



**Calhoun: The NPS Institutional Archive**

---

Theses and Dissertations

Thesis Collection

---

2012-12

**Preparing minority populations for emergencies:  
connecting to build a more resilient community**

Miller, Paul L.

Monterey, California. Naval Postgraduate School

---

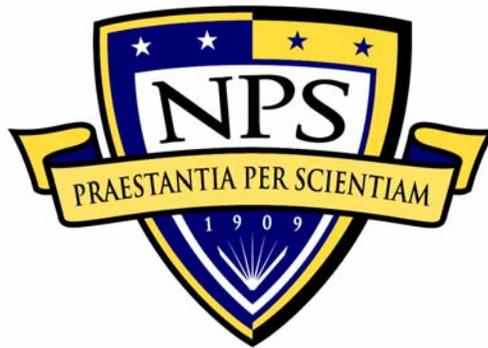
<http://hdl.handle.net/10945/27871>



Calhoun is a project of the Dudley Knox Library at NPS, furthering the precepts and goals of open government and government transparency. All information contained herein has been approved for release by the NPS Public Affairs Officer.

**Dudley Knox Library / Naval Postgraduate School  
411 Dyer Road / 1 University Circle  
Monterey, California USA 93943**

<http://www.nps.edu/library>



**NAVAL  
POSTGRADUATE  
SCHOOL**

**MONTEREY, CALIFORNIA**

**THESIS**

**PREPARING MINORITY POPULATIONS FOR  
EMERGENCIES: CONNECTING TO BUILD A MORE  
RESILIENT COMMUNITY**

by

Paul L. Miller

Thesis Advisor:

John Rollins, Esquire

Second Reader:

Danny O. Crew

**Approved for public release; distribution is unlimited**

THIS PAGE INTENTIONALLY LEFT BLANK

<b>REPORT DOCUMENTATION PAGE</b>			<i>Form Approved OMB No. 0704-0188</i>
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington DC 20503.			
<b>1. AGENCY USE ONLY (Leave blank)</b>	<b>2. REPORT DATE</b> December 2012	<b>3. REPORT TYPE AND DATES COVERED</b> Master's Thesis	
<b>4. TITLE AND SUBTITLE</b> PREPARING MINORITY POPULATIONS FOR EMERGENCIES: CONNECTING TO BUILD A MORE RESILIENT COMMUNITY		<b>5. FUNDING NUMBERS</b>	
<b>6. AUTHOR(S)</b> Paul L. Miller		<b>8. PERFORMING ORGANIZATION REPORT NUMBER</b>	
<b>7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)</b> Naval Postgraduate School Monterey, CA 93943-5000		<b>10. SPONSORING/MONITORING AGENCY REPORT NUMBER</b>	
<b>9. SPONSORING /MONITORING AGENCY NAME(S) AND ADDRESS(ES)</b> N/A		<b>11. SUPPLEMENTARY NOTES</b> The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government. IRB Protocol number ___N/A___.	
<b>12a. DISTRIBUTION / AVAILABILITY STATEMENT</b> Approved for public release; distribution is unlimited		<b>12b. DISTRIBUTION CODE</b> A	
<b>13. ABSTRACT (maximum 200 words)</b> Disagreement continues over events that resulted from the country's largest and most controversial natural disaster, Hurricane Katrina. Casualties due to poor evacuation procedures and inconsistent responses in search and rescue have been examined in the media and academia. Finger pointing trumps constructive discussion. Government officials sought to place responsibility at the feet of many including the victims. Likewise, others place blame on an ineffective government process that excludes people of color. Are government authorities really reaching out to minorities to bridge the gap, or are lapses in communication efforts systemic of a larger problem? Shared experiences resulting from long-standing discrimination toward minority populations, particularly those of African descent, have historically affected their perception of government and its concern for their well-being. To quell this perception and add value to the emergency preparedness doctrine, a community-based approach emphasizing personal responsibility is most effective in bridging the trust gap and building resiliency, which will necessitate change in narratives that create the story lines of minority communities to promote social force change. The use of "positioning theory" variables will enable this change in both individual behavior and actions, and positively impact the next generation's ability to be prepared for disaster.			
<b>14. SUBJECT TERMS</b> Disaster, Minorities, Preparedness, Resiliency			<b>15. NUMBER OF PAGES</b> 143
			<b>16. PRICE CODE</b>
<b>17. SECURITY CLASSIFICATION OF REPORT</b> Unclassified	<b>18. SECURITY CLASSIFICATION OF THIS PAGE</b> Unclassified	<b>19. SECURITY CLASSIFICATION OF ABSTRACT</b> Unclassified	<b>20. LIMITATION OF ABSTRACT</b> UU

