tell their personal stories of war experience and dream interpretation. These two treatments were highly effective in relieving symptoms of posttraumatic stress.

Abram Kardiner, a student of Franz Boas and Sigmund Freud, influenced the study of psychological trauma through collaboration with world renowned anthropologist and cultural theorist Ralph Linton. Linton chaired the Department of Anthropology at Columbia University from 1938-1945, succeeding Franz Boas in that post.

The two World Wars and the Vietnam War were natural settings for the study of psychological trauma. During the World War II era, psychoanalyst Abram Kardiner, influenced by anthropologist Franz Boas, studied war trauma as it occurs in the context of the violent environment. Kardiner studied posttraumatic stress in

The field of psychological traumatology has developed sporadically because of diverse theoretical orientations and periods of waning interest interspersed with surges of research after catastrophic events (Robben 2000).

*Traumatic Events*

A life event is traumatic when it overwhelms ordinary human adaptations to the environment. There is usually a threat to life or bodily integrity. The salient characteristic of a traumatic event is its power to inspire helplessness and terror with profound and lasting changes in physiological arousal, emotion, cognition, and memory (Herman, 1997).

All traumatic events cause a disruption of the experience of safety (Fullerton 2003). Exposure to trauma causes a *rupture* in the continuity of life and disrupts social relations. Disruption in the continuity of one's life can impact health. Approximately 70 percent of the US population is exposed to some type of traumatic event over their lifetime (Bloom 1998; Norris 1992). Traumatic events are socially constructed and given meaning within a cultural context. It is the meaning ascribed to the event that affects the impact of the event. The meaning attributed to the event affects how the trauma is experienced and the way in which recovery occurs and life ways are reestablished (Ursano 1994). The accounts people develop of the traumatic event will profoundly influence their adaptation.
American culture is a “traumatogenic environment” where traumatic events occur frequently (Bloom 1998). Recent traumatic events include the Oklahoma City bombing of the Murrah building in 1995 and the September 11, 2001 terrorist attacks. The recent war in Iraq has also been traumatic for the families of soldiers killed or severely injured.

Judith Zur, a psychological anthropologist, conducted her dissertation fieldwork during the war in the Northwest highlands of Guatemala. She interviewed Quiché war widows. The widows revealed to her that in their culture the loss of property and livestock is more traumatizing to the family then the loss of individual kin. In their socio-centric view of society, individuals are viewed in terms of their social roles. This view of loss contrasts with the American egocentric view of society focused on individuality distinct from the social roles occupied.

The pain caused by the loss of a family member is expressed in terms of the economic hardship resulting from the vital economic role the person held in the family household (Zur 1996). The meaning attributed to traumatic events is based on cultural beliefs in fate and restraint of negative emotion. Quiché coping behavior includes self-denial, self-effacement, and a passive resignation. Somatization is a normative or adaptive response to trauma among the Quiché, and the biomedical construct for posttraumatic stress disorder is not applicable.

According to Zur, an understanding of Cartesian dualism, so basic to Western ideology (such as the mind-body dualism) is an unknown concept in Quiché culture. Instead, there is a tendency to express distress through literal somatic metaphors. In cultures that inhibit the open expression of emotional distress, psychic pain is
expressed using metaphors, thus masking the Western bio-medical symptoms that would provide a diagnosis of traumatic stress. For example, the Quiche speak of losing their “essence” when they are frightened and having their “balance” restored when their essence returns. This description would clearly not fit the diagnostic categories of Western biomedicine. Ultimately, treating traumatized populations subjected to social and political atrocities means understanding their health related complaints within a cultural context.

Traumatic Loss and Mourning

Violence and war, common realities of human existence usually have an impact on human adaptation over time. (Apfel 1996; Bloom 1998; Desjarlais 1995; Harvey 2002; Herman 1997; Knauft 1985; Scheper-Hughes 1992). Traumatic loss is embedded within a historical, political, and cultural context. It occurs when a person experiences a death as sudden, unexpected, and violent. The Holocaust reminds us of the capacity of humans to perpetrate violence. Traumatic loss from mass murder as occurred at Auschwitz, Germany in the 1940’s and in the United States on September 11, 2001 is loss of magnitude. Green (2001) found that sudden unexpected violent death of a loved one resulted in prolonged traumatic grief (Green 2001). Bereavement resulting from violent traumatic death and loss of the magnitude experienced on September 11 can become prolonged and debilitating (Shear 2002). It is important to study loss, bereavement and mourning from a cross-cultural perspective. Manifestations of mourning vary cross culturally. Mourning a loss is a time of shared suffering that helps people to accept the finality of death.
Religion and ritual are important in restoring a sense of community. Cultural beliefs signify the core means of coping with traumatic loss. Rituals play an important role in recovery from trauma by providing powerful culturally accepted metaphors. Prayer, religion, rituals, culturally prescribed commemorative acts, and ceremonies, each help people to remember in a benign and adaptive way. Some traditional, non-industrial societies collectivize their suffering by creating healing rituals, religious ceremonies, communal dances, and revitalization movements. Symbolic places are restored such as religious centers, community centers, and special places for women and children, as cultural responses to loss (Krystal 1968; Nader 1999; Rogers 1999; van der Kolk 1987; Wilson 1989).

In the United States and other nations traumatic loss has been collectivized in museums, cemeteries, statues and monuments. For example, the Vietnam Memorial and the Holocaust museum in Washington D.C. are powerful collective remembrances of loss. Veterans Day celebrations and memorial services on the anniversary of September 11 commemorate the nation’s losses.

Victor Frankl a Holocaust survivor and psychiatrist spent three years in concentration camps. He argued that finding meaning in life helped people endure suffering. The intrinsic value in human suffering is as a connecting force for people to share the experience of death and loss and search for meaning in their suffering (Frankl 1959, 1963). A focus on the meaning attributed to a loss is essential for understanding how people adapt to severe stressors.

Acts of senseless violence like the terrorist attacks on September 11 shatter basic assumptions and illusions about the nature of the world we live in. When
assumptions are shattered, we must construct new assumptions that are more adaptive (Janoff-Bulman 1992). Bonding, solidarity, and shared meaning help construct the new social narrative. In New York City, when the recovery efforts ended on May 30th, a ceremony, honoring the deceased was held at ground zero with a silent procession and removal of the last standing pillar. At the 6-month anniversary of the attack on the World Trade Centers a moment of silence was observed nationally at the exact time of the collapse of the second tower.

Trauma and Health

Healing from a traumatic loss is a social adaptation process that occurs over time. After a major loss, an individual’s identity undergoes change. To create an altered identity, the loss must be integrated with a new set of assumptions about life so that one’s sense of continuity and connectedness are restored (Harvey 2002; Janoff-Bulman 1992).


The deleterious impact of trauma on psychological health has been well established (Danieli 1982). Trauma may result in acute and chronic traumatic stress and even have intergenerational effects. In addition, research suggests that physical
functioning is also affected (Lovallo 1997; Wagner 2000). Physical illnesses resulting from trauma may even lead to accelerated aging and increased mortality (Danieli 1982). There is also evidence of the persistence of health problems following psychological trauma (Holen 1991; Kimerling 2000; Ursano 1995). Anticipatory stress about future terrorist attacks can also have an adverse impact on health (Schuster 2001).

Traumatic Stress

Traumatic stress responses may result from experiencing personal traumas, criminal assault, war, disasters, mass violence, and terrorism (Danieli 1982). The literature addressing traumatic stress has increased considerably in the post-Vietnam era. War trauma has played a significant role in advancing research on posttraumatic stress disorder. Numerous studies suggest the persistence of health problems ranging from one to up to twenty years after trauma (Kimerling 2000). Research has confirmed that symptoms of posttraumatic stress increase significantly with frequent and recurrent exposure to traumatic events (McCann 1990).

Traumatic stress research has focused on survivors of war, child abuse, sexual abuse, domestic violence, and disaster. However, research on the traumatic effects of disaster on different populations is negligible. Most of the evidence of negative impacts of traumatic stress on health has come from studies of combat stress (Armfield 1994), PTSD (posttraumatic stress disorder) (van der Kolk 1996), post-disaster body handling, and emergency services (Ursano 1994).
Posttraumatic stress disorder (PTSD) is a pervasive anxiety disorder that may follow exposure to a traumatic event. PTSD affects those directly exposed to the threat to life and the horror of a traumatic event (Fullerton et al., 2003:9). It often results from a psychologically traumatizing event that is generally outside the range of normal human experience, such as disaster and violent death, and results in symptoms of mental and physical distress (Bryant 2000; Harvey 1990).

Posttraumatic stress disorder (PTSD) is the clinical diagnosis of the American Psychiatric Association for the most severe traumatic stress response. The diagnosis of posttraumatic stress is used internationally without evidence-based research that the disorder exists cross-culturally. The medicalization of posttraumatic stress disorder has decontextualized the complexity of psychosocial trauma (Robben 2000). Green and Lindy (1994) provide a number of risk factors for the development of posttraumatic stress that are consistent across studies. Those most affected by a disaster who face life threat, lose loved ones, witness grotesque forms of death, and experience community devastation are more likely to develop posttraumatic stress disorder.

The existing literature on posttraumatic stress has underemphasized the importance of social, cultural, and environmental factors. Data on population prevalence of traumatic events most likely to cause PTSD is limited. Epidemiological research indicates the vast majority of individuals who experience trauma, even the most extreme trauma; do not develop PTSD (Kessler 1995; McFarlane 1995). The probability of developing PTSD is dependent upon, among
other things, the nature of the traumatic event. Risk factors include the extent of environmental devastation, community disruption, proximity of survivors to the disaster, physical injury, and exposure to death and mutilation (Ursano 1994).

Gender and ethnicity are also risk factors for PTSD. Research has shown that ethnic and gender differences exist in vulnerability to stress (Barnett 1987; Gadzella 1991; Gore 1991; Green 1996; Howard 1997; Stein 2000; Thoits 1991). Individual differences in vulnerability to traumatic stress responses are the result of complex interaction among person, environment, and event (Harvey 1996).

Epidemiological studies indicate gender differences in PTSD. This difference in prevalence may in part be attributable to differences in rates and types of traumatic stress experienced. Research suggests that men and women are exposed to different types of stress and therefore may be at differential risk for developing posttraumatic stress disorder (Breslau 1998; Norris 1992). Women are twice as likely as men to suffer from PTSD and for a longer duration. In addition, several epidemiological studies comparing men and women have reported higher rates of pre-existing affective and anxiety disorder in women as well as prior traumatic experience.

Social structure also plays a role in shaping ethnic and gender differences in vulnerability and exposure to stress. Women are reported to seek meaning from the social context in appraising the significance of stressors, and their psychological well-being is more affected by these social interactions (Breslau 1998; Gore 1991; Stein 2000). To shed light on ethnic and gender differences in posttraumatic stress more cultural comparative research is needed.
To understand the natural course of PTSD, cultural differences in propensity for PTSD must be established. Longitudinal cross-cultural comparative research can broaden our understanding of the natural course of posttraumatic stress disorder. Creamer and colleagues (2001) found that the risk of developing PTSD following exposure to trauma is considerably lower in Australia than in the U.S., implying cultural differences in resilience to stress.

*Secondary Traumatic Stress*

Secondary traumatic stress occurs when an individual is indirectly exposed to a traumatized person by witnessing their trauma or gaining knowledge of the individual’s experience of the traumatic event. Diverse terminology has resulted in a lack of consensus on the definition of secondary traumatic stress. Pearlman and Saakvitne (1995) prefer the term “vicarious traumatization” defined as altered identity and worldview. They argue that repeated exposure to traumatic material places helpers at high risk for vicarious traumatization.

Figley (1995) presents two conditions considered necessary for the mental health professional to experience secondary traumatic stress: empathy and exposure to another’s trauma. Figley (1995) considers the cognitive processing of the traumatic event of prime importance in determining the individual’s response. He presents a conceptual model whereby the level of traumatic stress is a function of two major sets of variables: the individual’s coping ability (including his or her utilization of social support), and the individuals’ circumstances within the traumatic event which may be either passive (helplessness and immobility) or active (ability to modulate the stressor). Although this model addresses the psychological
consequences of secondary traumatic stress, it fails to emphasize the social context within which the exposure takes place.

STS in Mental Health Professionals

There is very little research on the effects of secondary traumatic stress on the health of the mental health counselor. It is evident that counselors with high exposure to traumatic material are at risk for secondary traumatic stress. However, a definitive description of what these stress responses are, the incidence, prevalence and scope remain unknown.

Research suggests that high exposure to victims of trauma increases the risk of secondary traumatic stress (McCann 1990). Several recent studies have investigated secondary traumatic stress in mental health professionals (Arvay 1993; Badger 2001; Birck 2002; Catherall 1995; Cerney 1995; Figley 1995; Good 1996; Stamm 1995; Wainrib 1998). One study done with counselors working with trauma survivors in British Columbia found that ninety percent of the respondents stated that they had been strongly affected by client’s traumatic experiences in both positive and negative ways. Content analysis of their responses revealed that these negative experiences were stressful, depressing, tiring, and emotionally overwhelming for them. However, on the positive side some reported it increased their empathy. In this study factors such as age, years in practice, work setting and perceptions of support are related to levels of stress experienced by counselors. A profile of impaired mental health counselors indicated those most at risk for secondary traumatic stress were younger, inexperienced with trauma cases, who felt their case load was too intense (Arvay 1993).
Compassion Fatigue

Compassion Fatigue is an occupational health hazard for those in the helping professions. Therapeutic intervention with clients who have experienced a traumatic event can be particularly stressful. There is increasing evidence that mental health counselors who work primarily with traumatized clients often show signs of psychological distress (Adams 2006). If untreated the stress can become chronic and result in a diminished capacity to function in all facets of life. The theoretical concept of Compassion Fatigue is based on twenty years of research on secondary traumatic stress. According to Figley (1995) compassion fatigue is an occupational hazard associated primarily with mental health clinical practice and first responders to traumatic events. Compassion fatigue is a symptom complex nearly identical to posttraumatic stress disorder, except that exposure to a traumatizing event experienced by the traumatized person becomes a traumatizing event for the helper. The emotional suffering of others is absorbed and retained. There is a sense of helplessness, confusion, and isolation from social support (Figley 1995). Despite more recent investigation on the nature of compassion fatigue there remains a lack of clarity on the defining symptoms and how it can be differentiated from other forms of psychological distress.

For the purposes of this study Figley’s definition and description of Compassion Fatigue is used. Figley conceptualizes Compassion Fatigue within a stress process framework. Stress affects the individual both biologically and psychologically (Lovallo 1997). Compassion fatigue can result from cumulative
compassion stress. Compassion stress is the natural outcome of helping or wanting to help a trauma survivor. It is defined as a state of exhaustion and dysfunction, biologically, physiologically and emotionally because of intense and prolonged exposure to compassion stress (Figley 1995:34).

There are several theories about how stress is transmitted in the course of interaction, but no conclusive empirical evidence exists. According to Figley (1995) exposure and empathy are key factors in the transmission of traumatic stress from the traumatized individual to the helper.

Vicarious traumatization, a term coined by Pearlman and Saakvitne (1995) is the transmission of traumatic stress through observation and/or hearing trauma stories and the resultant interpretations made and meaning given to the stories by the helper. The more intense and frequent a therapist's exposure to traumatic material the higher their risk for vicarious traumatization. The transmission of traumatic material to the helper often results in inevitable negative changes in self-image and behavior. The impact on the therapist's life is cumulative and pervasive. The changes occur more often in highly empathic, sensitive individuals, those with a previous history of trauma, and less experienced therapists.

Figley defines compassion fatigue as a “feeling of deep sympathy and sorrow for another who is stricken by suffering or misfortune, accompanied by a strong desire to alleviate their pain or remove its cause (Figley 1995). Compassion Fatigue can result from witnessing or gaining knowledge about a traumatic event and the stress resulting from helping or wanting to help the suffering person. It can emerge
suddenly and without warning or there may be a time delay such that the symptoms are not associated with the original event.

There is general consensus that secondary traumatic stress may overlap with job burnout. Both are characterized by the emotionally exhausting nature of working with the traumatized. While burnout is the generalized deterioration in motivation and empathy, secondary traumatic stress symptoms occur after a traumatic exposure. The onset of symptoms may be immediate or delayed. It is only since 1995 that research has focused on the specific impact of trauma exposure on helping professionals. It is evident that further epidemiological research is required to study the incidence and prevalence of compassion fatigue in helping professionals and the variability of stress responses within different cultural and environmental contexts.

Recent research suggests that compassion fatigue and burnout have different health effects on the individual (Adams et al., 2006). While mental health professionals are considered at highest risk for secondary traumatic stress responses, anyone who engages empathically with trauma survivors is considered at risk, including the family members of disaster survivors and disaster relief personnel. For family and friends it is the stress absorbed in their relationship to the “survivor” whereas for the disaster relief personnel and other health care providers, it is the stress absorbed while helping or wanting to help victims of trauma.

The historical development of compassion fatigue dates back to the early 1900’s with the work of Dr. Carl Jung’s. He was the first to identify his own suffering in his treatment of traumatized clients. In his writings, Jung discussed the phenomenon of “countertransference” the therapist’s vicarious absorption of the
traumatic material introduced by the client. He emphasized the importance of maintaining a balance and detachment from the suffering of his clients (Jung 1907). Since then the concept of vicarious suffering of the caregiver or therapist in work with trauma survivors has been conceptualized from various standpoints using a variety of terms that include secondary victimization (Figley 1982); vicarious traumatization (McCann & Pearlman 1989); and secondary traumatic stress (Stamm 1995). Recent writings provide examples of how psychotherapists have experienced symptoms that imitate the symptoms of their clients (Herman 1997; Pearlman 1995).

Charles Figley developed the theoretical foundation of secondary traumatic stress. In the late 1970’s and early 1980’s Figley’s work focused on the families of traumatized individuals particularly Vietnam Veterans suffering from PTSD. He later focused on the risk of compassion fatigue for all caregivers, particularly mental health professionals, who work primarily with severely traumatized clients.

In 1995 a body of scientific publications emerged laying the foundation for empirical investigation of the phenomenon of traumatization in helping professionals. Several terms for the phenomena and descriptions began appearing in the literature in 1990. The earliest term ‘compassion fatigue’ first appeared in a nursing journal in an article about the experience of critical care nurses (Joinson 1992). This term was later coined by Figley in 1995 to describe secondary traumatic stress, since it was favored by health care professionals in describing their experience. Other terms such as vicarious traumatization, secondary traumatic stress and compassion fatigue, are considered the cornerstones in the traumatology vernacular.
In summary, both the quality and quantity of trauma work, place trauma workers at risk for secondary traumatic stress responses. Because of frequent, repetitive, and cumulative exposures to trauma, many trauma workers experience various post-traumatic stress symptoms and have increased levels of stress-related morbidity and mortality (Taylor 1982; Ursano 1995). Additionally, there can be a spillover that theoretically can affect their relationships with family and friends causing interpersonal conflict and leading to serious mental health problems. It is imperative to conduct research on the impact of disaster-related stress on traumatologists so that their own health will be safeguarded through extensive training and preparation for deployment to disasters.

Compassion Satisfaction

Research also indicates there are positive effects gained through working with trauma survivors. There is the possibility of a powerful sense of satisfaction with trauma work. Figley (1995) has coined the term “Compassion Satisfaction” to describe the development over time of a much stronger: sense of personal strength, self-knowledge, confidence, sense of meaning and purpose, spiritual connection and respect for human resiliency. Although mental health professionals working with trauma survivors may over time experience the negative effects of compassion, a large majority of individuals indicate trauma work has brought greater meaning into their lives, increased their sense of purpose and inner strength, and heightened their sense of connection with others.
Burnout

Mental health professionals are at high risk for burnout, especially those who specialize in the field of traumatology. Burnout is also a common condition among emergency responders, medical and social service professionals. Recent research has broadened the scope of burnout considering it as a special type of occupational stress resulting from interpersonal demands in the workplace (Schaufeli 1998). While some theorists use the term ‘burnout’ interchangeably with secondary traumatic stress to refer to the same condition, it is considered in the field of traumatology to be a very different condition (Figley 1995).

The term “burnout” is a metaphor that describes a gradual wearing down similar to a brightly burning candle that eventually burns down to the wick. (Pines 1981) defines burnout as a state of physical, emotional, and mental exhaustion caused by long-term involvement in situations that are emotionally demanding. Emotional exhaustion combines with professionals’ high expectations.

Burnout is a gradual process of energy depletion. The cardinal signs of burnout in health professionals are feelings of anger, apathy, depression, boredom, cynicism, discouragement, and ineffective role performance. There may also be frustration and powerlessness associated with the inability to accomplish workplace goals (Farber 1983). Burnout interferes with a helping professional’s interpersonal relationships.

Burnout as a social phenomenon was discovered in the human service professions in the late 1960s. Freudenberger (1974) first described the occupational health effects and termed the condition “burnout.” Maslach (1982) conducted
research on job stress at around the same time and used the term burnout to describe the effect on health care professionals.

Burnout was originally considered a clinical syndrome that included physical, behavioral, cognitive, and motivational symptoms. The term became a buzzword in the 1980’s and usage stretched to encompass much more than originally intended. With the development of standardized measures, burnout was studied empirically.

Unlike the clinical approach, the social-psychological approach to the study of burnout emphasized the interpersonal nature of the phenomenon. Human service professionals were studied because of the high emotional demands of their work. The MBI (Maslach Burn-out Inventory) a self-report questionnaire continues to be the most widely used and best-validated instrument to measure burnout (Schaufeli 1998).

Empirical research indicates burnout occurs in health professionals from their interpersonal interactions with clients. The effects of burnout are particularly pronounced in mental health professionals due to the emotional drain, professional isolation, and ambiguous successes in their therapeutic encounters (Grosch 1994; McCann 1990; Sexton 1999). The organizational environment is also a factor in the development of burnout (Cherniss 1980).

Theoretically, psychological approaches have dominated the burnout literature. The social and cultural factors contributing to burnout as a social phenomenon have been a neglected area of study. There is a lack of consistency in definitions of burnout. While some definitions are extremely broad encompassing over one hundred and thirty symptoms, other definitions are narrow and discrete
The common feature in the definitions of burnout is the idea that it is a dynamic process of gradual breakdown in adaptation to one’s occupation.

There are also different theoretical perspectives that have developed in recent years. Schaufeli (1998) identifies four major theoretical approaches to the study of burnout including individual, interpersonal, organizational, and societal. The four approaches differ in the extent to which they emphasize particular factors in the development of burnout. All four approaches emphasize the subjective nature of burnout. Schaufeli (1998) argues that more deeply rooted social structural factors in western cultures contribute to the phenomenon of burnout. An integrative model of burnout incorporates all four approaches; individual, interpersonal, organization and societal. In the integrative model, the professional has a high level of motivation, a stressful work environment, and either effective or ineffective coping. The high motivation to help others and the dedication and commitment of most health professionals may place them at higher risk for burnout. Increasingly, the health and human services offer a stress prone work environment with structurally built-in sources of stress that may impede professional goals. If the professional has ineffective ways of coping with this occupational stress they will likely burnout.

Compassion fatigue is different from burnout in several ways. According to Figley (1995) burnout emerges gradually, and is the result of chronic emotional exhaustion, whereas secondary traumatic stress or compassion fatigue is acute and usually emerges suddenly without much warning. The onset of symptoms is quicker and often disconnected from real causes; but in contrast to burnout, compassion fatigue has a much more rapid recovery.
Secondary traumatic stress is being identified more often in health professionals exposed to high stress environments. It is considered an occupational health hazard for social workers with large caseloads of traumatized clients and nurses exposed to frequent patient death, trauma, and losses in high-risk areas of health facilities (Mings, 1995; Payne, 1998; Saunders, 1994; Spencer, 1994).

Disaster Mental Health Services

Disaster Mental health Services for large segments of the population have not been a priority until the Oklahoma City bombing in 1995. After the bombing of the Murrah building, it was recognized by FEMA that mental health services were not well integrated into the federal disaster response plan. The need of those affected by the bombing for short and long-term mental health services led to the development of a national disaster mental health services plan.

Disaster mental health services are now part of the federal emergency management system (FEMA) and a division of the National Red Cross. When there is a “Presidential” declared disaster, such as 9-11, FEMA in collaboration with the National Institute of Mental Health (NIMH) supply grant funding designed to supplement the available resources and services of state and local governments.

Disaster mental health services focus on crisis stabilization and referral of high risk cases to community mental health services. Emphasis must be placed on the identification of disaster survivors at high risk for posttraumatic stress responses. Local community mental health centers are the primary providers of disaster mental health services. The community mental health center is indigenous to the affected area with an established network of public and private service agencies and the local
government bureaucracy. In a crisis, community mental health centers are situated to coordinate services in conjunction with the local chapter of the American Red Cross, and Emergency Operating Center (EOC). Disaster mental health services are provided short-term to bolster the community services until funding is provided to adequately meet the mental health needs of the community.

After the terrorist attacks on the World Trade Center, departments of psychiatry in Lower Manhattan and Columbia Presbyterian Medical Center responded by sending clinical volunteers, as did both public and private mental health agencies in New York City and surrounding areas (Oldham 2003). However, these resources were soon attenuated resulting in the activation of the National Red Cross Disaster Mental Health Services and other outside organizations.

*The Role of Disaster Mental Health Services*

The role of disaster mental health services is to support and stabilize psychosocial functioning, assist disaster survivors to reestablish connection to social support networks and provide crisis intervention to mitigate disaster stress. A key issue in the provision of disaster mental health services is to match the needs of the community with the appropriate scope and duration of service provision.

In the aftermath of disaster, safety and support are primary concerns for disaster survivors. Disaster survivors are assisted to reestablish contact with relatives and other sources of social support. Debriefings may be conducted with affected groups and families. Support is given to relatives to identify the deceased. Minimizing exposure to intrusive media is also encouraged.
Community education is another key role. Informing the public about typical responses to a traumatic event and the availability of social support services is critical to mitigate post-disaster stress. The focus is on community outreach, consultation, and training of community mental health service personnel. Outreach, the informal “over a cup of coffee” method of disaster mental health intervention is considered an effective approach in disaster relief (Young 1998). A mental health team will enter the community locating disaster survivors wherever they are—in their neighborhood, schools, disaster shelters, workplace, hospitals, churches and community centers. The outreach approach is to get involved in the disaster relief effort and help with whatever needs to be done at the time. Pitching in is a way to provide “on the spot” help to those in need.

