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RESILIENT COMMUNICATION: A NEW CRISIS COMMUNICATION STRATEGY FOR HOMELAND SECURITY

by

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13. ABSTRACT (maximum 200 words)

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A case study of the 2007 Greensburg, Kansas tornado assessed the crisis communication strategy surrounding the disaster to assist in the development of a new comprehensive crisis communication strategy for homeland security.

The case study revealed the need for homeland security leaders to reframe crisis communication by considering disasters as the norm, not a rarity. The case study also found significant benefits to utilizing a complex systems approach in crisis communication strategy, specifically the pragmatic complexity model.

New crisis communication approaches were recommended including a public partnership approach and a resilient messaging/survivor psychology approach.

The research recommendations also included specific before and after message themes to engage the public and help them become more resilient.

The case study and research concluded a state-level strategy would be most beneficial and would allow specific messaging to be delivered by leaders familiar to the community affected.

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RESILIENT COMMUNICATION: A NEW CRISIS COMMUNICATION STRATEGY FOR HOMELAND SECURITY

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LIST OF ACRONYMS AND ABBREVIATIONS

CDC	Center for Disease Control and Prevention
CERC	Crisis Emergency Risk Communication
DHS	Department of Homeland Security
FEMA	Federal Emergency Management Administration
EPA	Environmental Protection Agency
EF	Enhanced Fujita (tornado scale)
H1N1	Subtype of Influenza A
HHS	Health and Human Services
NAS	National Academy of Sciences
NEA	National Education Association
PIO	Public Information Officer
USAID	United States Agency for International Development

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This document is dedicated to the individuals who lost their lives in the Greensburg, Kansas tornado, May 4, 2007.

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I. A NEW STRATEGY NEEDED FOR CRISIS COMMUNICATION

A. INTRODUCTION

1. Problems with Current Crisis Communication Strategy

Effective crisis communication is a critical element to a successful domestic response following a terrorist attack or other disaster whether here in the U.S. or abroad. The events of 9/11 confirmed the need for crisis communication planning for organizations in the homeland security enterprise (Giuliani, 2002, p. 16), and a few years later the events surrounding Hurricane Katrina revealed the devastating impacts a failure in crisis communication can have upon a community and a nation (Bush, 2010, p. 310). However, it does not take a mega-event like 9/11 or Hurricane Katrina to prove the need for comprehensive crisis communication planning. A deadly EF-5 tornado, which nearly destroyed the entire community of Greensburg, Kansas in 2007, also reveals the importance of a comprehensive crisis communication strategy.

Although communication plans have been developed to address what leaders should do and say during a crisis and in the immediate aftermath (the response phase), there is a very limited emphasis on what leaders should be doing and saying long before a crisis happens and in the recovery phase long after it is over. In addition, these plans do not incorporate resilient messaging, that is, honest messages of the significant challenges ahead combined with messages of hope for a better future. This would better engage the public to work through the difficulties together and help build a more resilient community. Therefore, a comprehensive crisis communication strategy for homeland security leaders is needed to address communication *before*, during, and *after* a crisis and to engage the public as a partner in emergency preparedness and response to help build more resilient individuals and communities.

A review of crisis communication guides and training materials developed by and for federal homeland security entities reveals the need for a new comprehensive strategy and a broader emphasis on public engagement. As these titles indicate, these documents

focus heavily on messages in the midst of the crisis: *Communicating in a Crisis: Risk Communication Guidelines for Public Officials* (Health and Human Services [HHS], 2002), *Considerations in Risk Communication: A Digest of Risk Communication as a Risk Management Tool* (Environmental Protection Agency [EPA], 2003), and a draft document from several homeland security entities entitled, *Nuclear Detonation Preparedness: Communicating in the Immediate Aftermath* (Office of the President, 2010). In addition, the nationally recognized Federal Emergency Management Agency (FEMA) Basic and Advanced Public Information Officer Courses designed for spokespeople and leaders in emergency management-related-fields, focus almost exclusively on communicating during and immediately after a crisis, specifically with media. Therefore, these documents miss key strategic opportunities for providing individuals with actions and messaging well before a crisis or in the many months following the crisis, and overlook the complexity of communicating in a crisis (Federal Emergency Management Agency [FEMA], 2005; FEMA, 2009).

Furthermore, specific messaging to improve resiliency in the population is not a part of current homeland security communication plans and strategy. For example, the *Governor's Guide to Homeland Security* has only one paragraph in the 84-page document referencing the importance of messages prior to an event to encourage the public to take actions to prepare and protect themselves, steps that could improve individual resiliency (Ferro, Henry, & MacLellan, 2010, p 22). A comprehensive approach to crisis communication (before, during, and after) incorporating messaging and actions compelling individuals to take preparedness measures would provide the public tools to be more resilient when a crisis occurs.

2. Reframing the Way We Think about Disasters and Crisis Communication

A shift in thinking about disasters and crises would help homeland security leaders in developing an ongoing and comprehensive crisis communication strategy. Per Bak, a Danish physicist who developed theories about accidents, disasters, and society, suggested a different view, that "we treat catastrophes as the norm" rather than the exception (Lewis, 2011, p. 10). This change to viewing disasters as the norm instead of as

a rarity would help homeland security leaders realize the importance of an *ongoing cycle of crisis communication*. This cycle would involve homeland security leaders providing continual resiliency-focused messages, adapted to the needs of the current circumstances (before, during, and after a crisis) and incorporating a strategy to engage the public as a partner in all phases of disaster. This shift in thinking and message timing would also improve the chances of messages being received by the public. According to CDC officials, "Communicating in a crisis is different. In a serious crisis, all affected people take in information differently, process information differently and act on information differently" (Centers for Disease Control and Prevention [CDC], 2002b, p. 4). Because of this, a comprehensive crisis communication approach is needed at all levels of government to ensure messages get to people during all phases of a crisis, not just during the crisis when they may struggle to process the message. This approach helps ensure they receive information to protect themselves and their families and assist emergency responders by following directions or offering help at the scene, if needed.

3. Defining Crisis Communication, Risk Communication, Resilient Communication

a. Crisis Communication

Crisis communication is defined as "the dialog between the organization and its public prior to, during, and after the negative consequence. The dialog details strategies and tactics designed to minimize damage to the image of the organization" (Fearn-Banks, 2009, p. 9). The Centers for Disease Control and Prevention (CDC) provides a similar definition, calling it communication about a crisis to stakeholders and the public with the crisis being an unexpected event that may not be in the organization's control and may cause harm to its reputation (CDC 2002a, p. 5). Another definition expands upon these two by describing more specifically what an organizational crisis is: "a specific, unexpected, and non-routine event or series of events that create high levels of uncertainty and simultaneously present an organization with both opportunities for and threats to its high-priority goals" (Seeger, Sellnow, & Ulmer, 2010, p. 7). Crisis communication incorporates messages to help the leadership and public focus on the actions being taken and the actions the public should take, with an emphasis on leaders

being empathetic and honest in the delivery of those messages. This communication could include events ranging from a health issue like bird flu and H1N1 flu to an ongoing attack in a community like the D.C. sniper case, or a devastating earthquake, tornado, or terrorist attack like Oklahoma City or 9/11. It could also encompass a private entity such as a theme park accident or medicine being tampered with (i.e., the Tylenol scare of the 1980s).

b. Risk Communication

Risk communication is a term often used when discussing crisis communication. It is defined as "an interactive process of exchange of information and opinion among individuals, groups, and institutions; often involves multiple messages about the nature of risk or expressing concerns, opinions, or reactions to risk messages" (HHS, 2002, p. 4). Risk communication encompasses the need to communicate risks and benefits to stakeholders and the public (CDC, 2002a, p. 6). For example, risk communication messages are needed when the public may not see the benefits over the risks of a proposed nuclear power plant in their community. They may be unaware of the safety record of such plants. Risk communication emphasizes messages that help the public understand the real risk, not just their perceptions, and it also may offer some messages to lower expectations so that they realize there is still a risk, because nothing is 100 percent fail-proof.

c. Resilient Communication

The New Oxford Dictionary defines resilience as "the ability of a substance or object to spring back into shape; elasticity, the capacity to recover quickly from difficulties; toughness" (Oxford Dictionary Online, 2011). For the purposes of this thesis, resilient messaging/resilient communication is defined as communication that provides a realistic assessment of the potential challenges a catastrophic event can bring, offers hope and encouragement during tragedy, and helps individuals and communities bounce back after experiencing devastation. Furthermore, resilient communication engages the public as a partner before, during, and after disaster, to help build stronger individuals and communities.

4. Overview of Recent National Disaster Crisis Communication Challenges

Homeland security leaders are usually expected to communicate to the public about a crisis when it occurs by addressing what is being done and what the public can do. This is recommended according to the various homeland security communication guides referenced above. Some leaders do well. Perhaps they have received crisis communication training or have a background requiring extensive skills in communicating challenging concepts. But other homeland security leaders struggle and may not have had any training due to higher priorities in the organization in which they work or perhaps being a great communicator is just not important to them personally. While those in leadership positions are expected to lead effectively, there simply may not have been a requirement placed on them to show they are an effective crisis communicator. This puts them at a major disadvantage when a crisis happens.

Unfortunately, former FEMA director Mike Brown learned this the hard way and his lack of crisis communication skills was a career ender for him during Hurricane Katrina (MSNBC, 2005). In contrast, former New York City Mayor Rudolf Giuliani made an effort to become a better communicator while progressing through political office. He explains in his book, *Leadership*, how he worked with his communication staff often and they taught him to "communicate directly and with emotional honesty," and he used those communication skills during and after the 9/11 response (Guiliani, 2002). Similarly, in Greensburg, Kansas following the deadly May 4, 2007 tornado, Maj. Gen. Tod Bunting, the director of Kansas Division of Emergency Management and Kansas Adjutant General, understood the importance of communication in a crisis. He arrived on the scene as the sun was coming up over the destruction and began talking with media and then asked what it was they needed to be able to tell the world the Greensburg story (Kansas Adjutant General's Department, 2010c).

These disasters point to the need for every homeland security leader, whether governor or fire chief, a politician or not, in a large city or small one, to make it a priority to learn to communicate before a crisis happens to his or her community and to follow a comprehensive crisis communication strategy for public engagement.

The impact of a failure in crisis communication can be tragic, including loss of life if the public does not get the information needed to make the right choices for their safety and their family's safety, loss of the public's trust if there is not clear direction, and loss of control of a disaster scene if the public does not work with emergency responders and follow their directions. Hurricane Katrina provides examples of the above and of poor crisis communication at various levels of government throughout various stages of the disaster.

According to *The Federal Response to Hurricane Katrina: Lessons Learned*, "Federal, State, and local officials gave contradictory messages to the public, creating confusion and feeding the perception that government sources lacked credibility" (White House, 2006b). Public disputes between New Orleans' Mayor Ray Nagin, Louisiana Governor Kathleen Blanco, and President George W. Bush raised more questions than answers for the public regarding what was being done and what the public should do. Ultimately, the result was loss of public trust in government, questions of who was really in control of the disaster scene, debates about the role of active duty military and National Guard, and questions about whether the government's delayed actions caused more people to die (Forman, 2007, pp. 201–203). Former President Bush acknowledged this in his memoir, *Decision Points*, "Katrina conjures impressions of disorder, incompetence, and the sense that government let down its citizens. Serious mistakes came at all levels, from the failure to order a timely evacuation…to the dreadful communications and coordination" (Bush, 2010, p. 310). Even Lt. Gen. Russell Honore (retired), commander of active duty troops in Hurricane Katrina's response, despite his take-charge persona, expressed in his book how difficult it was to gain please the public in the situation. He stated, "Everybody seemed to have an agenda, and to hear it from the people with those agendas, we were not doing anything right" (Honore, 2009, p. 161).

Federal authorities did determine the need for a better crisis communication plan after Hurricane Katrina, but to date, that plan has not been developed. The *Federal Response to Hurricane Katrina: Lessons Learned* states, "The Department of Homeland Security should develop an integrated public communications plan to better inform, guide, and reassure the American public before, during, and after a catastrophe" (White

House, 2006a, 73–75). Even this recommendation falls short because, given the context of the report, it focuses on actions *immediately* before a disaster (such as use of the Emergency Alert System) and *immediately* after a crisis, rather than an ongoing comprehensive crisis communication plan that continually cycles from "before" messages/actions to "during" messages/actions to "after" messages/actions. For example, once a crisis is near the end of a recovery phase, the plan cycles back to the "before" phase of communicating messaging and actions guiding and urging the public to prepare for the next crisis.

In conclusion, developing a comprehensive crisis communication strategy to incorporate into homeland security leaders' action plans and messaging before, during, and after a crisis, is critical to the success of homeland security efforts in the U.S. In addition, homeland security leaders' effective use of resiliency messaging to encourage public partnership during all phases of a crisis (before, during, and after) will improve the public's chances of rebounding from the crisis individually and will help them work together toward a better future.

B. RESEARCH QUESTIONS

To determine what a new crisis community strategy for homeland security should consist of, this thesis research considered the following question and subset of questions using a literature review and case study of the 2007 Greensburg, Kansas tornado:

What can we learn from the communication practices surrounding the deadly Greensburg, Kansas tornado in May 2007 to assist in developing a comprehensive crisis communication strategy for before, during, and after a crisis that incorporates resilient messaging and encourages public engagement?

Answers to the subset of questions below helped in developing the specific aspects of the comprehensive crisis communication strategy.

- What is a reasonable approach for homeland security leaders to engage the public in crisis communications *before*, *during*, and *after* a crisis to enhance community resilience?
- What message themes should homeland security leaders use to help the public better prepare for, respond to, and recover from a crisis?

- Can research into individual resiliency and survivor psychology provide insight into crisis communication messaging that will help the general public?
- What do communication practices in disasters, other than the Greensburg tornado, offer to the development of a comprehensive crisis communication strategy for homeland security?
- At what level of government (local, state, or federal) should this comprehensive crisis communication strategy for homeland security be implemented?

C. LITERATURE REVIEW

This literature review assisted in answering the above research questions by determining what crisis communication guidance is available to homeland security leaders in federal, state, and local government, specifically regarding comprehensive crisis communication planning and messaging for *all phases* of a crisis. The review also determined what research has been conducted regarding messages to compel the public to become more involved in all phases of a crisis and what the field of survivor psychology and resiliency research can offer to crisis communication strategy. Finally, the review revealed which case studies including the Greensburg, Kansas tornado disaster might provide practices that would be applicable to developing a comprehensive crisis communication strategy and messaging themes for all phases of a crisis.

There are two primary categories of literature and several subcategories of literature that are critical to the research. The first category is effective crisis communication methodology with the subcategories of:

- Risk communication and crisis communication techniques;
- Public involvement using crisis communication;
- Using resiliency and survivor psychology research in crisis communications;
- Case studies involving the Greensburg, Kansas tornado and other examples of crisis response; and
- Complexity models for crisis communication.

The second category is homeland security leadership's role in crisis communication with the subcategories of 1) importance of leadership skills in crisis communication and 2) importance of crisis communication training for homeland security leaders.

1. Effective Crisis Communication Methodology

a. Risk Communication and Crisis Communication

There are several books, government publications, and articles that address risk communication and crisis communication and recommend techniques to use in a crisis. These documents include a significant amount of research on risk and crisis communication by two authors in particular in the past 20 years: Vincent Covello and Peter Sandman. Covello and Sandman's recommendations for improving messages in a crisis represent some of the more significant advances in the crisis communication field due to their research efforts. For example, Covello studied news conferences presented around the world following a crisis event to determine the 77 most asked questions by reporters in an effort to help communicators be prepared to answer those questions using psychological concepts of how people perceive information (2005). In addition to publishing much of their research findings, Covello and Sandman have also served as government consultants on controversial issues like nuclear power and health scares, including SARS and West Nile Virus. Each has provided a large amount of their work on their respective Websites: http://www.psandman.com/ (Sandman) and http://www.centerforriskcommunication.com/staff.htm (Covello). Furthermore, Covello teaches a number of principles of crisis communication using psychology as a basis for his research. Sandman addresses some best practices for engaging with the media on controversial topics and looks at the impact of the public reaction, including how panic and fear should be addressed.

Two specific resources often used as textbooks in crisis communication university programs focus heavily on crisis communication theory. Author, Timothy Coombs, in *Ongoing Crisis Communication*, discusses the need for a crisis management

plan to prepare for potential vulnerabilities (1999). *Crisis Communication Theory and Practice*, by Alan Jay Zaremba, focuses not only on preparing and responding to a crisis, but also ethical issues (2010).

Several government publications have been developed in the last decade to incorporate using crisis communication techniques for specific issues such as health, environment, and education. These include:

- Crisis & Emergency Risk Communication by Leaders for Leaders (CDC, 2002),
- Communicating in a Crisis: Risk Communication Guidelines for Public Officials (Health and Human Services [HHS], 2002),
- Terrorism and Other Public Health Emergencies: A Reference Guide for Media (HHS, 2005),
- Seven Cardinal Rules of Risk Communication (EPA, 1988),
- Considerations in Risk Communication—A Digest of Risk Communication as a Risk Management Tool (EPA, 2003), and
- Crisis Communications Guide and Toolkit (National Education Association [NEA], 2000).

Many of these publications are also available on government Websites.

A variety of books and articles also discuss crisis communication management in politics and offer beneficial crisis communication techniques garnered from the political world. These include several titles by political spokespeople including *Ten Minutes from Normal* (2004) by Karen Hughes, *Taking Heat: The President, The Press, and My Years in the White House* (2005), by Ari Fleisher, and *Lipstick on a Pig* (2008) by Torie Clarke. Despite their political focus, these types of publications have information on crisis communication that is very relevant to government crisis communication situations. For example, Hughes notes how her experience as press secretary confirmed the press values speed over thoughtfulness and how the 24-hour news cycle known for repeating stories multiple times, makes it very challenging to change an impression once it is set. This material offers insight into specific crisis communication techniques used in political environments, which due to the nature of politics, offers many opportunities for crisis response, which can be applied to disaster and emergency settings.

A number of books also address how best to deliver messages during a crisis. In the book, *The Heart of Communicating*, the author covers the importance of communicating in a way so the public believes you care, for example, by showing empathy (Brundage, 2006). Other materials build on this concept and focus on preparing a spokesperson and organization for a crisis response. Another important resource in providing methods for delivery of messages is the *Executive Media Training Workshop Handbook*, which author James Lukaszewski (2005) uses in daylong training sessions. This book has a number of checklists and guidelines to help the reader understand the needs of the media and improve delivery.