THIS PAGE INTENTIONALLY LEFT BLANK

**Approved for public release; distribution is unlimited**

**PREPARING MINORITY POPULATIONS FOR EMERGENCIES:  
CONNECTING TO BUILD A MORE RESILIENT COMMUNITY**

Paul L. Miller  
Deputy Chief of Police, City of Miami Gardens  
Police Department, Miami Gardens, Florida  
B.A., Barry University, 2005

Submitted in partial fulfillment of the  
requirements for the degree of

**MASTER OF ARTS IN SECURITY STUDIES  
(HOMELAND SECURITY AND DEFENSE)**

from the

**NAVAL POSTGRADUATE SCHOOL  
December 2012**

Author: Paul L. Miller

Approved by: John Rollins, Esquire  
Thesis Advisor

Dr. Danny O. Crew  
Second Reader

Harold A. Trinkunas, PhD  
Chair, Department of National Security Affairs

THIS PAGE INTENTIONALLY LEFT BLANK

## **ABSTRACT**

Disagreement continues over events that resulted from the country's largest and most controversial natural disaster, Hurricane Katrina. Casualties due to poor evacuation procedures and inconsistent responses in search and rescue have been examined in the media and academia. Finger pointing trumps constructive discussion. Government officials sought to place responsibility at the feet of many including the victims. Likewise, others place blame on an ineffective government process that excludes people of color. Are government authorities really reaching out to minorities to bridge the gap, or are lapses in communication efforts systemic of a larger problem? Shared experiences resulting from long-standing discrimination toward minority populations, particularly those of African descent, have historically affected their perception of government and its concern for their well-being. To quell this perception and add value to the emergency preparedness doctrine, a community-based approach emphasizing personal responsibility is most effective in bridging the trust gap and building resiliency, which will necessitate change in narratives that create the story lines of minority communities to promote social force change. The use of "positioning theory" variables will enable this change in both individual behavior and actions, and positively impact the next generation's ability to be prepared for disaster.