The broad objective of community outreach is to relieve temporary stress and bolster healthy coping strategies to mitigate severe stress responses. Another important goal is to assist neighborhoods and families to rebuild social relationships by working together and offering help. Setting up informal social groups is another way for disaster survivors to share their common experience, and exchange useful information on where to find help and other tips.

Collaboration with community social service and mental health agencies is essential to rebuilding and strengthening community ties. Therefore, mental health services play an important role in working closely with other public service agencies to provide post-disaster education about common stress responses, effective ways of managing stress and available community resources.
When planning a community-wide disaster mental health service program the demographics of impacted communities must be considered. It is essential that the needs of cultural groups in the community are taken into consideration. Urban, suburban, and rural areas with diverse ethnic populations will have differing needs, resources, traditions, and values about giving and receiving help. Factors to take into consideration include the impact on the level of unemployment, loss of financial resources, substance abuse, marital and family discord, as well as disaster-related organizational politics involving safety, rebuilding, and relocating. In addition, outreach programs are most effective if mental health service personnel indigenous to the community and various ethnic and cultural groups are integrally involved in service delivery (Myers 1994).

The recovery phase of disaster mental health service interventions often persists from several years to decades post disaster (McFarlane 1995). One of the lessons learned from the Oklahoma City bombing is that even though distress and disorganization subside with recovery, many lives are still affected by the disaster long after it ceases to be a public interest. This makes the integration of disaster mental health services during all phases of disaster response a priority. The role of mental health services must be clearly defined in a community disaster plan. A second lesson learned from Oklahoma is that part of a community’s disaster preparedness plan must require the training of disaster mental health service personnel that will be available for deployment in the event of a disaster. Finally, emergency first responders must be provided training on the common responses of disaster survivors.
Much of the disaster intervention work provided by mental health professionals falls outside the boundaries of traditional training programs and roles. Traditional clinical training is focused on diagnosing and treating mental illness that is often an impediment in the disaster environment. Since 9-11, the Department of Homeland Security has disbursed funds specifically for disaster mental health training of community mental health professionals.

*Occupational Health Risks for the Helper*

Volunteering for work in disasters can have unintended psychological consequences. The trauma of surviving a disaster is a shared experience between the survivor and helper. In a disaster, major sources of stress for the helper include: sharing the anguish of survivors as they retell their traumatic experience; close encounters with death and loss; empathic identification of the helper with the traumatized person; and ambiguous roles.

Disaster work is a form of non-stop crisis intervention. The environment is chaotic, noisy and even dangerous. Workers have unstructured schedules, ambiguous roles and often no time to rest. Humanitarian aid workers in particular, are often in harms way in war zones, and their lives may be in danger. They are faced with coping with extreme demands that are impossible to meet in dangerous environments with high risk of epidemic disease. There is far less capacity in underdeveloped nations to counteract the extent of death, disease and violence. The massive needs far exceed the available resources, and competition for resources often leads to violent eruptions in the refugee camps (Danieli 1996).
Aid workers form relationships with select refugees as they help them and are exposed to chronic loss when these people die. Workers often feel powerless as they watch multitudes of sick and dying people they cannot save. In fact humanitarian aid workers have been described as a new type of war veteran, returning from battlefields unable to escape the horrors seen there (Smith 1996).

Humanitarian aid workers in refugee camps are exposed to a disaster environment for months and even years, or may be continually reassigned to other disaster areas with no respite from chronic stress. They are often exposed to mass starvation and death, grotesque sights and smells, and are involved in handling and disposing of dead bodies (Danieli 1996). The environment is chaotic and there is often no clear incident command center as there is in U.S. disasters. There is also higher risk of disease epidemics because of poor sanitation and public health conditions. As they are responsible for making difficult choices, they are often confronted with moral conflict, guilt and despair. Making meaning of such human destruction is an ordeal for humanitarian aid workers.

In contrast to humanitarian aid workers, disaster mental health service professionals are deployed for a shorter tour of duty in the U.S. Their roles are significantly different with respect to scale. Aid workers have responsibility for afflicted populations while the roles and responsibilities of disaster mental health service professionals’ are much more circumscribed. Emergency first responders and disaster mental health services personnel usually work at a disaster site for a maximum of four to six weeks.
Humanitarian aid workers and disaster mental health service professionals share certain key characteristics of concern, compassion, dedication, and commitment. They also share a sense of responsibility and heightened empathy for pain and suffering. These characteristics predispose the helper to altruistic behavior. However, most aid workers do feel a sense of gratification or a need to relieve others pain and suffering (Bergman 2003).

Generally, disaster workers are tremendously committed to their work, often to the point of being over-invested and frequently deny fatigue, stress, and medical problems out of fear of being relieved of duty and sent home (Myers 1985). They may have strong emotional reactions that affect the quality of their work. They may feel quickly overwhelmed by the situation and their role as helper. During the disaster relief phase, workers may work frantically trying to accomplish tasks and exhaust themselves.

Raphael and colleagues describe the responses of helpers to their encounter with death and destruction. Helpers confront their own mortality and need to grieve both for those who died and suffered, and for themselves and their own future losses (Raphael 1983). In addition, stress responses can spillover to affect intimate sexual, social, and work relationships causing interpersonal conflict and leading to severe psychological distress. For some helpers the sheer magnitude of the event and the impact of the workload influence their attitudes regarding the relative importance of other activities. There is now a consensus regarding short-term after effects, though debate continues over the existence of longer-term effects.
In the aftermath of disaster, some helpers view life from a different perspective. Many have directly confronted their own mortality, have suffered the loss of their ‘invulnerability’, and consequently regard life as more tenuous. Others find their experiences lead to a positive reevaluation of their life and report a change in values to less materialistic ones (Raphael 1983). Since the late eighties, there has been a strong increase in awareness about the effects of traumatic or critical incidents on emergency service personnel and concurrently, a rapid introduction of programs of psychological support to assist staff and their families. Most emergency service agencies throughout Australia have had some form of debriefing/peer support program in place since the early nineties (Raphael 1983; Raphael 1996). Some of the organizations where CISD programs can be found are in hospitals, military services, protective social services, prisons, youth and family services, welfare departments, departments of education, rehabilitation services, social security departments, banks, petroleum companies, airlines and other industries (Mitchell 1985; Mitchell 1995).

Despite the comparatively substantial research on disasters survivors, few studies have focused on the impact of disaster on the helpers, particularly mental health professionals. One early study conducted in 1983 described the experiences of a volunteer disaster mental health team that responded in the aftermath of the Australian Ash Wednesday bushfires (Berah 1984). There was immense property loss from the fires but few deaths. Many reported feeling shocked, confused, helpless, saddened and fatigued. Team members suffered from physical exhaustion, emotional strain, and traumatic stress. The intensity of encounters with disaster survivors taxed the empathy, emotional reserves and intervention skills of team
members (Mitchell and Everly 1993). After the disaster experience approximately half of the group reported physical illness, accidents and changes in their eating, smoking and drinking habits. A minority of the group had disaster-related dreams, disturbed sleep, or described reactivation of previous traumatic experiences (Berah 1984).

Traumatic stress is an occupational health hazard for all disaster response personnel. It is the magnitude and exposure to death and suffering that leads to traumatic stress. The degrees of trauma to which humanitarian aid workers are exposed are a constant source of stress. Bearing witness to trauma or gaining knowledge of traumatic events forces the helper to confront their own vulnerability to stress. The risk of traumatic stress is a function of the degree of exposure and empathy with the trauma survivor. Prolonged emotional contact with the severely traumatized places the helper at highest risk of experiencing vicarious trauma (Herman 1997).

The role of the traumatologist in a disaster deployment is in stark contrast to the routine time-limited appointments with clients that characterize a mental health practice. Disaster deployments are immensely challenging to the mental health professional because they must leave their job to deploy and commit to at least a one or two week stint. Roles are not predefined and are at times ambiguous.

The effects of secondary traumatic stress include preoccupation with the suffering of trauma survivor(s); an inability to disengage from the traumatized person; an inflated sense of responsibility to reduce the suffering; and emotional exhaustion from over exposure (Arvay 1998; Badger 2001; Figley 1995). In this
fatigued state the helper may experience the symptoms of the sufferer. The symptoms include intrusive thoughts and images, nightmares, sleep disturbances, hypervigilance, and physiological changes. The helper attempts to avoid thoughts/feelings through avoiding activities and situations that may trigger the symptoms. The helper may detach from others. The more protracted the exposure to the trauma survivor the greater the risk to the helper of post-traumatic stress disorder (Figley 1995).

Disaster operations are often traumatic for the helper when there is extraordinary human loss or no survivors. One of the after-effects of bearing witness to mass death and destruction is called the “death imprint” which can cause severe anxiety and a sense of being out of control (Lifton 1967). Robert Lifton documented ‘psychic numbing’ and the emergence of a “death imprint” among disaster workers after the atomic bomb disaster at Hiroshima. Lifton (1967) also identified “survivor guilt” in disaster workers confronted with unparalleled mass destruction and loss of human life.

The effects of traumatic stress on mental health professionals and the efficacy of interventions such as debriefing have rarely been studied (Birck 2002; Catherall 1995; Good 1996; Stamm 1995). Weisaeth (2000) suggests that debriefing can be an effective intervention for professional teams that have previously been “briefed.”

The events of September 11 compel recognition of the extraordinary occupational health risks faced by the nation’s disaster relief personnel. Thirty-eight traumatologists were among the thousands of medical and mental health professionals
deployed to New York City after 9-11. All of them were at risk for secondary traumatic stress.

Traumatologists deployed by the Green Cross Projects left their workplaces and families for up to six weeks to assist disaster survivors in Lower Manhattan. Stationed twelve blocks from ground zero and in full view of the billows of smoke, debris filled air, pounding machinery and the stench of human remains, mental health services were provided for the employees of local union 32BJ, their members and families who were traumatized from their exposure to the events at ground zero.
CHAPTER IV.

METHODS

Three key assumptions guided the methodology for this study. The first assumption is that a personal narrative given at a particular historical moment is representative of overarching cultural patterns. The second assumption is that the interaction between the participant and researcher is a collaborative and creative process that generates the narrative and culminates in “documents of interaction” (Angrosino 1989). The third assumption is that the attribution of meaning to experience is an interactive process between researcher and participants affecting the participants as they reflect on their experience and requiring the researcher to be reflexive in the evaluation of the impact of the researcher on the research process. Scientific knowledge and evidence is viewed as situational, contextual, and processual.

Design

The study design is exploratory. A multi-method strategy of data generation included observation, participant observation, informal and formal interviews, field notes, a personal journal, and media sources. I believe that evidence of the social world and meaningful knowledge is generated using a multi-method approach that includes direct observation and participation in events as they occur in the ‘natural’ or ‘real life’ setting, as well as narrative accounts of personal experiences. The data
generated through fieldwork occurred naturally within the context of the New York City World Trade Center disaster. My premise is that the international union that was the site of the Green Cross Projects deployment is a natural setting that revealed data in multidimensional ways. Observation in a natural setting allows for “situationally generated” data (Mason 2002:85). As an active participant in this setting, I can be a “knower” through my own lived experience in the role of traumatologists, as well as a participant observer in the role of researcher since I shared a similar experience with the thirty other traumatologists who are participants in this study.

Fieldwork afforded me the opportunity to collect multidimensional data on social interactions from various settings that occurred spontaneously in “real time” rather than relying solely on retrospective accounts and reconstructions of lived experience. I experienced being part of a large-scale disaster deployment, working with the traumatized and having access to the wider disaster community outside the union building. I also focused my observations on the interactions of the “helpers” as they interfaced with the community at large from the hotel in mid-Manhattan to ground zero. Fieldwork observations were selective and reflect my anthropological perspective. My observations focused on the physical, spatial, temporal, and experiential aspects of the fieldwork site. I was particularly interested in the deployment operation and processes that occurred at the interface of three diverse systems: the Green Cross Projects, the union and the New York City community.

According to Lee (1995) fieldwork is often conducted in settings that place the fieldworker at risk. There were certain potential dangers to my health and safety. The risk of infection and Compassion Fatigue were the most serious. There was also
the situational danger for further terrorist attacks in New York City. The dangers of fieldwork are often overlooked or discounted. However, it is a methodological issue that needs to be addressed if risk is to be mitigated.

Sample

The study sample is purposive. According to Strauss and Corbin (1990), purposive or theoretical sampling consists of selecting groups to study on the basis of their relevance to answering your research questions and building a convincing argument. The process of purposive sampling is viewed dynamically and interactively. Theoretical or purposive sampling is a set of procedures where the researcher manipulates their sampling activities, data generation, analysis, and theory, interactively during the research process, to a much greater extent than in statistical sampling (Mason 2002). Using purposive sampling, I made data gathering decisions throughout data collection and analysis. The sampling strategy was reviewed during the data collection phase and additional sources of data were sought. Recruitment of study participants continued until all who were willing to participate were included for a total of thirty of thirty-six potential participants. A snowball effect occurred during the recruitment phase as potential participants learned about the study from participants and decided to join in.

The wider universe from which the study sample was selected included the entire Green Cross Projects deployment team which at the time of the study was approximately 40 members. By including the entire deployment period of six weeks my aim was to produce a relevant range of experiences and differing contexts which would enable me to make strategic and cross-contextual comparisons; and thus, to
develop an empirically and theoretically grounded argument about the lived experience of traumatologists within a disaster environment. To maximize diversity of experience all of the traumatologists deployed to New York City were invited to participate in the study. Green Cross Projects deployed thirty-six traumatologists and two administrative staff. The study sample consisted of thirty-one participants in leadership roles and roles as traumatologists, trainers and compassion fatigue specialists.

Making key comparisons and developing an argument links sampling directly to the process of generating theory and explanation ‘inductively’ from the data (Mason 2002). The sample reflected relationships within the Green Cross Projects organization, the interface of the organization with the union, and the interface between the Green Cross Projects and the outside community.

Data Collection

Data were collected during a two-year period. My fieldwork included participant observation at the New York City World Trade Center Disaster as a member of the Green Cross Projects. I was deployed in the role of Field Traumatologist. After I returned home from the deployment, I attended the annual meeting in mid-November 2001 where I presented my research proposal to elicit interest in the study. A letter of invitation to participate in the study was mailed to all who were deployed. A participant information form, interview guide and a self-addressed prepaid postage return envelope was included with the invitational letter (Appendices A-C). Those interested in participating in the study were asked to complete and return the participant information form. The participants indicated on
the form how they would like to contribute their story. The interview options included: in-person interview, phone interview, self-recorded interview, personal journal, and written submission. The participants determined the type of interview they preferred and where and when the interviews would take place. In an effort to encourage collaboration, the participants were also invited to write additional questions they deemed important in the interview schedule. Each participant decided the length of the interview and the depth of information they shared. The participants were encouraged to tell their stories focusing on what was most important to them.

An interview guide was used to collect information in categories deemed significant to reveal the lived experience of the study participants. The standardized open-interview format was used to diminish variation in the questions so that each participant’s story had a chronological sequence. The interview guide consisted of a set of 42 questions that were carefully worded and arranged in a chronological manner with the intention of taking each respondent through the same sequence and asking each respondent the same questions with essentially the same words. The research questions provided a guide for them of the information I wanted as a researcher. There is some variability in the questions sequence in the interviews. I allowed for divergence from the interview schedule, and I would reorient the interviewer to the next question in the sequence. During the interviews I adhered to the interview questions and asked for clarification from the participants. However, I encouraged them to continue when they were particularly interested in telling me something only tangentially related to the interview question. This divergence often provided me with new information and opportunities for further discovery. I engaged
with the participants as the interviews moved from a superficial to self-disclosing level, sharing with them my own experiences when it seemed appropriate to do so.

The participants were audio taped, and upon request, the tape was turned off. Participants had signed and returned the informed consent and knew their participation was voluntary and could be withdrawn at any time. To protect participant identity each person chose a pseudonym. The informed consent form (Appendix E) was mailed to each participant prior to scheduling interviews or accepting written submissions. Upon receipt of the signed consent a copy was made and mailed to the participants.

The participants were kept informed at each stage of the research process, and given opportunities for input. I sent emails and made phone calls to seek clarification and validation of what the participant meant. After transcription of the tape recordings the text was entered into N-vivo qualitative analysis software for analysis.

Multi-Method Approach

Triangulation of methods in qualitative inquiry aids in the demonstration of trustworthiness of the findings. I employed three major techniques to gain a holistic perspective of the lived experience. First, I was the human instrument of inquiry actively observing, participating, gathering, and interpreting data. My role as a researcher was an integral part of the evidence and the interpretation offered. Using a reflexive approach I became not only a participant in the Green Cross disaster deployment, but I reflected on my experience and the experience of others and wrote my reflections down in my personal journal. A reflexive approach led me to continually ask new questions and seek more focused answers and details about the
experiences of deployment. In fact, I went out of my way to ask the most experienced master traumatologists to take me under their wing, so to speak, and in this way I was able to watch them as they performed the critical tasks of large group debriefings and intimate therapeutic counseling’s with families who had a missing or deceased member.

Second, I conducted fieldwork in a natural setting where people were living in a disaster environment daily and confronting the stark reality of devastation in their midst. I interacted with team members and community members sharing the experience of working in a disaster environment. Third, I included the surrounding environment as part of the context of living and working in a disaster environment. Since the lived experiences and processes of a disaster deployment of traumatologists are unknown, I believed it important to include multiple perspectives.

**Ethnographic Methods**

Qualitative inquiry guided the study of a Green Cross Projects deployment in its natural setting. The behaviors and interactions of traumatologists working with disaster survivors need to be understood in a “disaster context.” The methods of data collection were chosen to generate the greatest breadth and depth of experiences and detailed representation of the participants’ perspectives. The ethnographer according to Geertz “scribes” social discourse; he writes it down (Geertz 1973:19), and in so doing creates “thick description.” In addition to first-hand information acquired through conducting interviews, making observations and writing voluminous field notes, I also collected secondary data from websites. Visual data sources included viewing media coverage of the events, photographs, documentaries, and my own
videotape of my visit for the one-year anniversary memorial service at ground zero. Textual sources included archival data from numerous publications and newspapers. Analysis of the various data sources enhanced my ability to describe the environmental context of the disaster holistically illustrating the divergent perspectives and social processes.

Member Checks

Member checks were done throughout the course of the study to enhance the trustworthiness of the data. Member checks are a common strategy used in qualitative research to ensure validity and reliability. Study participants were asked to comment on my interpretation of their life histories and narrative renditions. In this way the text was co-constructed. The first contact consisted of sending the potential participant an information packet. The contents of the packet included a letter of invitation to participate in the study with an explanation of the purpose and data collection methods, a participant information form, and an adult consent form (Appendix A &B). Interested individuals were requested to complete and return the forms in a postage paid envelope. A copy of the interview schedule was also included for review, and participants were asked to add any additional questions they felt were particularly important in the space provided on the Participant Information Form. Those who returned the Adult Informed Consent and Participant Information Form were then contacted by e-mail or phone to set up an interview. Participants were asked their preference for face-to-face, phone or written response to the interview questions, convenient time, and date for their interview. Most respondents requested a phone interview while several requested face-to-face interviews if
possible. Only two participants chose a self-recorded interview and one participant chose to submit a written account. The participants were kept informed of my progress at each contact and given opportunities for input. Each participant was invited to share in the construction of the narrative text and interpretation of the findings. Ethically, I wanted to facilitate participation in the research process and provided opportunities for feedback at every phase.

Participant Observation

The purpose of participant observation is to witness and record events; learn and develop skills and offer help to the traumatized. My role as an ethnographer included working as a member of the advance deployment team. Team members viewed me as a traumatologist and fellow team member. Although I was a novice, I was accepted as one of them. They viewed me as the person who would document the experiences we shared and lessons we learned from the disaster deployment.

Participant observation was conducted during an eight day deployment to New York City from September 16th to September 23rd 2001. Green Cross Projects, a not-for-profit humanitarian mental health organization, provides trauma intervention to community-based organizations affected by traumatic events. Green Cross Projects deployed traumatologists to New York City over a four-week period, in ten member teams, to provide trauma intervention services to Service Employees International Union. The personal narratives of traumatologists deployed to New York City to provide disaster mental health services to employees and staff of the union were collected during a one-year period from January 2002 through January 2003. Participants selected the type of interview they preferred. The narratives were
collected in face-to-face, phone, and self-recorded interviews. A $25.00 stipend was offered in appreciation for each participant’s personal narrative. If participants declined to accept the stipend, it was donated to the Green Cross Foundation on their behalf. In addition, interviews were conducted with one traumatologist who made a return trip to New York City to participate in the one-year anniversary of the disaster, attend memorial services at the union building and ceremonies at ground zero, and with a union representative who had headed the outreach team to families following the disaster. I also attended the memorial services and kept field notes of the return to New York City.

Interviews

The interview questions were constructed so the flow of the interview was from a superficial and non-threatening level of questioning about personal background to sensitive questions about feelings and experiences during deployment. The questions asked in the mid section of the interview were the most subjective, experience and meaning oriented. The final sections oriented the interviewee back to the present and more superficial topics including memorabilia. The final interview question was open-ended so the participant could respond to anything not addressed in the interview and important to them.

The interviews were audio taped and notes were taken. Upon request the tape recorder was turned off and we talked further “off the record.” Once all interviews were complete I contacted each participant and requested they provide a pseudonym. Every effort was made to maintain confidentiality. Since the interview format varied the length of the interviews varied from forty-five minutes to over three hours.
Participants were free to decide on the level of self-disclosure so the breadth and depth of information also varied. However, all participants were encouraged to tell their stories highlighting what was most significant to them. I intentionally took a respectful empathic and encouraging stance during the interview. Once I stated the open-ended question, I allowed the participant to interpret the question from their perspective and elaborate, as they deemed appropriate. I would only rephrase a question if asked to do so by the participant.

My research strategy for conducting both informal and formal interviews was to encourage the participant to recount their story with minimal interruption. To accomplish this goal my probes were limited to asking for clarification, further description, and common term usage. I also engaged in interaction with participants offering authentic responses to questions asked about my own experience and by self-disclosing parallel experiences. Participants were informed before the interview that their participation was voluntary and they could choose to withdraw at any time. None of the participants chose to withdraw and the request to talk “off the record” was made by only three participants. Every effort was made to conceal each participant’s identity. Each participant chose a pseudonym for the narrative text. The participants were kept informed of the progress of the research through updates by email, phone, and mail contacts. Participants were also given opportunities to further describe their experiences, assist in the construction and interpretation of the findings, and review and edit their transcript for accuracy as a way to validate the findings that would become part of the final written narrative.
Interview Schedule

A standardized open-ended interview schedule was used to collect the stories of participants. The participant information form and the interview schedule provided a consistent structure for data collection. The interview schedule was constructed to be contextual and draw upon the social experiences and processes I was interested in exploring in a narrative format. The interview questions were constructed to reflect the situation of the disaster as it unfolded in the lives of the traumatologists. The questions were open-ended and allowed for new questions to be asked based on what the participants shared. This structure allowed for the generation of situated knowledge with all of the participants reflecting their unique experiences.

Semi-structured interviews were conducted using an interview guide of forty-three open-ended questions. The Interview was structured with three major sections. Section one included the life review, ethnic/cultural background, professional history, disaster deployment history, and relationship with the Green Cross Projects. Section two included the impact of the New York City World Trade Center Disaster on the participants life and the participants experiences as a member of the Green Cross Projects in New York City. Section three included the impact of events on the participants, the participant’s employment and family, and the impact of the events on the personal health of the participant. Section four included contributions participants made in their own communities, memorabilia from New York City, and additional reflections on their experience.

Participants were asked at the end of the interview if they had anything else they wanted to discuss that was not asked in the interview. Many participants took
this opportunity to elaborate on other aspects of their experience, including how they felt about disaster mental health training programs, and ways to improve the collaboration of agencies to reduce duplication of services and territorial conflict.

Field Notes

I wrote field notes in a notebook at the end of each day, after I had retired to my hotel room. The field notes contained detailed descriptions of lived experiences and included conversations and observations with union workers, staff, traumatologists, those gathered on the steps of the union building or at the small city park at the memorial at the end of the street. I also wrote about the debriefing experience at the end of each day. In addition, I wrote field notes while at the annual Green Cross Projects conference in November 2001 and during the one-year anniversary week memorial trip to New York City September 11th 2002.

Emerson (2001:353) and colleagues argue that field notes are writings produced in close proximity to ‘the field.’ Proximity means field notes are written more or less contemporaneously with the events, experiences, and interactions they describe. Field notes are a form of representation that is a way of reducing just-observed events, persons, and places to written accounts. The social world is reconstituted and preserved in forms that can be studied and analyzed.

Personal Journal

While in the field in New York City, I used my personal journal to express my thoughts, feelings, and impressions about my work with disaster survivors, my relationships with union staff, and other traumatologists, and the emotional impact the
work was having on me. During the data analysis phase of the research, I again used my personal journal to write about my experience of the process of research, reflect on my role and impact on the participants and their impact on my interpretations of the data and construction of the narratives.

Data Analysis

For data analysis, I used heuristic inquiry. Heuristic inquiry is a process of discovery as research proceeds. I used myself as the instrument of data collection and interpretation and included the participants in the process of reflecting on the lived experience we had shared during the Green Cross Projects deployment. This collaborative process facilitated participant insights about the meaning they attributed to the experience and discovery of common themes we shared. Most of the participants were very interested in learning from the experience we shared and this interest facilitated our communication.

Data from field notes, interviews, written submissions, and archival documents were transcribed, coded, and analyzed for themes related to finding meaning in disaster, gender and cultural differences in responses and interpretation of traumatic events, and the impact of the disaster on the health of the helper. Each audiotaped interview was transcribed verbatim as a text document. The tapes were replayed to edit the transcripts and capture intricacies (speech and language usage, terminology, laughter, silence, gaps, pauses, hedging and crying). I referred to my field notes when the audio tape was inaudible for non-verbal cues (body language, facial expressions). The text of the interviews were read first for answers to each question. The text was then entered into NVivo qualitative data analysis software and
the sets of all responses to each question were generated. NVivo qualitative data analysis software was used for the purpose of managing the multiple sources of complex descriptive data, coding the data and generating distinct categories, exploring patterns and constructing thematic domains.