The *Media Relations Handbook for Agencies, Associations, Nonprofits and Congress* (2004) by Brad Fitch and *The PR Crisis Bible* (2007) by Robin Cohn are excellent resources as they provide government and businesses advice on handling a variety of crisis scenarios. Although Cohn's focus is primarily on businesses rather than government, the book is an excellent "how to" guide for managing difficult and challenging situations when the organizations reputation may be negatively affected. It also addresses how public perception impacts messages and how organizations can actually use a crisis to improve their image, if they respond quickly, with the best messages and empathy toward the public when appropriate.

The materials mentioned in the above section offer a significant amount of guidance on how spokespeople and their organizations can more successfully manage the media and the message immediately after a crisis has occurred. In summary, the guidance recommends preparing for what to do in disaster communications by getting to know reporters who would be covering a crisis in a specific community or region. It also covers choosing the right spokesperson for the job and ensuring information is released frequently throughout the early hours of the disaster. In addition, the guidance covers understanding the psychology of communication, such as the importance of earning the listener's trust by showing empathetic and caring traits when delivering messages. It also includes the following recommendations: release negative information quickly so the messages are framed by one's organization, explain why an issue cannot be discussed, and correct misinformation in the news.

b. Public Involvement in a Crisis

Some publications address the issue of how to involve the public in a crisis incident, which provides insight into the types of messages needed to compel the public to take steps to be involved and be more resilient in a crisis. Peter Sandman, in his crisis communication training materials, recommends involving the public in disaster preparedness and decisions before an emergency and keeping them involved throughout it with information on what they can do (2004).

Some documents address the myth of panic and suggest the public generally responds well to a crisis and helps their neighbors rather than climbing over them (Clark, 2002). Other researchers, including Covello and Sandman, support this idea (HHS, 2005, p. 171; Fischhoff, 2006, p. 80). This kind of literature provides a new viewpoint for addressing concerns of panic and raises the possibility of the benefits of more public involvement in all phases of a crisis response and the need for more messaging in this area.

Some of the above referenced materials (primarily those from Covello and Sandman) address the benefits of involving the public in a crisis response by having leaders communicate to them quickly and telling them what they can do to assist themselves and their community. This information is beneficial to disaster response messaging. In addition, because it is psychology-based research, it offers excellent guidance on basic language for leaders and spokespeople to include in their messages that may help the general public to:

- Respond in ways which help the responders,
- Take actions which keep them safe physically, and
- Help them cope better from a psychological perspective, and be more resilient.

Some research is available assessing how the public responds to disasters that can provide insight into what messages may be needed in a to compel individual actions before, during, and after a crisis to ensure a more resilient population. For example, *On Risk and Disaster*: *Lessons from Hurricane Katrina*, assesses that individuals generally underestimate the chances of a disaster happening, and also

generally underestimate how long it takes to mentally recover from a crisis when it does happen, indicating we have deep-rooted biases that can impact our decisions before, during, and after a crisis (Kunreuther, 2006, p. 178; Meyer, 2006, p. 154). One risk communication researcher worth noting for similar research in this area is Baruch Fischoff who studies risk management, risk communication failures, the dangers of an information vacuum in a crisis, and the impact these have on the public experiencing the crisis (Fischoff, 2006, pp. 77–88; Leiss & Powell, 1997, pp. 26–40).

In summary, this research, indicating how people think and behave before, during, and after a crisis is invaluable in determining the best messages and the appropriate time for homeland security leaders to deliver those messages.

c. Resiliency and Survivor Psychology

Some additional research into resiliency and the study of survivors in disasters, known as survivor psychology, reveals beneficial insight into the thought processes (or internal messages) helping people survive a catastrophe and why they are more resilient following a disaster. Some excellent resources are available including *The Survivor Personality* (2010) and *The Resiliency Advantage* (2005) by Al Siebert, *The Survivor's Club* (2009) by Ben Sherwood, and *The Unthinkable: Who Survives When Disaster Strikes and Why* (2008) by Amanda Ripley. These books reveal some extremely useful research that may benefit the field of crisis communications. For instance, Siebert, a psychologist, describes in *The Survivor Personality* (2010) how a mindset that welcomes adversity as a part of life and a strengthening process helps individuals anticipate a crisis, plan for it, survive it, and bounce back from it faster. He also discusses throughout the book how an individual's viewpoint on adversity depends on the self-talk she or he uses to frame a situation and then specific actions they take to address the crisis (Siebert, 2010, pp. 90, 185). A few other books like, *The Adversity Advantage* (2006), by Erik Weihenmayer and Paul Stolz, and *The Adversity Paradox* (2009), by J. Barry Griswell, look at specific individuals who have used adversity to their advantage, and they credit it for pushing them to greater success than they would have otherwise attempted. These materials reveal what messages individuals have told themselves to

survive a crisis and offer ideas as to the best types of messaging homeland security leaders should use to help the public be more resilient in the face of challenging times.

In summary, the above resources, which focus on resilient individuals despite crises, and survivors of disaster, provide insight into messages that could be incorporated into crisis communication strategy used by disaster responders and homeland security leaders to enhance the resiliency of the community.

d. Case Study in Kansas and Review of U.S. Disasters

1.) Greensburg, Kansas Tornado Case Study. Several firsthand accounts from individuals who survived the tornado have been documented in three books published by Greensburg, Kansas tornado survivors. These books detail what happened before, during, and after the deadly 2007 Greensburg, Kansas tornado and provide insight into the community's education and awareness of the dangers of tornados and what people did to protect themselves.

Planet Green, a division of Discovery Communication, developed a documentary series, including interviews with local leaders and residents regarding the impact of the tornado and the rebuilding of Greensburg. This series provides information about the mindset of the residents of Greensburg, their resiliency, and their community's leadership.

In addition, the news media accounts of the ongoing event give details about the overall communication efforts before, during, and after the disaster and their impact on residents in the community.

2.) U.S. Disaster Communication Processes. In reviewing several U.S. disasters, which have occurred in the past 20 years, it is beneficial to compare the crisis communication techniques used to inform the public. An assessment of materials written about Hurricane Katrina, 9/11, the Oklahoma City bombing, and the Washington, D.C. sniper case provides a number of crisis communication lessons learned. Many of these materials include books written by those involved in one or more of these crises, including George W. Bush in his memoirs, *Decision Point* (2010) and Rudolf Giuliani in

his biography, *Leadership* (2002). Both of these include their experiences during and after 9/11. Several leaders in charge of various aspects of the Hurricane Katrina response wrote first-hand accounts of their experiences. For example, Lt. Gen. Russel Honore wrote *Survival* (2009) on his role in Katrina's response, and New Orlean's Mayor during Katrina, Ray Nagin, discusses his experiences in *Katrina's Secrets* (2011). Nagin's press secretary Sally Forman gave her own account in *Eye of the Storm, Inside City Hall during Katrina* (2007). Another firsthand account was written by Charles Moose, the police chief in D.C. during the sniper manhunt in October 2002, who describes his experiences in *Three Weeks in October: The Manhunt for the Serial Sniper* (2003). All of these materials offer a beneficial inside view at why specific communication methods were chosen in a crisis as well as how politics played into messaging development and delivery.

e. Complexity Models and Ideas for Reframing Crisis Communication

Some researchers in the past decade have begun to examine the complexity of crisis communication, including the challenges of getting a message to a recipient given the dynamics of our society. Communication has often been seen as simple and linear in that one person or group sends a message and another person or group receives the message. Too much has changed in society for this simple method to be effective in a crisis. Literature, such as Donna Meadows' book, *Thinking in Systems* (2008), and Nassim Taleb's book, *The Black Swan* (2010), provide an excellent overview of the complex world we live in and the need to view issues from the complexity within which they exist. In crisis communication, this means acknowledging the messages of homeland security leaders and other government officials, politicians, media, including the fast growing role of social media, and the general public. It also means considering how they each affect one another. Researchers at Arizona State University developed the pragmatic complexity model to help reframe the way crisis communication in a dynamic environment. It recommends embracing complexity, varying approaches and messages, considering disruptions, and planning for failure (Corman, Goodall, & Trethewey, 2007, pp. 10–12).

Another researcher who studied complexity, Per Bak, the Danish physicist referenced earlier, also provided a new framework applicable to crisis communication when he suggested disasters should be considered the norm "with inconsequential periods of calm in between" (Lewis, 2011, p. 10). Viewing disasters from this perspective could help homeland security leaders better utilize the phases well before and well after a disaster.

In summary, this important research into complexity and its application to crisis communication provides a critical new reframing tool to utilize when developing a comprehensive crisis communication strategy for homeland security.

2. Homeland Security Leaders' Effective Use of Crisis Communication

a. Importance of Leadership Skills in Crisis Communication

Several books assessing the job of homeland security leaders responding to the crisis of 9/11 are available, including biographies referenced above such as Rudolf Guiliani's book, *Leadership* (2002), and President George W. Bush's book, *Decision Point* (2010). Others like Sally Foreman's, *Eye of the Storm* (2007), provide insight into leadership styles during the Hurricane Katrina crisis. Government publications and lessons learned reports assess the positives and negatives of the leaders' communication efforts during both 9/11 and Hurricane Katrina.

While much more has been written on leadership during Katrina and 9/11 than the 2007 tornado in Greensburg, Kansas, there are still a number of news reports and magazine articles on the leaders involved in Greensburg. One book, *Effective Crisis Communication, Moving from Crisis to Opportunity* (Seeger et al., 2010), assessed how key community leaders like Steve Hewitt, the city administrator, communicated hope for an even better community just a few days after the tornado left a mile and half wide path of devastation through town. Two recorded interviews with Maj. Gen. Tod Bunting, who lead the state's response in Greensburg, addresses his ideas of leadership and some of his thoughts about the Greensburg disaster and the community (Kansas Adjutant General

Department, 2010). In addition, Greensburg residents have written three books providing their personal accounts. These offer some idea of the community resilience and the impact leaders had on them.

The above referenced materials provide information on the importance of leadership skills and vision in communicating effectively to the public during a crisis. They also reiterate the importance of leaders preparing for their crisis communication roles prior to the event occurring.

b. Importance of Crisis Communication Training for Homeland Security Leaders

Without training our homeland security leaders on the importance of crisis communication, it will be challenging to implement a comprehensive crisis communication strategy effectively. Since homeland security leaders come into their roles with a variety of backgrounds and no specific training requirements required by the federal, state, or local government, their experience in crisis communication varies significantly and can negatively impact a crisis.

Several articles address the need for more consistent training for homeland security leaders to ensure more effective, consistent messaging in a crisis. Unfortunately, very little information is available on how to effectively implement crisis communication training for homeland security leaders, given their roles and turnover rates. FEMA's Website offers recommended public information officer/communication trainings for those involved in the field, including National Incident Management System (NIMS) and Incident Command System (ICS); however, this training is not required for every homeland security leader, including political members (governor and lawmakers). Therefore, this leaves a big gap in knowledge and can result in a negative crisis communication response to an incident. In addition, this type of training provided by FEMA and states does not currently include crisis communication training.

The high turnover in homeland security leadership positions due to their political nature adds to the challenges of training leaders in crisis communication as they enter and leave their roles in a short period of time. Another challenge to training is

reduced funding. Following 9/11 and the anthrax attacks in the U.S., federal funding for crisis communication training was provided for some homeland security entities, but it was temporary. Funding cuts at all levels of government in recent years have reduced crisis communication training and overall post-9/11 funding of many programs.

c. Literature Review Conclusion

In conclusion, this literature review reveals several publications address the importance of homeland security leaders using specific crisis communication techniques *immediately before, during, and immediately after a crisis*, and the importance of messages to encourage the public to take specific actions *immediately before, during and immediately after a crisis*. A few materials address the need for establishing good media relations and community relations on an ongoing basis. However, existing crisis communication materials do not address what actions and message themes are necessary from homeland security leaders, *well before a crisis and well after a crisis*, to help improve resiliency in communities, and to ensure a truly comprehensive crisis communication strategy is in place.

Case study materials on the deadly 2007 Greensburg tornado, 9/11, and Hurricane Katrina present communication practices that could also provide guidance into the approaches and messages needed for a more comprehensive approach to crisis communication.

Documents on survivor psychology and resiliency in individuals surviving a crisis are plentiful, including books specific to resilient thinking to individual resilient behaviors and messages. These can be very useful for determining resiliency messaging before, during, and after a crisis for inclusion in a crisis communication strategy for homeland security entities.

Materials specific to preparing leaders for homeland security roles are limited in number and reveal a gap in resources; however, a number of materials provide insight into leadership styles that may contribute to successful implementation of critical

crisis communication strategy and messaging. Documents on crisis communication training for homeland security leaders are almost nonexistent revealing a gap in research and a lack of resources available.

Research into the complexity of crisis communication is available, but sparse. Concepts of complexity, which can be applied to crisis communication, appear in literature regarding systems thinking, and a model specific to crisis communication offers a new reframing tool for comprehensive crisis communication strategy.

D. HYPOTHESIS

A comprehensive crisis communication strategy should be developed for homeland security leaders to use *before*, during, and *after* a crisis, which incorporates resilient messages and survivor psychology to enhance individual and community resilience.

E. SIGNIFICANCE OF RESEARCH

This research is significant because a comprehensive crisis communication strategy for homeland security leaders does not currently exist. Some might argue crisis communication guidelines are available to homeland security leaders; however, these guides do not provide a plan for a continual communication effort, well before and well after a crisis, nor do they incorporate actions and messaging in the before and after phase to empower the public to become more resilient to the inevitable crises the public will face in the future.

Thorough research considering whether communication practices from other disasters, besides the Greensburg, Kansas tornado, would apply to a comprehensive crisis communication strategy makes this research an important expansion of the current crisis communication literature. It also assists in moving the concept of resilient communication forward to guide future research efforts in this area of building resilient communities through a comprehensive crisis communication strategy.

F. METHOD

The research for this thesis is a case study of the crisis communication strategy used by the state of Kansas and Greensburg leaders before, during, and after the deadly 2007 EF-5 Greensburg, Kansas tornado to determine what approaches are needed for a comprehensive crisis communication strategy for homeland security. The case study assisted in identifying crisis communication approaches that result in a more engaged and resilient public in all phases of a crisis.

The case study included a review of the complexity of crisis communication before, during, and after the Greensburg disaster using the pragmatic complexity model as a framework (Corman et al., 2007, pp. 12–14). It also considered the impact of applying Per Bak's reframing of disasters as the norm to crisis communication strategy (Lewis, 2011, p. 10).

Specifically, the case study examined crisis communication approaches the state and local leadership used **before** the Greensburg disaster. Additionally, the case study assessed the state and local crisis communication practices **during and immediately after** the Greensburg tornado aftermath. This helped in determining which methodologies worked well and which ones did not, including what messages would best enhance community resilience. And finally, the case study examined crisis communication actions and messages **after** the Greensburg tornado and how the communication approaches in this phase of the disaster can help contribute to a more resilient community in future disasters.

Also, the research involved the review of other large-scale disasters and literature on disaster survivors to determine what resilient communication would be useful throughout all phases of a disaster.

Crisis communication efforts in large-scale crisis events such as 9/11 and Hurricane Katrina were examined to determine what lessons learned could be applied to a comprehensive crisis communication strategy for homeland security leaders.

In conclusion, the case study revealed why a comprehensive crisis communication strategy should be developed for homeland security leaders to use *before*, during, and

after a crisis, which incorporates resilient communication to engage the public as a partner in emergency preparedness and response and to build community resilience. This thesis utilized the case study, examined crisis communication literature, best practices, lessons learned, as well as leadership materials, to determine what elements are needed for a comprehensive crisis communication strategy that includes all phases of a disaster and includes public engagement to enhance community resilience.

G. UPCOMING CHAPTERS

The following chapters expand upon the ideas about crisis communication strategy presented in Chapter I.

Chapter II provides a more in-depth explanation of the numerous problems with the current homeland security crisis communication approach. This includes a review of the efforts of local, state, and federal government and the lack of emphasis on communication that engages the public as a partner in emergency preparedness for the purpose of building more resilient communities.

Chapter III focuses on the case study, which assesses crisis communication approaches the state of Kansas and Greensburg leaders used before, during, and after the 2007 Greensburg tornado. The purpose is to assess what worked and did not work and how a comprehensive crisis communication strategy implemented throughout all phases of the disaster could have been used to enhance community resiliency.

Chapter IV includes the analysis of the case study and other research findings to determine how to best provide homeland security leaders with a comprehensive crisis communication strategy encompassing events well before, during, and well after a crisis, and emphasizing resilient communication.

And finally, Chapter V provides conclusions from the research, answers the research questions, offers a new approach for homeland security crisis communication strategy based on the case study of the 2007 Greensburg, Kansas tornado, and provides

recommendations for resilient communication practices before, during, and after a crisis. It provides a conclusion of how the thesis proved the hypothesis and it also addresses future areas for research consideration.

II. FRAMING THE PROBLEMS OF CURRENT HOMELAND SECURITY CRISIS COMMUNICATION STRATEGY

This chapter will provide an assessment of the problems with current U.S. homeland security crisis communication plans and strategy.

A. REFRAMING CRISIS COMMUNICATION: A CONTINUAL CYCLE WITH "DISASTERS AS THE NORM"

U.S. strategy would benefit from a new framework for disasters. Danish physicist, Per Bak suggested we consider disasters differently, not as something rare and unusual, but as the norm (Lewis, 2011, p. 10). Using this concept, the communication cycle is continual: we are either preparing the public for a disaster, in one, or recovering from one, soon to start the cycle over, therefore, we must focus on messaging for all three phases.

> Instead of treating, catastrophes as outliers, why not treat catastrophes as the norm, and stability as the outlier? In Bak's universe, everyday stability is simply the prelude to the main event—unexpected and extreme collapse. Only through collapses and catastrophes does the world evolve. Life is a series of passages from catastrophe to catastrophe with inconsequential periods of calm in between. We need to learn to navigate stormy seas, because they are the new normal. (Lewis, 2011, p. 10)

By following Bak's concept (Lewis, 2011) when we approach the crisis communication cycle, we need to put an *equal* focus on the before, during, and after phases to ensure we are continually doing what is necessary to manage the upcoming disaster. Our current cycle, based on FEMA's training materials and guidance documents referenced earlier, concentrates on the what to do during a disaster, with some attention to immediately before the disaster and immediately after the disaster. Instead, our cycle should move toward Figure 1, giving equal attention to the phases well before and well after a disaster to ensure efforts and messaging are ongoing, regardless of the phase. The specific actions and message themes needed for each of the three phases will be addressed later in this document.