THIS PAGE INTENTIONALLY LEFT BLANK

# TABLE OF CONTENTS

<b>I.</b>	<b>INTRODUCTION.....</b>	<b>1</b>
<b>A.</b>	<b>A PROBLEM SELDOM ACKNOWLEDGED .....</b>	<b>1</b>
<b>B.</b>	<b>THE STARTING POINT .....</b>	<b>6</b>
<b>C.</b>	<b>AN ARGUMENT FOR CHANGE .....</b>	<b>12</b>
<b>D.</b>	<b>EXPECTED OUTCOMES .....</b>	<b>16</b>
<b>II.</b>	<b>LITERATURE REVIEW .....</b>	<b>19</b>
<b>A.</b>	<b>INTRODUCTION TO LITERATURE REVIEW.....</b>	<b>19</b>
<b>B.</b>	<b>BEHIND THE PROBLEM: A HISTORY OF MINORITY COMMUNITIES AND DISASTER.....</b>	<b>19</b>
<b>C.</b>	<b>COMMUNITY RESILIENCY: A TOOL TO REDUCE VULNERABILITY.....</b>	<b>26</b>
<b>D.</b>	<b>MENDING THE PAST AND CREATING RESILIENCY IN MINORITY COMMUNITIES .....</b>	<b>29</b>
<b>E.</b>	<b>GRASSROOTS APPROACH TO DISASTER PLANNING .....</b>	<b>33</b>
<b>F.</b>	<b>CONCLUSION .....</b>	<b>34</b>
<b>III.</b>	<b>HURRICANE KATRINA—ONE STORM, MANY PERCEIVED INEQUALITIES, WHY? .....</b>	<b>35</b>
<b>A.</b>	<b>THE STORM IS COMING .....</b>	<b>35</b>
<b>B.</b>	<b>PAST EVACUATION, IS EVERYTHING EQUAL?.....</b>	<b>39</b>
<b>C.</b>	<b>AN OPPOSING VIEW.....</b>	<b>42</b>
<b>D.</b>	<b>BLACK, WHITE AND OTHERS .....</b>	<b>52</b>
<b>IV.</b>	<b>CASE STUDIES.....</b>	<b>59</b>
<b>A.</b>	<b>CASE STUDY: EMERGENCY PREPAREDNESS DEMONSTRATION PROJECT.....</b>	<b>60</b>
<b>1.</b>	<b>Site Selection.....</b>	<b>62</b>
<b>2.</b>	<b>The Plan.....</b>	<b>66</b>
<b>B.</b>	<b>GRASS ROOTS COMMUNICATION PROJECT: OBSERVATIONS AND FINDINGS .....</b>	<b>69</b>
<b>1.</b>	<b>Outcomes .....</b>	<b>80</b>
<b>2.</b>	<b>Barriers to Implementation of a Grassroots Risk Communication System.....</b>	<b>82</b>
<b>C.</b>	<b>CONCLUSIONS .....</b>	<b>82</b>
<b>V.</b>	<b>RECOMMENDATIONS.....</b>	<b>85</b>
<b>A.</b>	<b>POSITIONING THEORY .....</b>	<b>87</b>
<b>1.</b>	<b>Positions .....</b>	<b>89</b>
<b>2.</b>	<b>Social Force.....</b>	<b>89</b>
<b>3.</b>	<b>Story Lines.....</b>	<b>90</b>
<b>B.</b>	<b>STRATEGY.....</b>	<b>92</b>
<b>1.</b>	<b>Changing An Individual’s Position .....</b>	<b>92</b>
<b>2.</b>	<b>Building the Future Through Children .....</b>	<b>96</b>

<i>a.</i>	<i>Starting in the Schools</i> .....	97
<i>b.</i>	<i>Using Technology to Reinforce School Lessons</i> .....	99
<b>VI.</b>	<b>CONCLUSION</b> .....	<b>107</b>
	<b>LIST OF REFERENCES</b> .....	<b>111</b>
	<b>INITIAL DISTRIBUTION LIST</b> .....	<b>123</b>

## LIST OF FIGURES

Figure 1.	Cycles of Disaster .....	3
Figure 2.	The Whole Problem .....	10
Figure 3.	Kulig’s Community Resiliency Model .....	14
Figure 4.	Sociocultural Framework for Intergroup Relations .....	47
Figure 5.	An Unstable Information Environment .....	75
Figure 6.	A Stable Information Environment.....	77
Figure 7.	Grassroots Communications System Principles .....	78
Figure 8.	Examples of Grassroots Organizations Serving Minority Populations .....	79
Figure 9.	Positioning Triad.....	88
Figure 10.	Pre-Disaster Communication Flow.....	95
Figure 11.	What Apps Are People Using? .....	100
Figure 12.	Participation in Media Activity by Race Children Ages 0–5 .....	101
Figure 13.	Total Media Exposure by Race.....	102
Figure 14.	Number of Cellular Phone Applications Downloaded .....	103

THIS PAGE INTENTIONALLY LEFT BLANK

## LIST OF TABLES

Table 1.	Perceived Racialization of Hurricane Katrina .....	49
Table 2.	Emotional Response to Hurricane Katrina by Race .....	50
Table 3.	Item Mean for Perceived Racism in Katrina Related Events .....	51
Table 4.	Cities Selected to Participate in EPD Project .....	63
Table 5.	Most Active Participants on the Emergency Planning Team .....	64
Table 6.	Promising Practices that Extend the Network of Allies.....	66
Table 7.	Thematic Analysis of Focus Group .....	72
Table 8.	Effective Ways for Government to Enhance Pre-Disaster Communication....	80