I was also interested in extracting terms that were in common usage by taumatologists. The second reading focused on stories told during the interview and the meaning of the stories. A distinct set of all personal narratives the “portraits” was also generated using NVivo. The third reading was done to identify themes and patterns in the narrative text. Ongoing email communication with study participants provided opportunities for seeking clarification and validation of meaning.
Chapter V. is divided into three parts; The Green Cross Organization, Fieldwork, and The Green Cross Deployment. The Green Cross Organization includes the subsections Green Cross Founder; Green Cross Foundation; Academy of Traumatology; Training in Traumatology; International Traumatology Institute; Green Cross Board of Directors and Green Cross Projects Deployments. In this section a description is given of the history of the Green Cross organization from its inception in 1997. A narrative of the development of the infrastructure and evolution of the organization are provided by the founder Dr. Charles Figley.

Organizational strengths and weaknesses in contrast to more established emergency response organizations are provided in the narrative given by the first president of Green Cross Projects. In the second subsection, Fieldwork, the setting of the fieldwork in New York’s Lower Manhattan is described along with demographic characteristics of the participants. The third and final subsection The Green Cross Deployment describes the Green Cross deployment mission, incident command structure, functions of the commanding officers, and the roles of traumatologists.

The Green Cross Organization

This is day 16 of the terrible tragedy of the 9-11 attack. Our mission during this deployment has been modified once we arrived. Our host 32BJ of the Service Employees Union International has asked us for services that exceed our resources. Moreover, word about or services
The Green Cross Foundation and Projects is an international traumatology organization created in the 1990’s. It originally developed from the critical need for specialized training in traumatology after the Oklahoma City bombing of the Alfred P. Murrah Federal Building in 1995. The traumatized survivors of the bombing needed mental health professionals specialized in psychological trauma to provide both immediate and long-term care. In response to this need, a registered traumatologist certification program was developed by the International Traumatology Institute at Florida State University. The institute provided training and certification for over seven hundred Oklahoma City mental health professionals.

The Green Cross Projects receive contributions and staffing support from the Green Cross Foundation. The Foundation was established in 1997 and supports the field of traumatology through the advancement of education, research and policy development. The Green Cross Projects is a membership-based professional organization with Federal tax-exempt status and an elected Board of Directors and By-laws. Full membership in the organization requires certification as a traumatologist.

The purpose of the Green Cross Projects is to provide traumatology intervention and training to communities recovering from disasters and other humanitarian crises. The goals of the Green Cross Organization are to a) build an international cadre of psychological trauma specialists; b) collaborate with other traumatology organizations in the establishment of internationally accredited training
programs, standards of practice, and certification; and c) to provide effective psychological trauma intervention world-wide in response to humanitarian crises.

**Green Cross Founder**

The founder of the Green Cross Foundation Dr. Charles Figley began his academic career in the 70’s. While a graduate student in child psychology he developed an interest in research. A major turning point in his academic development occurred in April of 1971 when he participated in an anti-war protest as part of the veteran’s against war organization. He had served in the Marine Corp in Vietnam.

As he recalls;

I went to Washington DC as part of the veteran’s against the war, and the main purpose was to demonstrate our dislike and lack of support for the war, and obviously not the warriors, because we were the warriors, and in the process I discovered trauma and posttraumatic stress. I camped out with about six hundred other people and the current Senator Kerry from Massachusetts, a Silver Star winner was one of the leaders. What was so very important to me was that it provided a certain amount of closure for me with regard to the Vietnam War, but it also opened up what would be the major focus of my career, the war veteran. From that day forward for at least six years or so…I was interested in understanding the full cost of the war, the interpersonal systemic impact of the war, and how these soldiers came home and infected, if you will, their family with this trauma.

Charles Figley, dedicated the next decade of his career attempting to discover the “active ingredients” of traumatic stress reactions and how the experience of trauma transcends the context of war. As a political activist Figley was instrumental in bringing together academics interested in the study of the armed forces and spearheaded the consortium on Veteran Studies in 1975. A major outcome of the work of the consortium was the convening of a special subcommittee to revise the nomenclature to include posttraumatic stress disorder as a diagnostic category in the
American Psychiatric Association Diagnostic and Statistical Manual (DSM-3).

Figley also contributed an annotated bibliography of veteran studies for publication in the congressional record in 1974. The consortium really got the ball rolling politically, and the following year a member of the Veteran’s Affairs Committee from Georgia, Max Cleland took the information to the Senate. He and the Senate chair Alan Cranston then proposed a bill for Vet’s Centers. Senate bill 7 eventually passed in 1979. Under the Carter administration Max Cleland served as Secretary for Veterans Affairs. Figley and several other academics were requested to develop the Vet Center Program. There was a confluence of events that politicized post-war stress and forced public awareness of PTSD.

Before 1978 PTSD did not exist. A major turning point in Figley’s career occurred in 1978 with the publication of the book *Stress Disorders among Vietnam Veterans: Theory, Research and Treatment*. The book became not only the theoretical foundation for understanding stress disorders, but for the Department of Veterans Affairs, it provided the evidence necessary for establishing treatment programs for combat veterans with PTSD. In 1980 Figley published a second volume on Vietnam Veterans and their families titled *Strangers At Home: Vietnam Veterans Since the War* and then coauthored two books with Hamilton McCubbin on stress and the family. He was the editor of Volume 1 and 2 of *Trauma and it’s Wake* in 1985.

From 1974 to 1980 he conducted research on POW’s at the Naval Health Research Center. He also conducted training workshops nationally facilitating the emergence of a cadre of traumatologists who would become leaders in the field of traumatology. Figley recalls;
Now what is important about this early work is that it was a precursor to what I would be doing in the 1980’s, which was attempting to apply what we had learned in the military context to the civilian context.

In 1983 he got a chance to affect federal policy. He convened an expert panel on families of POW’s during the Iran hostage crisis. The panel generated an 800 page report covering research on traumatized families of POW’s and Vietnam Veterans. It was presented to congress and also published in the appendix of his book *Stress in the Family Volume II: Coping With Catastrophe*.

The discourse in the field of trauma included diverse forms of victimization besides war trauma. There were victims of rape, sexual abuse and domestic violence, airline crashes and vehicular accidents. A single trauma exposure or multiple trauma exposures had the same outcome…PTSD. In 1985 Figley brought together experts in research on trauma and victimization to create the first issue of the first volume of the *Journal of Traumatic Stress* which was published in 1987, and since October 2004 became a subscription journal. In order to publish this journal however, there needed to be an organization. So Figley invited these experts to be board members of this new organization called the Society for Traumatic Stress. The organization was both interdisciplinary and international. Two of the original members of the board were Yael Danielli, editor of *International Responses to Traumatic Stress*, and Bessel Van der Kolk editor of *Traumatic Stress: The effects of overwhelming experience on mind, body, and society*. Figley was very instrumental in establishing and building organizations, but not always appreciated for his efforts:

I like to start things because they need to be done, and if people want to blow me off and say, ‘well, I can do this better’ then fine, that’s okay with me.
In the first issue of the *Journal of Traumatic Stress*, Figley as editor of the journal introduces the field of traumatology and traumatic stress studies. He served as President of the Society for Traumatic Stress from its inception in 1985 until 1986, and he was editor of the Journal of Traumatic Stress from 1987 until 1992. In 1987 he relinquished his ownership of the journal and gave it to the society. He then turned his efforts to international trauma. The Soviets requested help with their veterans returning from the Afgan War. Figley was a member of a delegation that provided education and training in traumatology and facilitated some important institutional changes, particularly in psychiatry, where the veterans were typically labeled mentally ill and discharged without long term treatment.

In 1989 before shifting away from trauma research to investigate secondary traumatic stress, Figley published *Stress and Families* and *Helping Traumatized Families*. Figley’s interest in compassion fatigue began in the 1970’s, although his major contributions came much later in the 1990’s. He recalls;

> My interest in compassion fatigue really started with the research that I was doing in the mid 1970’s when I experienced compassion fatigue and took it out on my doctoral students.

Some of his friends in the field described leaving the field because they had “burned out.” Figley pondered over how prevalent secondary trauma was and the impact it had on other groups exposed to the traumatized.

So by the mid 1990’s I had drifted away, certainly long ago from the society, recognizing that we had a real crisis on our hands. If we can’t help those who work with the traumatized, and not just mental health professionals, but police, fire fighters, journalists, school teachers…if we can’t help them, then they are not only going to be traumatized themselves, burnout and quit, but they are probably going to re-traumatize and hurt other people.
Figley had turned his attention to compassion fatigue.

I started putting little ads in mental health newsletters saying ‘if you have worked with traumatized people and that has affected you, then write me!’ So they wrote me, and from those letters I developed what eventually would become a self-test for psychotherapists, which is the first test of compassion fatigue.

In 1990 he published the book *Compassion Fatigue*. He urged colleagues and students to publish research on secondary traumatic stress.

There are forty some books that I have been publishing along the way, and I have been trying to get others to write books that add to the field. It is still desperately needed.

Figley had learned from his study of Vietnam Veterans that death and loss have a major impact on health, worldview and sense of self. Realizing that the literature in this area was scant, he began to promote a convergence of the trauma literature with the death, loss and bereavement literature. This sparked the interest of many colleagues in the trauma field, so in 1996 Figley became editor of the first book *Death and Trauma* in the Psychosocial Stress Series. In the same year another collaborative effort *The Traumatology of Grieving* was published. The perspective of the authors was that grief and loss are subjective experiences; and therefore variable, not adhering to any set pattern.

*Green Cross Foundation*

In August 2000 Green Cross really took off. The organization formed a board of directors and the first President was elected. There was a summit and membership drive held in November. In 2001 Figley stepped back from Green Cross Projects to focus his efforts on building the Green Cross Foundation and promoting the journal. In 2002 the Traumatology Institute transferred to the University of South Florida.
USF withdrew support after confronted with a conflict of interest in teaching courses and also issuing certifications. The Traumatology Institute in Florida eventually became a private training institute. Meanwhile in order to standardize traumatology training and standards for certification, Figley instituted the Academy of Traumatology. The Academy took over the certification process for the Traumatology Institute. In 2003 Figley continued implementation of his vision with the establishment of the Commission on Certification and Accreditation or COCA. The Commission is multidisciplinary and has both national and international members. In addition, the first president of Green Cross acts as ex officio. The COCA advisory board is made up of the 14 Traumatology Institute site directors.

Initial steps taken by COCA were to transform the educational objectives into certification standards, generate a listing of all certified traumatologists and develop a continuing education program for renewal of certification. They are also working on changes to the certification standards and additional certifications including master traumatologist and compassion fatigue specialist.

In 2004 The Green Cross Projects and Green Cross Foundation merged.

Figley reiterated his plans and goals for the future of the organization in the form of an analogy;

What the Green Cross Foundation will provide is a foundation. In a year everyone will have a membership list; in a year every member will be certified as a field or certified traumatologist and in a year the foundation will have the resources to fund people to attend conferences. In other words the Foundation is ‘a foundation,’ that’s what it is, it’s a hot house, a holding pattern. It is like a hot house in which you start plants and when they get big enough put them outside. What the Foundation does is it provides a foundation for an entire field.
Academy of Traumatology

The Academy of Traumatology is made up of an elected board of directors and the commission on accreditation which sets policy. The Academy commissioners’ role is to review and approve any changes to standards for accreditation and certification. Figley stated that in a year the academy of traumatology will have applied for its own 501-C3 and will be a separate institution from the Green Cross Foundation. COCA will also be independent. Figley intends to apply to the Department of Education for accreditation as the accrediting institution for the entire field of traumatology, which includes trauma surgeons.

We will accredit the training programs to make sure they are teaching to our standards of certification. So, essentially what we are doing is creating a university.

However, this is a lofty goal since there are already many institutions including universities that offer post graduate specialized training certificates including New York University, University of California, San Diego, and University of Alabama, the Academy of Experts in Traumatic Stress, the Association of Traumatic Specialists, the International Society for Traumatic Stress Studies and the International Critical Incident Stress Foundation. Figley’s vision is to unite all of these disparate organizations and their training programs through the Academy of Traumatology. The Academy would be the only policy setting institution able to sanction and accredit preexisting traumatology training programs as long as they met the standards of the Academy of Traumatology. Moreover, he is arguing for the expansion of more satellite traumatology training institutes. Once students graduate from the university with a professional degree, if their university is a participating
member of the Academy of Traumatology they are automatically considered certified as a traumatologist. If they are interested they can then apply for membership in the Green Cross.

In a year therefore, my hope is there will at least be an organizing structure so Green Cross Project folks can talk to each other about the dos and don’ts of mobilization, the dos and don’ts of contracting with local disaster response organizations to be part of the disaster plan within their own community; to connect with EAP’s (Employee Assistance Programs), so EAP’s know they exist and to have Green Cross Project chapters with memos of understanding not only with the local chapter of Red Cross and Disaster Mental Health and EOC’s, but with EAP’s and corporations to provide assistance when there is a death, accident, or a disaster in their own individual community. Those are things I thought of long ago but they have never happened. So my hope is if we provide stability and Green Cross members at the very least know who else is a member and who lives near them at the minimum the Foundation is going to enable them to have an opportunity to talk with each other about models they can use, it is just going to happen. So for Green Cross Projects it will go wherever it needs to go and my hope is it will go places where I see a need and that is everywhere. But, starting in your own backyard, in other words, think global act local.

*Training in Traumatology*

The Oklahoma City bombing occurred on April 19, 1995. Figley convinced his funding sources for a veteran’s family treatment program that Oklahoma City was a domestic terrorist attack against our own citizens and we should use the opportunity to apply the considered most effective to the disaster survivors and train the community mental health professionals in these four techniques: Thought Field Therapy (TFT), Visual/Kinesthetic Disassociation (VKD), Eye Movement Desensitization Reduction (EMDR) and Traumatic Incident Reduction (TIR). A
community needs assessment was conducted and the greatest need was for traumatology training. Figley explains;

We had the funding we needed and we had the green light from Oklahoma City. What I created from the beginning was an organization that would work with community-based organizations, not individuals, not corporations. We enable them; teach them to fish as in the bible story so they can take care of the needs of their own. We partnered with a community-based organization serving families and they were our liaison.

So in August of 1995 Green Cross held its first traumatology workshop. Seven hundred people attended that included national and international luminaries. These trauma specialists worked with victims of war, torture, hostages and victims of terrorist bombings. This first traumatology workshop was open to all mental health professionals and emergency response occupations. The traumatology training modules were developed after the Oklahoma City bombing but became the foundation courses for training in traumatology through the Florida State University Traumatology Institute. The more advanced courses for clinical and master traumatologist trained mental health professionals in the major trauma treatment approaches, provided supervision to evaluate the application of the techniques, and monitored therapists’ vulnerability to compassion fatigue. 1998 was a very important year for the development and expansion of the Traumatology Institute and the Academy of Traumatology. The training institute expanded its satellites which now include over 14 independent sites. The Academy of Traumatology was developed as a body of over forty international experts who define the standards of practice for the field.
CC: Now did you develop all of this after the Oklahoma City bombing, or did you have these training modules already developed, or some of them?

Charles Figley: Totally after, see that is the thing, I look back on my career and say, ‘well how the hell did I do that,’ it’s just amazing to me. Now obviously I didn’t do it all by myself, I enlisted the help of all kinds of important people, but that really is how I would characterize my career, I’ve always networked. But yes, most of my courses emerged in May, June and July of 1995. There were 58 people that had gone through the entire program by May of 1996. So the first graduation of what is now called certified traumatologists took place in Oklahoma City.

Figley recalled telling the graduates that they could help others by sharing their own lived experience;

This is also a part of my ethic so I told them, ‘you are now trained so that every minute needs to be devoted to helping other people fly.’ So there was a sort of evangelist element brought into it.

*International Traumatology Institute*

Oklahoma City was the birthplace of Green Cross Projects, the deployment arm of the Green Cross foundation originated. In 1996 the first highly trained cadre of traumatologists was ready for deployment to a U.S. disaster. From 1996 until 2001, traumatology training continued particularly in Florida, the home of the Traumatology Institute. Over three hundred professionals had been certified by the fall of 2001. When the terrorist attacks took place on September 11, 2001 this growing cadre of professional traumatologists was activated across the nation and many were deployed to New York City to work with traumatized survivors of the International Union 32BJ.
Green Cross Projects Board of Directors

According to Figley the Green Cross Projects deployment after 9-11 only happened because of the Green Cross Foundation and Green Cross Projects President. After the deployment the leadership expected members to step forward to take board member positions and elect a new President. The first meeting after 9-11 took place in Tampa in November 2001, and the new board of directors was elected and began their work. Unfortunately, the board fell dormant and faltered. Figley explains it this way;

Our hope was that because of all of the energy that went into 9-11 we would have all of these folks stepping forward and saying ‘ok, rah-rah lets go.’ But that didn’t happen. Green Cross languished for a year; it just languished for a year. I feel there just has not been a sufficient synergy to really get people involved.

See, what happens with Green Cross up to this date—and this may be one of the more key things in this whole interview…what happens is it attracts action oriented people, I didn’t say junkies…action oriented people, and there has been a whole literature in the area of thrill seeking behavior, and the characteristic of thrill seeking behavior is they get bored very easily and they don’t like hum drum monotonous things. That’s what being on a board of directors is. I loved getting off boards of directors.

So what happens is the people that migrate to Green Cross are action oriented, they like action and it is the worst thing to be stuck with boredom doing dry and boring things. It is fine to survive with a board when there are 4 or 5 people that are inactive. They have about 20 people on this board and only 2 or 3 are active. That doesn’t work.

Figley talked about the dynamics of this “dead” board that evolved an ethic of not doing a good job. The board members did not want to be associated with a poorly performing board so excuses were made for not participating and resignations ensued.

So that’s where we are now with the board and that’s why a proposal is being propagated as we speak about the possibility of a merger. So we have a board but it isn’t working. The board will form a merger
committee then it will disband once the merger takes place. It is just good news. I think the board just painted itself into a corner. It’s been really frustrating. Thank God there hasn’t been a need for a mobilization because we just aren’t ready yet.

The last question I asked Dr. Figley was how he envisioned Green Cross Projects becoming integrated into a future national scale disaster.

CC: In trying to understand this whole process and your vision, if there is another disaster like 9-11 and we need to have a mobilization, how will it work under this new system; or how do you envision working with the national government?

Dr Figley: It will be the same, I won’t work with the national government first of all, never have, never will. If they ask us obviously, it’s our country, but again community-based organizations are our forte. So the challenge then will be that whatever community is affected, we would ask them to let us know if there are any community-based organizations that could use our help such as a union or an agency, but this is what we will need. We will get our own transportation but they have to foot the bill for maintenance, you know housing and food. They don’t have to pay it immediately, we will sign an agreement. That is the only stipulation. So if we had another 9-11 we would do just the same thing we did before.

Green Cross was Charles Figley, until he was able to train a cadre of mental health professionals after the Oklahoma City bombing. These trained traumatologists were recruited to join the Green Cross as its founding members. Unfortunately, due to mismanagement, the critical list of new traumatologists was lost and Charles Figley continued to be the sole proprietor of Green Cross. In 1997 he recruited a very dedicated volunteer to assist him in building the membership. Together with a small clerical staff of volunteers they founded the Traumatology Institute and Green Cross Projects. This faithful volunteer would become the first President of the Green Cross.
Green Cross Projects Deployments

Disaster deployments are voluntary but are a major objective of the organization. One of the most seasoned Master Traumatologists explained it this way:

I have been a member of Green Cross Projects (GCP) for several years now and I am on their list of professionals who are willing to travel nationally and internationally to help with disaster trauma relief work.

Certified field traumatologists are deployed as members of a trauma response team to provide crisis intervention, education and training following a humanitarian crisis. Mobilization occurs within hours after a request for services is made.

Requests for Green Cross Projects come from both the public and private sector. The president of Green Cross during the mobilization for the 9-11 deployment recalls the challenge;

What it entails first of all is finding out who is available and then putting them on standby, and that was a major effort. So first it is availability and standby.

A Green Cross Deployment follows the incident command structure utilized by FEMA and the American Red Cross. The Incident Commander (IC), who is also the President of the Green Cross Projects, coordinates the deployment and is the point of contact for the host organization. The Operations Manager (OM), oversees all operations and reports directly to the IC, assists the IC with overall coordination, and manages the mobilization and provision of services to the host organization. It the immediate aftermath of a disaster it is the OM who sends out the alert for members of the organization to assume standby status. Members then report their availability to be deployed. The operations manager also works with the host organization to define
the project mission and specify deployment goals which consist of 1) attainable mental health interventions, 2) sufficient human and financial resources, and 3) individuals to serve in key leadership and disaster services roles (Figley et al 2002).

The president explained the incident command structure used:

I used the incident command system, which is a structured system for working in a disaster, so my role was incident commander. Second in command was the operations manager and under him the two teams. The team leaders reported to the operations manager and the team members and compassion fatigue specialists reported to the team leaders.

A Green Cross disaster deployment takes place in phases. Phase one of deployment occurs in the immediate aftermath of the disaster as mobilization of members for the “advance team” begins. During phase one the mobilization commences and an “advance team” is deployed to the disaster site. Once on site they begin to set up the incident command structure, logistics, and team deployment schedule for the duration of the deployment which is approximately 45 days. Most team members will deploy for a one week tour of duty. It is often a challenge to take a leave of absence from work and make arrangements for family need on such short notice. Some team members will be available for a two or three week deployment which provides continuity from week to week as new members arrive and require orientation. The president continued to explain the steps in a deployment:

The attack happened on Tuesday, we got the first hint that we were being brought in on Thursday so logistics came into play. How are we going to get them there and where will they stay? Logistics was the next piece. I called Air Lifeline to arrange for free transportation into New York City, and I worked with the union, so it was a matter of coordinating all of the logistics; when we would leave; when we would get into the city; where we would stay and how we would all meet up.
The president explained that Green Cross was contacted through long standing professional connections. The union president’s wife had graduated in psychology from the University of Michigan and she contacted a former professor. The professor’s expertise was in ambiguous loss, and she accepted the offer to come to New York to work with the union workers and bring some of her graduate students. For trauma specialists she recommended contacting Dr. Figley.

A range of services is provided depending on the needs of the host organization. Services may include; psychological trauma assessment and referral, defusing, debriefing, individual and family crisis stabilization, community outreach, training and consultation with local mental health agencies. Immediate intervention services consist of debriefing, and crisis stabilization. Once the debriefing of survivors has occurred community outreach is begun. Mental health agencies are identified for training in traumatology that will provide the community with continuity of service provision to the traumatized when the Green Cross deployment terminates services. One of the most difficult transitions for many mental health professionals is to relinquish their role of therapist and assume the role of disaster traumatologist. The president of Green Cross explained the transition this way;

It got better with time. The two greatest challenges for people were number one, the chain of command structure, and number two, the fact that they are not here to do clinical work. They’re here to do disaster trauma work. Those two challenges had to be mastered. By the end of the deployment it had been worked out. The operations manager understood the concept of chain of command and trauma management as opposed to psychotherapy and making him OP’s manager was an excellent move because in a chaotic environment you need structure and strong leadership, and he was able to communicate and manage effectively.
The second phase of deployment (Days 10-20) consists of continuing the CASER- model of contact, assessment, stabilization, education and referral (Ritchie et al., 2006). Outreach services include community contacts with disaster survivors and conducting train the trainer and certification programs for mental health professionals. The primary focus of the final phase (Day 20-45) is building a network of community agencies for the development of traumatology training programs for the long-term recovery process. Some of the team members remain after the termination of the deployment to assist with the transition, program development and consultation. In the months following the 9-11 deployment, team trainers received many requests from local and national organizations to provide traumatology training.

In the post deployment phase the standard operating procedures were reviewed and an After Action Report was written. To make contributions to the literature on trauma there was a call for papers from members who had worked with disaster survivors for the journal Traumatology. Another contribution was an article entitled Tuesday Morning September 11, 2001: The Green Cross Projects’ Role as a Case Study in Community-Based Traumatology Services by Charles R. Figley, Kathleen Regan Figley and James Norman, was published in the Journal of Trauma Practice and in Trauma Practice in the Wake of September 11, 2001, (editors Steven Gold and Jan Faust), by the Haworth Press. I asked the president what she considered to be the major strengths and weaknesses of the organization:

Green Cross Projects as the deployment arm of the organization is relatively young. The strengths are the commitment of the people who are really dedicated to the organization. There are people who really believe in the mission and I would hold myself among those people. However, Green Cross Projects is like an entity that doesn’t have to act until there’s a crisis. I think that is the biggest struggle. People
become very complacent; they may even become discouraged because there are no deployments. Until something happens the interest is fairly minimal. So I think that’s my biggest concern with the organization.

The President described another weakness that is keeping Green Cross from developing a presence within the disaster response system. Many communities have the mentality “it ain’t gonna happen here.” There is a lack of preparedness to respond to a large-scale event. Members of Green Cross are highly trained, but for the most part, are not integrated into the community emergency response system.

In terms of integrating into the local system and promoting Green Cross by saying hey, I’m here, I’m a resource, and I’ve got 5 more like me, and we want to have a letter of agreement with you. That’s not happening locally. I see it is a problem for those who don’t know how to navigate the Disaster Management System.

Before becoming president she had attempted to get a letter of agreement with the Florida state Emergency Management System but was turned down because Green Cross was too small. To be considered viable Green Cross will have to grow its membership nationally. Since that time there have been several unsuccessful attempts to increase the membership.

That’s where we’ve got to start, with our membership and build it. Then we can say not just in Florida, but in any state, this is how many people we’ve got. Granted it’s small but you use us, and more people are going to be trained. Shout this from the rooftops, Green Cross is desperately needed. It’s just that there hasn’t been the momentum to continue to grow so that we have a presence.

The president has marketed the services of Green Cross to promote recognition and establish linkages at the local and state level.
So if the seed is planted at the local level to develop the reputation, then get it to the state level then the federal level. But the state is key, that’s why chapter development is so crucial. The chapter then goes to the state for a letter of agreement. So at every layer of government there needs to be a link and the more links we have the better shot we have of being called. You can probably tell, I get really hyped up about this because the reality of it is, I feel incredibly passionate about this work.

She shared her frustration with the lack of momentum in the organization and explained that the greatest weakness of the Green Cross at the present time is a lack of structure and strong leadership. In November after 9-11 a new board took office and a new president was elected. There have been no board meetings, no annual meetings of the membership and no leadership since that time.

The president then made a comparison of Green Cross with other well established emergency response organizations including the American Red Cross and the Critical Incident Stress Foundation.