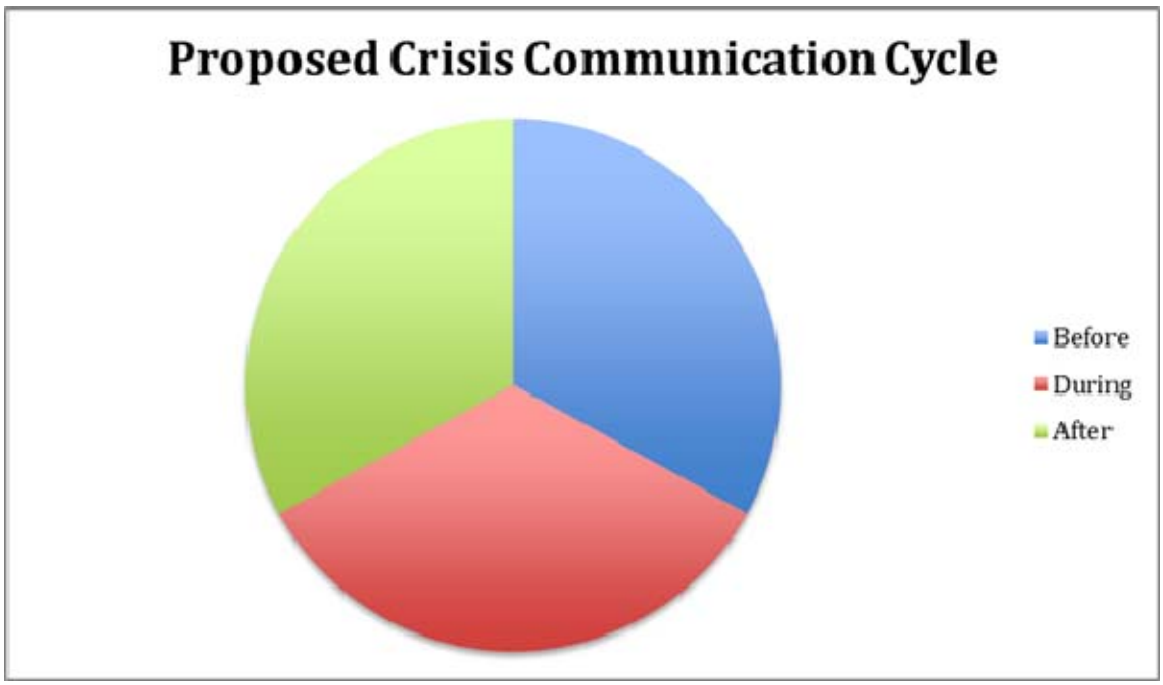

Figure 1. Proposed Crisis Communication Cycle

B. MOVING FROM A LINEAR MODEL TO A COMPLEX SYSTEMS MODEL

1. Linear Model of Crisis Communication Strategy

Our nation's current crisis communication strategy is built on *linear model* (Figure 2) rather than a *complex systems model* (Figure 3), which more closely resembles reality. The linear model of crisis communications follows a simple five-step process in a *best-case* scenario:

1. Government officials/spokespeople work to build relationships with area media and develop messages to deliver by specific people when a disaster strikes,
2. A disaster strikes and an assessment is made of messages needed,
3. The messages are delivered,
4. The public responds to the messages,
5. Government officials/spokespeople review the messages delivered to see if changes are needed for the remaining situation or the next disaster.

This five-step process (see Figure 2) is a summary of key recommendations from FEMA's Basic Public Information Officer and Advanced Public Information Officer trainings (FEMA, 2005; FEMA, 2009).

While, these five steps involve a best-case scenario, many situations involve only steps 2, 3, and 4, because the spokesperson has not developed messages in advance and does not do any post-disaster analysis to determine what worked or did not work. Examples of this can be found by reviewing some major U.S. disasters. In these cases, the leaders of high profile events, who became lead spokespeople in large disasters, specifically cite their lack of preparation in communicating with the news media and public prior to the event. These include Charles Moose, the police chief of Washington D.C., during the sniper shootings (Moose, 2003, p. 163) and Mike Brown, FEMA's director during Hurricane Katrina (Brown & Schwarz, 2011). Also Ray Nagin, the New Orleans' mayor during Katrina, often spoke before determining the best message for the situation, one that would help the public determine next steps, set public expectations, and help residents keep a resilient mindset (Forman, 2007, pp. 201–203; Nagin, pp. 188–189).

If officials simply follow the five-step linear model, they may still have a successful outcome in some disasters with some luck and if the situation is simple and very straightforward. However, most disasters present a dynamic and complex situation, such as the anthrax attacks after 9/11 or Hurricane Katrina. Nassim Taleb, author of *The Black Swan*, points out that "Modern reality rarely gives us the privilege of a satisfying, linear, positive progression" (2008, p. 88). Taleb called Hurricane Katrina a "black swan." It is a term he coined to describe something tough to predict based on historical data, predictable after the fact or "retrospectively predictable," and something involving random, unlikely and unexpected events (Fora.tv, 2010). But disasters do not have to be the size of Hurricane Katrina to require and benefit from a crisis communication strategy based on a complex systems view. The current crisis communication strategy is out of sync with a seemingly chaotic and increasingly complex world and needs to be reframed as will be outlined in the next section.

Figure 2. Linear Model of Crisis Communication

2. The Complex System of Crisis Communication

Donella Meadows in her book, *Thinking in Systems* (2008), addresses the concept of systems and complexity, which this thesis will apply to the crisis communication cycle or system.

According to Meadows, "A system is an interconnected set of elements that is coherently organized in a way that achieves something…a system must consist of three kinds of things: elements, interconnections, and a function or purpose" (2008, p. 11).

The elements of our crisis communication cycle include the messages of government officials, politicians, the public, and the media (traditional news media and social media). The interconnections include the flow of information between these four entities. A primary purpose of the crisis communication system is to ensure the public is informed and remains safe before, during and after a disaster.

Before a disaster, specific elements or messages from government officials, politicians, public, news media, and social media impact the public's perspectives during and/or after a disaster. Similarly messages given during a disaster can affect public response after the disaster. And messages given after a disaster can impact perception of the next disaster. **At each phase, any given message from government, politicians, the public and media can have a significant impact on the communication process, and therefore, on the actions and perceptions of everyone involved.**

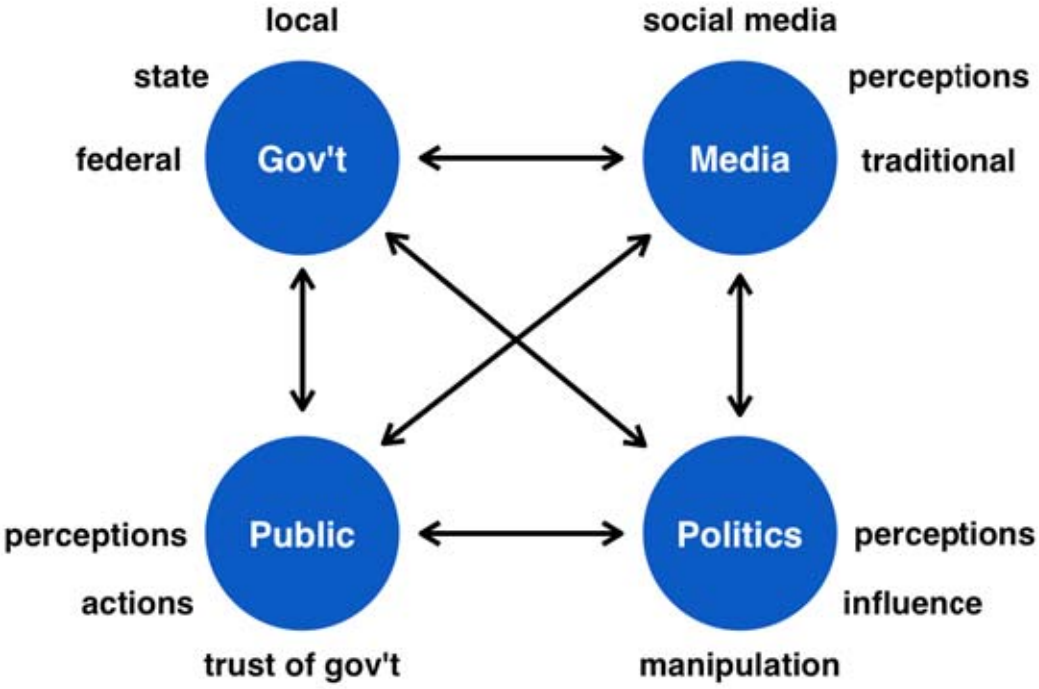

Figure 3. Complex Systems Model of Crisis Communications

For example, prior to the devastating Greensburg, Kansas tornado in 2007, Kansas Governor Kathleen Sebelius had raised concerns about Kansas National Guard equipment not being returned quickly enough to the state for disaster response purposes (Hegeman, 2007b). As is common practice during war, some large equipment sent over with Kansas National Guard troops had been left behind for other units. Other Kansas equipment had been destroyed in battle. The end result was a delay in getting the equipment back to Kansas. When the tornado hit and the Kansas Guard was sent to Greensburg to assist in response, Gov. Sebelius's previous concern became a hot topic of national debate and national news, drawing 24/7 coverage and a debate between Sebelius and the White House (Vu, 2007). The debate intensified due to the different political parties of the governor, a Democrat, and President Bush, a Republican. The public debate completely refocused the communication surrounding the response for several days, and

it was heavily covered by local and national media which prompted many offers of assistance from other states and active duty military (Vu, 2007).

This unexpected political issue in the aftermath of a tornado was just one of many communication challenges in Greensburg. Others included few local government officials available to make decisions due to being personally affected by the tornado, military members looting, and the mayor eventually resigning shortly after the tornado. Each of these actions resulted in reactions and messages from each of the complex system's four primary elements: government, politics, the public, and the media. The dynamic situation increased the communication challenges, which could have been improved if leaders had been using a complex systems model.

C. "MESSAGE INFLUENCE MODEL" TO "PRAGMATIC COMPLEXITY MODEL"

A more specific way to view crisis communication as a complex systems model is based on a concept developed by the Consortium for Strategic Communication at Arizona State University, which recommends changing our views about communication from a "message influence model" to a "pragmatic complexity model" (Corman et al., 2007, p. 2).

The message influence model "conceptualizes messages as a vehicle for carrying information from a source to a receiver" according to Corman et al. (2007, p. 4). "The purpose of the message is to influence the receiver to understand the information in the same way as the source, if not persuade him or her to change attitudes or act in a particular way" (Corman et al., 2007, p. 4).

Corman et al. suggest the message influence method fails because the listeners "create meanings from messages based on factors like autobiography, history, local context, culture, language/symbol systems, power relations, and immediate personal needs" (2007, p. 7). In addition, under this model, individuals and groups interpret messages through their "social reality," holding to a belief, even if it is wrong (Corman et al., 2007, p. 7).

The pragmatic complexity concept acknowledges that the sender of messages and receiver of messages are "locked in a relationship of simultaneous, mutual interdependence" (Corman et al., 2007, p. 10). In other words, "the success of A's behavior depends not only on external conditions but on what B does and thinks," and "what B does and thinks is influenced by A's behavior as well as B's expectations, interpretations, and attributions with respect to A (Corman et al., 2007, p. 10).

Since the pragmatic complexity concept factors in the mutual interdependence between messenger and receiver, this concept could have been beneficial in the hours and days after the tornado when a number of factors kept changing (e.g., political focus on the Guard response, military members caught looting, mayor resigns). This model recommends leaders "de-emphasize control," rely on "variations on a message theme," anticipate "disruption," and "plan for failure" with a good contingency plan (Corman et al., 2007, pp. 12–14).

And after the tornado hit, understanding the *mutual interdependence* of the message senders (local and state government leaders, politicians, residents, and media) and the message receivers (local and state government leaders, politicians, residents, and media) could have been invaluable for homeland security leaders, helping them better prepare for the next response.

This complexity model will be applied to Greensburg further in the case study and analysis chapters.

D. SPECIFIC CHALLENGES OF CURRENT CRISIS COMMUNICATION APPROACH

Our current homeland security crisis communication approach in the U.S. falls short in three specific areas:

1. It is almost entirely focused on how homeland security leaders should respond *during* a crisis, and lacks a comprehensive strategy for the *before* and *after* phases of a crisis (even the efforts recommended for the before phase simply involve how to react during the crisis).
2. It lacks a viable public engagement component targeted at improving individual and community resiliency and building a sense of citizen responsibility for preparedness and response. Furthermore, U.S. crisis

communication strategy uses a parental approach to the public rather than sharing information with the public as an equal partner in solving the challenges brought by natural disasters and terrorist attacks.

3. It lacks use of strategic messaging to enhance resiliency in the population, a concept found in survivor psychology.

1. Focus on During Phase of Disaster vs. "Before"/"After" Phase

The Department of Homeland Security's Federal Emergency Management Agency has made many improvements to its disaster and emergency plans since 9/11, Hurricane Katrina, and the massive 2007 California wildfires by incorporating lessons learned from those disasters. However, its plans are still primarily focused on what do during a crisis, overlooking key strategic efforts that could improve public engagement at all phases of a crisis. The 2008 National Response Framework is the primary federal document guiding the structure of disaster response (FEMA). Its emergency support function 15 annex (external affairs) is the guide for crisis communication structure. This annex updated in 2009 "creates framework for providing timely information to affected audiences *during* [emphasis added] an incident requiring a coordinated Federal response" (FEMA, 2009c, p. 28). Unfortunately, neither the 2008 National Response Framework nor the external affairs annex updated in 2009, address what communication or specific messages to provide in the timeframe well before or well after a crisis.

The 2009 revision of the FEMA Basic Public Information Officer course, which instructs homeland security leaders how to communicate in a crisis, has been updated to reference the "cycle of communication" (the before, during, and after phases). Unfortunately, the overwhelming emphasis is still on what to do during a crisis rather than messaging in all phases. There is some information regarding building relationships with media prior to an event, but no mention of messaging that could assist and engage the public well before a disaster. Additionally, the references to the before and after phases in the 2008 FEMA document and the 2009 Basic PIO document focus only on *immediately before* and *immediately after* the event. Adding a comprehensive before and after approach is an important step in improving public engagement, readiness, and resilience in disaster. The current reactive approach to communication overlooks the

power homeland security and emergency management leaders can wield with a communication strategy that is always in action, before, during, and after a disaster.

Fortunately, in Greensburg, the dedicated state and local leadership followed the available crisis communication strategy *during the disaster* and focused on getting important messages out to inform the public of the actions being taken and actions the public needed to take. Leadership also addressed how to have a more resilient recovery process as they moved forward.

Unfortunately, Kansas was operating without a comprehensive crisis communication strategy for resilient communication to engage the public and enhance resiliency *before and after* the disaster and missed some key opportunities in the before and after phases. This will be addressed further in the case study and analysis chapters.

2. Parental Approach vs. Public Partnership Approach

The current Department of Homeland Security and FEMA crisis communication guidance (as noted in the above documents) focuses on how to work with the news media to get messages to the public during times of crisis, rather than incorporating a strategy of messages to engage the public as a key partner in a preparedness and response mindset throughout the year. While increasing public use of social media has prompted DHS/FEMA to expand its communication to social media, the DHS/FEMA approach to engaging the public as a partner in preparedness and response is primarily focused on telling the public what to do to avoid danger *during* a crisis rather than messages provided long before and after a crisis, which would improve engagement and resilience. Traditional messages to the public during an emergency focus on getting the public to evacuate or stay where they are or take other specific actions to protect themselves. FEMA officials recognize this is a problem. David Kaufman, Director of FEMA's Office of Policy and Program Analysis states, "The way we have been approaching homeland security has been too parental. What's needed is a strategy for energizing and mobilizing the power of the citizenry to contribute meaningfully" (Center for Homeland Defense and Security, 2009).

Three DHS/FEMA campaigns attempt to get the public more engaged prior to a crisis, but their reach is still limited based on survey statistics and target audience. These campaigns include the *Be Ready* campaign, launched in 2003, which encourages the public to be informed, have an emergency kit and a plan for their family to be ready for disasters (FEMA, 2011). Another is the *If You See Something, Say Something* campaign (DHS, 2011), launched in 2010 to get the public to report suspicious behavior in anticipation of terrorism. According to a 2009 FEMA Citizen Corp survey, only 57 percent of respondents have an emergency kit and only 44 percent have a family plan (FEMA, 2009b). FEMA officials recently revised the *Be Ready* campaign for 2012 calling it *Resolve to Be Ready* with a focus on tying disaster preparedness to New Year's resolutions. The *If You See Something, Say Something* campaign is still being launched in numerous venues across the country making it difficult to analyze at this time in this document. A third federal campaign, *Citizen Corp*, launched in 2002, targets individual interested in helping response efforts during a crisis, rather than the general public (FEMA, 2009b). This program provides a venue for the public to get involved in a coordinated way, including training and other requirements, but its message is geared toward those individuals wanting to help responders in a crisis. All of these efforts are a step in getting the public involved, but a more comprehensive crisis communication strategy would strengthen all of these efforts.

Additionally, government sends the wrong message by not having a comprehensive crisis communication strategy for public engagement that will appeal to a broader audience. Specifically, the wrong message is that government will be there to help regardless of how bad things get. That is ideal, but not always possible. In addition, it leaves out the possibility of engaging a key and critical partner, the public, who by being prepared would not become an additional burden on the response system, and could possibly even help their neighbors.

3. Fear of Public Panic Hinders Leadership Actions and Messaging

One significant challenge to better engaging the public as a partner in emergency preparedness and response is an underlying fear among homeland security leadership that

the public will panic in a crisis or if given truly honest, but unsettling information. This fear among government officials can heavily influence their decisions about what messages to give. According to Vincent Covello (HHS, 2005), a risk communication researcher who has studied communication in crisis events for many years, leaderships' unfounded fears of panic can result in leaders making a situation worse:

> The assumption that people will immediately panic or behave irrationally following a disaster can have negative consequences. Authorities may provide inaccurate information or unfounded reassurance motivated by a wish to calm the public. The desire to avoid panic may also lead authorities to miss opportunities to engage the public in managing the disaster. (HHS, 2005, p. 171)

Understandably, public panic was a concern for New York mayor, Rudolf Giuliani, on 9/11. He explained, "I had to communicate with the public, to do whatever I could to calm people down and contribute to an orderly and safe evacuation" (Giuliani, 2002, p. 16). Giuliani's concerns were reasonable given the circumstance, but research into public reactions during 9/11 show the overall reaction from the public was not panic (Glass & Schoch-Spana, 2001, p. 218). Lee Clarke, an author and researcher on public panic, writes "even when people feel 'excessive fear'—a sense of overwhelming doom—they usually avoid 'injudicious efforts' and 'chaos.' In particular, they are unlikely to cause harm to others as they reach for safety and may even put their own lives at risk to help others (Clark, 2002, p. 21).