THIS PAGE INTENTIONALLY LEFT BLANK

## LIST OF PICTURES

Picture 1.	“Tossed Together by Crisis” .....	4
Picture 2.	Blowing the Poydras Levee in 1927 .....	21
Picture 3.	Displaced Persons from the 1927 Levee Breach .....	22
Picture 4.	“Man Looting” .....	55
Picture 5.	“Finding Food” .....	56

THIS PAGE INTENTIONALLY LEFT BLANK

## LIST OF ACRONYMS AND ABBREVIATIONS

AP	Associated Press
CERT	Community Emergency Response Team
EJ	Environmental Justice
EM	Emergency Management
EPD	Emergency Preparedness Demonstration
FBO	Faith Based Organizations
FEMA	Federal Emergency Management Agency
GOW	Grassroots Outreach Worker
GRC Project	Grassroots Risk Communication Project
MSU SCHP	Morgan State University's School of Community Health and Policy
NGO	Non-Government Organization
NIMS	National Incident Management System
NRP	National Response Plan
QHSR	Quadrennial Homeland Security Review
UNC	University of North Carolina

THIS PAGE INTENTIONALLY LEFT BLANK

## ACKNOWLEDGMENTS

I would like to thank my father, Stephen Miller Jr., for being my inspiration for not only entering this program, but for instilling character and integrity in my upbringing that has spanned my professional career. During our fourth In-Residence, my father collapsed unexpectedly, which necessitated my return to Florida immediately. Upon my return, he died within the resulting 12 hours, which brought untold grief to my family, and especially his wife of 62 years and my mother, Vivian. It is the respect, honor and love of my mother and father that kept me engaged in this process and never allowed me to falter. A lifelong educator, 'I am sure my father is aware of this accomplishment and will be with me on the day of our classes' graduation.

During this entire process, I have had the support of my family, friends, co-workers, and administration. My daughter Samantha has kept me encouraged and supported me in this effort despite being worlds away in Japan and giving birth to my grandson Jason Michael. I love you both. To everyone who has accompanied me through this journey, I want to say thank you for being a part of this process and holding a special place for me in your day.

To my thesis advisor John Rollins and second reader Dr. Danny O. Crew, I would like to thank you for the constructive comments you have provided during this process. Your confidence in me to craft a well-researched and written thesis was never questioned. At every turn, you were responsive to my questions and provided feedback in a manner that encouraged learning while keeping my focus. My City Manager, Dr. Crew, allowed me the time to focus on not only this project but also the course of study as a whole. His commitment to higher education for all employees is a quality that all administrators should emulate.

I would be remiss if I did not thank the entire 1103-1104 Cohort. It is because of you that I will be a graduate in December. Your confidence in petitioning the staff to allow me to continue in this cohort after my father's death was such a heartfelt and meaningful display of professionalism and compassion, I will never forget it.

Lastly, I would like to thank my wife Renee for her confidence in me, never allowing me to get frustrated and for always being my biggest advocate. Whether late night proofreading or those many weeks alone while I was in IR, Renee was supportive and never placed additional burdens on me. For this, I love you and express my unwavering commitment to you and our future.

## **I. INTRODUCTION**

### **A. A PROBLEM SELDOM ACKNOWLEDGED**

When evaluating responses to disasters in the United States, the focus on community resiliency is fast becoming an emerging concept. A nationwide concept based on the premise that communities ready for disaster will recover faster and face less impact is growing significantly and is a trending movement in emergency management. Unresolved, however, is how to build that resiliency in communities that lack infrastructure, have an inherent distrust of government, or simply will not or cannot prepare for disaster. These communities have normally consisted of minority and lower income communities that have socioeconomic challenges typically predating natural or manmade emergency situations.