With other organizations they have strong leadership, very strong leadership. As a result they have involvement and they have money. For example, International Critical Incident Stress Foundation has an incredible training program and their people are utilized at the local level. Red Cross is also utilized at a local level. They both also have excellent structure. We on the other hand have weak leadership and minimal structure. So what makes Green Cross different? What could we bring to the table that these other organizations lack? First of all, in terms of whom we serve. We serve anybody who is traumatized. It doesn’t have to be public or private sector, it doesn’t have to be first responders or private citizens, we are all purpose. We go where the need is. The other organizations are specialized. CISD’s primary focus is group debriefings and Red Cross specializes in disaster relief. Red Cross is not trained in trauma. Their disaster mental health program a) requires licensed counselors; and b) they don’t do anything but reflective listening. That’s their disaster mental health program. It might be not quite fair, but I mean, compared to trained traumatologists? So we work with groups, we work with individuals, we work with responders, we work with citizens, we work with public sector, we work with private sector. We go where the need is, where
we’re invited, where we’re integrated. The reason why I underscore the public sector first is that if we’re integrated in the emergency management structure, when there’s a Presidential declaration, we’re called, as opposed to waiting to be invited. We need more exposure, and more integration. We’d never want to see Green Cross Projects become absorbed under Red Cross, because our people would feel frustrated and constrained and unable to do what they know how to do best, which is crisis intervention in trauma. Our people are committed and ready. We can be a crisis intervention strike team, just like that.

Finally, in speaking about the 9-11 deployment and the future of the Green Cross Projects the president framed it this way;

We had people who worked the 9-11 disaster and did wonderful things, their stories should be told.

Fieldwork

While conducting fieldwork in New York City I kept a field journal and a pocket size note pad for field notes. The field notes included my daily observations during the deployment of activities and interactions inside and outside of the union building. The red star is the location of the Service Employee International Union Local 32B-J a twenty-two story building situated on the corner of Grand Street and Avenue of the Americas just fifteen blocks north of ground zero.
The local union in the heart of Manhattan where my fieldwork was conducted is the largest union in the country for “building service” workers and is affiliated with the Service Employees International Union, Local 32B-J (SEIU). It is the largest private sector union in New York City and is located fifteen blocks north of ground zero—the former site of the World Trade Center complex. The membership of the union is approximately 70,000, covering New York, New Jersey, and Connecticut. Union members are represent sixty-four countries and twenty-eight different languages. Many of the most recent members are immigrants from Eastern European countries. About forty percent of the organizations members are non-English speaking Hispanic. The membership of the union is comprised of building service workers (window cleaners, doormen, porters, maintenance workers, elevator operators, security guards, superintendents and theater and stadium workers).
On Tuesday September 11, 2001, over 1500 union members were working in or near the World Trade Center complex. Another 7,500 members were working in lower Manhattan (below 14th street). At the union building, a twenty-two-story structure with ceiling to floor windows overlooking Manhattan, over 800 union staff were eyewitnesses to the airliners crashing through the twin towers and the collapse of the smoldering buildings. Later reports from staff members indicated the second plane flew very close to the union building as it rounded the corner to head for its destination. Employees working in different departments of the union building were fixated on the horrid sites of people jumping to their death, and running up the street toward them covered in gray ash.

The twenty-second floor of the union building became Green Cross headquarters for the four week deployment that began on September 16th and ended on October 14th 2001. On October 19th a memorial service was held at St. Patrick’s Cathedral for the twenty-four union members missing in the World Trade Center disaster. Over 4,000 members attended the service.

Participant Demographics

As shown in Table 1, the group was predominantly white (90%), female (74%) above fifty years old (48%), Protestant (58%) and professional social workers (48%). Twenty-two of the Traumatologists were certified and 7 were certified Compassion Fatigue Specialists. Of those deployed most lived in Southern States particularly Florida (61%).
Green Cross Projects Deployment

The Green Cross Projects had it first full mobilization following the tragic events of September 11, 2001. The organization responded to a request from an international union in New York City to provide assistance with the traumatic stress responses experienced by the administration, staff, workers, and their families. The Green Cross President had received a letter on September 14th requesting assistance from the Chief Executive Officer of the Union’s Health Fund. She evacuated her residence because it was in the area designated “ground zero.” She explained the dilemma faced by the Employee Assistance Program;

We have a small employee assistance staff and a group of volunteer therapists to help us deal with the situation but we are totally without expertise. Your assistance would be invaluable. Our employees and members are suffering with many different symptoms and their families are reporting difficulties as well. To add to our complications, will be the economic realities our members will be facing (Figley et al 2002:15).
Green Cross Mission

This is day 16 of the terrible tragedy of the 9-11 attack. Our mission during this deployment has been modified once we arrived. Our host 32BJ of the Service Employees Union International has asked us for services that exceed our resources. Moreover, word about our services have spread and we are now receiving requests from other unions and other groups most affected by this disaster (President, Green Cross Projects).

The overall Green Cross mission was to mitigate the impact of trauma on union staff, workers, families and the surrounding community. To accomplish these goals three objectives were outlined: Objective 1: Provide immediate crisis intervention and critical incident stress debriefings to union administrators and management and then to staff and union workers. To accomplish this objective two person teams met for debriefings with small groups of managers and staff. Objective 2: Increase the number of trained traumatologists and compassion fatigue specialists. To accomplish this objective educational training and certification as registered traumatologists was provided to the unions Employee Assistance Program, and local community mental health professionals. Finally, Objective 3: Establish the New York Green Cross Projects Chapter. The crisis intervention services began early Monday morning September 16, 2001 and were discontinued Friday October 14, 2001. A fourth and final objective focused on the internal structure of the Green Cross Projects organization. A review of the deployment indicated several areas for improvement in the deployment protocol.

One of the experienced team members from the second week was glad she had not deployed with the advance team.

The first week team really had it rough because they had to get the word out to everyone about who Green Cross was, and what we were
there for. Then they had to do these emergency debriefings of the entire union staff. The delivered mass care for an auditorium filled with traumatized people and they had to talk about death certificates and all this heavy stuff. They dealt with mass crowds of people reacting. By the time I got there they were much more organized as far as you covered separate departments and dealt only with certain groups. They had the EAP offices as a kind of funneling place. So I didn’t have to deal with all the really heavy stuff like a thousand people in one room. I can’t imagine working like that week after week. It is hard work and I think any longer then a week is pushing it.

Another unique aspect of the Green Cross Project deployment was the networking with other experts in the field to provide comprehensive care to disaster survivors and families of those lost. A national expert in ambiguous loss from the University of Minnesota joined the Green Cross mission and brought along several graduate students specializing in ambiguous loss to assist families who lost loved ones at the World Trade Center.

As a result of the disaster, all of the union members employed at the World Trade Center lost their jobs, income, and benefits instantly. The EAP (Employee Assistance Program) although it attempted to meet the needs of those suffering losses, was ill equipped to provide all the services needed by the disaster survivors. The composition of the staff was only four fulltime social workers and seven volunteers who had no training in disaster mental health. The president of the Green Cross Projects was contacted and asked to assist with crisis intervention for all of the union members and union staff. The Green Cross Projects accepted.

Approximately 2,800 union members and employees were served. The primary task of the traumatologist during a disaster is to assess, stabilize, and refer for further care as needed. Those individuals needing further assistance were referred to
the union Employee Assistance Program where they received evaluation and continuing care from community mental health professionals. A network of agencies including the American Red Cross was coordinating mental health care for the traumatized, and so a New York City Green Cross Projects chapter was postponed.

A total of thirty-six traumatologists were deployed between September 16, 2001 and October 14, 2001. Several of the initial group remained for the second and third week of the deployment and this provided continuity during the transition of outgoing and incoming team members. In addition to providing direct services, links were established with other community-based mental health organizations in New York City so training in traumatology could be done, and a New York Green Cross Chapter was established.

At the conclusion of the deployment the president of local 32B-J expressed his appreciation for the Green Cross Traumatology services in a letter which read;

From the day you hit the ground, Green Cross brought an immeasurable degree of safety and calmness as we dealt with what was for many the most horrible and tragic events of their lives. Time after time, people would tell me how they were struggling to get by and because of some connection with one of the Green Cross volunteers, they were able to continue to assist our members and carry on in their own lives.

It was hard to imagine, in the beginning, that five weeks later we would begin to have some distance from this terrible event and be able to resume some semblance of a normal, although changed, life. For this we owe many thanks to you.

The Green Cross deployment to the New York City World Trade Center disaster took place in several phases. During deployment activation an e-mail request for emergency mobilization was sent to all active Green Cross members from the
The immediate post disaster phase (days 1-10) consisted of providing crisis stabilization services, and beginning to develop links with other community mental health agencies for continuing service provision. The next phase (days 10-20) consists of building alliances with mental health service agencies in the community and providing traumatology training and certification to community mental health professional. The final phase (day 20-40) consists of preparing the network of community agencies to take over the training and recovery process. Continued assistance is provided through support and consultation.

The week of September 16 –September 23, two teams were mobilized drawing from Oklahoma, Florida, Tennessee, Kansas, West Virginia and Puerto Rico. The advance team consisted of eleven traumatologists who were flown into New York City on privately owned Lehr jets to a private airport in New Jersey. From the airport the group was conveyed by limousine to the Sheraton Hotel in mid-Manhattan. The additional pro bono transportation by Jet Blue airlines and Air Life Line made it possible for Green Cross members to be transported quickly and safely in and out of the New York City area. The largest contingent of seven members of the “advance team” was from Florida and had received their training and certification at the Florida State University International Traumatology Institute. The second contingent consisted of four traumatologists with experience from the Oklahoma City bombing. Reg Koen recalled his initial reluctance to deploy and then the exceptional leadership roles he was asked to assume during the deployment.
On September 11th when the attacks took place I told my wife, ‘I’m not going to volunteer, but if someone asks me than I am going to go. So that was Tuesday. On Saturday I get a phone call from Morgan Whitaker (Green Cross President). My wife was not real happy about this. I packed up a weeks worth of clothes, and got myself to Wichita. Somewhere between Wichita and New York I became a team leader. Then somewhere within the first few days, I went from being a team leader to Ops manager. Then she (Morgan Whitaker) left and I became instant incident commander slash manager. The feedback I got from folks is I did that role fine.

In a Green Cross deployment the most experienced traumatologists are called upon to lead as the “advance team.” This team of specialists’ is readily mobilized as an emergency response team. Their task upon arrival in New York City was to set up the Green Cross Incident Command Center at the union building, local 32B-J and become fully operational during the first few days of the deployment.

Since this was the first Green Cross deployment the ideal “advance team” was not readily available and so the advance team members were recruited on the basis of who was available to deploy immediately. Those who responded were a mixture of experts and novices. One of the first timers shared her opinion about the advance team;

The first thing I learned as a result of what we experienced the first week as the advance team, I believe pretty firmly number one experienced people should always go with the advance team, number two like what we encountered nothing works the way you expect it to. Nothing is set up the way you expect it to be. It was hard for some people to adjust to that and there was complaining and I think it was just the stress and all the surprise. I know there is always going to be an element of surprise but if you have been through it once it’s is not going to be so shocking.
Upon arrival at a disaster site the focus is on immediate intervention to reduce the chaos and establish stability, calm disaster survivors and provide emotional support. The President of the Green Cross met with the administrators of Local 32B-J several days after 9-11 to establish a plan of action, identify objectives, and obtain a letter of agreement for traumatology services.

**Incident Command Center**

A deployment of the Green Cross Projects follows the incident command structure utilized by FEMA and the American Red Cross. The Incident Commander (IC), who is also the President of the Green Cross Projects, coordinates the deployment and is the point of contact for the host organization. The Operations Manager (OM), reports to the IC, assists the IC with overall coordination, and manages the mobilization and provision of services to the requesting organization. The Operations Manager sends an alert for the organization to assume standby status. Members then report their availability to be deployed. The operations manager also works with the requesting organization to define the project mission and specify deployment goals which consist of: 1) attainable mental health interventions; 2) sufficient human and financial resources; and 3) individuals to serve in key leadership and disaster services roles (Figley et al 2002).

The incident command structure is what makes a deployment work. You send a bunch of mental health folks into an area with no controls intact, there’s going to be utter chaos, so incident command structure and chain of command is what works best for disaster. Because just the way the incident command structure is set up, it lends itself to structure and control, and you superimpose it onto a disaster that has no structure, not control. That’s what helps people to feel comfortable. For example, say you don’t like the logistics and take it to your team leader, who takes it to the operations manager. The operations manager handles it or it goes up to the incident commander. So there is a procedure to follow to resolve problems. The key in any
deployment is to set up the incident command structure, right off the bat, get your key people in place and they go from there. This is right out of military strategy, used by cops, firefighters and FEMA because it works.

Logistics is the greatest challenge in a deployment of this magnitude and many lessons were learned about how to improve the existing system. The operations manager addressed these issues:

It is really difficult for an all-volunteer organization to be ready for mobilization at a moments notice. Logistics was a problem because it was not set up before we deployed. When you arrive on the scene you know your troops are coming in waves, and it just wasn’t set up that way. The database of who could deploy was not in place. I really didn’t have any way of knowing on Thursday who the crew was going to be on Saturday. We did not know who was going to be there the second week until sometime Friday night, but I had to have hotel reservations made for them and transportation from the airport and an allowance ready. Once they arrived I had to start working on ways to get them back home the next weekend. The second week I found the best logistics person ever and he set up the remaining two weeks so there was much less stress on the command structure.

The incident command structure provided all of us with clear channels of communication, role relationships, and role functions. Many of us had never worked under this type of organizational structure before. While some liked the leadership role differentiation others were resistant to it. Emily Turner was one who found the structure beneficial.

I really liked that incident command protocol. I liked working under that and that's not something I'd ever been exposed to, but I thing for us, that seemed to really work. It fell apart, but it works because it organized us and we all knew what we were suppose to do that day, what our role was, who we reported to, and there was just that chain of command established so I didn’t have to think about it and I didn’t have to make any decisions.
Compassion Fatigue Specialists

One of the most unique characteristics and strengths of the Green Cross is the Compassion Fatigue Specialists who are responsible for providing social support for the traumatologists. The president asserted;

No one has ever done that before in a deployment. Ever! Red Cross doesn’t do it. They tell people to debrief themselves. The Green Cross is the only deployment I am aware of where the needs of the traumatologists, or the workers were taken care of before they ever hit the ground. So that stands out and I feel really good about it.

Utilizing Compassion Fatigue Specialists to assist the traumatologists to manage stress was a new component of the deployment and implemented for the first time by the Green Cross Projects. Two compassion fatigue specialists were assigned each week to support team morale and meet individual needs of team members. Follow-up with team members who had returned home after their tour of duty was vitally important to check for compassion fatigue. One team member was especially impressed with the group debriefings with the compassion fatigue specialist at the end of each work day;

Green Cross did something I have never seen before. They had several members of the group trained in compassion fatigue and they would go through each night and do a very brief de-briefing and I found that very helpful.

Another team member recalled how important the Compassion Fatigue Specialists were to her;

Our compassion fatigue specialists, they were awesome! They took really good care of us, checking in with people throughout the day making sure we were doing ok. I talked with them when I had concerns. There were times when I could feel the stress pushing on
my diaphragm and what helped the most was a compassion fatigue specialist was there. You had a place to put it. You could safely put it on the shelf and continue to do your work knowing that there was a safe place to let it out. I could temporarily stash it knowing in the evening debriefing I could process it and so it didn’t threaten to overwhelm me.

During the four-week deployment period two Compassion Fatigue Specialists were assigned each week to address the needs of the traumatologists. The command center was located on the twenty-second floor of the union building. The spacious area had once been an executive penthouse with all the amenities including a shower and sauna area and was obviously not a typical setting for a disaster command center. Although no longer functional the area was suitable for our group. There were several comfortable leather couches and a panoramic view of the city. The large windows overlooked Lower Manhattan and the smoldering ash of the debris from the twin towers.

The Compassion Fatigue Specialists were responsible for maintaining a quiet environment as a respite for the traumatologists. It is critical to maintain a “low tension” environment away from the “high tension” trauma interventions. High-tension exposure is considered contagious in a disaster and there is a high-energy expenditure that can lead to fatigue. They also provided nourishment and arranged for massages. Although I did not have an opportunity to have a massage during the first week, several of my coworkers remarked that it lowered their stress considerably.

A centralized communication board was created for internal and external messages and updates. The Compassion Fatigue Specialists attempted to maintain
contact with each traumatologist in the field and “check in” to evaluate their needs and facilitate meeting them whenever possible. This was a problem the first week as the Compassion Fatigue Specialists were pulled from the command center to conduct individual and group crisis intervention and as a result were not readily available. I did not realize the significant role they had because they were so busy with other tasks. I also did not realize I was experiencing compassion stress until I returned home and began to have compassion fatigue symptoms. I think it is very important for the novice to be fully informed of the benefits of talking with the Compassion Fatigue Specialist and “checking in” to prevent the occurrence of compassion stress.

During the second week of the deployment the Incident Command Center was fully functioning and roles were clearly defined. This allowed the Compassion Fatigue Specialists to provide support and assist traumatologists with stress management. For the remainder of the deployment Compassion Fatigue Specialists were stationed in the command center and readily available to meet identified needs promptly. An incident occurred toward the end of the first week where three traumatologists and one Compassion Fatigue Specialist began to have symptoms of upper respiratory infection, possibly related to poor air quality, smoke, and debris in the air. The Compassion Fatigue Specialist took immediate action and contacted a nearby physician who agreed to work us in to his busy schedule. He took time to examine and prescribe antibiotics and inhalation medication, free of charge. I was one of the four who went to the doctor and it was a relief to know that the Compassion Fatigue Specialist was there to help us get the medical care we needed.
The addition of Compassion Fatigue Specialists and Spanish speaking traumatologists turned out to be exceedingly important component of the deployment. Unfortunately there were not enough Spanish speakers for the needs of the union population. A team member on the advance team shared her feelings about the language barriers;

There were a couple of times where I felt very impotent. I encountered language barriers. I had two experiences that stand out where I couldn’t speak the language of the person in front of me I was trying to help. One woman in particular I remember. I worked with the window washers and the head of the window washers brought a woman to me who was traumatized and could not speak English. Her husband was one of the missing. She had this need in her eyes and tears so I hugged her and stroked her hand, but we could not communicate verbally, only with our eyes. I comforted her and then called on one of our Spanish speakers so she could be attended too.

Another team member who was a Spanish speaker explained her role.

I went the third week. I was recruited because I speak Spanish. They called me and asked if I could come because they found out the first week there was a tremendous need for Spanish speaking traumatologists. So I was put in from place to place wherever there was a need for a Spanish speaker. I actually didn’t find it that stressful. People really seemed appreciative and it seemed to make a difference. Certainly there was sorrow, but also hope that what we were doing there was helping.

_Traumatologists_

Traumatologists are mental health professionals from varied disciplines including medicine, nursing, social work, psychology, and mental health counseling. They hold professional licensure in their discipline and in addition have procured specialized training and certification in the field of traumatology. Specialization in Traumatology prepares mental health professionals to treat the severely traumatized
including disaster survivors and individuals with posttraumatic stress disorder. They are deployed to a humanitarian crisis as members of a crisis intervention team. Crisis intervention includes trauma assessment, stabilization, and debriefing and referral services to community agencies. Traumatology services are provided to individuals and communities who have experienced trauma both as a single disaster event and as an ongoing or recurrent humanitarian crisis. There are several levels of training for certification as a traumatologist. The basic training prepares the Field Traumatologist. The more advanced training prepares the Clinical Traumatologist and the most advanced training prepares the Master Traumatologist. The field traumatologist has skills in the triage of disaster survivors, trauma assessment, stabilization, service planning, and referral to other mental health services. The majority of traumatologists deployed to the New York City World Trade Center disaster were certified field traumatologists. Most of the team leaders and trainers were certified as Clinical and Master Traumatologists. One local volunteer who helped at the union described her role this way:

I would go trolling as a volunteer to different departments in the union building or I would stand-by in the lobby to be available to talk to people.

One of the main objectives is to inform those affected by a disaster that what they are experiencing is not abnormal or pathological. This is known as “normalizing” acute stress reactions. It is extremely important to help disaster survivors understand that acute stress responses following a traumatic event are normal, not dangerous or indicative of personal weakness or mental illness (Ritchie et
A traumatologist working the second week describes this informative process;

We provided information about what an acute stress reaction is and that what they were experiencing was a normal reaction to a traumatic event.

It is also important to focus on adaptive coping and support the individual’s ability to manage stress based on past experience. Early intervention with union members, employees and family members focused on meeting immediate needs to reconnect with loved ones, apply for financial assistance, death and unemployment benefits.

Many of the family members I spoke with did not know where to turn for help. They were glad I could help them negotiate the different benefit stations set up in the union building for assistance.

Traumatologists offered social support by their presence in the union building circulating in every department and being available provide help with coping for union employees, members and families. They offered practical solutions to those overwhelmed and unable to make simple decisions.

The field traumatologist may be called upon to do a defusing or debriefing. A defusing is an informal conversational technique used when tensions are high and support is needed immediately to assist someone to calm down and regain control. During the first week of the deployment many defusings took place in the union building where tensions were high and people needed immediate intervention to alleviate distress. Several defusings were done with urgency to calm an emotionally distraught employee or union member. However, the need for defusing declined in
the succeeding weeks as emotional reactivity waned. In contrast, the formal
debriefings were carried out on the second day of the week with groups from each
department meeting with two traumatologists. A psychological debriefing is an early
mental health intervention done shortly after the traumatic event. It is usually held
for a period of one to three hours depending on the size of the group. Each person in
the group is encouraged to participate and express thoughts and feelings about the
traumatic event. Experts in the field of traumatology believe that key processes
leading to chronic mental health problems may occur during the first month after
traumatization; and therefore, early intervention is recommended to mitigate post
traumatic stress disorder (Ritchie et al., 2006).

Although there were many novices in the group including myself, we were
asked to lead debriefing groups with union staff the first day. These were small
groups of 10-15 people. The most experienced traumatologists were called upon to
lead the large debriefings of over 20 people.

Each person had an opportunity to share with the group what they were
experiencing and get support for coping with the stress. We who had never
conducted a formal debriefing in the aftermath of disaster relied on our group therapy
skills to facilitate the group interaction. Here is what one of the novices had to say
when the day was over:

I had never walked into a room to do a debriefing—I mean nothing
with that many people, and it was just me! When I saw that, I can
remember just stopping dead in my tracks and thinking to myself,
‘don’t let them see your surprise. Don’t let them see that you feel ill-
equipped at this moment. Just get in there and get them talking.’ So,
that is what happened, but in terms of the numbers that we saw, I
mean, we saw something well over 1000 people that first week,
between all of us in all of those groups.
During group debriefings, traumatologists assist those affected to process their feelings of shock and disbelief allowing each individual the opportunity to share their memories of the traumatic event and receive emotional support from the group to bolster existing coping skills. A master traumatologist described one of the debriefings he led;

Well I remember being in a debriefing group with union staff. There were about 18 to 20 people there and I was the only team member. I was alone with the bunch. Within 20 minutes, I knew I was in for the long haul, at least three and a half hours. So during the debriefing a person would start sharing their story and maybe crying for 20 minutes. I’m processing it and then someone else would do the same. Many people were voicing questions like ‘I don’t know how we’ll be able to live life now, or ‘It seems like God doesn’t care or ‘God would prevent this so he probably doesn’t exist.’ It was a common thread in the group sharing the experience. Then all of a sudden, again this was a multi-ethnic group, a Hispanic woman about 28 or so, shouted ‘STOP! Why do you say God doesn’t exist, or that God forgot us or he wasn’t there? He was there in the policeman that gave his life. He was there in the paramedic that risked her life. He was there giving the lives of those service men and women, so don’t say anymore that God forgot us, God wasn’t present. He was present.’ These questions always come up when people experience an overwhelming event; they wonder abut the fabric of life and faith. I was witnessing people trying to make meaning out of these tragic events.

Most often the debriefings were led by two traumatologists. The group experiences were all different but had a common theme of sharing a traumatic experience.

We did a critical incident stress debriefing with the folks on the 21st floor who were involved with the election seats and it was taking a great deal of time because everyone in the group was at a different location at the time of the airline crashes and so they didn’t have the same memories. Some were in the union building at the time; some were out in the field and some saw the planes hit. Because they didn’t have the same pieces just getting the basic information around the circle took a while. There was one fellow who gave the impression of being this tough guy, cutoff shirt, lots of gold chains, and he crossed his arms against his chest and leaned back the entire time sighing
heavily like he was bored out of his skull. During the break I went up to him and I found out he was a Muslim. He hid this from his co-workers out of fear. We talked about his fears and what he needed. He made the decision to share this in the group and his co-workers rallied around him. He didn’t have to live a lie anymore.

Some of the traumatologists were assigned to departments in the union building such as the financial assistance, health benefits, insurance, and Employee Assistance Program (EAP). There work consisted of checking in with employees identified by the managers as needing support. Traumatologists worked on each of the 21 floors either individually or in pairs.

We went through the same floors every day. We made sure together that we stopped in on each and every one of those people in each department everyday we could. We would just say ‘Hi! How are you doing today? It’s nice to see you.’ In some cases things would be fine and we would just do a walk through giving encouragement and letting people know Green Cross was still there. In other cases, I remember walking into one department and we were talking to one person in a cubicle and all of a sudden this horrific scream came out of the next cubicle. We were there and everyone came running to see what had happened. The woman in the cubicle was reading the New York Daily news. It was the first aerial view they had shown of ground zero. This poor woman had really done well the week before and had worked through a lot of her initial shock, but when she saw the picture of ground zero; she was taken back to the day of the disaster, so we helped her. It just came out of the blue, no one expected it. We found that frequently. That is why we went trolling because you’re okay for a while, and then there is some trigger and you need support again for a while.

Those people who were being referred from different departments to the EAP were assigned to the traumatologist for crisis stabilization and referral to community mental health agencies. Since it was my first time I felt overwhelmed initially and remember requesting to be placed in the Employee Assistance office for the first two days.
I actually requested to work in the EAP because I had no experience doing group debriefings and I felt overwhelmed with the extent of trauma I was witnessing. This worked well for me at first because it was an environment I was familiar with which reduced my stress. I was able to see people referred from other departments who were traumatized and also physically injured. A man from Guyana, South America came in complaining of pain in his lower back and shoulders. He worked at the World Trade Center in building two. He had been scheduled to work on Tuesday September 11th on the evening shift but he had switched his schedule and worked on Monday September 10th instead. He was suffering from survivor guilt. The woman who took his place had died in the fire. He believed his pain was stress related.