In addition, "research on population responses to a wide range of natural and technological disasters suggest that there is a tendency toward adaptability and cooperation," by the affected public (Glass & Schoch-Spana, 2001, pp. 218–219).

Despite these compelling arguments, fear of public panic remains a theme in homeland security communication guidance. Leaders and public information officers are frequently urged to take steps to reduce the panic of the public in emergencies: "As the acting spokesperson during a risk or crisis event, you need to…minimize confusion and panic," state the authors of the *Risk and Crisis Communications: Best Practices for Government Agencies and Non-Profit Organizations* (Booz, Allen, Hamilton, 2010, p. 31). The U.S. Agency for International Development (USAID) *Pandemic Influenza*

Message Guide states, "During a national emergency such as an influenza pandemic, the media plays an important role in helping to maintain calm and reduce panic" (2009, p. 15).

The recent research on panic should reduce homeland security leaders' concerns that the public's reaction to a crisis situation is always panic.

4. Parental Approach to Public Partnership Approach

When homeland security leaders assume the public cannot handle certain situations and/or information because of fear the public will panic, they are operating from a parental approach and assume the public, like a child, must be protected from the complete story and only limited information can be shared. Examples of this way of thinking can be found in many homeland security documents and literature including the book, *Psychology of Terrorism* (Bongar, Brown, Beutler, Breckenridge & Zimbardo, 2007). Authors Rose McDermott and Philip Zimbardo state, "Alerts (terrorism alerts) should be targeted geographically as much as possible, so that those who are outside the greatest risk zone *need not worry unnecessarily* [emphasis added]" (2007, p. 366). They later state, "Oftentimes, alerting the general public serves no useful purpose, *but increases psychological distress* [emphasis added] for no practical reason," and the authors say raising force levels "may only cause *confusion and anxiety* [emphasis added] on the part of the general public" (McDermott & Zimbardo, 2007, p. 366). There are times when the public may not need certain information, but too much concern by leaders over causing public anxiety confirms a parental approach to crisis communication.

With many years of disaster research debunking the notion of public panic in disasters, homeland security leaders can now shift from the fear-based parental approach to one of public partnership, where the public is viewed as fully capable of assisting themselves and their community in all phases of a crisis response. Clarke believes "our leaders would do well to see us as partners in recovery rather than as a 'constituency' to be handled" (2002, p. 26).

Shifting from a parental approach to a public partnership approach should happen in all phases of a disaster (before, during, and after). Significant guidance to assist in this

change can be found in *Developing Strategies for Minimizing the Psychological Consequences of Terrorism Through Prevention, Intervention, and Health Promotion* (2003), a publication of the National Academy of Sciences. The document proposes recommendations to incorporate concepts to improve public engagement and enhance public resilience. Current U.S. crisis communication strategy does not include these steps in the before and after phases of a crisis.

5. Incorporating Survivor Psychology into Crisis Communication Strategy

The current homeland security crisis communication strategy would benefit from considering the concept of survivor psychology in its messaging approach to enhance resiliency in communities across the nation.

Resilience requires individuals, families and communities, not only to be physically prepared, but also to be mentally prepared, by having a *survivor mindset*. Looking once again to history for an example, Winston Churchill demonstrated this concept in his speeches during the dark days of World War II by using language to prepare the public mentally for unpleasant, but real challenges before them (Sandys & Littman, 2003, pp. 144–146). He would then give additional speeches in the midst of the difficulty to keep them motivated and engaged with the survivor mindset. According to authors Celia Sandys and Jonathan Littman, "when things were darkest, Churchill did not hesitate to broadcast or address Parliament or his Cabinet" (2003, p. 144).

Three current resources capture this concept using research based on interviews and studies of disaster survivors and provide insight into concepts to apply to current crisis communication messaging strategy. These resources include *The Survivors Club* (Sherwood, 2009), *The Unthinkable* (Ripley, 2008), and *The Survivor Personality* (Siebert, 2010).

According to *The Survivors Club* (Sherwood, 2009), survivors of disasters typically display one or more of the following characteristics, each of which serves to counteract the shock of the impact of the disaster:

1. Assess what is needed
2. See what is really there, not what they expect to see
3. Open to possibilities—willing to think outside the box and consider solutions that might have been ruled out before
4. Confident they will find a solution
5. Persistent—they do not give up. (Green, 2011, p. 6)

Applying this concept to the messages leaders use during all disaster phases to encourage and motivate the public as partners will provide another step toward enhancing community resilience.

The importance of the language we use in the crisis communication system cannot be overlooked. According to Meadows, "Language can serve as a medium through which we create new understandings and new realities as we begin to talk about them…Language…as articulation of reality is more primordial than strategy, structure, or…culture" (2008, p. 174).

The survivor psychology concept will be explored in more detail in the case study and analysis chapters.

By expanding current crisis communication strategy from a *during approach* to also incorporate a *before/after approach*, from a *parental approach* to a public *partnership approach*, and including messaging for resilience using a *survivor psychology approach*, homeland security leaders will be moving toward a more engaged and resilient citizenry in all phases of a disaster.

E. CONCLUSION

Going back to the bigger picture from which this chapter started, ultimately, it is a shift from linear thinking to complex systems thinking that enables the development of a new communication framework that encompasses the concepts above and is the focus of this thesis. That new framework recognizes "disasters as the norm" and the need for a continual cycle of communication, embraces complexity, and is one of **resilient communication**. That is, communication that provides a realistic assessment of the potential challenges a catastrophic event can bring, offers hope and encouragement

during tragedy, and helps individuals and communities bounce back after experiencing devastation. It also engages the public as a partner before, during and after disaster, to help build stronger individuals and communities.

To affect change upon the current crisis communication strategy, it is helpful to look for what Meadow's *Thinking in Systems* book describes as "leverage points—places in the system where a small change could lead to a large shift in behavior" (2008, p. 145). The significant leverage point this thesis addresses is "paradigms—the mind-set out of which the system—its goals, structure, rules, delays, parameters—arises" (Meadows, 2008, p.162). Our current paradigm is focused on addressing the "during phase" of a disaster. Our new paradigm should be a "before to after" focus. Our current paradigm is a parental approach, but our new paradigm should be a public partnership approach. Our current paradigm is telling the public what to do, and our new paradigm should be helping the public frame the disaster with survivor psychology concepts. Any one of these paradigms is a leverage point, which when changed, has the power to affect our crisis communication system positively, and the more of these leverage points we can affect, the more our crisis communication strategy will positively shift to become resilient communication.

F. WHERE TO BEGIN PROPOSED CHANGES

One specific place in the system to affect necessary changes to crisis communication strategy would be at the federal level by federal officials; however, a state-level approach that could be adapted to fit federal or local levels of government is a more realistic place to start, especially since states often resist the one size fits all federal approach. Therefore, using the case study of the 2007 Greensburg, Kansas tornado, this thesis will focus on state level changes to crisis communication strategy.

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III. CASE STUDY: GREENSBURG

A. INTRODUCTION

This chapter will assess current crisis communication strategy in the U.S. by focusing on the state of Kansas and the approach state and local leaders used before, during, and after the deadly May 4, 2007 Greensburg tornado. The purpose of this case study research is to answer the following questions:

- What can we learn from communication practices surrounding the Greensburg tornado to assist in developing a comprehensive crisis communication strategy that incorporates resilient messaging and encourages public engagement?
- What is an appropriate crisis communications approach for homeland security leaders to engage the public in *before, during*, and *after* a crisis to enhance community resilience?

This chapter will use an appreciative inquiry approach to Greensburg, reviewing what went right, which will also assist in evaluating what crisis communication approach would improve a future Greensburg-like scenario and enhance community resiliency.

B. GREENSBURG—DISASTER STRIKES

On the evening of Friday, May 4, 2007, many residents of the rural southwest Kansas community of Greensburg, a close-knit farming community of about 1,500, were going about their usual summer activities, watching their kids play ball, enjoying a family picnic, or finishing up their evening meal. Meteorologists had been talking about the potential for strong storms on radio and television throughout the day, but that was not an unusual forecast in Kansas in May.

Families living in Kansas know the risk of tornados, but many storms come and go each year, affecting someone else, or leaving only minor damage, reaffirming the common belief that "it won't happen to me."

> We used to able to tease our children with their little fears of storms, 'What makes you think you are so special that a tornado would choose to hit you? Do you know of anyone a tornado has hit? Chances are not very likely,' recalled Eric and Fern Unruh, authors of *Tornado! Up From the Debris.* (2007, p. 11)

On May 4, Steve Hewitt, the Greensburg City Manager was in Pratt, a town 30 miles away, and had been hearing reports of significant storms headed toward his community (Planet Green, Discovery Channel, 2009). “When I hear storms come our way, I try to get back to my community, so me and my family hustled back to Greensburg,” Greensburg told the Discovery Channel. “We got to the house around 8:30 that evening.”

Ray Stegman, the county emergency management coordinator, was watching the storm closely on radar (Unruh & Unruh, 2007, p. 85). Stegman recalled that “at 9:15 p.m., he called back to the sheriff’s office in Greensburg and told them to set off the tornado sirens…later he called again and told them to leave the sirens on” (Unruh & Unruh, 2007, p. 85).

Hewitt recalled the moments leading up to the tornado hitting Greensburg: “I heard some real heavy banging noises, and I saw the baseball size hail come down,” Hewitt said. “I told my wife, let’s go down to the basement.’ She said, ‘just a minute,’ and I said, ‘you know, let’s go, and I think, let’s go now and then our ears popped,’” Hewitt recalled for a documentary (Planet Green, Discovery Channel, 2009).

“And when my ears started popping, I knew,” said Mary Merhoff, a mother of three, “I’ve never been in a tornado, but I knew, and I said, ‘Kids go get in the basement now.’ The ten steps that it took to get to my basement it was already hitting and I could barely get the door shut. All you could hear at that point was just what sounded like a wrecking ball going through your house” (Planet Green, Discovery Channel, 2009).

The tornado was on the ground for more than 10 minutes as the town’s residents took cover in basements, under stairwells, in bathtubs, praying and waiting for it to pass. Lloyd Goossen was in his basement when it hit.

> Lloyd knew they were in trouble when he heard all the air sucking out of the house. The window and exterior-door weather stripping started vibrating and whistling. Then the windows broke out, and the doors started slamming. The noise sounded like a huge turbine winding up as they heard the house disintegrating above them. (Unruh & Unruh, 2007, p. 23)

Some families did not have a basement in their home, so they went to their neighbor's house. One couple, Lyndon and Denise, took shelter in Larry Schmidt's basement, just three minutes before the tornado hit (Unruh & Unruh, 2007, p. 53). They recalled the shock of finding the home above them gone, "walking up the stairs, they opened the door, and there was the great outdoors" (Unruh & Unruh, 2007, p. 53).

After the tornado had passed, Hewitt heard water running into the house and went upstairs to find where it was coming from, thinking it was going to be a mess to clean up (Planet Green, Discovery Channel, 2009). Hewitt recalled, "I look up and I see nothing but sky, the top of my house is gone. I look to my right, my neighbor's house gone, to my left, my neighbor's house gone. I turn around, destruction everywhere" (Planet Green, Discovery Channel, 2009). Soon afterward, a sheriff's deputy told Hewitt the entire town was gone.

Eleven people died that night in Kiowa County, nine of them in the town of Greensburg, including a man driving through town from New Mexico. A twelfth death, resulting from injuries that night, followed within two weeks (Kansas Adjutant General's Department, 2007b). Two more people died in the years following as a result of their injuries (Haney, 2009b, iii).

More than a thousand structures in town were destroyed, with only a few homes left standing on the east and west side of town (Kansas Adjutant General's Department, 2007a). Nearly every business in town was destroyed, including the schools, city hall, hospital, water tower, fire station, business district, and main street (Jackson, 2008).

Many wondered why the death toll was not higher. A number of factors were recognized as having helped increase the survival rate. This included the warnings from news stations in time for the residents to take action. Meteorologists warned residents to take cover 20 minutes prior to the tornado touching down and some of them called the situation a "tornado emergency" (FEMA, 2007). Also the forecasters had been talking all day about potential dangerous storms by evening, so residents anticipated it and had time to plan to be home near shelter. Another significant factor in survival rates was

Greensburg residents knew what to do in a tornado. Even when they lost power and could not hear the meteorologists' instructions, they still knew to get to a basement, a shelter, or a bathtub.

For Greensburg residents, it was not simply the broadcast messages that compelled people to take action. It was a combination of factors ranging from what they had been taught by parents and grandparents, what they had practiced in drills at school, phone calls from friends, plus the weather warnings that compelled them to take life-saving steps.

1. Dangerous Myth: "It Won't Happen to Me"

The biggest challenge working against the community was the past experiences of residents who had seen so many severe storms pass by them, leaving them unharmed. Lloyd Goossen recalled telling his friend earlier in the day "the weather channel usually over-rated these storms" (Unruh & Unruh, 2007, p. 19). While history had proven Kansas could have devastating tornados, it had been 42 years since a community had experienced a tornado that destroyed a community. This occurred in the town of Udall in 1955 with 82 deaths (no weather warning was issued) (Finger, 2011). Other severe tornados had left a deadly path since then including a 1966 tornado in Topeka, which killed 16, and a 1991 tornado in Andover with 19 deaths (Finger, 2011).

The years between each deadly tornado event and the distance between these towns gave Kansans time to forget and to rationalize by thinking "it won't happen to me."

Some Greensburg residents chose not to heed the warnings to take shelter in basements or storm shelters and lost their lives. This included Randy Kelly's mother, Evelyn. "If God wants to take me, He will," she had told friends that day (Unruh & Unruh, 2007, p. 27). Some elderly individuals found it difficult to get to a storm shelter or basement so they turned down offers also. Colleen Panzer was one of those. She suffered head injuries and died on a helicopter in route to the hospital (Unruh & Unruh, 2007, p. 120). Norman and Beverly Volz were at home with her father, Max McColm. They tried to take shelter but did not have time and got into the hallway (Unruh & Unruh,

2007, p. 120). The tornado hurled a large sheet of metal through the house hitting Beverly and Max. Beverly died that night, and her father, died several months later from his injuries (Unruh & Unruh 2007, p. 148). Others, like Emma Hargadine, recall, "I had ignored going to the safety of my nearest neighbor's basement" (Haney, 2009a, p. 4). She was lucky and made it out alive.

2. Local Leadership Impacted by Tornado

City administrator Steve Hewitt made sure his wife and baby were safe and then began to check on the community around him (Planet Green, Discovery Channel, 2009). First responders from surrounding towns were coming to the rescue of the town because many of Greensburg's emergency response vehicles and its hospital had been destroyed by the tornado (Kansas Adjutant General's Department, 2007e).

State officials had been monitoring the storm from the State Emergency Operation Center in Topeka throughout the evening and began getting calls around 10 p.m., indicating this tornado had taken out most of the town (Kansas Adjutant General's Department, 2007e).

"We had never had a community where everyone with any significant role to play in that community had been impacted," said Maj. Gen. Tod Bunting, Adjutant General and Director of Kansas Division of Emergency Management, during a recorded interview for the Kansas Adjutant General's Department on September 21, 2010.

> Even when I got to Greensburg as the sun came up that Saturday morning, I don't think anyone could understand that there was literally no one from Greensburg in any capacity to really sit down as the incident commander or to truly make all of the decisions that needed to be made at that moment. In all of our training you never envision that you go somewhere where there isn't someone (who could lead the response), Bunting said. (Kansas Adjutant General's Department, 2010)

Bunting, through his department's State Emergency Operation Center, began sending state resources just after midnight, including communications support and a team to serve as the incident command (Kansas Adjutant General's Department, 2007e). With approximately 90 percent of the community destroyed, local officials needed the support to carry out basic operations (Kansas Adjutant General's Department, 2007e).

Hewitt was the most active local leader engaging in the decision-making processes in the hours and days after the tornado. He worked with state and federal officials on the next steps for the town.

3. Media Arrive from Across Kansas and the Nation

Local media as well as media from Wichita, about 80 miles away, and surrounding communities began arriving not long after the tornado hit. Hewitt began talking to the media telling them what was happening with search and rescue operations and the residents of the town.

"We'll just continue to do what we can to try to find everybody who's out there who may be trapped and we'll do our best," Hewitt said. "We'll begin evacuating the community and we will not let anybody into the community until we know it's safe for residents" (Planet Green, Discovery Channel, 2009).

By the next day (May 5), early in the afternoon, national media were beginning to arrive and their media trucks would eventually fill up a two block long section of town.

Both Hewitt and Bunting went before the news media frequently, describing the extent of the damage to the infrastructure of the town. Hewitt explained to the media and public what crews were doing to rescue individuals who might still be in the rubble and asked residents to remain patient while crews made it safe for them to return (Planet Green, Discovery Channel, 2009).

Hewitt and Bunting followed the communication guidelines recommended by FEMA, explaining what had happened, what they were doing about it as government officials, and what the public should be doing (Potter, Wistrom, Griekspoor, & Laviana, 2007). They gave their assessment of what the tornado had done to Greensburg's homes, businesses, power and water systems; how local and state officials were addressing the problems; and what the public should do to stay safe and get information (Potter et al., 2007).

4. Leadership Reframed the Greensburg Disaster

In the early hours of the disaster, the focus of the leadership and the media was on search and rescue. By Sunday afternoon when search and rescue drew to an end, Bunting, Hewitt, and Greensburg Mayor Lonnie McCollum, known for the stars and stripes baseball cap he wore, began talking more about the future of Greensburg and rebuilding (Planet Green, Discovery Channel, 2009). The local and state leaders knew the town and its people had a long road ahead of them.

"The city as far as our utilities and our infrastructure, we just lost everything," McCollum told the Discovery Channel (2009). He explained, "The city has absolutely zero resources left, so there goes our income. We don't have a way to generate any income. Ninety-five percent of our homes, our buildings are destroyed. Our folks are homeless, so things they've worked hard for their whole life have all been blown away" (Planet Green, Discovery Channel, 2009).

"Almost immediately, key leaders in the community saw the potential to frame the disaster positively for its residents…'The tornado had a silver lining, for it made this town and some 1,400 people regroup and reinvent itself,'" Hewitt said (Seeger, Sellnow, & Ulmer, 2010, p. 141).

"We plan on everybody coming, back, okay, that's our goal, number one," Hewitt told community members at a town meeting (Planet Green, Discovery Channel, 2009). "We can't walk away from this," McCollom said at the same meeting (Planet Green, Discovery Channel, 2009). "We're not gonna walk away. We're gonna build a brand new town, no matter what it takes" (Planet Green, Discovery Channel, 2009).

Hewitt focused his attention on how to make an even better Greensburg than it had been before the tornado. He looked for new businesses, worked to keep the previous businesses in Greensburg, and inquired into making the town a "green community," with buildings built using environmentally friendly materials (Seeger et al., 2010, p. 142).