In considering the reasons that lead to these conditions, it is necessary to understand that human nature, not intellect, is a significant part of the problem. Many underpinnings of the problem do exist; however, proper and relevant communication may be the key to breaking down imaginary social barriers that lead to success in developing a comprehensive plan for equality in disaster preparedness and response issues.

Numerous scholars, politicians, and research studies, as well as those immediately affected by Hurricane Katrina for example, disagree as to the exact reasons, for or the right answers as to what happened during the country's largest natural disaster. The casualties that resulted from poor evacuation procedures and the inconsistent response in search and rescue have been presented across all types of media. Amid the devastation, millions of Americans sat transfixed in front their televisions, watching the gruesome pictures emerging from the tragic aftermath of Hurricane Katrina. They saw people dead or dying. They saw many clinging courageously to life on the roofs of their flooded homes, praying someone would rescue them, while others desperately wading through disease-infested water with nothing but the clothes on their backs, seeking refuge wherever they could find it. Viewers saw thousands of families, predominantly people of color, trapped in the squalor of the New Orleans Superdome. As they watched in

astonishment, many Americans asked: How did this tragedy happen? Why did it happen? Who or what is responsible? Moreover, how do we make sure it 'does not happen again?'<sup>1</sup>

Finger pointing has replaced constructive discussion, and those looking to place blame have done so both directly and indirectly. Government officials have looked to place responsibility at the feet of many including the victims themselves, while those most affected have placed the blame on an ineffective government process that does not care about people, especially the poor and those of color. In April 2006, the Joint Center for Political and Economic Studies, one of the nation's premier think tanks on issues of concern to African-Americans and other communities of color, held a standing room only forum in Washington, DC entitled, "Never Again: Themes from a Forum on Disaster Preparedness and Post-Katrina Reconstruction" in which public officials, scholars, and community advocates discussed ways in which to prevent a repeat of the aftermath of Hurricanes Katrina and Rita. They identified a number of obstacles to progress, including the desire of most people to "play the blame game," and "dealing with the same roadblocks" any time efforts are made to prepare more effectively for disasters. A series of lessons learned that emerged from the forum including a change in the role of public leadership, an emphasis on preparedness, changes in the disaster alert system, preserving the culture of the community, and a "change of heart" in protecting what is most vulnerable.<sup>2</sup>

The issue of a lack of preparedness and response in minority communities pre-dates the concerns and issues associated with individual and government preparedness efforts relating to Hurricane Katrina and centers on what must be done to change cultural perspective and community action to avoid these circumstances. Due to a number of previous disasters (Vanport, Oregon 1948, New Orleans 1927, etc.), history has shown that minority communities have a severe distrust of government and oftentimes lack the resources to prepare adequately and/or evacuate in an emergency.

---

<sup>1</sup> Michael R. Wenger, "No More Katrinas: How Reducing Disparities Can Promote Disaster Preparedness," *Joint Center for Political and Economic Studies*, 2008, 1-18.

<sup>2</sup> Proceedings of this forum were published and are available on the Joint Center website. <http://www.jointcenter.org>.

- Literature from the past 30 years strongly indicate that racial/ethnic minorities suffer disproportionately at each phase of an emergency



Figure 1. Cycles of Disaster<sup>3</sup>

This reoccurring condition raises the question of if those in the emergency management field have the capacity to understand the magnitude of the socioeconomic issues facing these communities. If the emergency management field fails to seek an understanding of the complexity of these challenges, the problems will remain unresolved and may potentially surface negatively in event after event in the form of casualties and disruption in quality of life issues. The beginning of the solution is determining why the conditions in the cycle of disaster occur and prevent them from reoccurring by taking positive steps to acknowledge that one emergency management manual does not include the specific needs of these communities in times of disaster. The basic understanding of a problem is most often the first step to finding a solution. Emergency practitioners must realize that there is not a one-size-fits all method of handling this problem and must take the necessary steps to design a program that fits those needing service.