The expert traumatologists took the most challenging assignments one of which was meeting with the families of the missing. On one occasion, I decided to “buddy-pair” with a veteran and master traumatologist Mary who was frequently called upon to intervene with families in crisis. I asked her if I might sit in on an intervention with a Hispanic family of five whose youngest son, a security guard on the fifty-fourth floor of the north tower, was missing. The family members included the father, mother, daughter, and younger son. The family held on to the belief that he was safe in the basement of the building. It was a very enlightening experience for me to see how she facilitated the family group so they could face their fears and yet maintain hope that their son was still alive. The last time they had heard from him was on Monday September 10th. His wife had dropped him off in front of the building on Tuesday morning, as the first explosion occurred and she saw him rush into the building to save his supervisor. Mary focused on each family member giving them an opportunity to verbalize their pain, and verbalize how they were managing the uncertainty. Mary acknowledged their pain and suffering and encouraged them to pray together as a family. Mary explained that talking to each other about their pain was a healing process and giving each other support and their religion were strengths.
they had as a family. She also emphasized how their son was a hero for not leaving his job and for helping others. Mary Salisbury was exceptionally skilled in my estimation in the way she comforted and supported this family. She maintained contact with them because the father had become suicidal. In the end the father received treatment for his depression, and together, the family was able to face the reality of their loss.

Two of the bilingual traumatologists Goldie and Arthur during the first week worked with several different groups at the union building including children and police officers. They worked together with some of the children who had been in a day care center right next to the World Trade Center who didn’t speak English. Their parents, who were union members, brought them to the union building for help. As Madeleine recalled:

We went out to get crayons, because we didn’t have any and we wanted them to draw.

A clinical traumatologist also had an opportunity to work with the families as they arrived at the union building to register for special benefits provided by the American Red Cross and Children’s Aid. There was also legal assistance to help families complete the necessary paperwork for death benefits.

At that time there were many who were still considered missing, but it was with the knowledge that they were dead. So the families had appointments one by one. There would be just a few families in the waiting room at a time, so I was there to do crisis counseling on an informal basis. I would just check with them to see how they were doing and that usually evolved into the chance to talk with them. Sometimes I would show them Thought Field Therapy and some relaxation techniques.
Techniques

The work of traumatologists also includes specialized techniques employed to mitigate the traumatic experience. Several of the traumatologists used these different techniques that included Thought Field Therapy.

The tapping technique is one of the “energy therapies” effective in extinguishing traumatic memories. One of the clinical traumatologists skilled in this technique demonstrated it to people she worked with as one way of coping with the recurrent traumatic images. She explained;

I do the tapping on myself when I’m helping them tap and we did some tapping, that was one piece of it, but I was enveloped in this peacefulness, I can’t explain it and I would go home at night and think about some of the things we were experiencing and feel sad, but the actual front, face to face trauma work was not that stressful. Tapping is a simple technique that can be learned quickly and another clinical traumatologist found it one way to be helpful with employees that would otherwise not seek help.

A lot of the guys in the building would not come to us so we would bump into them in the hallways or elevators and just kind of talk to them. One of the maintenance men told me he hadn’t eaten or slept except for maybe 2 or 3 days. He said, ‘I have a job to do and I am going to do it even if I am working at 50% efficiency.’ So I showed him a simple tapping technique. I saw him the next day and he looked so good. He had slept and eaten and felt better.

Trolling

The primary focus of the second week and third week was different because the crisis phase had passed, debriefings were over and people were beginning to return to their usual routines. The second week’s team members were also assigned a floor of the union building or stationed in the lobby to be available for union members coming in. On the floors team members roved through the various union
departments “trolling.” I had never heard this word used the first week, and so during the interviews I asked people what “trolling” was and how it was done.

I want to speak to you about trolling because this word has come up in several interviews and I’ve never heard that word before. I never heard it used while I was there the first week. It is interesting because it is part of our internal language. It is something that is unique to our work, that outsiders would not know what we are talking about.

The operations manager, who became the incident commander the second week had introduced the concept of “trolling” to the second week team and they carried it on into the third and fourth weeks. He instructed the team in how to troll and they started using the technique usually working in pairs. He described “trolling” to me;

Trolling is really a fishing technique. You have this boat and you put the boat where you perceive to be in close proximity to the fish. You throw the bait out there and you just kind of troll along…then you hook them, or snag them and you have caught yourself a fish. Well, from a crisis intervention standpoint you don’t go to a room and sit in that room and wait until somebody comes to you. Where the real work was done, was trolling. That was folks like you walking the hallways, weaving in and out of cubicles where people were working. Introducing you as a member of Green Cross and asking ‘How’s it going? We’re trauma specialists we’re here to sit with you guys. What can I do for you? How can I help? now here comes the cathartic process…you would ask the question and give them permission to be where they are. To be where they are is important, because they’re there physically. The work is done just as soon as you see what’s going on with them; you address it right then and there. That minimizes the need for intermediate and long-term mental health care, right there. That can only be done by trolling.

One of the novice field traumatologists, a member of the advance team stayed three weeks and recalled how our work changed from week to week. She reported;

The second week we started this thing called trolling. That was the trolling time, second and third weeks. I don’t know for sure where the term originated. The new members of the team would pair up with those from the first week to orient themselves to the work being done.
The orientation period varied and some people continued to pair while others went on their own. There was a doctoral student from a university, a female student, and she and I did this trolling. The two of us trolled together, and we went through the same floors that the people that I had done groups with the week before, or the people that she had met the week before. One of the departments was full of young people in their twenties. We made sure together that we stopped in on each and every one of those people. I have stayed in touch with many of them and it has been really sweet for me to read their emails, at first every day, and the last month it’s been maybe weekly or every other week, so I know that they are going on and doing new things.

I asked another field traumatologist to describe a typical day. She replied;

We had to sign up each morning for a particular floor. We checked in periodically with the compassion fatigue specialist so that they knew we were doing ok and to find out if there were any calls from a particular floor. A lot of my time was spent just trolling around, just being there to provide a listening ear and talking to people.

During the last three weeks of the deployment team members trolled in pairs or alone within their assigned departments. This team member was assigned to the fifth floor where the staff offices faced ground zero. The staff actually saw the planes strike the twin towers. After the disaster this group of staff had the most direct contact with union members who had lost their jobs at the World Trade Center or lost loved ones and were filing claims.

One of the clinical traumatologists deployed to do training decided to decline so he could participate in the “trolling” He described his role in this way;

My job was to wander the halls of the union building and talk to as many people as possible. I often situated myself in front of the memorial wall in the union lobby at the entrance to the building. The wall contained photos of the ‘missing.’ You never said ‘dead’ or ‘deceased.’ They were missing. So, I’d stand there and people would come up and look at the photos and read about the missing.
Another team member recalled an encounter with a union member at the memorial wall;

One of the most memorable experiences I had was going up to this Black man who had dreadlocks and was easily seven feet tall. I mean, he was huge, and his hands were like three times the size of mine. I watched how everybody was sort of milling around him, but he gave off the impression of being very strong and very isolated. So I went up to him and asked him, ‘did you know anybody,’ and he started pointing at every picture on the wall. He was a night shift security guard and he said that he had said hello and good morning to every single one of those people, and so I asked him if he would come in to the private room we had set aside. He came in with me and he just bawled. He just broke down the moment the door closed, he just collapsed emotionally. We talked for about an hour and a half, and he finally said, ‘I look crazy why is it that you just started talking to me?’ I said, ‘no what I saw was that because you were so big people think you are so strong, and this is something that we all have trouble practicing and dealing with and no matter how big or how strong you are this has affected you.’ It was an incredible experience. There are times when I visualize different faces in my mind and his is one that comes up.

The memorial wall was a very significant space where people gathered to mourn the loss of union members. Another team member also spent time in the lobby by the wall and had this incredible encounter;

There was a man down in the lobby that was very standoffish. I used to go down in the lobby a lot down around where the pictures were, and tried not to approach people directly just kind of stand around and go over and sometimes say a few words. This man kept coming in then leaving and then coming back, so finally I just went over and I think one of the things I probably said to him was, something to the affect of, ‘it’s hard standing here looking at the pictures isn’t it.’ He proceeded to tell me a story about how he was an elevator operator at the World Trade Center. He was working to cover another elevator operator’s vacation. She had a week’s vacation but she came home early and called him up on Monday night before and said, ‘you don’t have to go in to do my work, I will be in tomorrow.’ So on Tuesday morning September 11th he was supposed to be in that elevator where she was instead. He was just in shock. I guess that is the best way to say it, emotional shock, why he wasn’t there.
Finally, through the “trolling” work of a clinical traumatologist two people were united to share their sorrow and give each other support. This story also occurred at the memorial wall.

People would come and see the pictures of the missing. They would start talking about who was this lady or gentleman. So I started doing the same thing. By doing so, I learned a lot about who each person was and what they did before the terrorist attack. I remember the picture of one gentleman who was married with two children. At the time of the terrorist attack he was in a class for security guards. When the planes struck the buildings he rushed out of the classroom and into the burning building to help. One of the ladies I talked with told me ‘if it wasn’t for him I would be dead, because he came into the office and pulled me out and then he went back in to help more people.’ Well his wife did not know what happened to him and she didn’t know what he had done even though it was accepted that he had perished. This lady wanted to talk to his wife and I asked his wife about talking to the lady and they both agreed to do so. Through this lady the wife found out about the last minutes of her husband life, what he was doing and how he was very much a hero. You know, it is a small thing, you can say, but that was something that they both appreciated.

The Green Cross also provided outreach services to families with missing family members. Ann Peters a field traumatologist on her first disaster deployment, volunteered to quickly train union employees as an outreach team to visit the homes of missing union members. She was commended for her work with the employee outreach team who was very effective in providing information on benefits and comforting the grieving families. Ann recalled her outreach work this way;

I was put in charge of mobilizing a group of union members to volunteer as an outreach team for the families of the missing union members. They were to make home visits with my guidance. The outreach group was made up of 25 elected union officials such as the head of the window washer’s union and the head of the elevator operator’s union. They volunteered their time to make phone calls to missing members’ families to schedule visits to their homes and offer
them services through the union. I met with them the first time to help guide them in what would be the best way to approach the affected families. This group had no history of being caregivers other than in their own families, and no training as therapists, or disaster workers. They were just co-workers who wanted to reach out to help the families. I met with them before they ever went out to the first home. I gave a brief lecture about what to expect and what the families were going through. I also told them what to expect when they were going to be walking into these homes. I taught them how actively listen and not talk. How just tell them who they were, and let the people tell them their stories. I gave them like a mini-crash course on how to be a provider of services to these families. They were hanging on my every word. When I was done speaking, they asked such poignant questions, like they had just sucked up everything I had just told them and asked such important questions that again, I was in awe of how these window washers and elevator operators and cleaning staff and people with no background in therapy could be so responsive to the needs of their fellow workers. One gentleman I can remember brought tears to my eyes as I spoke to them before the first time they went out. He said ‘is it okay if we cry with them.’ The tears began to roll down my cheeks and I said ‘of course it’s okay if you cry with them.’ I told them if they want to hug, hug them. Let them tell their story, and then when you feel that they are finished, then do your paperwork and talk about the benefits and services available to them. So they went out and when they came back I met with them again. By meeting with them afterward I helped them process their own feelings about going out and share their own personal experiences with each other and the insights they had gained about themselves and other people. They came back with these beautiful and powerful stories of being able to give their love and their energy and their time to these total strangers. They were so appreciative in thanking me for telling them how to do it because they said it worked perfectly. I remember one man before he went out, mentioning after the guy had asked, you know, should we touch them? Are we allowed to cry with them? One man commented, ‘well, I’m not a touchy-feely person, I don’t think I can hug anybody.’ But he was going out with somebody else, and so she said ‘don’t worry, I’ll do the hugging.’ He came back and tears welled up in his eyes, because he said for the first time in his life, he reached out to hug somebody who was a total stranger. It was something. He had no idea that he had the capacity to do that. They would go into the house, tell them who they were and say, ‘I understand your son or your father or your daughter or your mother was such and such and she was working the day of the disaster’ and then they would be quiet. The families would tell them about their family member and tell them stories about them growing up. They would spend an hour or so in a home, just listening to the families talk about the person who was missing, or lost
in the rubble. They processed that information, and it was incredible to me to see the level of understanding they had and compassion they had given and received from these people. They were changed. There was no question about it. We didn’t talk about it, but everybody in that room had been changed by going out to those families’ homes, changed in good ways.

Of all the experiences with the clients that we were there to serve, that group was the one that was most powerful for me and I walked away from that group changed. They changed me. I helped change them. They helped change the level of horribleness for the families they visited, and I walked away changed from them.

Trainers

Traumatology training was one of the core objectives of the Green Cross mission so that the trauma work could be transferred to the metropolitan New York community.

While trolling continued to be the primary activity of the field traumatologists the certified trainers began to offer training to outside groups toward the end of the first week. Numerous requests kept coming in as the word got out that Green Cross was offering traumatology training. A significant outcome of the training workshops was the need for more to meet the needs of requesting organizations. This had a snowball effect in the community. The impact was so great in fact, that several of the trainers returned to the metropolitan New York area and to other states to do as much training as possible. For Reg Koehn it became a fulltime commitment for several months.

I really just want as many people as possible to get this information, ‘cause it’s not mine. It’s a gift that has been given to me by hundreds of traumatized people that make a transition from being a victim to being a survivor. When you are given a gift it is best to give it away. So all I want to do is give people these tools so then they can give these tools to others. It is a kind of idealist idea, but I think it’s a workable one.
Myron Forbush described his contribution to the training workshops conducted for outside agencies.

We brought in social workers and trained them in some of the concepts in Meridian Therapy; tapping. It was a week-long training. I showed them some of the techniques they wanted to learn.

Several of the trainers did not know before they deployed that they would be called upon to conduct training. Sharon Kelly described her training experience this way:

When I arrived, I was identified as a trainer because of my training experience. So I ended up doing the training for 40 professionals in the community. For the first three and one-half days of the week I was there I worked with another Green Cross trainer. It was 16 hour training for certification as a Registered Traumatologist.

I was in the second week of the Green Cross deployment and I was asked to lead a field traumatology training which turned out to be a very pivotal experience. I was not told ahead of time that I would be doing training. Had I not stuck in my field traumatology manual just for my own benefit, we would have been in trouble. It was basically a Tuesday afternoon, all day Wednesday, and Thursday morning. The three of us just sat down and outlined what we could cover in that length of time and what was most important. We all worked together with such ease we were surprised. As it was the EAP of the union including the union CEO’s wife and some local mental health professionals attended. I also did a crisis intervention workshop with some EMS personnel whose involvement included being at ground zero for a number of days following the attack and servicing the injured in New Jersey as well as in Manhattan. It was very memorable. (David James).

David James was the most sought after trainer. He had requests pour in from across the nation. He conducted several field traumatology trainings after 9/11 with diverse audiences of health care professionals, university professors, clergy, building trade unions and law enforcement agencies. In addition, he provided trauma intervention workshops for groups directly impacted such as emergency medical
service personnel, FBI employees, mental health professionals, school nurses, and
school counselors. He has also talked extensively about the lessons learned from
Oklahoma City and New York City stressing the need for disaster preparedness prior
to a deployment. Although the traveling wore him out, just like Reg he continued to
fulfill the training requests. He recalled his return trips to New York in this way;

I am not sure of the exact number of times, but I probably made eight
or nine trips back to New York City. I went back for the first time in
March of 2002. I led a field traumatology training workshop at
Columbia University and then facilitated a crisis intervention
workshop, which is an adaptation of a model we used in Oklahoma
City. I adapted the Oklahoma City model to a one-day event for the
building trade unions that had been involved in the clean-up at ground
zero.

The same surge in requests for training has kept Reg so busy traveling he has
not been able to establish his private practice that he opened shortly before 9/11. He
related;

It’s just that I haven’t had a whole lot of time to do a whole lot of anything.

Reg had numerous calls to return to New York City for trainings and
consultations which he attributed to his work experience in Oklahoma City. Reg had
worked with Oklahoma City federal and state law enforcement programs. He
returned to New York City after 9/11 to conduct field traumatology training
workshops with other state and federal programs and assist with the debriefing of
personnel who worked at ground zero. Reg explained the content of the training he
provided.

It is a three-day training program, it is small, and it emphasizes real
good self-care and disaster response skills. I provide certification in
Field Traumatology. The training is based mainly on my own personal
experience. For example; you may see, hear or smell something or
your have a bad memory of something. It is a purely physiological response where your brain rushes to your long-term memory to find whatever the event is and bring it forward. When you have a traumatic experience it leaves you with a ‘trauma imprint’ in your mind. So, rather then tell yourself a negative story and lose it and fall apart or go crazy, ‘I can’t handle it,’ you can say to yourself, you know what? I recognize this. This is a schwoop. I came up with all of the languaging that I use. I came up with trolling and schwoop as a result of working the Murrah building bombing and it works. People understand that kind of language. I talk up front and I tell people the skills I use may not work for them, but this is what has worked for me and a lot of other folks.

In addition to New York City, Reg has traveled to Arkansas, Florida, and Missouri, to conduct field traumatology training. It seems initial contacts through their work in Oklahoma City for the federal government has brought both David and Reg acclaim as disaster mental health trainers for large-scale disasters. Reg explained his ideas about the future of disaster mental health training to me;

I am not going to advertise. I am only going where I consider it to be the new ‘American Path’ approach to disaster. I have a lot of experience and knowledge and I am more than willing to share that with anybody who wants to hear it, but in a formal organized, highly structured training format, where you tell people that ‘when this happens you do this’…I don’t see me doing that.

Reg explained to me that in the immediate aftermath of a disaster there is a proliferation of disaster related training programs that turn out to be short-lived. We talked about the variety of training going on across the country since 9/11 and the different training approaches. Reg continued his explanation;

Mitchell, Everly, and Solomon, those guys are always going to be doing Critical Incident Stress Management training. But it is all basically the same and there is little that is new. They keep on talking about getting together and making the training a universal and standardized approach. That is not going to happen because Mitchell wants to use his model, Everly wants to use his model, and Figley wants to use his. It would be really great if there could be a universal
disaster training curriculum but there are tons of agencies out there just trying to do something to raise public awareness. Public awareness is the main point. You have to market it and I don’t market.

Training sessions were also offered by Professor Boss and her students on ambiguous loss. The terrorist attacks in New York caused a different kind of loss for disaster survivors and families of the missing. David James explained the meaning of ambiguous loss;

For example, in New York you have the dynamics of ambiguous loss for many of the victims. You have families who never had bodies or body parts recovered at all and that complicates in my estimation, both the nature of the trauma and the grieving process. I think we will require a greater knowledge of grief and loss if we are going to deal with the impact of terrorist attacks.
CHAPTER VI.
THEMATIC ANALYSIS

In this chapter, I will discuss patterns and themes that emerged during reflexive analysis. The goal of the thematic analysis is to gain a deeper understanding of lived experience during a disaster deployment from the narrative accounts given by study participants.

To write the thematic analysis I positioned myself as the researcher reflecting on the narrative accounts. I take an interpretive perspective and construct thematic domains reflecting my thinking about my own lived experience during the deployment and my relationship vis-à-vis the study participants.

To manage the multiple sources of detailed information I constructed a bulky but functional matrix and mounted it on a spare wall. As I spent time reflecting on the interrelated ideas contained in the matrix I began to notice patterns and recurring themes. The matrix was functional because I could create and modify categories as the reflexive analysis proceeded.

The categories in the matrix were created by extrapolating key concepts and cross-matching each concept with the individual participant. For example, if a participant mentioned using self care practices to manage stress, this was recorded as a way to manage stress in the matrix under their name. Frequencies for each theme and concept were tabulated for all participants and by gender to determine the
salience of each theme. There were 772 independent participant responses categorized by thematic content into seven domains. Forty-three percent of responses concerned health and emotional wellbeing, 29% deployment activities and services and 28% human responses to disaster. Table 2 displays the seven thematic domains ranked by percent.

Table 2. Thematic Domains Ranked by Percent

<table>
<thead>
<tr>
<th>Domains</th>
<th>Rank</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>1</td>
<td>201</td>
<td>26%</td>
</tr>
<tr>
<td>Stress Management</td>
<td>2</td>
<td>130</td>
<td>17%</td>
</tr>
<tr>
<td>Finding Meaning</td>
<td>3</td>
<td>126</td>
<td>16%</td>
</tr>
<tr>
<td>Green Cross Deployment</td>
<td>4</td>
<td>124</td>
<td>16%</td>
</tr>
<tr>
<td>Trauma Mental Health Services</td>
<td>5</td>
<td>100</td>
<td>13%</td>
</tr>
<tr>
<td>Helping</td>
<td>6</td>
<td>55</td>
<td>7%</td>
</tr>
<tr>
<td>Disaster Relief</td>
<td>7</td>
<td>36</td>
<td>5%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>772</td>
<td>100%</td>
</tr>
</tbody>
</table>

Overall, the thematic domain “Health was the most predominant and “Disaster Relief” was the least predominant. When analyzed by gender the only difference in ranking between men and women was an inverse ranking of Green Cross Deployment and Disaster Mental Health Services. The women were more concerned with internal issues during the Green Cross Deployment while the men were more concerned with external issues related to community training and delivery of disaster mental health services.
Health

Health was the predominant theme. Traumatologists placed a high priority on the need to protect themselves from exposure to environmental irritants, manage stress and avoid compassion fatigue. Although, several traumatologists acquired debilitating illnesses including upper respiratory infections requiring medical treatment, including myself, traumatic stress had the greatest impact on health. Goldie Newman, a master traumatologist did not realize the toll the disaster deployment took on her health until months later.

I didn’t think the deployment had an effect on my health. I thought I had put it out of my mind, but I have to tell you, I can’t read a book about it. I’m not interested. I don’t watch any TV show about it. I don’t want to see it. I can hear about it and not have any problems. I think that I’m avoiding talking about it because I think it triggers all of the stories that I heard and the fact that I can’t help them is the worst part. When I think back on it I believe we did an incredible job, we really did, under the circumstances. I believe that. I just didn’t think that I had been affected by anything. But I realize now after how many months? A year later? It took me this long to realize the effect it had on my health and how I have changed.

Prior to deployment all of the traumatologists admitted experiencing some stress from hearing about the 9-11 terrorist attacks and over-exposure to the news media images. Emotional reactions to the news varied in intensity and included shock, disbelief, fear, anxiety and hyper-vigilance among others. Several reported experiencing significant emotional reactions prior to the deployment which may have increased their health risks in the disaster environment.

Symptoms of compassion fatigue were reported by several traumatologists including exhaustion, intrusive thoughts and images, anxiety, nightmares, withdrawal,
apathy and the “thousand mile stare.” When I returned home I was utterly exhausted and emotionally drained. I felt numb and out of touch with my surroundings. It took me three days to recover from the exhaustion and required sleeping almost 12 hours a day. It seemed surreal being home where it was quiet and serene and the intensity of activity and tension was absent. I did not feel like talking about my experience with anyone. It seemed inappropriate somehow. When people would ask me questions about the trip I would answer but provide no detail. Although I don’t think I was depressed, I did experience “let down” and apathy. I did not realize I was experiencing compassion fatigue until I went to the theater to see a violent film. I have never reacted in this way before, but I was triggered by the violence and would begin weeping unexpectedly. I had to leave the theater. I had to screen the news media and turn off anything that was violent in nature. The symptoms of Compassion Fatigue vary individually and people will react to different triggers. Acts of violence were what triggered my symptoms. According to Beaton and Murphy (1995) emergency workers absorb the traumatic stress of those they help. My symptoms of compassion fatigue may have resulted from being overexposed to the traumatic stories and to my vulnerability related to past personal trauma. I unknowingly was at risk for Compassion Fatigue. In addition, negative behavioral changes are common and include depression, substance abuse and relationship conflicts (McCammon and Jackson 1995).

I shared with another team member Luther Hampton an odd experience of continually scanning the movie screen in an effort to spot the World Trade Center towers in movies filmed in New York City.
When I see TV shows like NYPD Blue or older cop shows set in New Jersey, Brooklyn, or Manhattan, I always look for the towers and I look for references of the towers and so on. I have a feeling of nostalgia that I was there and the actors in the movie don’t realize what is coming. I have fantasies about wishing I could warn them and somehow change things.

**Resilience**

Resilience is the ability to overcome adversity and transform a traumatic experience into an opportunity for personal growth (Polk 1997). Overcoming life adversity often results in the development of resiliency (Rutter 1987). The ability to find meaning and purpose in life while confronting adversity is what prepares a person to manage stress and mobilize resources for adaptation to irreversible changes as occur in a disaster. Wendy Watson and Marie Fullenwider remembered how some union employees demonstrated how they confronted the adversity and began to adapt to the altered environment they worked in. Many had witnessed the terrorist events from their office windows.

I think the most memorable experience for me was on the very last day employees in the claims insurance office had not been able to open the blinds because most of them saw the planes crashing from their windows so they kept the blinds closed. They wanted to block out the idea of seeing the site but the last day they were able to open up the blinds again and let some light in and were even able to look over in the direction of the towers. Wendy

It taught me the incredible survival ability of people. It reaffirmed what I believe about the traumatized. If somebody is there to say, “hey you’re alive so whatever you did to stay alive is the right thing to do and we will go from there.” If you validate where they are they usually have the skills to get on with life. Maybe it is different from what we assume would be the appropriate and honorable thing to do, but if it is enabling them to survive, that is not always a bad thing. Marie
The resilience displayed by traumatologists proved to be a protective factor mitigating the effects of traumatic stress. The deployment teams were committed to the Green Cross mission and objectives and developed an esprit de corps. Team resilience was displayed in the ability to view the disaster deployment as a challenge rather than viewing it negatively as a catastrophe; displaying professional competence and detachment; resourcefulness; flexibility and team cohesion. Resilience is most often found where there is the opportunity to encounter suffering within a social context of meaning and support (Apfel 1996, Eranen, 1993, Kleinman 1997, Nader 1999). Several of the traumatologists reported experiencing childhood and adulthood trauma. Overcoming previous traumatic experiences may have resulted in personal growth. Team resilience may have inoculated those particular individuals to some degree from secondary traumatic stress. Brandy Michaels explained how important the team was to her.