Leadership recognized the importance of the school in the town's future. Darin Headrick, the school superintendent, was like the other leaders in town who had lost their

home. “Towns are about people, they are not about building. And it’s a huge opportunity to rebuild - not just rebuild it the way it was, but maybe rebuild it a bit better than it was,” Headrick said (Seeger et al., 2010, p. 141).

Like many rural Kansas towns, Greensburg’s population had been declining for many years as students left for college and did not return. Hewitt was concerned about this dwindling population and saw it as an opportunity in the disaster (Seeger et al., 2010, p. 141). One teenager, Levi Schmidt, said after the tornado that the tornado and the community’s rebuilding effort had changed his mind about returning to Greensburg after college (Seeger et al., 2010, p. 141). “Now I’m definitely coming back, and I know a majority of my friends are,” he said (Seeger et al., 2010, p. 141).

Bunting knew the importance of the language he and the other leaders used and the power it had to compel Greensburg residents to envision a rebuilt town. Some of this knowledge stemmed from his research into resiliency programs to improve the outcome of National Guard members and disaster responders facing extremely difficult challenges in war and response efforts (Kansas Adjutant General Department, 2009). Using what he was learning about resiliency, he talked about the future.

Hewitt provided similar uplifting messages to the community.

“We'll rebuild,” said Greensburg City Administrator Steve Hewitt, who lost his home. “It’ll take time, but we’ll rebuild this city” (Potter et al., 2007).

“I see a community coming together. I see a future here. I really do,” Hewitt said (Hegeman, 2007b).

The school superintendent also joined in to the efforts to establish a vision for the future. “Our teachers will have jobs; our kids will have classrooms to attend,” he (Headrick) said (Hegeman, 2007b).

Together and individually, Hewitt, Headrick, McCollum, and Bunting communicated their vision for a better Greensburg to the many local and national news media on hand until the media began to scrutinize the disaster response efforts of the

Kansas National Guard. This scrutiny started Sunday evening (May 6) when the governor arrived for a news conference and her comments shifted the focus off of the recovery efforts into a political debate.

5. Political Fray Changes Focus of Communication

Just months prior to the Greensburg tornado, Kansas Governor Kathleen Sebelius had raised concerns about Kansas National Guard equipment left overseas during military deployments. Although the equipment would eventually be returned, or replaced with new equipment, this took time. It also meant the equipment was not in the state for use when disaster hit, so Sebelius expressed concern this had affected the Guard's response to Greensburg:

> We're missing about half of our trucks from the National Guard units," Sebelius said. "Clearly trucks to haul this debris away would be enormously helpful. We are missing flatbeds. We are missing humvees, which are used to get people to safety and security and to haul equipment around. We are missing a number of our well-trained National Guard personnel. The equipment that we continue to harp on that has been sent overseas when our troops are deployed and not restored at the same level could be enormously helpful. (Hegeman, 2007b)

Sebelius's comments became a hot new topic of debate, drawing 24/7 news coverage, and rising to a national debate between the governor and the White House (CNN, 2007). This public discourse over whether the Guard had the equipment it needed to respond to the devastating tornado shifted the focus of the media from the rescue and clean up of the disaster to the political concerns of the governor regarding National Guard equipment (Vu, 2007). The perception that the Guard did not have the equipment it needed to respond then prompted many offers of assistance from other states and active duty military (Vu, 2007) and the White House:

> White House spokesman Tony Snow said Monday the National Guard has stockpiles of equipment stashed around country for emergencies. "The administration is doing whatever it can. If there's a need for equipment, it will arrive." (CNN, 2007)

The debate was polarized further because Sebelius was a Democrat and President George W. Bush a Republican. Support and objections expressed by the two political

sides of the aisle across the country increased the attention on the National Guard equipment issue and kept the debate alive for several days (Saulny & Rutenburg, 2007).

6. Media Rumors to Dispel

Another challenge resulted Sunday, May 6, when four active duty military members from Fort Riley, Kansas, pretended to be Kansas National Guard members and were allowed into Greensburg where they began to loot items from the local grocery store that had been demolished by the tornado (Hegeman, 2007a).

Media incorrectly reported the men were Kansas Guardsmen. Bunting became concerned about the public's trust in the hundreds of Guard members he had deployed to work throughout the town of Greensburg to help with the clean-up efforts and spoke about the arrests to reporters (Associated Press, 2007). Despite efforts by the National Guard to correct news stories that were falsely identifying the men as Guard members, the incorrect information continued to be distributed by some regional and national media outlets for several days.

Media members scrambled to find heroic stories of individuals who had survived days in the rubble, and in their haste, reporters incorrectly reported that an individual had been rescued from his basement. He had actually gone back to his home to look around, prior to when residents were allowed to return (CNN, 2007).

7. Rebuilding Public Trust

One of the most challenging media topics in the aftermath of the tornado for leadership to address was the debate over a slow Kansas Guard response. Numerous media requests came to Bunting after the governor's Sunday evening news conference. Reporters asked Bunting to explain Governor Sebelius's comments on a slow National Guard response (CNN, 2007). Recognizing the public trust in the Kansas Guard members in the town was at stake, Bunting and his leadership devoted time over the next two days to talk to reporters from across the country explaining the status of Guard equipment and its impact on Greensburg (CNN, 2007). They explained how some of the Guard equipment currently overseas would have been helpful in transporting equipment for

debris cleanup, but that the Guard was not involved in the search and rescue efforts (CNN, 2007). This was a key point in the debate because it reduced the criticality of getting to Greensburg a few hours sooner.

The political debate carried on while Greensburg residents watched Guard members, along with other state and local organizations, remove debris from their community and help with rebuilding some city projects.

Hewitt and Headrick continued to keep the focus of their messages to the media and public on the future of Greensburg attempting to assure the public the school would be open by the fall semester (Hegeman, 2007b). They encouraging residents to make plans to rebuild in Greensburg rather than move away to another school district (Hegeman, 2007b).

8. Public as a Partner

Since the night of the tornado, residents of the community had been evacuated and kept out of the town for their safety. Many went to a local shelter in the nearby town of Haviland, while others stayed with family or friends. On Monday, May 7, residents were allowed back into the community to search for belongings in and around their homes. President George W. Bush arrived on Wednesday, May 9 offering words of hope and encouragement to the devastated town (Hegeman, 2007b). He had also promised ongoing federal help a few days before his arrival (Hegeman, 2007b).

“We’ll help in any way we can...There’s a certain spirit in the Midwest of our country, a pioneer spirit that still exists, and I’m confident this community will be rebuilt,” Bush said (Hegeman, 2007b).

Numerous community meetings were held in the first few weeks after the tornado to get the public’s input and ensure awareness of and support for the decisions being made about the future of the town (Seeger et al., 2010, p. 141). Unfortunately, the challenge of rebuilding a home and an entire town was too much for some residents, and they decided to relocate permanently.

In a surprise move, the Greensburg mayor, Lonnie McCullom, who had been a key public motivator in the days and weeks after the tornado, determined that his role in rebuilding the town would be too much stress for him and for his wife, so he resigned just a few weeks after the tornado hit and moved away" (Planet Green, Discovery Channel, 2009).

"There was a tremendously good life for me there," McCollum told producers of a Discovery Channel documentary. "And I think after the tornado, the first three or four weeks, I was like, 'boy, we got a big problem here. Isn't it gonna be fun solving?' I was thinking 'boy, if we do this, this, and this and we just commit long and hard enough we'll fix this thing'" (Planet Green, Discovery Channel, 2009).

Hewitt continued to carry on the role of motivating the community by framing the disaster as an opportunity. He saw the public as partners in the process of rebuilding their lives, homes, and community" (Planet Green, Discovery Channel, 2009). Moreover, he encouraged them to dream big and consider rebuilding the town environmentally friendly with high standard certification of buildings" (Planet Green, Discovery Channel, 2009).

"Maybe it's a little bit crazy. There are only 14 platinum buildings in the country. When it's all said and done, I'd like 4 or 5 here in Greensburg," Hewitt said (Seeger et al., 2010, p. 142).

"When you talk about the environment, that is what Kansas is about," Hewitt said. "What's more green than agriculture?" (Planet Green, Discovery Channel, 2009).

Bunting assured residents the state resources and National Guard would stay as long as needed and kept that promise with a total of 1,400 of his troops serving in Greensburg during the two months following the disaster (Kansas Adjutant General's Department, 2007d). He worked closely with state and federal officials trying to find ways to go beyond what had been done in past disasters because of the extensive devastation caused by this disaster (Kansas Adjutant General's Department, 2007c).

When Governor Sebelius toured the devastation of Greensburg, she talked about the resilient people of Kansas encouraging residents to be strong and thanking the nation

for support (Barr, 2007). Bunting carried this message of resiliency to the residents also and continued to reference the disaster as yet another example of how Kansans have bounced back from tremendous challenges (Kansas Adjutant General's Department, 2009). "Through the tough times, we've seen how strong Kansans are and how resilient they are despite incredible destruction and loss," he said (Kansas Adjutant General's Department, 2009).

9. Greensburg: A "Black Swan" from Which to Learn

Greensburg was a black swan:

- Something history made difficult to predict,
- But retroactively predictable, and
- Something involving random, unlikely and unexpected events. (Fora.tv, 2010)

Greensburg was "difficult to predict" because historically tornados affect only a portion of a community, as occurred when an EF-3 hit Reading, Kansas on May 21, 2011, and when the EF5 tornado hit Joplin, Missouri on May 22, 2011 (Kansas Adjutant General's Department, 2011a). When an entire town is destroyed, in a rural area, with all of the leadership personally affected, the challenges ahead are overwhelming for those whose lives, homes, and community were uprooted in a 15 minute period.

Greensburg was "retroactively predictable" because it had happened 52 years earlier in Udall, Kansas, but those who remembered lessons learned from that 1955 storm were not leading the state response or the local response in Greensburg (Bunting and Hewitt were both born after 1955). Also so much had changed since the Udall tornado regarding technology and weather warnings, that it was not often referenced in state planning discussions. Instead lessons from a more recent storm, the Andover tornado of 1991, often came up in tornado planning discussions in Kansas (Finger, 2011).

Greensburg involved "random, unlikely and unexpected" events, all aspects of Taleb's "black swan" characterization (Fora.tv, 2010). The fact that the mayor and city administrator were personally affected by losing their homes, trying to take care of their spouses and children, and still reeling over the sheer loss of everything not only in their

home, but their entire town was unlikely. Also, the political debate over National Guard equipment escalating from a street corner news conference on a Sunday night in Greensburg to a national debate involving the White House spokesman Monday was unexpected. The issue of active duty military members blending in with hundreds of Guardsmen to steal from the community was a random event.

These random, unlikely, unexpected, but very real events of the 2007 Greensburg tornado make it a valuable black swan to study for improving our nation, state, and local crisis communication strategy.

C. CRISIS COMMUNICATION EFFORTS *BEFORE* THE GREENSBURG TORNADO

Crisis communication efforts in Kansas prior to the Greensburg tornado involved numerous different entities. The efforts were not part of a specific local or state crisis communication strategy, but worked well based on the way the public responded.

Fortunately, Kansas residents are taught from a young age about the dangers of tornadoes the Midwest presents. These messages begin with regularly scheduled school drills requiring children to take cover. Broadcast meteorologists frequently remind residents throughout the year when and where to take cover, whether at home or in a car. And finally, sirens blare in communities as a last warning symbol indicating action should be taken before it is too late.

The primary local and state government messages prior to the Greensburg tornado involved the governor's office and Kansas Division of Emergency Management promoting a spring and fall awareness week annually. Every spring, Severe Weather Awareness week involves the governor signing a proclamation encouraging Kansans to stay alert to the dangers of severe storms (Kansas Adjutant General's Department, 2012). In addition, a similar day is promoted in September on which the governor signs a proclamation promoting Kansas Preparedness Month and encourages families to follow the FEMA recommendations of getting a kit, having a plan, and staying aware (Kansas Adjutant General's Department, 2008). News releases are sent statewide to media to

generate news stories and increase awareness of the dangers of storms in Kansas (Tongonoxie Mirror, 2011).

Tornados are ranked in the top two dangers Kansans may face in the state risk assessment (Kansas Adjutant General's Department, 2011b). Exercise scenarios and drills are conducted at the state and local level, requiring officials to anticipate how to respond to the aftermath of a tornado or other high risk. Occasionally, these exercises are announced to media and news stories result reminding Kansans of the need to prepare for specific disasters and participate in statewide drills (Kansas Adjutant General's Department, 2012).

Fortunately, on May 4, meteorologists had been warning of the potential for tornadoes early in the day. Residents had time to modify their evening plans based on storm predictions. Many families were together. And they also had 20 minutes of warnings including sirens blaring as a final reminder to take cover. Ultimately, danger was communicated to the residents, most of them heeded the warning, and some of them even planned in advance to go to a relative or friend's house knowing they did not have a good location to remain safe. In many cases these decisions to follow the guidance given meant the difference between life and death. In a few cases, individuals were just lucky despite ignoring warnings or, unlucky, despite their best efforts depending on where they were when the tornado hit.

In addition to the messages presented on May 4, the preparedness messages coming from schools and media (including meteorologists) as well as political officials and state and local emergency management officials throughout the year likely helped increase residents' awareness of what to do in the Greensburg tornado.

In many ways, Greensburg served as a model of community preparedness on the night of May 4, 2007: residents looked out for one another, made plans, helped those without the necessary safe area to go, and took the necessary actions when warned. The results: 10 deaths in a community of approximately 1,500 instead of the 200 deaths first responders had initially anticipated when they requested hundreds of body bags (Finger, 2008).

1. What Could Have Been Better Regarding Crisis Communication Efforts *Before* the Greensburg Tornado?

Despite all that went right, there was unfortunately a common and deadly myth that persisted: "it won't happen to me." This happened to individuals as well as local and state leaders who did not anticipate such a horrible incident could happen in their town. This "failure of imagination" was identified as a key reason officials across the country did not see the warning signs addressed throughout the *9/11 Commission Report*, and it applies to disasters like Greensburg as well (National Commission on Terrorist Attacks Upon the United States, 2004).

Long before a disaster, the public and leadership must fight against this "failure of imagination," this desire to believe that disaster cannot happen to an individual or a community. Residents in Greensburg and leaders in Greensburg had to overcome this *during and after the tornado hit*, but, with a comprehensive crisis communication strategy to address this, messages from state and local leaders could have guided residents to change their mindset about disasters before they happen, helping them to expect the unexpected, and better plan for the worst-case scenario.

D. CRISIS COMMUNICATION EFFORTS *DURING* GREENSBURG TORNADO

Crisis communication efforts in the "during" or "event" phase of the tornado were consistent with the state's crisis communication strategy outlined in the *Kansas Response Plan* (2011b) as well as with risk communication principles included in FEMA (2009) and Centers for Disease Control and Prevention training (CDC, 2005).

The messages communicated the morning after the tornado came from first responders, first Hewitt and later Bunting. They told the media what they were finding as daylight began to reveal the full extent of the damage (Hegeman, 2007b). They used risk communication principles developed in recent years by Vincent Covello, as well as FEMA and CDC officials. This involved communicating frequently with media in the first several days, providing regular updates as things changed, and discussing what government was doing and how the public could help and stay informed. This guidance is

included in FEMA public information officer training materials (2009) and CDC risk communication training for public information officers (2005).

Although the political debate over National Guard equipment took center stage for a couple of days, local, and state officials continued to provide updates. They worked closely with local media to ensure residents understood what was happening to the town, which remained closed off to the public through Monday morning, May 7 (Hegeman, 2007b). As residents were allowed to return to their homes to begin clean up, state and local public information officers created flyers to hand out and recorded messages on a local radio transmitter set up within the city limits to keep residents informed. All of these actions followed the guidance of the Kansas Response Plan Emergency Support Function 15 external affairs appendix and assisted in keeping the public informed.

1. What Could Have Been Better Regarding Crisis Communication Efforts *During* the Greensburg Tornado?

The crisis communication efforts occurring during Greensburg provides an excellent example of a complex system. Messages from state and local government to media represent the linear model upon which most crisis communication efforts are based. By focusing on this portion only, crisis communication strategy overlooks the messages politics may add to the situation as occurred in Greensburg with the National Guard debate. In addition, it overlooks how the media's coverage including rumors and other stories may affect the public and change the course of the day's messages. It also overlooks public reaction to political messages, government messages and media coverage.

By developing a crisis communication strategy using a complex systems approach, which accounts for the dynamic environment of government, politics, media and the public, leaders would be in a better position to anticipate the many challenges each quadrant of this crisis communication system may present. This strategic effort could assist in keeping the important messages in the forefront as other issues arose.

E. CRISIS COMMUNICATION EFFORTS *AFTER* GREENSBURG TORNADO

Crisis communication efforts after the tornado did not follow a specific state or local crisis communication strategy, but it did go well primarily due to the local and state leadership of local leaders like Hewitt, Headrick, McCollum, and state leaders like Bunting.

These leaders communicated a vision for the future of residents in Greensburg, and offered them hope. They used language specifically addressing a resilient recovery and discussing those in the past in Kansas who had overcome great challenges. This message was delivered consistently by local and state officials, and later by President Bush, when he arrived on May 9.

Bunting and Hewitt used two important concepts in their approach and their messages following the Greensburg tornado: public partnership and survivor psychology.

Their messages addressed the public as key partners in the rebuilding of their lives and their community, rather than that government officials who were there to save the day. Each explained that it was going to be difficult and they would help. They encouraged residents to be strong and to remember their forefathers who had built lives from the open prairie, and they offered hope to move forward.

Both Hewitt and Bunting, having never met prior to the disaster, seemed to have the same understanding regarding messages of resilience. Unknowingly they followed concepts recommended in survivor psychology in their communication and their approach to rebuilding Greensburg. The survivor psychology concept includes assessing what is needed, seeing what is really there, being open, confident, and persistent (Green, 2011, p. 6)

As Hewitt and Bunting spoke of the future of Greensburg numerous times a day, whether to media or individuals or government officials, they helped the public envision a future and framed it with hope. They also took action to support their messages like working with federal officials to quickly remove debris, set up temporary housing, begin discussions for rebuilding the school and have it open for a fall 2007 start.

1. What Could Have Been Better Regarding Crisis Communication Efforts *After* the Greensburg Tornado?

Bunting and Hewitt did not follow a specific plan or script for their messages, and had the two of them not been a key part of the response and recovery, Greensburg might not look as it does today with 900 residents staying in the community, a new school, and many businesses, as well as the use of some of the most advanced technology and environmentally-friendly buildings in the country (Planet Green, Discovery Channel, 2009). A comprehensive crisis communication strategy incorporating the concept of public partnership and survivor psychology to assist those leaders who do not normally think as Bunting and Hewitt did is essential. In addition, because current crisis communication strategy does not address the phase well after a disaster, there were a number of missed opportunities in the months and years following Greensburg. These included strategic efforts to tell stories of survival and how public preparedness and decisive action assisted in reducing the number of deaths, discussing with residents, the media, and government what went right and what went wrong, as well as how response will be done differently in the future.

F. CONCLUSION

Many things went right in Greensburg. The residents, along with local and state leaders, each had a key role in the survival of the people and their town before, during, and after the tornado. The actions individuals took before the tornado by heeding warnings and doing what they had been taught to do helped to minimize loss of life. The actions of the local and state leadership in the moments, days, and weeks following the tornado helped frame the disaster in a positive way, helping residents and the public to see a possible future for themselves and their community, despite the incredible loss suffered.

The crisis communication efforts before, during, and after the Greensburg tornado reveal the need for a comprehensive crisis communication strategy that develops approaches for the before and after phases of a crisis, and enhances the during phase using a complex systems approach rather than a linear approach.

Using specific themes and messages in each phase of the crisis, especially the before and after phases, phases which have not been emphasized in the past, will improve leadership's understanding and implementation of this comprehensive crisis communication strategy.

Chapter IV further analyzes the actions of the public and the leadership, assessing what could be improved for the next Greensburg-like scenario in Kansas.

IV. ANALYSIS

This chapter analyzes what happened in Greensburg and how developing a comprehensive crisis communication strategy for all phases of the disaster, with an emphasis on resilient messaging, would improve preparedness, response, and recovery; and community resiliency.

A. INTRODUCTION

Lack of a focus on a crisis communication strategy well before and long after a crisis is a missed opportunity for homeland security leaders. A pre-disaster communication strategy would help officials establish public expectations that disasters are a serious threat and will happen, while also working to debunk the myth of "it won't happen to me." A post-disaster communication strategy would help officials develop and use language to frame a different public mindset to deal with disasters when they happen. In addition, it would allow homeland security leaders to help the public understand what worked and did not work in previous disasters and what improvements would be applied next time, as well as what role public preparedness played in the response and recovery.

Not only are key strategic opportunities missed with the current strategy, but the current crisis communication guidance overlooks the need for themes and messages of *resilience* to be included before, during, and after a crisis. Ideally, crisis communication strategy would incorporate resilient messaging, which are messages targeted to help the public realistically understand their disaster risk. It would also incorporate the need to plan appropriately for those risks and the criticality of maintaining a survivor mindset when the disaster hits.

Incorporating the above steps into a comprehensive crisis communication strategy would help compel the public to adopt an enhanced readiness mindset regarding disasters.

B. GREENSBURG "BEFORE" PHASE

Crisis communication guidance available for government officials to use in Greensburg focused on communication practices leaders should take immediately before disaster, during, and immediately after a disaster, rather than actions needed long before and long after the crisis. By focusing on the moments surrounding the disaster, many opportunities are missed to engage the public in the time periods between disasters.

Despite this problem, local and state officials were fortunate for a number of reasons:

1. Kansans generally know what to do in a tornado due to practicing drills throughout childhood in school, then later as adults at work or when taking cover for actual storm warnings.
2. Kansas meteorologists and government officials discuss and show the devastating results of the dangers of tornados throughout the year.
3. Greensburg residents knew of the dangers early that day and also received a 20-minute warning before the tornado hit with sirens blaring.
4. After the tornado, local and state leaders focused on communicating hope and ensuring a resilient recovery.

If any of these factors had not existed, such as the familiar type of disaster, the pre-education and warnings, or the specific leaders involved, the results might have been dramatically different. Excluding the loss of life, the town's residents were very fortunate for the convergence of these factors. But relying on a streak of luck for the next disaster is not a good strategy in crisis communication and steps should be taken to improve the status quo.

1. Changing Strategy in the "Before" Phase: Using a Complex Systems Approach

Crisis communication guidance has traditionally followed a linear model that consists of a deceptively simple formula, which asks, "How can government best communicate a message to media regarding a crisis or potential crisis?" Homeland security leaders must understand crisis communication no longer falls into this simple model. They must also understand how message senders and recipients are "locked in a relationship of simultaneous, mutual interdependence," as described by the pragmatic

complexity model developed by the Consortium for Strategic Communication at Arizona State University (Corman et al., 2007, p. 10). In other words, leaders must acknowledge how their messages influence various parts of the crisis communication system, and how other parts of the crisis communication system influence messages, by adding different interpretations and new messages.

The pragmatic complexity model provides a more realistic viewpoint of disaster communication and should be incorporated into comprehensive crisis communication strategy. This model recommends leaders "de-emphasize control," rely on "variations on a message theme," anticipate "disruption," and "plan for failure" with a good contingency plan (Corman, et al., 2007, pp. 12–14).

By reviewing the case study, Greensburg can be considered an example of successful communication in the "before" phase of a crisis. This is because of the messages on the dangers of tornados delivered from a variety of different sectors in the complex crisis communication system (i.e., government (emergency response leaders), politicians, the public (including family and friends), and the media (including weather forecasters). The consistent messages encouraged preparedness and strongly reinforced each other.

Tornados in Kansas are a believable threat, so the danger is addressed often by each of these sectors of society. Greensburg residents would have heard about the dangers of tornados from childhood with preparedness messages frequently communicated by parents as well as meteorologists on television and radio, and the preparedness actions would have been reinforced through required drills and exercises at school and work. Residents who had lived in Greensburg or the Midwest for a while would have also likely taken precautions for tornados that had passed by their community before. All of these factors helped persuade Kansans to pay more attention to the warnings and proactively take cover as the threat of the tornado was bearing down on the town.

Unfortunately, none of the community messaging was included in a comprehensive local or state-level crisis communication strategy with a before, during,

and after emphasis. The messaging simply happened throughout the parts of the complex crisis communication system because of the common threat of dangerous tornados in Kansas, not because of a strategy or communication guidance. Therefore, if it had been a different type of disaster, Greensburg residents might not have been fortunate enough to know what steps to take. For that reason, it is important to note that while Kansans responded well to the tornado preparedness messaging and threat, they could not be expected to respond as well to other less common threats to the state, such as an earthquake or a terrorist threat.

Another successful communication effort to consider in the "before" phase of Greensburg is the increased effectiveness of messages when they are provided by multiple sources. Providing unified messages on what to do before a tornado from government officials, elected officials, media, and public (including family), increased the credibility of the messages, which is a key crisis communication principle (CDC, 2002a, p. 23).

Using Greensburg as a model from which to develop a comprehensive strategy for the before phase of a disaster reveals the need for leaders to communicate about disasters on a regular basis. This communication would need to include messages to ensure the public that disasters will happen and can be devastating, messages explaining the need for public preparedness, and then take it a step beyond this to ensure similar messages are coming from different parts of the crisis communication system as occurred in Greensburg.

When developing crisis communication strategy, homeland security leaders must first consider how to best understand and use all parts of the complex crisis communication system to get preparedness messages out to the public effectively on a variety of threats. Messages are more effective when provided by numerous sources, and move beyond the linear communication model used in current crisis communication guidance (primarily government officials to media).

2. Shifting "It Won't Happen to Me" Thinking to "It Will Happen To Me" Thinking in the "Before" Phase

Based on the Greensburg case study, one mindset that leaders must work to change before a disaster is the public's mindset of "it won't happen to me." Researchers including David Ropeik, former Harvard professor and author of *How Risky Is It, Really?* (2010), describe this idea as "optimism bias," which causes individuals to believe disasters can happen to someone else but not to them. This cognitive error is based on how we learn. Author and researcher Robert Meyer explains "We have developed strong instincts to learn things by trial and error, avoiding actions (or inactions) that yield bad outcomes and repeating those that yield good ones" (2006, p. 155). Therefore, if we have not needed to take special precautions against a deadly tornado or hurricane in the past, or we have not been directly impacted by past threats, optimism bias reinforces we will survive without taking precautions in the future.

Research conducted during the past five years offers homeland security leaders more effective ways to overcome this "optimism bias." Researchers Passyn, Luce, and Kahn (2005) found communication messages that appeal to individual regret are more likely to increase compliance in a desired behavior than messages of fear, which cause recipients of the message to turn away. According to Meyer, "The regret appeal seemed to work in this context because it heightened senses of personal responsibility for preventive action while at the same time being unthreatening—hence allowing the content of the message to be processed" (2006, p. 172).

Using this research, homeland security leaders would be wise to talk routinely about personally witnessing the impact of disaster on residents of their state or community, including the shared regret of those who did not prepare. To strengthen their message, individuals negatively impacted by disasters could be encouraged by state or local leaders to talk about those regrets publically, influencing individuals otherwise likely to discount a disaster ever happening to them. For example, an emergency manager could ask a recent survivor of a tornado or flood to speak at a news conference or a community meeting about how preparedness measures could have made a difference or did make a difference. Emergency managers could also work with schools and churches

to present the same message, asking disaster survivors from the community to tell their story. Incorporating this type of systematic and targeted messaging into the local and state crisis communication strategy would increase public awareness and help reduce the "it won't happen to me" belief by presenting individuals from a local community to refute that wrong and dangerous perception.

Another way of overcoming "it won't happen to me" thinking is in the advice of psychologist Daniel Gilbert, who suggests we "think about the future as if it were tomorrow, which leads to more realistic judgments about how things might turn out" (Ropeik, 2010, p. 10). This requires homeland security leaders to construct their messages carefully in ways the public envisions a crisis occurring to them tomorrow not next week or next year. This will enhance the target audiences' likelihood of taking precautionary measures.

Additional research conducted in the late 1990s and early 2000s found that optimism bias could more likely be overcome by providing messages with specifics of how to avoid a likely or specific hazard rather than the more general messages, such as the all-hazards "generic catch-all lists where only a subset of precautions would be seen as relevant to any one decision maker" (Meyer, 2006), p. 171). For example, specific information on protecting oneself from a local hazard, such as a hurricane, could prove more effective than information about an emergency kit list applying to numerous disasters.

Homeland security leaders must use messages and strategies to change the "it won't happen to me" mindset to one that helps the public imagine "it will happen to me," and, furthermore, that a disaster could even happen tomorrow. Leaders must communicate in ways the listener visualizes being affected by disaster individually, and sooner rather than later.

3. Using a Public Partnership Approach in "Before" Phase of Crisis Communication Strategy

Fortunately, Greensburg residents were well aware of the critical role they could play in saving their life and the lives of others by taking specific actions before a tornado

hits. Firsthand accounts reveal this awareness came about as residents repeatedly heard about deadly tornadoes in the media, having experienced near misses in Kansas communities, being told of the dangers of not preparing, and the importance of taking responsibility for one's own safety.

In other Kansas and U.S. crises, there is hesitancy by homeland security leaders to provide messages considered too negative or too blunt to the public before a crisis happens because leaders fear the public will panic and overreact or there will be political repercussions. This became evident in the years leading up to the 2009 pandemic flu preparations and discussions across the country as officials hesitated to discuss in the media issues like a possible shortage of ventilators, which could result in doctors choosing who would live and who would die. One exception was the city of New York, which formed a work group to develop a plan that was released for public comment (Roos, 2007). Many homeland security leaders dared not publically discuss this likely because of the high political pressure that would result. Ironically, in these scenarios, homeland security leaders mirror the same dangerous "optimism bias" as civilians choosing to hope that any event will not happen on their watch versus taking actions appropriate in accordance with their responsibilities.

The dilemma of withholding difficult information exists for the nation in the communication about a possible nuclear detonation or dirty bombs in the U.S. FEMA and a number of other agencies have prepared a document called *Nuclear Detonation Preparedness, Communicating in the Immediate Aftermath* (2010) for use *after* such a device is activated. However, there is little emphasis on messaging before it happens to ensure the public takes the appropriate steps when or if it does (Office of the President, 2010). Homeland security leaders are choosing to accept the risk of dealing with the chaos that could erupt from the public not understanding dirty bombs, rather than proactively explaining the effects of dirty bombs and what the public can do to minimize their risk through being informed.

The language used in current crisis communication strategy approaches the public as helpless children who must be sheltered from unpleasant realities. Unfortunately, this approach has become part of the language that leaders use in crisis communication

efforts, with themes like “don’t overreact” and “remain calm,” while at the same time purposely *leaving out information* determined to be too frightening for the public such as in the preparation for dirty bombs. This was also the situation during the 2011 Japanese tsunami and resulting Fukushima nuclear disaster in which U.S. leadership told state officials to inform residents not to worry because radiation would not make it to the U.S. coast, when days later it showed up in radiation testing in the U.S. raising questions about leadership efforts to hide information:

> …the Obama administration’s initial reluctance to release its own radiation information and the haphazard way that the readings came dribbling out of Europe first—not the United States—raised questions about whether American officials were being as forthcoming as they had pressed the Japanese to be. (Broad, 2011)

While the public may not need to know every technical detail in a crisis response, this parental approach affects the language that leaders use, reduces public trust, and, most importantly, prevents the public from being a part of the solution and a partner in the preparedness efforts.

Subtle attempts have been made by some U.S. homeland security officials to increase public engagement. “What I’ve always found,” says James Lee Witt, FEMA director from 1993 to 2000, “is that people will respond to meet a need in a crisis if they know what to do. You give people the opportunity to be part of something that will make a difference, and they will step up” (Ripley, 2008, p. 211). Unfortunately, many attempts by government agencies to incorporate the public as a partner in disaster preparedness fail at truly engaging the public. For example, the announcement of the Homeland Security Advisory System (color-coded alert system) by Homeland Security director Tom Ridge was provided as a way to empower the public as a partner in homeland security. Unfortunately, it did not give the public any specific actions to take.

> In fact, the announcement included no suggestions on what citizens should do to reduce their risks at any particular stage of alert. Had the planners of the advisory system included just a few general safety tips for each threat level, the chart might have given Americans a sense that they could do something to reduce their risk—a sense of control. (Gray & Ropeik, 2002, p. 113)

A parental approach to homeland security messages damages U.S. preparedness efforts by encouraging the public to continually look to the government for personal help, protection, and assurance, rather than encouraging reliance on self and community. A public partnership with government, where people are prepared to take care of themselves if government resources are not immediately available, will strengthen the national's overall preparedness.

In summary, a comprehensive crisis communication strategy must incorporate language encouraging a public partnership in preparedness, response and recovery. This strategy must include specific actions to take and the acknowledgements of real dangers facing the public.

4. Public Engagement Before a Disaster

The National Academy of Sciences (NAS) recommends before a disaster, "information and training on implementing effective *disaster behaviors* [emphasis added] should be provided to the public…This information will further increase the confidence of the population by enhancing individual perceptions of self-efficacy and mastery," according to the National Academy of Sciences (National Academy of Sciences [NAS], 2003, p 107). The NAS also recommends going far beyond just providing the public with actions to take, and encourages clarifying controversial information and explaining why recommendations are or are not made. It also recommends admitting that conflicting answers may appear while solutions are being sought, and explaining what psychological reactions the public should expect of themselves (NAS, 2003, p. 109).

The above recommendations represent a truthful approach to the public as a partner, helping set expectations, and when followed, gives people clear information on what is expected, what reactions they may expect to have to the crisis, and why government officials are doing and saying specific things.

For an example of what this approach looks like when applied, we can turn to Winston Churchill, who survived near defeat as Britain's leader during World War II. Churchill took the time to find the right messages to motivate the public even when the

days ahead were filled with difficulty. Below is a quote from one of Churchill's speeches before Parliament in January 1942, informing the public of what had happened and what was about to happen:

> Things have gone badly and worse is to come. In no way have I mitigated the sense of danger and impending misfortunes of a minor character and of a severe character which still hang over us. But at the same time, I avow my confidence, never stronger than at this moment, that we shall bring this conflict to an end in a manner agreeable to the interests of our country, and in a manner agreeable to the future of the world. (Sandys & Littman, 2007, p. 146)

Churchill was also specific in his use of language to help individuals understand their role. According to authors Celia Sandys and Jonathan Littman, "Churchill challenged a nation to find strength and vision to look upon its current struggles as an opportunity for greatness in each and every man and woman" (2007, p. 144).

Crisis communication strategy should incorporate the public as a partner rather than a victim or child who may not be able to handle the truth.

5. Proposed Messages and Themes Before a Disaster

The NAS research, as applied by Churchill's approach of honestly setting expectations and engaging the public, points to the need for new messages from homeland security leaders in the before phase of a disaster. The Greensburg case study further reveals the importance of formally incorporating message themes into a comprehensive crisis community strategy before a crisis. These messages will also help counter the "it won't happen to me" mindset of optimism bias and help to engage the public fully as part of the solution. The following message themes should be incorporated into the before phase of crisis communication plans:

1. Disaster will happen to you,
2. It will be life changing, and
3. You have the power and responsibility to minimize its impact.

When combined with other strategies outlined here (i.e., offering messages of regret delivered by those previously affected by disaster, and offering specific actions for people to take), these messages would likely inspire the public to take steps to prepare for disaster.

6. Potential Risk of the "Before" Disaster Message Approach

These themes may not be popular to deliver, especially when disaster seems to evade a community or state for some time. This situation increases the risk the public may grow weary of hearing leaders say how disaster *will happen* to them and their community when it has not yet. This requires the messages to be framed with supporting statistics showing how often the state, region, or county has had a devastating event that wreaked havoc on people and their property. The public should be reminded that over the course of a lifetime virtually everyone will be impacted by devastating circumstances, whether damaging storms and tornados, earthquake, hurricanes, fires, or the effects of terrorism activity. Although the message could be modified to say, "disaster *can* happen to you," the research cited earlier in this chapter indicates that individuals will likely discount that message as they recall how they have avoided disaster so far, and they believe they can continue on the same path of unpreparedness based on historical experience. The "disaster *will* happen to you" is more attention getting and when followed with statistics and personal stories, it has the power to move people from passive complacency to active preparedness.

The goal of this direct messaging approach is not to frighten the public, nor to make them complacent when disaster does not happen. Rather, it is to present a strong case for being realistic about what real dangers each of us face every day, and move people to act in areas they can control to minimize the impact of disaster on their life.