The members of the Green Cross team were the most important to me. We didn’t have a lot of time to talk. We were all very busy, but just being there and sharing the experience knowing that we all had a similar commitment to helping others was very comforting and reassuring. We were all vulnerable and we all had to take care of ourselves. It’s not like we had a lot of chance to do much for one another, but just being together I think made a difference. Being part of the team made a huge difference.

Stress Management

Two major themes were related to stress management; healthy and unhealthy coping. Healthy coping with stress included consistent use of effective stress reduction strategies and self care practices. Unhealthy coping included risky behavior and insufficient stress reduction.
To effectively mitigate experiencing traumatic stress traumatologists employed a variety of stress management strategies. The most effective strategies included: 1) flexibility; 2) a “non-anxious presence” 3) limiting exposure to toxic media images; 4) individual and group debriefing; 5) regular breaks; 6) maintenance of regular routines and rituals; 7) self care practices; and 8) networks of social support.

Wendy Watson told me she managed stress by “doing a lot of praying.” The typical daily routine on her team helped her to effectively manage the stress of the day. She recalled;

Our compassion fatigue specialist was very good and she kept us laughing. We all met at the end of the day for a debriefing and talked about what we had experienced. Later in the evening I would go back to the hotel and try not to dwell on it. Usually one or two of my friends would call to see how I was doing. We didn’t talk too much about what I had been through just light talk. I walked around the city quite a bit. I knew how to use the subway and so I could bounce around on the subways and feel comfortable about that. I think the scariest moment was the day when I first got there and I hadn’t even linked up with my team and it was the day that the United States attacked Iraq. I was thinking to myself, here we are at war and I am 1400 miles from my home and there is nobody around. I wondered if I would ever be able to get back home. But mostly I just found things in the evening to keep my mind occupied and not to think too much about what had gone on that day.

Green Cross Deployment

The domain “Green Cross Deployment” focused on deployment practices and processes. Deployment had an affect on each individual as well as their families, their workplace and their social networks. Many of the participants indicated they had confronted challenges when trying to arrange time to be away from their jobs and
their families. Most of the study participants were parents and several had young children. Anna Hill was particularly concerned being the mother of two young children and leaving them for a week with their father. She shared her dilemma with me during the flight up to New York City and how they managed in her absence.

It was very hard while I was gone for my husband and two children. My kids were very scared about me going to New York City and it was hard to call home every night because my son would just cry the whole time. My husband would tell me everything that was going on at home and so I was emotionally exhausted after the phone calls. Here I have had this long intense day talking to our clients and then I have to hear all the details about what is going on at home. When I came home from New York everything was better. I don’t think my kids were affected too much because I was immediately talking and calling about it. My son is 10 and my daughter is only 3. She didn’t seem to be aware of it at all. I helped my son by talking with him about it the whole time I was gone and I went and talked to his class about it too when I came back. I showed them pictures and showed them the masks we had to wear. They were really impressed and they had lots of questions and so that was kind of cool.

The tragic events of 9-11 also influenced the type of interpersonal relationships developed during the deployment. When team members met for the first time they quickly began to establish interpersonal relationships. This spontaneous cohesion was referred to as “bonding.” The high frequency of daily contact with team members and the intense stress encountered in their work increased the intensity of interactions that produced both unity and dissension.

I said to Goldie during our interview, “I hear there was some real divisiveness that was going on the first week within the group.” She then informed me that the dissension was highly unusual and reflected differing views of various informal leaders about how the deployment should be run. Later on Ann Peters and I talked about how the internal conflict was distracting us from the important work we had
come to do. We both felt like we had to take sides or stand on the sidelines. Ann decided to take sides and join the group of dissenters while I remained on the sidelines. As she recalled:

For me, the lowest point of the trip was when one person’s personal problems became the center of attention and got in our way. Then a couple of the team members that I didn’t even know began arguing about the way things were being done. It really aggravated me because it interfered with our work and that had a negative impact on me. But I didn’t let it get in my way of performing my job. I mean, it’s all part of the process, group process of coming together as total strangers. Their bickering and complaining irritated me. It’s like hey our work here is too important to waste time bitching and moaning.

Once the structural support of the Incident Command Center was firmly in place it provided stability and predictability in the chaotic disaster environment. Leadership, although unstable at the outset grew stronger once the chain of command was established and roles were assigned. The routine daily work schedules also provided necessary infrastructural support. In addition, role flexibility, “front” or “back door” tasks, the formation of “buddy” pairs and cliques defined a range of interpersonal relationships of support that developed.

**Social Support**

Social support and sustaining interpersonal relationships was a significant theme that emerged in the narratives. In the study findings quotes depicted how Traumatologists described their attachments to team members as “family,” “bonding,” and “glue.” These strong attachments provided needed support like an anchor in a tumultuous sea.

Traumatologists functioned interdependently in a tight web of intense relations. Cohn (1985) suggests a dynamic interactive group is the most viable source
of social support. In addition, supportive communication exchanged with family, friends and members of the community promoted a sense of social unity. According to Albrecht (1994) supportive communication is the foundation for giving and receiving social support. This description applies well to the dynamics of the small, intimate teams. In fact, many study participants described their attachments to other team members as like “family.”

A family is a social network consisting of interpersonal relationships that form elaborate interconnections in which an individual is embedded. Anthropologist Elizabeth Bott defines a network as “virtually any kind of social entity” (Bott 1971:319-320). This network contains all of the individuals and groups in contact with a particular individual. According to Bott’s definition the Green Cross Projects became a social network comprised of formal and informal interpersonal relationships that developed as a consequence of the Green Cross Projects disaster deployment. The communication linkages created by the trauma teams included both internal and external linkages. The internal linkages included union leaders and staff, workers and families. The external linkages expanded beyond the union to community organizations including health and social service agencies, fire houses, police stations, hospitals and voluntary agencies.

External linkages also included a personal network of family, friends, co-workers and others in their home communities. Expanding inter-connectedness was similar to a ripple effect of a stone thrown into a pond. The network radiated outward in ripples that included strangers sharing a disaster experience. After the disaster some traumatologists maintained relationships with union employees and workers,
while others made new contacts at home as they accepted public speaking opportunities and offered educational programs about disaster preparedness to community organizations. Moreover, several became members of other disaster service organizations.

The study findings also included illustrations of the lessons learned about the Green Cross deployment included the inadequate external linkages with other disaster service organizations and inadequate internal deployment processes. Internal strengths and weaknesses were identified by traumatologists and suggestions offered to improve structural and functional aspects of the organization.

Green Cross strengths included: a diverse network of trauma specialists; social support; team bonding; compassion fatigue specialists; and adequate resources for service delivery, community outreach and training. Weaknesses identified outweighed strengths. The Green Cross Projects is poorly established in the disaster service arena and is not integrated within the nationally recognized disaster response system. The membership fluctuates and training and skill level varies considerably. The deployment infrastructure is underdeveloped and there have been few mobilizations for deployment to a large-scale disaster.

As reflected in their narratives the female members of the deployment teams were most concerned with inadequate communication regarding preparation for deployment and miscommunication during deployment regarding scheduling changes, travel arrangements, lodging and reimbursement.

Jane Giovannina described how disconcerted she was when she arrived expecting to be at ground zero in a pair of jeans and t-shirt and found out we would
be working at the union building and living at a hotel. We both felt somewhat
disoriented because what we encountered when we arrived was totally unexpected.

Jane commented that

Nothing is set up the way you expect it to be. I mean we didn’t know
how to dress, how to pack or where we would stay.

In contrast, the men’s concerns related more often to deployment problems
like the logistics nightmare, paying the bills and providing funding and issues with
leadership.

Disaster Mental Health Services

This domain included both the services provided to the trauma survivors and
outreach services to the community. The union staff and workers received priority
“on the spot” interventions while traumatized families received outreach services and
community-based agencies received traumatology training.

The mental health sector of the community was targeted for field
traumatology training. Trainers received positive evaluations from participating
agencies and more referrals for training. However, a common complaint of
traumatologists was that mental health services were viewed as a lesser priority.
Mental health services continue to receive lower priority, lower visibility and less
funding then disaster relief and recovery (Doherty 1999, Weine et al 2002). There
was a consensus of opinion among study participants that the 9-11 disaster recovery
would be arduous and protracted as a result of the extent of psychological trauma and
inadequate community mental health services.
Disaster Relief

Disaster relief received the least emphasis in the narratives but is a significant contextual domain. American disaster relief provided the cultural context for the Green Cross Projects deployment. The narratives revealed disaster relief themes paralleled in the disaster literature. These themes included the experience of chaos in a disaster environment; human variation in response traumatic events; political dynamics such as turf guarding, competition for disaster relief resources; and the low priority given to disaster mental health services (Dudasik, 1982; Oliver-Smith1996; Ursano, 1995).

The disaster relief stories shared by study participants began with detailed descriptions about where they were and their reactions to the news of the terrorist attacks. The ebb and flow of activity in a disaster environment was vividly described through accounts of daily deployment activities. Many participants shared memories and colorful images of an eerie stillness in the city, gruesome sites, the noisy drone of heavy machinery, putrid smells and intermittent swells of grey ash and soot in the air. In stark contrast to morose memories were many uplifting descriptions of friendly encounters with strangers; extraordinary acts of kindness, and gatherings of mourners throughout the city at impromptu street corner memorials.

A resident of New York City who was not a member of the Green Cross wanted to volunteer to help after the terrorist attacks. She described for me how difficult it was to find a way to volunteer to help after 9-11. She joined the Green Cross team after contacting a friend who was a union employee.

I started reading about trauma work and talking to people. I wanted to know more about it to know if I could do the work and then 9-11
happened. I knew the EAP person at the 32BJ union where I eventually went to volunteer. I called him and was trying to find a way to help because a lot of my social work friends were having trouble getting connected somewhere. My friend put me in touch with the Green Cross and they trained me right there, which I was really grateful for, because I wanted to be able to be as helpful as I could be. There is a particular way of working in a disaster situation which was foreign to me, really, because you’re very active as a social worker or as a supervisor, with people you have to be directive and more assertive and more directive than this work required, so the training was very helpful. I thought at that time I wasn’t sure what I would do with this training but I knew that it was important to be of help, and it was important to be trained properly in order to be more helpful.

Helping

The sixth ranked domain “Helping” was comprised of three sub-themes; helping is a social value; helpers and healers; and making a contribution.

Helping is a Social Value

Helping others is a positively valued social behavior in American culture. Generosity and helpfulness is deeply ingrained the social fabric of society. After the events of 9-11 many of the traumatologists expressed their beliefs and values about helping others in comments such as “I wanted to help,” “do something worthwhile,” “be part of something greater than myself” and “do my part to contribute something meaningful.” Shared values and religious convictions unified team members and sustained morale.

Social responsibility for the welfare of others is associated with pro-social behavior (Piliavin 1990). Traumatologists exhibited pro-social behavior as caregivers who were motivated by social responsibility and self expectations. Motivating factors also included family values. Social responsibility was a norm and expectation of team members. Some participants felt “called” to do trauma work while others felt
self-validated by helping. While helping is primarily based on other-oriented empathy at times the motivation is self oriented meeting personal needs for recognition and self-esteem (Batson (1989).

Helpers and Healers

Empathy and concern for the welfare of others are related character traits that distinguish rescuers from non-rescuers (Wuthnow 1991). Empathy is the ability to assume the perspective of another in an attempt to understand that person’s feelings. It has been suggested that some individuals are more inclined towards acts of public service and display intentional helping behavior holding no expectation of personal gratification (Galston 1993).

It isn’t the fancy techniques of skilled traumatologists but just being there and being available and willing to listen to those in need that is the essence of disaster work. It’s the little things that count. Edie Rich Monroe (1991:214) interviewed rescue workers and found in many cases the rescue workers didn’t even think what they did was in any way unusual or extraordinary. Their decisions to risk their life to help another person appeared spontaneous and simple. In addition, this spontaneous response to a person in need seems constant, being evidenced at an early age.

Brehony (1999) found rescue workers share a constellation of character traits that include: a sense of commonality and connection to other people; an attitude of responsibility for the welfare of others; a view of helping as an honor and privilege and humility. Green Cross traumatologists appear to have these traits and consider their professional behavior as expected rather than exceptional.
In humanitarian crises traumatologists assist the traumatized to cope with suffering and loss. Helping relationships create a supportive atmosphere conducive to disclosure. Sharing a trauma story is the first step in the healing process. The major themes in the trauma stories were of losses, of life, property, employment and security. Helping people to feel understood in a safe and supportive environment is the core of the helping process (Wuthnow, 1991).

Reciprocity defined many of the interpersonal exchanges between traumatologists, union staff, union workers and members of the community. Volunteering to help was a gift given to the traumatized community. The metaphor “gift” applies quite literally to the voluntary services provided by the traumatologists. In return, traumatologists received tangible and intangible gifts expressing gratitude for the help received.

*Making a Contribution*

Making a contribution to society was highly valued. Many traumatologists derived satisfaction and fulfillment from participating in a humanitarian mission. Some described their experience as “being useful,” “relieving suffering,” and “making a difference.” After the deployment many contributed at a local, state, and national level by speaking publicly, conducting trainings and through written publications. In addition, some took further training and joined other disaster response teams at the local, regional and state levels.
Finding Meaning

The themes that emerged in the domain “Finding Meaning” represented ways of creating understanding from lived experience. Meaning was found in inner feelings, faith, human connection, traumatic loss and posttraumatic growth.

Inner Feelings

Inner feelings conveyed by traumatologists reflected a sense of impending doom, awareness of vulnerability and uncertainty about the future. Some reported significant positive changes in self-image that resulted from their relationships with team members and trauma survivors. Some reported feeling stronger and more resolute in their beliefs and values as a result of their experience. Others reported being more vigilant and safety conscious. Overall, the 9-11 disaster had a significant impact on the lives of traumatologists particularly in a reordering of life priorities to make relationships with family and friends a first priority. Study participants reported learning about themselves and others through their shared experience.

I learned that people have their own strengths and healing.

I learned that showing respect and allowing a traumatized person to ventilate and grieve their loss allows them to realize in their grief that they are able to go on, that there is life after their pain and that they will eventually be able to integrate their loss, then a transformation happens.

Faith

Religion offers universal truths, ideals and enduring values that can preserve meaning when faced with illusions of permanence or invulnerability (Wuthnow, 1992). For many of the traumatologists their religious and spiritual beliefs were the foundation of their worldview and morality. Faith guided their behavior and
interpretation of the traumatic events. Religious rituals and practices and the institutions that support them have a firm connection with what is enduring, and therefore can be powerful ways of providing meaning to what is disruptive and extraordinary (Wuthnow, 1992). Living in a disaster environment several traumatologists described their faith as “grounding” them. Meaning and purpose was found through beliefs that for some were reinforced or strengthened. A keener awareness of the “sacredness” and “divinity” of life was also reported. Sharon Kelly shared the meaning the experience had for her and how she felt spiritually connected to other people in the world.

For me what came out of this experience is that we are one and we are awakening to the fact that more people around the world gathered in prayer after 9-11 then at any time in history. We have the opportunity to unite and not to be drawn into the fear. If we are crippled by the fear then they win, and so I haven’t been fearful or I really haven’t doubted that this is an act of the divine order.

Performing rituals and religious practices was believed to buffer stress. The traumatologists who practiced religious or spiritual beliefs, believed their faith protected and sustained them so they could offer hope to those who felt hopeless.

Human Connection

The human connections created in the aftermath of disaster provided the necessary stability and social support for adaptation to an altered environment and for finding meaning in traumatic loss. The traumatologists offered traumatized individuals a safe haven where care, compassion and tangible assistance were provided. Humanitarianism was displayed in the union auditorium by a collaborative effort among local agencies to provide emergency benefits and services to those
affected by the disaster. The connections made with social service agencies provided
tangible assistance, social support and initial stability for affected families. The
outpouring of compassion and financial assistance offered by the union was
impressive. The caring displayed by the union workers for each other was inspiring
and hopeful.

It amazed me how powerful a well organized community could be in
terms of helping its members. The union takes good care of its people.
My work as a trauma specialist was much more effective because it
took place in the organized, cohesive community of the union. I could
feel the sense of connection and belonging. In fact the whole city felt
that way to me. I loved that feeling of community and was energized
by it. Geoff

What impressed me the most was that the best resource we’ve got is
one another. I was brought to tears many times when I saw the people
just finding each other and being so grateful that they hadn’t been
killed that they were hugging and crying. They may not have been
real close work associates but they were so glad to see each other and
know they were alive and to find out about some of the others. They
were just caring for one another. The resilience of relationships is
what I saw. Mary Brown

A unique feature of the interpersonal relationships between traumatologists
and disaster survivors was the shared experience of the traumatic events on
September 11th 2001. Disaster survivors as well as traumatologists experienced the
volatile impact of the terrorist attacks on the nation. Both groups expressed
experiencing distressing emotions, concerns with immediate safety, and future
vulnerability.

I learned about the best of human nature—solidarity, strength and
tolerance, heroism. I saw that there is even in the darkest moments,
something unbelievable that came out of it and it is this sort of peace
and beauty of people searching and reaching out to help each other. It
was the small human things that made a big difference. James Bond
The differences in the lived experience of each group included their roles as traumatologist and trauma survivor, their proximity and exposure to the disaster environment and the severity of the impact of traumatic stress on their lives. While trauma survivors were at risk for post traumatic stress because of the traumatic loss they experienced, the traumatologists were at risk from repetitive exposure to the anguish and suffering expressed in personal trauma stories. A common thread in the trauma stories was suffering, loss and guilt. It has been suggested that while the details of the life narrative may be lost or distorted over time the “core truth” tends to remain intact. (Neisser 1994).

*Traumatic Loss*

Living in the world depends on the stability of our core assumptions or what McCann and Pearlman (1990) refer to as our “frame of reference.” Core assumptions about life and the world we inhabit are learned within a cultural context, and based on a socially sanctioned system for symbolizing events, supporting self validation and affirmation by others (Harre 1993). The core assumptions that our world is orderly and we are relatively safe are cultural beliefs that allow us to manage the otherwise paralyzing fears of death and destruction (McCann and Pearlman 1990: 69). Nonetheless, life is full of unanticipated losses. When unexpected losses occur that are extreme in nature and disrupt the basic assumptions that give meaning to our lives we have had a “traumatic” experience (Neimeyer 1996). Green Cross Traumatologists were exposed to these traumatic experiences through the eyes of the disaster survivors they talked with, many of whom experienced traumatic loss.
Traumatic life experiences disrupt meaning construction and the severity of
the trauma will influence the degree of disruption. Making meaning after a traumatic
experience is a process reconstructing core assumptions about life drawing upon past
experiences and personal resources (Janoff-Bulman 1992; Thompson 1988).

Traumatic loss is like the ravage of a major hurricane or earthquake on
physical structures. Loss can shake the foundation, severely damage, or destroy the
fundamental components of an individual’s worldview and life narrative (Tedeschi
and Calhoun 1998). Reconstructing aspects of one’s core assumptions is present in
normative losses but to a lesser extent than with a traumatic loss (Neimeyer 1998).

Story telling is a natural way of making sense of traumatic life events.
Traumatologists encouraged each trauma survivor to tell their personal trauma story.
Retelling the story helped them to construct a coherent narrative, articulate meaning
in the experience and incorporate the loss into an altered life narrative (Janoff-
Bulman 1992; Connelly 1990; Neisser, 1994; Neimeyer 1996). It has been suggested
that people search for ways of assimilating the multiple meanings of loss into the
overarching story of their lives (Neimeyer, 1998).

Posttraumatic Growth

Ironically, catastrophic life events like the terrorist attacks on September 11th
2001 often have profoundly positive effects on people’s lives. A traumatic
experience may be considered a turning point after which their sense of self and life
purpose is transformed (Antonovsky 1987; Tedeschi, Park, & Calhoun 1998).

Posttraumatic growth comes from struggling to understand a traumatic loss.
A general assumption made by scholars has been that posttraumatic growth is more
likely when a loss involves a major disruption in the individual’s worldview. Overcoming the trauma strengthens the individual’s ability to mobilize personal resources to manage change. Generally, posttraumatic growth is considered more likely for people who are resilient, hardy and optimistic, which enables them to confront the crisis and reach a new level of adaptation (Tedeschi, Park, & Calhoun 1998).

In their research on traumatic loss Tedeschi and Calhoun (1995) found that individuals who have found meaning in the loss experience report they have grown in important ways as a result and have even been transformed by the experience. For many of the traumatologists, working this disaster was truly a transformative experience. The work they completed in New York inspired many of them to continue to do trauma work. Telling and retelling their stories in their home communities was a way of processing the experience and reshaping their lives.

While the 9-11 terrorist attacks on the nation challenged core assumptions about safety and homeland security, the degree to which individual traumatologists felt traumatized varied. However, a majority reported they shifted their worldview, reordered life priorities and made significant life style changes.
CHAPTER VII.
LESSONS LEARNED

In this final chapter, the study participants give their personal opinions about the Green Cross Projects 9-11 deployment. They address the 9-11 deployment successes and failures and make suggestions for ways to strengthen the organization and improve deployment preparedness.

From the standpoint of the Green Cross Projects administrative staff the most important lesson learned from 9-11 was the importance of erecting the infrastructure prior to deployment of the staff and installation of a chain of command. It is critical to provide the basic needs of the staff for adequate compensation for time worked, food, transportation, lodging, physical and emotional safety and access to communication channels. The infrastructure is the foundation supporting the basic needs of the traumatologists so they can focus exclusively on the mission. In New York City the installation of a fully functioning incident command center was delayed and coincided with the deployment of the advance team. This lack of infrastructure, leadership and role relationships during the first week of deployment was a root cause of much frustration, confusion, and conflict. From the standpoint of the traumatologists there were many valuable lessons learned. These lessons are divided into the six most salient categories: 1) Green Cross Projects Infrastructure; 2) Pre-deployment Preparedness; 3) Deployment Health and Safety; 4) Disaster Mental Health Interventions 5) Culturally Sensitive Helping; and 6) Training.
**Green Cross Projects Infrastructure**

Overall, the success of the Green Cross Deployment can be attributed to the commitment of the traumatologists to the mission. A major contributing factor in the capacity of the Green Cross organization to deliver disaster mental health services effectively to so many people was in the diversity of the professional skill sets, disaster experience, teamwork and management of human resources. Promoting cultural diversity and multidisciplinary members would further strengthen the organization.

The veterans in disaster took leadership roles and took the novices under their wings. The students provided an academic and research orientation to the activities undertaken and the specialists in grief counseling, child and family services, compassion fatigue specialists and health care professionals all played a role in providing the resources needed. Most believed the deployment was a personal growth experience like no other and many enduring friendships were made.

I think organization is real important, and the less organized a disaster response is, the less effective we are. *Brandy Michaels*

Not to take my organization for granted and expect that certain procedures are in place when in fact they are not. *Mary Salisbury*

The importance of infrastructure can’t be stressed enough. Logistics is the greatest challenge in a deployment of this magnitude and many lessons were learned about how to improve the existing system. Financial logistics posed a major problem with no checking account to secure the funds until they could be put into the hotel safety deposit box. *Reg Koehn*
Pre-deployment Preparedness

Preparedness for disaster or social disruption such as occurs with terrorism must begin before the occurrence of the next event. Promoting social resilience is a key factor in building future adaptive capacity. Successful adaptation to adversity stems from effective and efficient resource allocation, knowledge and past experience. Preparedness through public awareness campaigns, resilience building activities and train the trainer programs are essential to developing resilient communities.

Psychosocial resources play a central role in community resilience. According to Landau and Saul (2004), proponents of a community resilience approach, any attempt to increase individual resilience in the wake of a large-scale disaster must take into account the larger societal context. Community building through the establishment of social resilience programs is one way of improving general adaptive capacity. Certain characteristics are associated with effective community prevention programs and include: varied teaching methods, competent trainers, content that is culture specific, relevant and; appropriately timed, foster positive community relationships, include outcome evaluation are research based and theory-driven (Nation et al. 2003).

Disaster response organizations like Green Cross Projects have an opportunity to become leaders in community-based disaster preparedness programs at the local, state, and national level of government. The State of Florida leads the nation in disaster preparedness training and organizational response capacity. Green Cross Projects is a leader in providing traumatology training. A collaborative partnership
between Green Cross Projects, State of Florida disaster management and USF Traumatology Institute could play a vital role in advancing national disaster preparedness policy and implementation of public awareness campaigns and train-the-trainer programs. Knowledge transfer of evidenced-based best practices from lessons learned after 9-11 and other recent national disasters like “Katrina” is critical to building resilience.

I really believe that experienced people should deploy with the advance team. People who have worked a significant disaster site so that they know that nothing’s going to work right. Jane Giovannina

It is really difficult for an all-volunteer organization to be ready for a mass mobilization at a moments notice. Logistics was a big problem because it was not set up before we deployed. When you arrive on site you know your troops are coming in waves, and it just wasn’t set up that way. The database of who could deploy was not in place. I really didn’t have any way of knowing on Thursday who the crew was going to be on Saturday. We did not know who was going to be there the second week until sometime Friday night, but I had to have hotel reservations made for them and transportation from the airport and an allowance ready. Once they arrived I had to start working on ways to get them back home the next weekend Reg Koehn

**Deployment Health and Safety**

The importance of a pre-briefing and de-briefing was stressed by many of the study participants. “Touching base” with everyone first thing in the morning before beginning intervention with those affected by the disaster was considered essential because the group members may not see each other until the end of the day at the debriefing. Most participants also found the debriefing important not only as a safe place to “let down,” but to be updated by the incident commander and receive feedback from the union administrators on how things were going. The feedback was
mostly positive and thus reinforcing for the traumatologists who were physically fatigued an emotionally “drained” by the end of each day.

Receiving support from other trauma counselors was important. Working together as a team, having an opportunity to process at the end of the day, sharing with each other our feelings and what we can learn from it was helpful for me. Jill Kendrick

It is important to maintain a certain degree of detachment to keep from being pulled into the fray of internal conflicts that arise in the initial stages of a disaster deployment. Goldie Newman

A second salient lesson learned as a result of emergency medical services was the need to develop the role of safety officer to assess environmental and health hazards and make provisions for medical care prior to deployment. An incident occurred where one of the female traumatologists required emergency medical services as a result of vertigo. She became dizzy and fell while alone in her room. She was taken by ambulance to a local hospital for treatment. It was later learned the condition was a symptom of a disease process she had not yet been diagnosed with at the time of her deployment.