This approach is best supported by survivor psychology and survivor personality concepts, which encourage people to learn how to survive a disaster before it happens by changing the way they view the world. By simply being more aware of the dangers that happen in life and preparing for it to the best of one's ability, odds of survival increase. Ben Sherwood, author of *The Survivor Club* (2009), has interviewed many survivors to

determine how we can reframe our thinking and attain a survivor personality. In his research, he recalls being surprised to learn how many people are killed by cement trucks every year and being asked if was "disturbing to spend so much time thinking about the cement truck around the corner or if it was depressing to meet so many people slammed by life" but he said, no (Sherwood). He explains:

> Rather, it made me more realistic. To borrow from the military, I've got more situational awareness now. I'm more attuned to the possibility that things go wrong. I'm more alert to my blind spots and gorillas in our midst. And I'm a little more prepared. That's not to say I would fare well if you dropped me in the woods with only one matchstick and a fishing hook. It just means that my outlook has changed. I'm more vigilant, but not to the point of distraction. To the extent that I exert any control, I know I can improve my chances. (Sherwood, 2009, p. 336)

7. Implementing New "Before" Disaster Messages

To ensure these recommended message themes are reinforced, as occurred prior to Greensburg, homeland security leaders must work with communities to conduct drills and exercises for a variety of disasters. These must occur not just in schools, but also in businesses and organizations and other community gatherings. And finally, leaders must work with numerous sectors in the crisis communication system to get their preparedness messages out for a wider variety of potential disasters specific to their community, so as to increase citizen awareness and preparedness and add credibility to their message.

Greensburg reveals the success of a before messaging effort at the state and local level for a community impacted by a familiar disaster, despite the fact there was not a before phase strategy formally written into crisis communication plans. Expanding this concept and written strategy to other disasters, especially those considered high risk for Kansas, as part of a state and local comprehensive crisis communication plan, which incorporates pragmatic complexity model and the above messaging themes would improve the outcome of other communities impacted by various disasters in Kansas.

Homeland security leaders must incorporate message themes into crisis communication strategy well before the next crisis to ensure the public is engaged in preparedness efforts and has a readiness state of mind. This critical step will assist in

moving people from the mindset where they are passively educated about how disaster can happen to them, to the mindset where they believe there is a very high likelihood disaster will happen to them at some point in their lifetime, leading them to take action to minimize the effects of disaster.

C. GREENSBURG "DURING" PHASE

The success of crisis communication efforts in the event phase or "during" phase in Greensburg can be attributed to several factors. These included local leaders using crisis communication guidance (primarily federal), which urged leaders to communicate in an open, honest and frequent manner while also providing something for the public to do (CDC, 2002b, p. 21). It also included the use of survivor psychology concepts by local and state leaders in Greensburg as they framed the disaster as a new opportunity for Greensburg.

1. Changing Strategy in the During Phase

While this phase of the crisis communication effort is the most established of all phases in crisis planning nationwide, the Greensburg case study reveals some areas for improvements. First, leadership must anticipate the complexity of the crisis communication cycle and understand that it involves more than just media. By looking at the day-to-day changes of the communication efforts in Greensburg during the first week, it is clear the media, government, political officials, and the public were each impacting one another and causing a shift in the focus of the messages depending on the input into the system. Current strategy produces highly reactive responses to each of these inputs. A shift to a complex model of crisis communication is needed to anticipate communication needs. The Greensburg case study reveals the "during" phase of crisis communication strategy would specifically benefit from the pragmatic complexity model, developed at Arizona State University and referenced in earlier chapters of this document.

The pragmatic complexity model recommends leaders embrace complexity and deemphasize the illusion of control because "communication takes place in a complex system of double contingency that can be partially influenced, but not controlled by the

participants" (Corman et al., 2007, p. 12). Viewing a complex world using a simple paradigm will leave people confused and constantly behind the development of real-world events.

The pragmatic complexity model also recommends relying on "variations on a message theme," that is, by being ready to change your message to fit the dynamic situation at hand. In addition, pragmatic complexity suggests "considering disruptions," that is those game-changing events where your messages may no longer work. That leads into the final recommendation of having a contingency plan when efforts fail (Corman et al., 2007, pp. 13–14).

2. When Pre-Scripted Message Themes and Linear Thinking Do Not Work

As the case study indicated, the first few days of the state's response to Greensburg offered a number of challenges outside the scope of communication themes for the during phase of an event. These themes, used by state and local leaders included discussing the following:

1. What happened (loss of life, tornado damage),
2. What government was doing about it (the state/local response), and
3. What the public should do (what Greensburg residents and Kansans could do to help).

The moments and hours after the disaster held the common events of many other disasters, including receiving too many donations from the public, needing to shelter numerous displaced pets, and finding the best way to remove tons of debris, which included dangerous chemicals and weapons strewn about the town. While these issues seemed to intensify the chaos already present in a destroyed community, they were small compared to the ongoing challenges brought by the truly unexpected aspects of the disaster.

One of the most significant of the challenges were the governor's comments about National Guard equipment deployed to Iraq resulting in a slow Kansas National Guard response. Another was the looting by active duty military members and later the mayor resigning due to the mounting stress of rebuilding his own home and his entire town. An

additional challenge was the growing environmental and health concerns over the response and recovery. Each of these problems added more communication issues to an already chaotic scene and reinforced the importance of homeland security leaders embracing, or at least understanding, the chaotic nature of these kinds of events.

Applying the pragmatic complexity model to Greensburg during the crisis would have helped leaders as they encountered these challenges, providing them an alternative to the crisis communication plans that do not always fit the situation. Recognizing that the need for adaptability in a crisis communication strategy is essential in this type of dynamic, chaotic environment as one unexpected event followed another. While Bunting and Hewitt followed crisis communication principles taught by risk communication researchers, such as Vincent Covello, the pragmatic complexity model recognizes the need to embrace the unexpected, such as the governor's comment about Guard equipment rising to the level of President Bush's spokesman, who countered her comments in a news conference at the White House.

The pragmatic complexity model also acknowledges the need to vary the message, consider disruptions for the positives or negatives they could bring to the intended messages, and have a contingency plan for when plans do not work (Corman et al., 2007, pp. 12–14). Instead, the leaders in Greensburg were focused on the tasks at hand and were completely surprised by the turn of events brought about by the governor's comments about National Guard equipment at a news conference. Using this model could have helped them embrace the chaos and disruptions, modify the message quickly, and not rely on prior pre-written communication plans that were not designed to work in a non-linear setting, where unexpected events after the dynamics of leadership messages.

As the pragmatic complexity model addresses, with each new unexpected event, leaders in Greensburg were forced to vary their messages to address the changing events; however, not expecting these turn of events, they were left with linear model crisis communication guidance. Unfortunately, the disruptions offered few opportunities for more effective messages because as often occurs in a crisis, leaders fell into the mode of simply reacting and responding to the next media report thrown at them.

Although there was not a contingency plan for failure, this planning concept would have been beneficial to consider prior to the event and events like Greensburg. This concept is contrary to the "failure is not an option" often expressed by military and homeland security leaders. Admitting the very real potential of tactical failure and embracing it will not be popular for many in the homeland security sector; however, just like embracing chaos, it does allow for a new way of thinking about disasters and, therefore, new ways of approaching crisis communication strategy in a disaster. Having a contingency plan would have allowed leaders to anticipate the unexpected, quickly adapt, and refocus their messages, rather than simply react.

In summary, homeland security leaders must consider the pragmatic complexity model in the event/during phase of a crisis to truly be prepared for the chaotic nature of disasters. This includes embracing chaos, varying messages, considering disruptions and planning for failure incorporated into a comprehensive crisis communication strategy.

D. GREENSBURG "AFTER" PHASE

1. Resilient Messages and Survivor Psychology in the "After" Phase

In Greensburg, the use of resilient messaging after the tornado proved successful in encouraging residents to not only remain in their town and rebuild their lives, but also to take an active role in rebuilding Greensburg better than it was before. Resilient messages are messages that acknowledge the challenges but focus on the future possibilities. Today, there is a population of nearly 900 of the approximately 1,500 original residents. This number represents considerably more residents than many leaders anticipated would return to Greensburg. The town's residents held numerous community meetings and boldly decided to rebuild in an environmentally friendly manner (Planet Green Discovery Channel, 2009).

The actions and language used by leaders in the hours and days after the tornado helped many residents to envision a future in Greensburg, to reconsider moving to a nearby town, and rebuild in Greensburg instead. This happened, in part, due to the leadership efforts and communication efforts of Bunting and Hewitt, who while having never worked together prior to the disaster, were able to consistently communicate a

bright vision for the future, along with messages inspiring a resilient comeback for the town. The leaderships' use of resilient messages in their communication style serves as an excellent example of what works well and what should be formally adopted into comprehensive state and local crisis communication strategy during all phases of a disaster but especially in the days, weeks, and months following a disaster.

Bunting and Hewitt provided an honest appraisal of what was ahead for the community, acknowledging challenges, and helping residents to visualize a new community. Their messages used language offering hope, but they also realistically outlining the challenging work ahead.

"Although you drive through and see the devastation, if you'll dream a little bit, you can see a lot of opportunity," Hewitt said. "I don't say a tornado is something you want to happen, but we just finally got that one opportunity now for a turnaround" (Planet Green, Discovery Channel, 2009).

Bunting's focus on resilient messaging came from research he was conducting to build a resiliency program for National Guard members because of the growing number of suicides the Kansas National Guard had experienced in the Global War on Terrorism (Hansen, 2009). His research lead him to the concepts of survivor psychology, which meant looking at Greensburg based on what was really happening and a willingness to consider solutions sometimes often or previously ruled out (Green, 2011, p. 4). It also meant being confident and being persistent in finding a solution (Green, 2011, p. 4). Hewitt and Bunting's actions and messages were in sync and helped them to inspire those in the community, encouraging those who did not think that they could survive such a disaster and rebound from it. These resiliency and survivor psychology concepts not only framed their language about the disaster, but also framed their individual leadership actions to decisions necessary in the response and recovery phase.

Homeland security leaders should adopt concepts of resiliency and survivor psychology for before, during, and after phases of a disaster, and incorporate these into state and local crisis communication plans to shape the future of a community positively.

2. Overcoming Hopelessness After Disaster

The importance of homeland security leaders using resilient messaging and survivor psychology concepts following a disaster is evident through research from the late 1990s and early 2000s. It indicates individuals have a difficult time seeing themselves recover from something devastating:

> …people tend to be too pessimistic about their ability to mentally recover—they presume that the immediate negative reactions they would have to negative events would persist in the future. In all these cases the excessive pessimism that immediately follows a negative event is the mirror image of the optimistic bias that arises before it: we simply find it difficult to imagine a negative set of circumstances (such as city under water) being made right again. (Meyer, 2006, p. 163)

This research reveals the need for homeland security leaders to communicate a vision of hope after a disaster. This occurred in Greensburg as local and state leaders spent the next two months laying out the vision of a new Greensburg and encouraging the public to be a partner in the recovery process. By using resilient messages and survivor psychology concepts, Bunting and Hewitt's communication was critical in preventing many residents from giving up and simply thinking the disaster was too much to overcome. Although some residents and businesses did leave the community to relocate elsewhere, the majority stayed in Greensburg accepting their leaderships' vision for a town rebuilt better than the one they had known before (Planet Green, Discovery Channel, 2009).

3. Changing Strategy in the "After" Phase

Current crisis communication strategy does not address leadership communication and actions much beyond the date of the disaster. Although leaders used resilient messaging to get Greensburg back on track, this was not a part of state and local crisis communication plans. Luckily, it occurred because of the particular leaders in the Greensburg response.

In addition, lack of comprehensive communication plans after the disaster resulted in some lost opportunities in the weeks following the Greensburg disaster. These included:

- No strategic effort to tell the public what went right as well as what went wrong for the government and/or for individuals in the disaster,
- No strategy to tell the public the lessons learned that will or should be applied to future disaster response and individual preparedness, and
- No plan to highlight how public preparedness helped save lives in Greensburg, or how it could have helped in more ways had additional preparedness measures been in place.

Strategic efforts to tell the successes and failures of the preparedness, response and recovery could have served as a powerful communication tool to improve individual and community preparedness levels throughout the state. These stories could have been told through news stories, public service announcements, public television segments, or Web (and social media outreach efforts which the public was just beginning to use), as well as presentations for school and community faith-based groups and events.

Research supports these communication steps. Having individuals who were impacted by a disaster discuss their regrets about not being more prepared or regretting not taking different action is persuasive and would impress upon individuals the importance of preparing before it is too late (Meyer, 2006, p. 172). Additional research shows negative messages indicating the presence of risk is evaluated as more trustworthy than positive messages communicating the absence of risk (Breckinridge & Zimbardo, 2007a, p. 122). In other words, if individuals communicate how difficult things were and how their actions could have changed the situation, that message is more effective than simply telling people to be prepared. Having individuals and government leaders repeatedly address what should have been done differently would also add to the credibility of homeland security leaders' warnings regarding future disasters.

4. Public Engagement After a Disaster

After the crisis, the NAS recommends U.S. homeland security and emergency management officials take a number of steps currently missing from our nation's crisis communication strategy:

> In the post-event phase, officials should communicate how preparedness helped to decrease the psychological impact of the attack and continue to publicize available services to the public in general, and provide targeted

> messages to specialized segments of the population who may be at greater risk for adverse consequences. (NAS, 2003, p. 131)

NAS also recommends conveying psychological consequences the public should look for after an event (NAS, 2003, p. 131).

The post-disaster phase of a crisis is a phase where current crisis communication strategy misses many opportunities because our strategy focuses largely on after action reports to determine if we provided the right messages. This internal process does not help the public understand what went right or wrong. Unfortunately, that debate gets left up to the 24-hour media cycle of talk shows and paid experts to analyze government efforts in homeland security.

5. Proposed Messages and Themes After a Disaster

Current crisis communication strategy would benefit greatly from applying these post-disaster phase recommendations, based on NAS research. In addition, the Greensburg case study also reveals the importance of incorporating message themes for the after phase of a crisis into a comprehensive crisis community strategy. To counter the hopelessness mindset which research indicates happens after a disaster, homeland security leaders have a critical role in the weeks and months after a disaster. The following message themes should be incorporated into the after phase of crisis communication plans.

Tell the public:

- What went right/wrong (for government and individuals)
- What will be done differently for the next disaster
- What public preparedness measures helped/would have helped minimize the impact of the disaster

Providing the above recommendations to the public, when combined with other strategies outlined here, will allow the public to better engage as a partner in the crisis process by knowing how to engage before a disaster, what to do during, why it resulted as it did, and what it all means for the next disaster.

6. Potential Risk of the "After" Disaster Message Approach

Some leaders may not be comfortable focusing on what government did wrong after a disaster; therefore, the alternative is to focus on overall places where some improvements or enhancements can be made to the process without pinpointing individual or department failures. Another option is to focus on the community and individual preparedness and areas where improvements and enhancements can be made for an even safer and more resilient community in the future.

7. Take Advantage of the Post Tragedy Opportunity Bubble

After a disaster, leaders can take additional steps to take advantage of the "post tragedy opportunity bubble," a term coined by Fahali Moghaddam and James Breckenridge (2011). Based on their research, Moghaddam and Breckenridge argue there is a window of opportunity after an event like 9/11 where the public wants to do more and be a partner in the recovery, such as volunteering (Breckenridge & Moghaddam, p. 2). They state "Leadership must pay special attention to opportunities to engage the public as capable partners in their country's response to the crisis—calling upon them as citizens with civic duties, as well as rights" (Breckenridge & Moghaddam, 2011, p. 1).

Moghaddam and Breckenridge found that two thirds of survey respondents did not believe the government had given them an adequate way to participate in defending the country after 9/11 (Breckenridge & Moghaddam, 2011, p. 2).

Homeland security leaders should incorporate the publics' stories and governments' lessons learned into messages to show what went right, what went wrong, and what changes will be made to future disaster response, as well as to show the powerful role of public preparedness in the outcome of the disaster.

E. DEVELOPING AND IMPLEMENTING A NEW STRATEGY FOR CRISIS COMMUNICATION AT FEDERAL, STATE, OR LOCAL LEVELS OF GOVERNMENT

The development of a new crisis communication strategy for homeland security incorporating the concepts outlined in this chapter would benefit homeland security leaders at the federal, state, and local levels of government, but the top priority should be

placed on a state-level strategy. Local governments are limited in resources and staffing to develop a comprehensive strategy and the federal government is challenged to produce a strategy that fits all 50 states. Therefore, a state-level strategy holds the most promise for robust implementation and for subsequent adaptability by local government.

Recent research by the Multi-National Community Resilience Policy Sub Group, co-chaired by David Kaufman of FEMA, revealed the benefits of implementation of new strategy at the state/local level (Bach, Doran, Gibb, Kaufman, & Settle, 2010). The group looked at a number of communities in the U.S. and around the world affected by disasters to determine what best practices could be applied to future strategy for community resilience. They found a number of positive efforts underway at the community level after a disaster, giving validity to the idea that federal-level or top-down strategy may not be the best approach (Bach et al., 2010).

> …the emphasis on local collective action, non-governmental groups, neighborhood institutions, and public participation is a significant strategic shift…the shift is evolving because of the changing context of natural and man-made risks and the realization that community resilience is essential to national and local survival. The fundamental belief is that the lead role must be played by society—individuals, groups, organizations and communities—who can understand and respond better to the complex risks. (Bach et al., 2010, p. 28)

In addition, the public is likely to relate more closely to those leaders in their community and state whom they have met or seen frequently in public settings or on local media. Psychologists James Breckenridge and Philip Zimbardo address this local versus federal approach in their research on how best to manage public fears related to terrorism (2007, p. 128). “Neither federal government public affairs efforts nor national media communications are likely to adequately address public concerns at state and local levels,” they state (Breckenridge & Zimbardo, 2007, p. 128). Breckenridge and Zimbardo go on to recommend “development and field testing of risk communications tailored specifically to local concerns, priorities, and cultural norms and attitudes” (2007, p. 128).

Research referenced earlier in this document also supports Breckenridge and Zimbardo’s recommendation, revealing that disaster communication is most effective when it includes specific messages, such as what to do for a tornado or hurricane, rather

than general preparedness messages. This type of strategy is best developed at the state level because of the vast differences from state to state.

Homeland security leaders at the state level are more likely to know the concerns of the residents in their state as well as the specific threats in their state, which makes state officials the most qualified to develop a comprehensive crisis communication strategy. A state plan would be more adaptable to local governments in the same state than a plan developed by federal government due to the many differences from state to state.

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V. RECOMMENDATIONS AND CONCLUSION

A. INTRODUCTION

Crisis communication plans and guidance at all levels of government have traditionally focused almost exclusively on communicating during a crisis, rather than a comprehensive approach incorporating the timeframe well before and well after a crisis. A case study of the 2007 Greensburg, Kansas tornado assessed the crisis communication strategy surrounding the disaster to assist in the development of a comprehensive crisis communication strategy for homeland security. The case study revealed a number of positive actions taken by the public and government as well as areas where improvements should be made in future crisis communication strategy.

Furthermore, the case study findings reinforced the need for homeland security leaders to reframe crisis communication, to incorporate strategy for the phases well before and well after a disaster, and to incorporate a number of new approaches into crisis communication strategy.

B. REFRAME HOW CRISIS COMMUNICATION IS VIEWED

Crisis communication strategy must be reframed using a crisis communication cycle (before, during, and after) that never ends, but constantly moves from one phase to the next. By viewing disasters as part of a normal and ongoing cycle in the world and in our lives, homeland security leaders and individuals can better use the time between disasters to prepare for what is inevitably coming in the next disaster, and to learn from what happened in the last disaster. Author Ted Lewis explains this as "Life is a series of passages from catastrophe to catastrophe with inconsequential periods of calm in between. We need to learn to navigate stormy seas, because they are the new normal" (Lewis, 2010, p. 10).

1. What the Greensburg Case Study Revealed about Reframing

The Greensburg tornado case study revealed the success of communicating before, during, and after a disaster, but many of the successes were due to random luck of

the situation, and not part of a comprehensive crisis communication strategy at the state or local level. The successes included multiple messages on tornado preparedness regularly disseminated by many entities, tornados being a familiar and believable threat in Kansas, and state and local leaders driven to use resilient messaging and survivor psychology concepts to rally the community back from devastation. The success of the preparedness measures surrounding Greensburg shows what is needed in a new comprehensive crisis communication strategy for Kansas. This crisis communication strategy for homeland security leaders could also be adapted for use by other states and by local governments.

2. Recommendation: Before and After Message Themes

The current communication guidance and information cycle focuses almost entirely on the time immediately before a crisis, during, and immediately after a crisis, but misses opportunities to reach and engage the public in the longest timeframe available: long before a disaster and long after the last disaster. Homeland security leaders generally use the following message themes to guide their communication through a disaster:

1. Tell the public what happened,
2. Tell the public what government is doing, and
3. Give the public something to do to stay safe or engaged. (FEMA, 2009)

While this a valid approach, it needs to be greatly expanded to the before and after phases of a disaster, also including well-planned message themes and strategic actions in these phases. Based on research regarding how individuals think before and after a disaster, the themes that follow will help homeland security leaders guide the community through these additional phases.

The **before phase** should include the following message themes to improve public engagement and enhance resiliency:

1. Disaster will happen to you,
2. It will be life changing, and
3. You have the power and responsibility to minimize the impact.

These messaging themes, when paired with additional strategies such as messages of regret from people affected by previous disasters, historical statistics of disasters in a specific state or region, and specific disaster preparedness instructions, will help shift the public away from "a disaster won't happen to me" mindset and encourage them to visualize the real possibility of a disaster happening to them and prepare for it.

The **after phase** should include the following themes:

1. What went right/wrong (for government and individuals),
2. What will be done differently for the next disaster, and
3. What public preparedness measures helped/would have helped minimize the impact of the disaster.

These messaging themes, when delivered after a disaster will take advantage of the "post tragedy opportunity bubble," that is, they will have a greater effect on individuals because of the timing of the message to a disaster (Breckenridge & Moghaddam, 2011, p. 2).

C. UTILIZE COMPLEX SYSTEMS APPROACH

Crisis communication can no longer be viewed using a simple linear model in which government provides a message and the media and public responds to the message. The entire complex system must be considered when developing strategy, especially given the dynamics social media bring to the communication environment. This means a communication strategy must anticipate the potential political issues in disaster, the emotional reactions of the public, the private sector business sustainment issues, tension with other government entities, and how media and social media impacts and constantly alters the public's perception of the disaster. The complex system of communication must be anticipatory because any unexpected actions can alter and may derail the focus of messages of each phase (before/during/after).

The pragmatic complexity model, when applied to crisis communication strategy, offers a new approach for homeland security leaders that recognizes the dynamic aspects of disasters and offers an alternative to communication plans built on linear models (Corman et al., 2007, pp. 12–14).

1. What the Greensburg Case Study Revealed about Complex Systems

The Greensburg tornado case study analyzed the anticipated and unanticipated dynamics surrounding the tornado strike through the lens of a complexity model approach and specifically a pragmatic complex model, rather than linear model approach to crisis communication. The dynamics included politically charged differences of opinion between the governor and White House officials regarding National Guard equipment availability for domestic response use, the arrests of active duty military members for looting, the unexpected resignation of a mayor, and health and environmental concerns associated with the disaster site. The analysis revealed homeland security leaders were using a linear approach to communication. While this disaster occurred prior to the widespread use of social media by public and media, the communication flow occurred in a complex system. Greensburg leaders would have benefited greatly from a pragmatic complex model for crisis communication (Corman et al., 2007, pp. 12–14).

2. Recommendation: Utilize Pragmatic Complexity Model for All Disaster Phases

Using a pragmatic complexity model in the before, during, and after phases of a disaster will help homeland security leaders prepare for unexpected events that happen in real situations and take into consideration the complex dynamics involving unexpected public reactions. It will also help leaders with governmental missteps and tension, political posturing, and the effects created by the news and social media. By following the aspects of the pragmatic complexity model, homeland security leaders are more likely to succeed in their crisis communication efforts than by relying on the traditional linear model of crisis communication (e.g., a model where leaders simply try to get the right messages to the media at the right time) (Corman et al., 2007, pp. 12–14).

D. SHIFT TO PUBLIC PARTNERSHIP APPROACH

Crisis communication strategy must incorporate the concept of fully engaging the public as a capable partner and move away from the current condescending parental approach that is communicating to the public as children who need protection from bad

news and difficult decisions. Efforts have been made at public partnership in preparedness on the federal level with FEMA's Be Ready campaign, and DHS's If You See Something, Say Something campaign. However, the language that public officials use when disseminating negative information and the approach public officials take when determining when to release information still treats the public as incapable of dealing with reality. Homeland security leaders must change the language they use with the public to show that they recognize the public is a real partner in preparedness, response, and recovery. This change from a parental approach to a public partnership approach will also affect decisions about when to release information and what to release.

1. What the Greensburg Case Study Revealed about Public Partnership Approach

The Greensburg case study revealed the benefits of having residents personally engaged in their own preparedness efforts prior to a disaster, which likely increased survival rates during the tornado. However, had Greensburg experienced a different type of disaster where preparedness measures are not well known and individuals are not familiar with the threat or appropriate preparedness efforts, the results would not have been as positive.

The Greensburg tornado case study also revealed a need for more public partnership efforts well after the event. Homeland security leaders did not talk to the public after the tornado regarding what went right, what went wrong, and what will be changed to improve future communication and preparedness efforts. This type of honest transparency would increase public participation in preparedness efforts and also take advantage of the public's focus immediately after the disaster when the effects are still very recent and real. Unfortunately, because government officials are often worried about detailed scrutiny of their previous preparedness and response efforts, this step is frequently avoided. If these types of concerns prevent this step from occurring, an alternative is to focus on the public actions related to what went right and wrong and what enhanced public preparedness measures could be taken in the future. This communication strategy would help the community understand what preparations need to be made by individuals, and as communities before the next disaster.

2. Recommendation: Shift from Parental Approach to Public Partnership Approach

Homeland security leaders must strongly encourage public engagement and individual responsibility for disaster preparedness. This will require homeland security leaders to avoid using parental thinking and parental language and instead acknowledge the public as a partner. It will also require homeland security leaders to consider sharing difficult news sooner. This will demonstrate that government officials view the public as a true partner in the preparedness, response, and recovery process. Certain national security information will always remain out of the public domain, but much more could and should be provided to engage the public. This approach must be incorporated in messaging well before and well after a disaster, not just during the crisis.

E. UTILIZE RESILIENT MESSAGING/SURVIVOR PSYCHOLOGY

Resilient messages must be included during all phases of a disaster. While state and local homeland security leaders in Greensburg only used these concepts in the "after" phase of the tornado disaster, using language encouraging resiliency and a survivor mindset in the "before" and "during" phase would help communicate realistic public expectations of government agencies and prepare the public for the individual and community challenges ahead. A great example of this type of language can be found in the speeches of Winston Churchill from the darkest days of World War II. In 1941, he spoke to the school he had attended saying:

> Do not let us speak of darker days, let us rather speak of sterner days, the greatest days our country has ever lived; and we must all thank God that we have been allowed, each according to our stations, to play a part in making these days memorable in the history of our race. (Sandys & Littman, 2003, p. 144)

The unique aspect of this communication style is Churchill's willingness to be amazingly blunt and truthful about the difficulties ahead, while also offering hope of eventual success.

1. What the Greensburg Case Study Revealed about Resiliency/Survivor Psychology Approach

The Greensburg tornado case study revealed the benefits of incorporating resiliency/survivor psychology into the language of homeland security leaders after the disaster in May 2007. The adjutant general and director of emergency management for Kansas, Maj. Gen. Tod Bunting, along with Greensburg City Administrator Steve Hewitt, and federal officials did not shy away from talking about the difficulties ahead in the weeks, months, and years to come.

"Some of the rubble is just so deep," Bunting said, after assessing the extent of the work ahead (Hegeman, 2007b).

"It's going to take a long time for the community to recover," President Bush said the weekend after the tornado hit (Hegeman, 2007b).

But officials also used resilient messages to help the public envision a better future in the town of Greensburg and to help them remain resilient.

"I see a community coming together. I see a future here. I really do," Hewitt told media (Hegeman, 2007b).

"The town will be back, I have no doubt about that," said Dick Hainje, regional administrator for FEMA (Hegeman, 2007b).

2. Recommendation: Shift Approach to Move Public from Helpless Victim Mindset to Resilient Survivor Mindset

Individuals have a very difficult time imagining their recovery from a significant personal setback, according to the research addressed in earlier chapters, but homeland security leaders can influence this paralyzing thinking with a properly focused crisis communication strategy. This strategy must include language explaining the challenges ahead to provide the public a realistic idea of what they face. The strategy must also include language that offers hope for a future. And finally, the strategy must reveal how the public's involvement is needed for success. Homeland security leaders must consider the power of their words before, during, and after a disaster and incorporate messages of resilience and a survivor mindset into crisis communication strategy.

F. RESEARCH QUESTIONS ANSWERED

The case study of the deadly 2007 Greensburg tornado, along with a literature review, set out to answer a primary question and a subset of questions to determine what should be included in a comprehensive crisis community strategy for homeland security.

1. What Can We Learn from the Communication Practices Surrounding the Deadly Greensburg, Kansas Tornado in May 2007 to Assist in Developing a Comprehensive Crisis Communication Strategy for Before, During, and After a Crisis which Incorporates Resilient Messaging and Encourages Public Engagement?

The Greensburg disaster revealed a number of efforts that were successful and should be adopted into a comprehensive crisis communication strategy for homeland security. These successes included tornado preparedness messages from multiple government and private entities well before the tornado, and a public engaged in tornado preparedness who heeded the weather warnings. The successes in Greensburg also included resilient messaging delivered by local and state leaders after the tornado.

Overall, the case study revealed a critical need to develop a comprehensive strategy for the before and after phases of a disaster so as not to overlook these valuable phases when so much can be accomplished to get individuals and communities ready for the next disaster. The study revealed the need to reframe the way we think about disasters overall, not viewing them as rare but as the norm. This forces homeland security leaders and individuals to acknowledge that preparation must be an ongoing process and lessons continually learned and applied. The case study revealed the need to utilize a pragmatic complexity model for crisis communication to ensure leaders do not fall into the habit of linear communication plans in a dynamic environment where those plans no longer work.

A subset of questions sought to determine how to develop the specific aspects of the comprehensive crisis communication strategy.

a. What is a Reasonable Approach for Homeland Security Leaders to Engage the Public in Crisis Communications Before, During, and After a Crisis to Enhance Community Resilience?

The Greensburg tornado case study and research revealed a need for a shift in the current approach to crisis communication, where government officials view the public as children who should be shielded from difficult news, to a public partnership approach, which speaks to them as equal partners in the disaster preparedness, response, and recovery process.

The case study and research also showed the need for leaders to incorporate specific "before" disaster message themes, such as "disaster will happen," and "after" disaster message themes, such as addressing what went right or wrong, to encourage an ongoing preparedness public mindset.

And finally, the case study and research showed the value of incorporating resilient messaging into crisis communication strategy. This is true not only after disaster, but for all phases of a disaster to help the public visualize the devastation disaster can bring, inspire hope they can get through disaster together, and envision a future after disaster.

b. What Message Themes Should Homeland Security Leaders Use to Help the Public Better Prepare for, Respond to, and Recover from a Crisis?

The research indicated specific "before" and "after" disaster message themes (listed earlier in this chapter) should be added to the current "during" message themes for a truly comprehensive crisis communication strategy. These themes would assist in getting in the public's attention before and after a disaster and are necessary to have an engaged public ready to help with disaster preparedness and response. The research also indicated these "before" disaster themes will help move the public from a "disaster won't happen to me" mindset to a "disaster will happen to me" mindset. The latter type of thinking is more likely to prompt them to prepare. The "after" disaster themes will assist in ensuring lessons learned are captured and applied by individuals, communities, and government.

c. Can Research into Individual Resiliency and Survivor Psychology Provide Insight into Crisis Communication Messaging that Will Help the General Public?

Several psychologists and authors, referenced in the research, indicate the benefits of resilient thinking and a survivor mindset when preparing to face a potentially devastating situation, getting through it, and rebounding from it. These concepts originate from authors who have interviewed and studied those who have survived tragedy and assessed their mindset prior to, during, and after the devastation. Resiliency and survivor psychologists believe this is a mindset everyone can develop prior to a devastating event. Their research suggests incorporating resilient messaging in crisis communication strategy would benefit the public's overall resilience. The Greensburg tornado case study further supports this because state and local leaders applied resilient messaging to their communication and action strategy following the tornado. This resulted in the majority of the residents stayed in the community, rebuilding their homes and working to make their community better than before.

d. What do Communication Practices in Disasters Other Than the Greensburg Tornado Offer to the Development of a Comprehensive Crisis Communication Strategy for Homeland Security?

The communication of leaders following 9/11 revealed the benefits of resilient messaging offered by Rudolf Giuliani, the mayor of New York City. Giuliani followed current communication guidance of telling the public what was happening, what government was doing, and what the public should do. He also practiced delivering the "during" disaster messages well in advance, which likely lead to more successful delivery of those messages. However, review of 9/11 communication practices also revealed the lack of a comprehensive strategy for crisis communication for New York leaders to utilize—long before the disaster and long after the disaster to help engage the public and assist them in becoming more resilient individuals and developing a more resilient community.

A review of the communication surrounding Hurricane Katrina revealed a crisis communication failure as leaders did not follow current guidance and let the

complexity of the event overtake and overwhelm their efforts. It also showed the importance of a comprehensive crisis communication plan to engage the public and incorporate resilient messaging. The lack of a "before" disaster messaging strategy to help the public visualize a disaster happening to them lead many people to resist evacuation because they had survived past disasters and did not believe a significant disaster could actually happen to them. The lack of an "after" disaster messaging strategy for homeland security leaders allowed the media to frame the "lessons learned" in unflattering terms, versus the local, state, and federal government leaders publically assessing what could have been better and what they plan to do differently next time.

e. At What Level of Government (Local, State, or Federal) Should this Comprehensive Crisis Communication Strategy for Homeland Security Be Implemented?

The case study and research pointed to the benefits of a state-level approach, which would be adaptable by local government. Although a federal approach could work for some situations, states are radically different, making a top down approach that is applicable and effective in all 50 states difficult to impossible to deliver. Research also shows communities are developing effective plans without the help of federal government, and the benefit of these plans is they address the unique needs of a specific state, region, or community. Additional research shows the effectiveness of messaging that is specific to disasters common to a specific area and delivered by local and state officials familiar to the audience.

G. CONCLUSION

This research and case study set out to prove a comprehensive crisis communication strategy should be developed for homeland security leaders to use before, during, and after a crisis, which incorporates resilient messages and survivor psychology, to enhance individual and community resilience.

The Greensburg tornado case study and research proved the current crisis communication efforts at federal, state and local levels are not comprehensive in that they focus almost exclusively on preparing for the "during" phase of a disaster. This overlooks

the time long before and long after a disaster that could be utilized to get leaders and the public in a preparedness mindset. It also overlooks ways to help individuals, communities, and government apply lessons from disasters after they happen.

The thesis confirmed the need for homeland security leaders to reframe disasters, not as something rare and unusual, but as something that will happen and are part of the norm. Because of the complex dynamics surrounding disasters, the research and case study showed the importance of moving from a linear communication model to a pragmatic complexity communication model. This will help homeland security leaders anticipate these chaotic environments and have crisis communication contingency plans in place when things do not go as planned.

The research into how individuals receive information and best respond to messages also confirmed the benefit of moving to a public engagement approach and resilient messaging approach. This can be done by incorporating both approaches into the comprehensive crisis communication strategy. The case study also showed a need for specific before and after message themes to assist in engaging the public and helping them become more resilient.

Furthermore, the research concluded a state-level strategy would be most effective and allow for specific messaging to be delivered by leaders familiar to the residents, rather than attempting to apply a federal approach to 50 different states.

H. FUTURE RESEARCH

Additional research should be done with more communities struck by disasters like Greensburg where applied pre-disaster messages and post-disaster messages could be measured for effectiveness in minimizing the effects of a disaster. This would help to determine if there are additional concepts equally suited for inclusion in a comprehensive state-level crisis communication plan beyond those highlighted in this thesis. It would also be beneficial to study the various methods of delivery of messages in all phases of a disaster to determine if a more effective method exists or if the results vary with the disaster and the community where it occurs.

Additional research should be conducted on the benefits of resilient messaging and survivor psychology concepts. While psychological concepts have been applied to crisis communication in the past, resiliency, and survivor psychology are new concepts in the field of crisis communication and warrant further study.

Another area of research to consider is how to ensure homeland security leaders are trained to communicate critical crisis communication messages at the local, state, or federal levels for all phases of a disaster. Expanding upon this concept, it would be helpful to study what changes are needed (i.e., policy, processes, etc.) to ensure that U.S. leaders at various levels of government effectively use a comprehensive crisis communication strategy.

In considering whether the public can be influenced to take a specific action during a disaster or crisis, there would be benefit to looking at research on how terrorists use communication techniques to influence the public and get them involved in a cause. One book in particular, *Inside Terrorism*, by Bruce Hoffman (2006), addresses this specifically. Hoffman discusses how terrorists began to communicate about suicide terrorism as a normal activity for young people, and then successfully shifted the societal view of it to acceptable, even heroic, to gain more recruits (Hoffman, 2006, pp. 145–154). Further review of materials on terrorism communication techniques may help provide insight on how to better use messages and emotional arguments to engage the public in a disaster/crisis preparedness and response situation, shifting society's view of their role in these efforts from simply recommended to a critical individual responsibility.

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