You don’t send a bunch of people out into a disaster without a safety officer and a safety check so you know what’s available before deploying. Mary Salisbury

Because of my own vulnerability to stress I do try to take care of myself more than I did before. Luther Hampton

People know their point of stress saturation. Christin McMurphy

Rescuer safety is paramount. Reg Kohen
Disaster Mental Health Interventions

When you arrive at a disaster site within the first 72 hours disaster survivors are most concerned with meeting basic needs for shelter, safety, food and water. They are also concerned with reconnecting with loved ones. One mistake that was made according to some of the seasoned traumatologists was that crisis intervention was initiated to soon and may have been a disservice to disaster survivors. How people recover from traumatic experiences is still not understood entirely. Natural recovery occurs for most people and there is a concern that premature intervention may disrupt or undermine the naturally occurring recovery process (Ritchie et al., 2006). In any event, there is sufficient time during the first week to make contact and assess the needs of the population being served to determine the most efficacious early intervention approach. What is of utmost importance is that services are offered by trained and designated disaster mental health service providers.

Truly emergency mental health work is not something that should be anything less than a priority. Arthur Tell

One of the lessons learned after 9-11 was that the danger wasn’t over yet, and people didn’t feel safe. People really have to feel safe before you intervene to help them understand how trauma has affected them because they are still in the middle of it. I think that maybe we would have had a better outcome, and I mean that for all of the teams that went up, if we worked under a different agenda, “let’s just help them get through today, tomorrow and the next day instead of being focused on how are we going to get them through this forever kind of thing. Madeleine Wood

You can be effective in an uncontrolled situation by your “non anxious” presence and by offering support to people where and when they need it. You can initiate contact with people who haven’t invited you personally. Rachel Williams
Culturally Sensitive Helping

Culturally sensitive helping requires the helper to have awareness and sensitivity to differences in belief systems, coping and adaptive capacity and access to social support. Culturally sensitive helping is meant to be beneficial and to avoid stigmatization. Early intervention will focus on helping make sense of the traumatic experience within a cultural context. An individual’s existing coping repertoire is acknowledged while education on improving coping is offered. Providing useful ways of lowering stress that are compatible with their life style is crucial.

Interventions targeting social support processes require understanding of family systems and availability of support within and outside the family. Facilitating referrals to social service agencies is often an effective early intervention for individuals lacking social support.

It is also important for an international disaster mental health service organization such as the Green Cross Projects to have a sufficient number of foreign language speakers and a membership educated in cultural sensitivity. In addition, traumatologists must be culturally sensitive to meet the needs of the community. During the deployment several Spanish speaking traumatologists were called upon to intervene with Hispanic individuals. The major complaint was they felt overwhelmed by the number of requests for this service.

We need to have people that speak other languages because it isn’t just English speaking people that are affected when disaster strikes. Jill Kendrick

A lesson learned that stands out in my mind, is that you have to understand the local culture. You have to understand that what’s important to the client is what’s important to the client, and it may be
something that in the scope of things may seem odd to you. It’s not always, “Oh I watched people bale out of the windows or saw traumatic injuries or saw the plane go in.” It may be “how do I tell my children,” how do I ride the subway again.” You have to be where the client is. If you start where the client is you will eventually find out the whole gamete of things that they were exposed to. *Marie Fullenwider*

The disaster in NYC was very different from other disasters, much more complicated. The religious, cultural diversity, the traumatic background of many immigrants and refugees made their plight a lot more poignant because of all they had gone through before coming to this country. *Arthur Tell*

**Training**

Disaster mental health training lacks standardization and varies widely, according to the type of organization and its mission. Disaster mental health services must address the challenges of providing comprehensive and standardized training. Training must also be relevant and event specific. It must take into consideration ethnic diversity, preexisting community conditions, resources and the impact of the disaster on the affected community. Predisaster training is optimal as it can facilitate efforts to coordinate and integrate a system-level response (Ritchie et al., 2006). Predisaster drills offer the opportunity for “first responders” to work in a team effort. A disaster simulation offers the opportunity to work within an Incident Command structure and team model.

Recent research recommends multiple trainings to prepare adequately for disaster mental health intervention (Ritchie et al., 2006).
A multidisciplinary training program is essential so mental health professionals get the opportunity to train with other first responders (law enforcement, fire fighters, clergy) so they can learn to be a collaborative team. David James

I think we still have a lot to learn about how to intervene effectively. We are going to have to do some revisiting our whole understanding of trauma and its impact on people to address some of the unique features of terrorism as a factor. A terrorist attack presents us with different dynamics that I think require greater knowledge of grief and loss as well as how people respond to traumatic events. David James.

Man-made disasters are a different animal than natural disasters and require better training and more skills in the trauma area. There are features to man-made disasters that are not present in natural disasters. In a man-made disaster like NYC there was the ongoing threat to life and trauma specialists who respond in such a deployment atmosphere really are subjecting themselves to a degree of risk that they would not fall into with a natural disaster. David James

In Table 3 suggestions are given based on the lessons learned by study participants.
Table 3. Suggestions for Improving Green Cross Projects Deployments

<table>
<thead>
<tr>
<th>Green Cross Projects Infrastructure</th>
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<tr>
<td>• Develop a Green Cross Projects Strategic Plan</td>
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<tr>
<td>• Develop a recruitment and retention plan</td>
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<td>• Establish an internet-based international registry of members</td>
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<td>• Issue ID cards with membership</td>
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<td>• Promote Cultural Diversity</td>
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<td>• Promote Multidisciplinary membership</td>
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<td>• Provide Incident Command Leadership training</td>
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<th>Pre-deployment Preparedness</th>
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<td>• Deploy logistics team in advance of a mass mobilization</td>
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<td>• Deploy medical safety officer and communications liaison as member of logistics team</td>
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<tr>
<td>• Develop pre-deployment “Readiness” protocol to include:</td>
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<td>• Physical and psychological health screen</td>
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<td>• Self-evaluation of secondary traumatic stress</td>
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<td>• Education on environmental, health and safety hazards</td>
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<td>• Role assignments</td>
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<td>• Contractual agreements for medical care</td>
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<th>Deployment Health and Safety</th>
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<tr>
<td>• Monitoring of deployment health and safety by medical safety officer</td>
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<tr>
<td>• Stress management and monitoring by Compassion Fatigue Specialists</td>
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<td>• Buddy pair assignment</td>
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<tr>
<td>• Implement a work rotation schedule for days off and days away from “frontline” exposure.</td>
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<tr>
<td>• Pre-deployment briefing, deployment debriefing and post deployment follow-up</td>
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<td>• Post deployment team “After Action Review.”</td>
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<th>Disaster Mental Health Interventions</th>
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<td>• Provide leadership skills training for developing leaders within the organization to assume Incident Commander and Operations Management roles during a deployment</td>
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<tr>
<td>• Develop a disaster deployment protocol and a policies and procedures manual for distribution to the membership</td>
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<td>• Create an internet-based national registry for rapid deployment mobilization</td>
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<tr>
<td>• Hold pre-deployment conference calls with deploying team members</td>
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<td>• Distribute an email contact list to deploying team members</td>
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<tr>
<td>• Establish the role of a Communications Liaison to coordinate internal and external communications</td>
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<tr>
<td>• Build collaborative partnerships with national, state and local disaster service organizations</td>
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<th>Culturally Sensitive Helping</th>
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<td>• Understand the culture of the community</td>
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<td>• Ready access to foreign language speakers and interpreters</td>
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<td>• Interventions based on the clients expressed needs</td>
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<td>• Collaborate with local service agencies to provide outreach</td>
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<th>Training</th>
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<tr>
<td>• Offer opportunities for multidisciplinary training for “first responders”</td>
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<td>• Training in evidenced-based best practices in disaster mental health intervention</td>
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<tr>
<td>• Internet-based continuing education,</td>
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<td>• Pre-deployment “Readiness” training and certification</td>
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CHAPTER VIII
DISCUSSION

The discussion will center on cultural themes of social significance. Lived experience provided the theoretical framework for interpretation of findings, recommendations and conclusions. The theoretical domains are: Cultural Continuity and Change; Green Cross Projects: A Disaster Deployment Culture; Health and Social Support, Deployment “Readiness” and Deployment Health Promotion. Suggestions are offered to improve the comprehensiveness of disaster preparedness training, deployment health and safety. Finally, implications for applied anthropology regarding future research and practice roles are proposed.

Cultural Continuity and Change

The occurrence of social stress is an inevitable consequence of human social organization. Stress and discontinuity are intrinsic aspects of social life requiring continuous adaptation to change. However, when social life is suddenly interrupted by unexpected calamity, social disruption and disorder are inevitable. Chaos and disorder often overwhelm adaptive capacity.

The collective experience of disaster exposes underlying cultural assumptions about social life. In times of societal crisis, cultural values, beliefs and behavior become apparent, and there is disparity between social expectations and reality. Before 9-11 American society was assumed to be stable, secure and protected.
American assumptions shattered on September 11th 2001 and American security was jeopardized. The American ethos of continuity was threatened by the terrorist attacks. There was a marked disparity between American social expectations and stark reality. Social disruption and crisis of this magnitude is often destabilizing.

Cultural processes are mediated at their most elemental level through subjective experience, which enables people to take in and reformulate the external world (Becker1999:194). The experience of a national terrorist disaster shifts worldview.

The collective meaning attributed to 9-11 and the collective reestablishment of cultural continuity by imposing a global “war on terrorism” reflects a shift in American ideology concerning human rights. The creation of a new department of Homeland Security and the global “War on Terrorism” has substantially changed American social institutions, foreign and domestic policy and civilian surveillance.

Control was reestablished swiftly with a Presidential declaration of disaster and national state of emergency. The magnitude of the devastation challenged federal, state and local emergency management systems capacity for rapidly deploying emergency, medical, mental health and environmental safety personnel. American resolve, resources and resiliency were paramount in mounting a sweeping defense. In the aftermath of 9-11 a plethora of federally funded training programs were implemented to extend the delivery of emergency, public health and disaster mental health services.

Altruistic behavior was evident in the outpouring of aid and volunteerism. The immense human suffering stirred the publics’ compassion to unparalleled levels
of altruistic giving. The compassion and community service extended to 9-11 victims revealed a shared sense of vulnerability. Many Americans responded with similar behavior that was simultaneously self-protective and altruistic. The selfish and selfless behavior patterns reveal the intricacy of American core values of individualism and collectivism.

The unprecedented surge in American volunteerism and religious outreach unified the nation. Collective meaning in the traumatic loss was derived from public displays of grief and mourning rituals. Widespread displays of the American flag symbolized identity, unity, and solidarity. Honoring heroism and rebuilding in the desolate space occupied by the World Trade Center towers signified hope in overcoming adversity. Despite the momentous human suffering the community united to overcome adversity.

Finding meaning in a traumatic experience was a major theme in the narratives and centered on the fragility of human life and connectedness. Key constructs are individual and collective vulnerability; life disruption; social support; and meaning. Metaphors were used by traumatologists to maintain connectedness and find meaning in traumatic loss. The metaphor used to describe relationships as "family" and connectedness as "bonding" and "glue" symbolized a need for team cohesion and social support. Traumatologists' narratives of "transformation" and "epiphany" represent personal growth from traumatic experience and ability to attribute meaning to human suffering.
Social Cohesion

Social cohesion is a concept for understanding the complexity of connectedness in society. Social integration is measured by the extent of mutual trust, reciprocity and cooperation in pursuing group goals and social networks (Kawachi and Berkman 2000). Social integration for the deployment teams was fostered by similarities in demographic characteristics, common beliefs and values, education and career choice, professional affiliation, and commitment to a common cause. Cohesion was maintained by team commitment to the Green Cross mission, volunteerism, altruistic values and strategic action.

Green Cross traumatologists are compassionate caregivers and socially responsible citizens. Compassion is a fundamental American value that unites disparate groups in society. In a social crisis compassion and altruism can bridge social barriers reinforcing a cultural belief in the common good. The ancient myth of the Good Samaritan captured in the verse; “Do onto others as you would have done to you,” reminds us of our common humanity and ability to create community even among strangers (Oliner 2003). Demonstrable compassion, altruism and mutual assistance united strangers in New York City and promoted cooperative behavior during the recovery phase of the disaster. There was an outpouring of immediate mutual helping, cooperation and emotional support in disaster affected areas. Disasters provide a unique setting for detection of societal levels of reciprocity (Kaniasty and Norris 1995). In a disaster context where everyone is traumatized it is advantageous to pool resources and rely on each other for help. Altruistic behavior
and religious beliefs were apparent in high levels of communal fellowship, cooperation and care giving.

Helping others and contributing to society were important values reflected in the narratives. Volunteering for a disaster deployment was a way to contribute to society and participate in disaster recovery. During the deployment altruistic behavior was displayed in the mutual support of team members, work with the traumatized and community outreach. There is a growing literature that suggests that volunteerism and altruistic behavior may be beneficial to health (Schwartz et al., 2003).

The anthropologist Victor Turner (1985) in On the Edge of the Bush used the concept “communitas” to describe the momentary upsurge in collective unity and spirit associated with certain ritual events and social crises. Communitas refers to brief moments in which social structural differences cease to be important and a “full unmediated communication” among strangers might occur. Referring to such collective moments as “altruistic community” mental health researchers have also identified and recorded the upsurge of mutual assistance and solidarity that can overtake whole communities in the immediate wake of disaster. In the aftermath of disaster the experience of communitas or an “altruistic community” is usually short-lived. Eventually resources are depleted, programs end and neglect sets in. Deterioration of perceived support exposes the extent of psychological trauma (Kaniasty and Norris 1995).
Green Cross Projects: A Deployment Organizational Culture

In the U.S. a majority of certified traumatologists are part of a lineage established by the founder of the Green Cross foundation. A lineage establishes professional identity in the field of traumatology. There are many cohorts of certified traumatologists trained at the International Traumatology Institute by Dr. Charles Figley. Loyalty and commitment to the mission of the organization sustain a core membership.

The organizational culture is built on policies, procedures and practices that stipulate the delivery of community-based traumatology services. Educational and licensure requirements define group membership. The Green Cross mission was the unifying force for social cohesion during the disaster deployment.

The Green Cross disaster deployment was an opportunity to study deployment processes in a disaster environment. As a highly specialized organization traumatologists are virtually indistinguishable from other mental health professionals until a disaster strikes. In a pre-deployment phase of operations the Green Cross Projects functions as a “loose knit” international network. The organization consists of what Granovetter (1973) describes as “weak ties” which have an effect on social cohesion. Activation of a disaster deployment reveals a distinct deployment subculture.

Deployment mobilization transforms Green Cross Projects into a deployment subculture that operates under an incident command center providing trauma mental health services. The incident command center provided structure and operating
procedures for the execution of the mission. To adapt to the unfamiliarity and austerity of a disaster environment team members formed a cohesive working unit.

Disaster deployment is a form of initiation into the organizational culture. Working a disaster for the first time is a “rite of passage.” Patterns of behavior and intervention skills are learned from the elders who are master traumatologists experienced in the practice of disaster mental health.

The Green Cross insignia on t-shirts identified traumatologists and symbolized healing as the nature of trauma work. Identity is an important determinant of behavior and influenced by culture, social relations and self perception (Mead 1934). Cultural norms and values are acquired and internalized through socialization in the Green Cross organization. Socialization occurs primarily during training at traumatology conferences and disaster deployments when the members are most likely to have contact. Beliefs and values are evident in training, certification, standards of practice and code of ethics. Group norms are learned during deployment as a team member and were demonstrated in leadership roles, member roles and responsibilities and distinctive trauma intervention practices. Idiosyncratic folk terms included “trolling,” “bonding,” “rock and roll,” “gearing up” and “letting down.” Learning the “ropes” is done “on the ground” and “in the trenches” observing, shadowing and modeling the behavior of experienced traumatologists in “buddy pairs.”

An analysis of participant narratives revealed a shared therapeutic and altruistic perspective. Group dynamics illuminated the formation of dyadic relationships, alliances and cliques. Interpersonal interaction was positive and
negative. Initially, negative attitudes toward the leader undermined group cohesion splintering members into factions. Despite internal conflict team members working together toward a mutual goal sustained solidarity. The interaction, information exchange and common goals afforded a “sense of community.”

Social Networks

Social networks are complex webs of relationships linking individuals to essential resources for sustenance, nurturing and belonging. As interactive exchange systems social networks operate on the basis of reciprocity in social relations. The internal reciprocity between team members and external reciprocity with the traumatized community contributed to emotional well-being (Alcalay 1983). Traumatologists perceived the team as a significant source of emotional support some describing it as like a “family.” The metaphor of the team as “family” illustrates the cohesive power of a social network. Connecting with others and sharing lived experience in a supportive social network is considered a form of “social inoculation” against stress (Alcalay 1983; Berkman 2000; Broadhead 1983). The ten member teams along with incident commanders comprised a dense social network. A network of strong supportive ties is valuable in times of stress and life disruption. The teams provided a sense of purpose and esprit de corps.

Bonding

The Green Cross Projects organization provided group identity, congruence of values and practices, material and socio-emotional support during deployment. Team members developed strong bonds by sharing a commitment to the mission, mutual
goals and the lived experience of providing trauma intervention to a disaster affected community.

The Green Cross deployment structure of interdependent relationships resulted in the creation of social cohesion and social support. The team “bonding” and supportive “family” atmosphere mitigated stress and protected health. Cohesive trauma response teams are considered more effective in executing tasks (Bell 1995; Mitchell 1993; Hogan 1990).

A strong social support network and interdependent bonding were protective factors mitigating stress. In addition, self care practices and stress management strategies reduced vulnerability to compassion fatigue. In short, well-being during disaster deployment is tied to protective insulation from stress and a strong supportive network.

Health and Social Support

Health, resiliency and social support mitigated the effects of excessive exposure to traumatic stress. The traumatologists as healthy, resilient individuals mitigated traumatic stress by engaging in self care and supportive relationships.

Social support is a determinant of health. Epidemiological research examining the social determinants of health provides strong evidence that social support especially socio-emotional support is a strong predictor of morbidity and mortality rates (Alcalay 1983; Berkman 1995).

It was evident from the narratives that study participants’ perceived socio-emotional support as both available and accessible. In a crisis situation social support
is known to buffer the deleterious effects of psychosocial stress and bolster adaptive coping behavior (Gore 1991).

Social support also enhances group competence and efficacy. During a disaster deployment social support should include socio-emotional and material support, a sense of belonging and safety. The Green Cross Projects deployment had all of these elements. It is important to ensure a supportive social environment during disaster deployments as a key factor in safeguarding health.

*Self Efficacy*

A sense of control over the environment instills a strong sense of self-efficacy (Wiedinfeld et al., 1990). Individuals with high self-efficacy perceive stress as manageable. Green Cross Traumatologists demonstrated high self-efficacy in rapid adaptation to a chaotic disaster environment, work competence and role flexibility. Flexibility or staying “fluid” was an indicator of individual resiliency. Self-efficacy can be improved with pre-deployment “readiness” and skill building.

Collective efficacy was demonstrated by the teams in maintaining high moral, cooperation and mutual support (Jex and Bliese 1999). Collective efficacy can be strengthened through pre-deployment team building.

*Health Risk Factors*

Psychological stress is a primary risk factor in disaster work. In the aftermath of 9-11 those with excessive exposure to the disaster environment were at high risk for posttraumatic stress. Other risk factors at ground zero in New York City included frequent exposure to immense human loss, property destruction and a traumatized community.
Gender is also a risk factor for traumatic stress. Females are typically underrepresented in the field of disaster relief and emergency services. However, a high percentage of trauma mental health professionals are female. While all of the Green Cross Projects traumatologists were at risk for PTSD the females were more likely to develop PTSD particularly those with a history of previous trauma and depression. Epidemiological studies of gender differences in PTSD consistently report women are twice as vulnerable as men and have higher rates of pre-existing affective and anxiety disorders as well as trauma histories (Anderson 1994). Gender susceptibility and trauma history put several female traumatologists at risk for PTSD.

There was also a higher risk of compassion fatigue among female traumatologists. Generally, women tend to be more emotional, compassionate and expressive (Howard 1997). There is consistent evidence that women respond more empathically than men to the distress of others (Piliavin and Unger 1985). Under excessive stress women are more likely to become emotionally fatigued. The capacity of men and women to help others is not inherently different, however, the way helping is done and the impact on health is different.

Most traumatologists reported no health problems. However, a few reported debilitating exhaustion and susceptibility to illness. Several female traumatologists including myself, returned home with symptoms of Compassion Fatigue. Some reported experiencing “letting down” or a sudden release of pent up emotions after deployment. Overall, sadness and fatigue subsided for most with readjustment to a familiar and supportive environment.
Health Protective Factors

Hardiness and stamina protected health. Resiliency was a primary team protective factor mitigating stress during the deployment. Resiliency is the ability to “bounce back” in an adaptive way to stressful life situations. Although there is human variation in resiliency it is considered innate (Richardson 2002). More resilient individuals manage distress in adaptive ways that effectively lower stress and ultimately improve adaptive capacity. Epidemiological investigations have identified particular characteristics that promote resiliency, prosocial behavior and social affiliation (Richardson 2002; Masten 1998). Traumatologists exhibited such characteristics as a strong sense of mission, goal orientation, resiliency and adaptive capacity which enhanced team morale and performance.

The deployment leaders established the infrastructure and Incident Command Center within a stable and predictable work environment prior to the deployment of the advance team. The incident command structure supported deployment functions within a hierarchy of authority, communication center, and routine operating procedures that provided a protective buffer from traumatic stress.

A majority of team members used self care practices for stress reduction, self soothing and energy renewal. This proactive coping behavior enhanced resiliency and reduced stress. Spiritual and religious practices were thought to be comforting and a way to find meaning and purpose in the experience. Social support from team members and compassion fatigue specialists, daily debriefings and after-hours “togetherness” were also protective resources. The combination of these protective factors had a “stress inoculation effect” (Mitchell 1990; Ursano et al, 1995).
Deployment “Readiness”

Deployment to a humanitarian crisis requires individual and group resiliency to sustain operations. West and Clark (1995) conducted oral history interviews with military nurses deployed to Somalia and concluded the two most important factors for adaptation in an austere environment were flexibility and innovation in problem solving. Disaster deployments require “readiness” for rapid deployment, mission execution and adaptation to an austere environment. Few disaster deployments have pre-deployment “readiness” programs or health and safety protocols to safeguard personnel.

“Readiness,” a term most commonly used in the military means a state of preparedness to perform duties and includes both individual and collective “unit” readiness. It includes the ability to mobilize efficiently, deploy effectively and sustain field operations. Components of “readiness” include commitment, morale, identity, and intent (Dolan et al., 2001).

Stressors in a disaster deployment are similar to those encountered during military operations. Deployment stress is attributed to disruption of daily routine; separation from home, family and job; unpredictable work schedules; long work hours with insufficient breaks; excessive exposure to trauma and health and safety risks in the environment.

Readiness for deployment must be assessed prior to mobilization to protect the health and safety of disaster workers. This can be accomplished through pre-deployment “readiness” training and health status evaluation. One example of a self-assessment tool used by the military is the Readiness Estimate and Deploy-ability.
Index (READI). The READI is a self-assessment tool that measures perceived readiness of nurses for military deployment (Reineck 2000). The tool assesses perceived readiness on three dimensions: skill mastery; attachment and intent.

Designing a self-assessment tool for use in pre-deployment assessment of traumatologists would enhance “readiness” for disaster deployment. Other aspects of pre-deployment training might include evaluation of environmental health and safety risks, stress management strategies and self care practices, skill competency and team building. A pre, mid and post deployment compassion fatigue self assessment would also be a valuable tool for monitoring traumatic stress during disaster deployment.

Trauma Mental Health Services

In the after-math of the Oklahoma City bombing psychological trauma was recognized as a serious threat to health and wellbeing (Reid et al., 2005). It was evident from the scope of the disaster that community mental health professionals were ill equipped to manage a multitude of trauma survivors. Federally funded Traumatology training programs for mental health professionals provided a cadre of certified trauma specialists. Conventional clinical treatment of mental illness is not appropriate in a large-scale disaster where the affected population is predominantly normal people reacting to an extraordinary traumatic event. It has been argued that trauma intervention must address the needs of the community not just the individual (Myers 1994).

In New York City after 9-11 there was a significant rise in unemployment, destruction to the infrastructure; changes to community composition; family and domestic strife; and elevated reporting of psychological distress particularly
posttraumatic stress disorder (Schuster 2001; Galea 2002). Several traumatologists deployed to the 9-11 disaster reported feeling overwhelmed by the scope of destruction and extent of psychological trauma. Although crisis stabilization services were initiated rapidly a tremendous demand for services challenged the capacity of local agencies (Schuster 2001; Galea 2002). In addition health and social service providers were also affected by the traumatic events.

Existing trauma mental health training is not yet standardized in content, skills or official recognition. In addition, there are no criteria for program evaluation. However, efforts are being made to integrate public health and mental health disaster preparedness. One available resource is offered by the Centers for Public Health Preparedness. It is a national mental health preparedness resource “toolkit” consisting of a compilation of training and education curricula and resources. The toolkit offers a means by which local, state and national organizations may have access to training that can be modified as needed in collaboration with the Center for Public Health Preparedness (CPHP). The toolkit is currently being used by state and local public health personnel, mental health counselors, emergency medical service providers’ as well as volunteer organizations seeking training and resources. Further development of the toolkit would include skill competencies, basic and advanced educational curricula and standardization of the nomenclature (Hoffman et, al. 2005).

The Florida Center for Public Health Preparedness (FCPHP), located at the University of South Florida in Tampa offers an array of educational and skills-based training programs in trauma mental health that prepare participants to provide disaster mental health services. The FCPHP as part of its comprehensive Disaster Mental
Health training program offers educational tools available on the internet that include an audio CD on Compassion Fatigue and DVDs on Cultural Competence in Disaster Response (Reid et al., 2005: 860). The goal of the training program is to prepare participants to offer disaster mental health interventions effectively and to care for themselves. Recent research by Ritchie et al., 2006 has identified core elements in disaster mental health intervention. Seven of the key intervention strategies are to: 1) initiate and maintain a “non-anxious” presence when bearing witness to traumatic events or stories of others; 2) follow the four phases of disaster/waves of assistance; 3) use the five-step C-A-S-E-R model of initial trauma intervention (contact; assessment; stabilization; education and referral; 4) conduct an initial trauma assessment; 5) provide CISM defusing and debriefing; 6) deliver culturally appropriate trauma intervention services and 7) apply Compassion Fatigue Resiliency skills.

A collaborative alliance between the Institute of Traumatology located at Florida State University, the Florida Center for Public Health Preparedness located at the University of South Florida, and the Florida Department of Health would benefit all institutions by combining resources for training and disaster drills, adapting and refining the CPHP “toolkit” to meet the needs of state and local organizations and promoting state-wide integration of trauma mental health with all emergency response services.

The International Red Cross (IRC) in its *World Disaster Report 2000* indicated that international mental health initiatives lacked consensus based guidelines, training and professionalism. This criticism sparked the development of
minimum standards for disaster response by several international humanitarian aid organizations. However, the standards were general and excluded international trauma training and intervention. To address this gap a task force of international experts and members of the International Society of Traumatic Stress Studies (ISTSS) was formed in 1999. Consensus based guidelines for international trauma mental health training and services are now available through the ISTSS organization. These guidelines are based on explicit values that are context specific, culturally sensitive and promote public mental health collaboration and community partnership.

The internationally acclaimed Institute of Traumatology, at Florida State University offers a comprehensive trauma mental health curriculum with certification at basic and advanced levels for Traumatologists and Compassion Fatigue Specialists. The Green Cross organization is developing chapters to expand membership and traumatology training. However, the Green Cross Projects deployment arm remains poorly integrated within the international disaster service arena.

Deployment Health Promotion

Pre-deployment health should be considered a priority for determining eligibility for disaster deployment. A pre-deployment health screening protocol could be activated prior to deployment mobilization. Health screening must be acceptable to the team, insure confidentiality, avoid stigmatization and be appropriate for a disaster environment (Rona et al., 2005). To be comprehensive pre-deployment health screening would include a physical, psychosocial and compassion fatigue assessment.
Preventative health screening and surveillance are health maintenance procedures employed by the military for the purpose of early detection and intervention. Since the 9-11 terrorist attacks more emphasis has been placed on mental health screening in the military. Emphasis has been on detecting and managing stress during and after deployment.

Several studies of military deployments have shown negative affects on health. The findings of a longitudinal study of US soldiers deployed to Bosnia indicated that length of deployment affected the morale, cohesion and mental health of soldiers (Castro and Huffman 1998).

Post-Deployment Follow-Up

Post-deployment follow-up is limited after a disaster deployment. McCaslin (2004) conducted a study of the health affects on a population of American Red Cross disaster relief workers after 9-11. The findings suggest that the more exposure workers had to disaster sites and survivors the more often they perceived subsequent life events as negative life changes during the year following the terrorist attacks.

A recent study assessed the need for follow-up with combat troops returning from redeployment to the Middle East. Soldiers were given a traumatic stress screening at 90 and 120 days post-deployment. Findings indicated a significant increase in posttraumatic stress 120 days post deployment (Bliese et al., 2004)

A disaster deployment health protocol should include debriefing at termination and several follow-up screenings to detect posttraumatic stress. Pre and post-deployment screening and monitoring for traumatic stress, assessment at
termination and post-deployment follow-up would provide a comprehensive continuum of care for trauma mental health service providers.

Implications for Applied Anthropology

Anthropological knowledge is holistic, experiential and contextual. In this study the anthropological perspective offered an understanding of the lived experience of traumatologists working within the context of an unprecedented terrorist disaster. Interdependent processes of culture change were illuminated.

The processes involved in a Green Cross Projects disaster deployment and the lived experience of traumatologists were examined using the ethnographic method of discovery. Ethnographic methods afford a comprehensive and varied analysis of ongoing processes and experiences of individuals. The ethnographic method of discovery using a multi-method approach resulted in the creation of a detailed description of deployment activities and processes grounded in the lived experience of traumatologists. Participant observation as an “insider” allowed entry into the Green Cross deployment culture and the opportunity to gain an in-depth understanding of beliefs, behaviors, customs and language usage unique to this group.

Applied anthropologists focus on cultural dynamics at the micro and macro levels of society incorporating emic (insider) and etic (outsider) categories of knowledge within a specific cultural context. An in-depth analysis of the narrative text provided an emic perspective of the lived experience of traumatologists delivering trauma mental health services to disaster survivors. Etic categories describe community-wide relationships cultivated within a disaster environment.
Anthropological fieldwork in a disaster environment is dangerous and there are significant risks to personal health and safety. This aspect of research has not received enough attention and there is a paucity of information on the subject of fieldwork hazards. We must be cognizant of the risks inherent in conducting fieldwork in dangerous environments. Awareness and planning for the potential health and safety issues in the research environment is imperative. There are both physical health and psychological costs of fieldwork in a disaster setting. A misconception of some is that fieldwork in a dangerous environment is done by a “thrill seeker” or someone who is reckless. In addition, closeness to risky, momentous, or stirring events such as a disaster does not preclude detachment from them (Lee 1995).

Applied anthropologists can be instrumental in the development of strategies to mitigate the health and safety risks of fieldwork. Applied research assessing the known hazards of fieldwork environments, safety policies and training programs would be of benefit to fieldworkers considering work in a dangerous environment.

There are several ways applied anthropologists could contribute to furthering research and development of the disaster services delivery system. Opportunities for training in disaster relief and recovery work are available through the American Red Cross and would provide the means for gaining entry to work a disaster. Conducting participant observation as a disaster service worker offers opportunities to develop relationships with both disaster workers and disaster survivors.

Further qualitative and social epidemiological research is needed on the processes of disaster deployment, health and safety risks and incidence of traumatic
stress and compassion fatigue. Ethnographic research comparing the processes of deployment across disaster service organizations will shed light on the similarities and differences in deployment preparedness.

Network analysis research of micro and macro linkages between disaster response-systems might detect cracks or absence of linkages. This information could be useful to policy makers for improvement in system coordination and collaboration between local, state, and federal disaster organizations. Identification of cracks and poor linkages in the system could inform policy to improve disaster system integration, communication and distribution of disaster recovery resources.

Applied anthropologists in the role of community advocate could be instrumental in the promotion of public awareness campaigns to improve disaster preparedness. Needs assessments to identify gaps in public health education, service delivery, and integration of community disaster response organizations could benefit decision makers seeking ways to improve disaster preparedness. Developing culturally sensitive, family oriented disaster preparedness programs based on community needs is another area for applied anthropologists to contribute their expertise.

Social stigma affects the use of mental health services. In a disaster it is critical to inform the public about available health and social services. Raising public awareness of the physical and psychosocial health effects of disaster may offset the prevailing social stigma of seeking mental health services.
As culture brokers applied anthropologists might work with emergency, health and social service organizations to build linkages and strengthen communication networks with the goal of producing an integrated disaster response system.

There is a dearth of long-term disaster research to meaningfully inform change in disaster preparedness policy and practice. Renewed efforts must focus on a broader context of social disruption and community trauma situated with a historical, social, ethnic and cultural context.

More evidence-based research is needed to determine the acute and chronic affects of disaster on public health and the impact of disaster mental health services on diverse populations.

Cross-cultural comparative research addresses the diversity of human experience. Longitudinal cross cultural comparative research on the social determinants of disaster preparedness, response, and health impact would provide a basis for culture specific actions, services and training programs. In addition, a cross-cultural comparative program evaluation of existing disaster training is a way to begin to assess the comprehensiveness of training and identify best practices.

Although there are many studies of occupations and occupational stress, few of them explore how workers in dangerous occupations cope with the hazards they face. Even fewer explore how researchers deal with hazards in sites that double as workplaces for them and for those they research. My roles as a researcher and field traumatologist increased my risk of Compassion Fatigue. My ability to gain entry to this specialized deployment environment actually placed me at greater risk than if I
had assumed a more peripheral role. I shared all of the occupational risks with study participants.

PTSD and Compassion Fatigue will continue to be serious occupational health risks for disaster mental health service providers. A primary goal for protecting occupational health and safety will be to enhance deployment preparedness and resiliency to mitigate occupational stress responses. To protect the health of helpers’ future research should focus on identifying protective factors and protective health practices to incorporate in deployment readiness training programs. With a growing interest in the prevalence of PTSD in disaster traumatized populations cross-culturally, longitudinal ethnographic research would be beneficial to increase our understanding of social vulnerability and resilience to traumatic stress in disaster environments. Finally, active participation as a helper in a humanitarian crises increases awareness and cultural sensitivity to the plight of disaster communities. Volunteering with non-profit organizations and other disaster relief organizations benefits the individual and the community.
CHAPTER IX
RECOMMENDATIONS

Recommendations derive from the lessons learned during the Green Cross deployment to the New York City World Trade Center disaster as well as evidence-based best practices in disaster mental health services.

Recommendations are offered to local, state and national disaster mental health service organizations and include the development of comprehensive pre-deployment readiness programs, standardized disaster preparedness training programs that are based on evidence-based best practices and implementation of occupational health and safety protocols. A listing of recommendations for improving the efficacy of disaster mental health services are shown in Table 4.
Table 4. Recommendations to Improve the Delivery of DMHS

<table>
<thead>
<tr>
<th>Pre-Deployment Preparedness</th>
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<tr>
<td>• Sponsor national public awareness campaigns to increase utilization of disaster mental health services</td>
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<tr>
<td>• Employ a medical safety officer to monitor environmental hazards, health risks and personal safety during all phases of a disaster deployment</td>
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<tr>
<td>• National pre-event conferences and mock disaster drills to build intervention skills, teamwork, stress management and promote group cohesion</td>
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<tr>
<td>• Develop a standard deployment “readiness” protocol that can be adapted to local needs but that will systematize deployment preparedness and regulate adherence to health and safety standards</td>
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<tr>
<td>• Implement a deployment “readiness” protocol that includes:</td>
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<tr>
<td>• Pre-deployment physical health screening.</td>
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<td>• Pre and post deployment self-evaluation of compassion fatigue</td>
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<tr>
<td>• Deployment training on health and safety risks and environmental hazards</td>
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<tr>
<td>• Readjustment after deployment needs to be addressed in pre-deployment “readiness” programs</td>
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<tr>
<td>• Pre-deployment environmental assessment by the safety officer to assess health risks</td>
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<tr>
<td>• Pre-deployment briefing, team debriefing and a post deployment organizational debriefing</td>
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<tr>
<td>• Pre-deployment contractual agreements for medical care</td>
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<tr>
<th>Occupational Health and Safety</th>
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<tr>
<td>• Instillation of a deployment “Readiness” protocol</td>
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<tr>
<td>• Pre-deployment health screening and health hazard education</td>
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<tr>
<td>• Deployment health and safety monitoring by Safety Officer and Compassion Fatigue Specialists</td>
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<tr>
<td>• Post deployment follow-up evaluation</td>
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<tr>
<th>Standardized Training for Disaster Mental Health Service Organizations</th>
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<tr>
<td>• National standardized training curriculum, certification and annual renewal course in Disaster Mental Health Services</td>
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<tr>
<td>• National Disaster Mental Health Services “Train the Trainer” program</td>
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<tr>
<td>• National internet-based continuing education courses and certificate programs in Disaster Mental Health Services</td>
</tr>
<tr>
<td>• State coordination of Emergency Management and Disaster Training Team exercises</td>
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Disaster of any kind is a traumatic human experience. The terrorist events caused mass destruction and human loss and evoked fear that reverberated globally. Acts of terrorism disrupt and threaten civilized societies. The events of September 11th were perpetrated on American culture unexpectedly. American security was threatened exposing vulnerability of the nation to undetected threats. However, within hours the United States launched an unprecedented national disaster response.

This exploratory study is situated within a broader context of American culture in crisis after terrorist attacks on September 11th 2001. In the post disaster phase, public health, community mental health and social service agencies were infused with Federal funds to provide disaster recovery services. The risk of community-wide psychological trauma was a priority. Federal funds provided for disaster mental health services and training.

Disaster work is recognized as an occupational health hazard. Disaster relief workers in closest proximity to disaster sites are at risk for posttraumatic stress. Likewise, trauma mental health service providers frequently exposed to trauma stories are at risk for Compassion Fatigue and PTSD. Given the nature of the 9-11 terrorist attacks; proximity to mass casualties; immense property destruction;
recovery of the dead; and urgent care of the traumatized; all emergency, medical and mental health service personnel were at high risk for posttraumatic stress disorder.

Unlike most Americans reacting to the terrorist events from a distance, Green Cross traumatologists worked directly with trauma survivors employed by the World Trade Centers. Exposure to traumatic material was frequent and intense. A range of reactions expressed by study participants included fear, shock, disbelief and denial. Most reported no adverse health effects while others succumbed to compassion fatigue and physical illness.

Ethnographic methods enabled a “thick” description of a deployment culture composed of specialized knowledge; shared beliefs, values and practices within a historical context. Seeing life from the insider’s perspective is a hallmark of the ethnographic method (Angrosino 2002:34). Emphasis was placed on participation in the deployment as a traumatologist. According to Wolfe (1978) ethnographic experience makes deliberate use of all connections possible to get entrée to the cultural group and develop rapport. Narratives were most appropriate for depicting lived experience in a disaster environment. The interactive process highlights multiple voices in constructing the narrative text.

A greater understanding and awareness of health and safety issues must become a normative practice for both the field traumatologists and the social researcher. A first fieldwork experience as well as a first disaster deployment becomes a “rite of passage,” that must be properly planned for to safeguard health. Access to resources via the internet and to relevant and timely information on potential health and safety hazards are essential. Lessons learned in previous disaster
must be passed on in training and disaster preparedness programs. Environmental risk assessments should be conducted prior to entering a disaster site and a report disseminated to those activated for deployment. Providing safety guidelines, emergency procedures and after action reviews of incidents is a responsibility of the disaster deployment organization. To be most effective deployment preparedness training must be case specific, updated with each disaster deployment and undergo evaluation for effectiveness.

Understanding secondary traumatic stress as an occupational health hazard of disaster work is essential for maintaining health and safety during deployment. It is recognized that emergency service personnel at a disaster site are at risk for traumatic stress. However, little is known about the chronic health effects of trauma work. Limited attention has been given to examining health risks, self-protective mechanisms and social support networks as protective factors during a disaster deployment. Pre-deployment preparedness and monitoring health status has received limited attention.

Furthermore, there continues to be a dearth of qualitative research describing the processes involved in a disaster deployment and lived experience of deployed personnel. A greater understanding of the deployment process and how it impacts health is critical for planning for deployment readiness. Few disaster deployment readiness programs exist or have comprehensive deployment health and safety protocols, pre-deployment preparedness training or Compassion Fatigue Specialists to monitor traumatic stress exposure. In addition, epidemiological research is needed to determine the long-term effects of traumatic stress on disaster affected populations.
Previous research on disaster affected populations limited the exploration of ethnic diversity, gender differences and cross-cultural variation in human responses to traumatic events.

In conclusion, this study reveals the complexity of disaster deployment processes within the historical context of the 9-11 terrorist attacks on American culture. The narratives illustrate the meaning attributed to lived experience in a disaster environment and concerns with deployment health and safety. The results should inform program planners and policy makers who require evidenced-based research to devise occupational health and safety policies and disaster deployment preparedness training.

Overall, the most critical lessons learned from the Green Cross Projects deployment are as follows:

*Deployment Processes*

Deployment is a complex multidimensional process involving the activation, mobilization, and management of disaster mental health services teams. Team members are assigned various roles that require training to function effectively in an incident command center. Strong and effective leadership is critical for successful execution of any mission. Leadership training is essential to develop the necessary skills to effectively manage a disaster deployment. There must be a strategic plan to ensure individuals meet requirements for deployment and a deployment protocol to ensure “readiness.”
**Health and Safety**

Occupational health and safety standards must be met through adherence to a set of guidelines that protect individuals during a disaster deployment. A deployment “readiness protocol” sets specific requirements for evaluation of personal health and environmental risk assessment. Policies and procedures specify provisions for personal safety, medical care and emergency notification.

**Comprehensive and Certified Training Programs**

A comprehensive training program for disaster deployment preparedness includes a standardized format of basic knowledge and skills that are easily transferable in the format of a “train the trainer” program. Fundamental knowledge about disaster and intervention skills must be applicable in any disaster. Skill building and mock disaster drills enhance performance and ability to work as a team. Team training builds cohesion and social support pre-deployment which are essential for effective intervention in a chaotic disaster environment. Training programs should meet a set of national standards and provide certification for continuity of services across a broad range of disaster service organizations.

My participation in the Green Cross Projects deployment as a field traumatologist and applied anthropological researcher provided insight into the underlying processes and concerns arising during a disaster deployment. The arguments I have made reflect the perspectives of all study participants including myself. The lessons learned and recommendations generated concern a critical need for pre-deployment preparedness, occupational health and safety, and disaster deployment training that are consistent across disaster service organizations.
That experience, interpreted with anthropological perspective, gives rise to recommendations for the development of comprehensive deployment readiness and disaster preparedness training programs to safeguard the health of traumatologists and all emergency service personnel. If the lessons learned and recommendations given are acted upon by planners and policy makers, the problems identified here will be mitigated.
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APPENDICES
Appendix A: Recruitment Letter

Date:

Dear ________________

As we move into the New Year we will not forget the mental health services we provided together following the events of September 11th. We are forever bonded by the disaster we experienced as we supported those survivors suffering the traumatic loss of that day.

Purpose of this letter

I would like to invite you to participate in a research study about your unique experiences working with disaster survivors following the New York City World Trade Center disaster. I am collecting the stories of traumatologists who were deployed as “first response” teams by the Green Cross Projects. This packet includes an information form and the interview guide. If you are interested in contributing your story please complete the information form and return it in the envelope provided. A $25.00 stipend will be given to participants as a token of my appreciation for your story.

The results of this study will be used to inform university training institutions, disaster mental health service organizations and to address the special needs of Traumatologists and Compassion Fatigue Specialists.

About My Background

I am a Psychiatric Mental Health Nurse Practitioner, certified as a Compassion Fatigue Specialist and Traumatologist. I am a doctoral candidate in Applied Anthropology at the University of South Florida. I was a member of the “first response” team deployed to the New York City World Trade Center Disaster, by the Green Cross Projects. I believe the stories of traumatologists deployed to this disaster are important because the confidential nature of our work hinders the opportunity to have our voices heard. It is time to share our stories and acknowledge our special needs. I hope you will agree to participate and add your story to my own.

About Confidentiality

I will personally conduct interviews. In person interviews will be planned with you and will take place in the most convenient and comfortable location for you. If you prefer a phone interview, I will schedule the date, time and length of call with you. If you prefer to self-record your story, I will send a tape-recorder and tapes and will pay for return shipping. You may also write or type your story and send me a copy on disc.

Several measures are taken to protect your confidentiality, and I will take every possible step to keep your name private. You will also receive updates about the
progress research and have an opportunity to review and edit your interview transcript.

How to Contact Me: Please call if you have any questions. Thank you for your consideration. Phone: (941) 792-8436, or e-mail carroncherrie@aol.com.
Appendix B: Participant Information Form

(Please complete the information sheet and return in the envelope provided)

I. Personal Story

Would you like to participate in this study?
_____ Yes
_____ No

How would you like to contribute your story?
_____ In-person interview
_____ Phone Interviews
_____ E-mail interviews
_____ Personal self tape-recorded interview
_____ Written/computer generated
_____ Personal Journal

II. Personal Background Information

A. Name:
B. Address:
C. Phone:
D. E-mail:
E. Date of Birth:
F. Place of Birth:
G. Cultural Background:
H. Gender:
I. Profession:
J. Years of professional practice:
K. Traumatology Training and Certification:
L. Previous Disaster Deployments:
M. Other topics of interest to you:
Appendix C: Informed Consent

Social Sciences/Behavioral  Adult Informed Consent
University of South Florida

Information for People Who Take Part in Research Studies

The following information is being presented to help you decide whether you want to be a part of a minimal risk research study. Please read carefully. If you do not understand anything, ask the Person in Charge of the Study

Title of Study:  Traumatic Loss and Transformative Life Experiences: The Lived Experience Of Green Cross Traumatologists Deployed To The New York City World Trade Center Disaster

Principal Investigator:  CARRON CHERRIE Ph.D. c, ARNP

Study Location(s):  USA

General Information about the Research Study
You are being asked to participate in this study because you are one of thirty-eight traumatologists who were deployed as first responders to the New York City World Trade Center Disaster, by the Green Cross Projects.

The purpose of this study is to describe in an anthropologically holistic perspective the lived experience of traumatologists who provided mental health services to disaster survivors of the New York City World Trade Center disaster, and who as Americans have also been affected by domestic terrorism.

The lived experience of traumatologists will be studied within the context of American culture, domestic terrorism, and globalization. Traumatologists are at high risk for subsequent health problems related to their work with survivors. It is important to study the experiences of traumatologists in their work with disaster survivors; because their intense exposure to immense human suffering increases their own risk of what Charles Figley (1995) refers to as “compassion fatigue” or secondary traumatization. This study will add new knowledge of how mental health professionals experience traumatic events resulting from domestic terrorism and how traumatic stress affects the health of the helper.

Risks of Being a Part of this Research Study

There are no anticipated risks
Confidentiality of Your Records

Your privacy and research records will be kept confidential to the extent of the law. Authorized research personnel, employees of the Department of Health and Human Services and the USF Institutional Review Board may inspect the records from this research project.

The data will be kept in a locked file cabinet and will be coded numerically. The results of this study may be published. However, the data obtained from you will be combined with data from other people in the publication. The published results will not include your name or any other information that would in any way personally identify you.

Volunteering to Be Part of this Research Study

Questions and Contacts
If you have any questions about this research study, contact Carron Cherrie, at (941) 792-8436.

If you have questions about your rights as a person who is taking part in a research study, you may contact a member of the Division of Research Compliance of the University of South Florida at 813-974-5638.

Your Consent—By signing this form I agree that:
I have fully read or have had read and explained to me this informed consent form describing a research project.

I have had the opportunity to question one of the persons in charge of this research and have received satisfactory answers.

I understand that I am being asked to participate in research. I understand the risks and benefits, and I freely give my consent to participate in the research project outlined in this form, under the conditions indicated in it.

I agree to one or more of the following

☐ In person interview
☐ Phone interview
☐ Self recorded interview
☐ Written submission
☐ Chat Room

I understand I will receive an abbreviated version of the dissertation

I have received a signed copy of this informed consent form, which is mine to keep.
Investigator Statement
I have carefully explained to the subject the nature of the above protocol. I hereby certify that to the best of my knowledge the subject signing this consent form understands the nature, demands, risks, and benefits involved in participating in this study.

___________________________
Signature of Investigator                                             Principal Investigator
___________________________
Printed Name of Investigator                                      Date
Or Authorized research investigators designated by the

Institutional Approval of Study and Informed Consent
This research project/study and informed consent form were reviewed and approved by the University of South Florida Institutional Review Board for the protection of human subjects. This approval is valid until the date provided below. The board may be contacted at (813) 974-5638.

Approval Consent Form Expiration Date:
Revision Date: ____________

I understand that I am being asked to participate in research. I understand the risks and benefits, and I freely give my consent to participate in the research project outlined in this form, under the conditions indicated in it.

Investigator Statement:
I certify that participants have been provided with an informed consent form that has been approved by the University of South Florida’s Institutional Review Board. That contains the nature, demands, risks, and benefits involved in participating in this study. I further certify that a phone number has been provided in the event of additional questions.

Signature of Investigator_________________________________________
Printed Name of Investigator______________________________________
Date___________________
Appendix D: Interview Schedule

SECTION 1

I.  Life Review
   a.  Birthplace/Birth Date?
   b.  Most significant childhood memories?
   c.  Significant people and events as you grew up?

II.  Ethnic/Cultural background
    a.  Significant family traditions?
    b.  Cultural beliefs, values and practices?
    c.  Impact of September 11 on family traditions and cultural practices?

III.  Professional History
      a.  How you decided on your profession?
      b.  How you decided to specialize in trauma work?
      c.  How have you used your specialized training to respond to disasters
          or other critical events?

IV.  Disasters deployments
     a.  Describe your past disaster deployments?
     b.  Your roles during each disaster deployment?
     c.  Lessons Learned?

V.  Green Cross Projects
    a.  How you are affiliated with GCP?
    b.  Length of membership?
    c.  Roles and Responsibilities?
    d.  Strengths of GCP?
    e.  How can GCP improve as an organization?

SECTION 2

VI.  The impact of the New York City World Trade Center Disaster on your
     life
    a.  How did you first learn about the NYC World Trade Center Disaster?
    b.  What was your response to the news?
    c.  How did you decide to deploy with Green Cross Projects?
    d.  In what capacity did you deploy?
    e.  How did your family respond to your decision to go to NYC?
    f.  How long were you deployed?

VII. Experiences as a member of the Green Cross Projects Disaster
     Deployment
    a.  What were your most memorable experiences?
    b.  Who were the most significant people?
    c.  How has the suffering of disaster survivors affect you personally?
    d.  What were the high and low points of your experience?
    e.  How did cultural differences of disaster survivors and New Yorkers
        influence your experience?
    f.  How did you find meaning in the experience?
SECTION 3  

VIII. Impact of events on yourself, family and employment  
   a. How has your experience caring for disaster survivors changed your life?  
   b. How has this disaster affected you personally?  
   c. How has this disaster affected your family?  
   d. How has this disaster affected you economically?  
   e. How has this disaster affected your work?  
   f. Have your experiences changed your attitudes, values, or beliefs in any way?  

IX. Impact of events on self and personal health  
   a. How has this disaster affected your health and well-being?  
   b. Have you suffered any subsequent physical illness?  
   c. Have you suffered any subsequent emotional distress?  
   d. How do you manage stress now?  

SECTION 4  

X. Contributions to your community  
XI. Memorabilia (photos, news clippings)?  
XII. Additional Reflections (Anything else you want to add)  

ABOUT THE AUTHOR

Carron C. Cherrie was born in Pontiac, Michigan July 25, 1950. She lived in a suburb north of Detroit, Michigan. She graduated from Southfield Sr. High School in 1968. She attended Wayne State University in Detroit Michigan receiving both a Bachelor of Arts degree from Monteith College, an honors college and a Bachelor of Science degree in Nursing in 1975. During her nursing career, Carron specialized in Pediatric and Transcultural Nursing. She received her Master of Science degree in Child and Adolescent Psychiatric Mental Health Nursing in 1979. She moved to Florida in 1985 and resides in Bradenton, Florida. She completed her doctorate in applied anthropology at the University of South Florida in June 2006. She received a letter of recognition from Florida Governor Jeb Bush and an award for outstanding community service from the Green Cross Foundation. She will continue to participate in humanitarian assistance missions.