The key steps that will support the emergency management community are dialogue, active listening, being inclusive, and learning from the past. The beginning point is dialogue. That simple form of communication in which questions are asked and answered, and when service is formulated on what is really best, not what is thought to be

---

<sup>3</sup> Dennis P. Andrulis, Nadia J. Siddiqui, and Jenna L. Gantner, "Preparing Racially and Ethnically Diverse Communities for Public Health Emergencies," *Health Affairs* 26, no. 5 (2007): 1269–1279.

best. Are government authorities really reaching out to minority communities to bridge the gap, or are the lapses in communication efforts symbolic as this Pulitzer Prize winning image captured after Katrina?



Louis Jones, eighty-one, right, and Catherine McZeal, sixty-two, left, help each other walk down flooded Poydras Street as they went to the Superdome on Thursday, September 1, 2005, days after Hurricane Katrina flooded New Orleans. In the background and appropriately out of focus are National Guard Troops seemingly unwilling to help.

Picture 1. “Tossed Together by Crisis”<sup>4</sup>

---

<sup>4</sup> Michael Ainsworth, *Dallas Morning News*, 2005.

Listening should also be a primary action and method of gathering information for first responders. Steps should be taken at all levels to incorporate community participation in action plans and preparation to effectuate change and enhance communications. By doing so, officials can achieve the crucial buy in by the stakeholders who will invariably criticize and chastise government response in emergencies when they are not part of the process, and in particular, the solution.

A possible solution may be for those in charge to meet those affected half way. Dialogue and active listening can pave the way for a deeper understanding of the root causes of the problem and create solutions to overcoming the obstacles that have previously been present. The hostility and distrust present in major incidents is destructive to a community and what a few hours can cause may take many years to fix. Low-income people and people of color, largely because they feel that decision makers have previously ignored their interests, are reluctant to trust instructions from such decision makers on how to respond to an emergency situation.<sup>5</sup>

By taking the steps to be inclusive and looking to the past to resolve the issues of the future, success can be achieved in overcoming bias that can lead to a destructive path and scar a community not only physically but also mentally and emotionally. Disaster planning largely has been the province of professional responders, public officials, and private sector leaders. They have not considered the unique needs of the most vulnerable, because these planners are not themselves aware of these needs, do not fully understand them, or simply do not consider them sufficiently important. People who live with these needs on a daily basis, clergy and other community leaders who serve them, public officials who represent them, and others who understand the situations of the least advantaged among us and are advocates for their needs, must be an integral part of the team developing emergency response plans. Only then will these plans fully and fairly reflect these needs of the community while at the same time create a level of ownership of the plan.<sup>6</sup>

---

<sup>5</sup> Wenger, “No More Katrinas: How Reducing Disparities Can Promote Disaster Preparedness,” 1–18.

<sup>6</sup> Ibid.

## B. THE STARTING POINT

George Bush doesn't care about black people<sup>7</sup>

This brief but powerful sentence resonated in the African-American community and brought shock and disbelief to others. Among the few not shocked were scholars and activists in the field of environmental justice (EJ) who observed the disturbing images from Hurricane Katrina splashing across television screens. EJ is defined as the fair treatment and meaningful involvement of all people regardless of race, color, sex, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations, and policies.<sup>8</sup> Researchers, who study chronic risk, generally find that lower-income minority communities, like those of New Orleans' Lower Ninth Ward, are disproportionately exposed to hazards and other disamenities.<sup>9</sup> As a result of these conditions, the primary issue addressed in this paper will focus on "Preparing Minority Populations for Emergencies: Connecting to Build a More Resilient Community."

Shared experiences resulting from long-standing discrimination and racism toward people of African descent over the past centuries have affected their perception of government integrity and concern for their well-being in their often-segregated communities in the Deep South. Their racial identity has signified their in-group solidarity and empowerment and is essentially important for survival in a hazardous environment, such as occurs in natural disasters,<sup>10</sup> which is thought to be caused by the inequality of the EJ that has not reached into the areas of emergency management and preparedness. Vulnerability for minority residents exists to the degree that their communities and institutions are isolated from or at odds with the government

---

<sup>7</sup> Lisa de Moraes, "Kanye West's Torrent of Criticism, Live on NBC," *The Washington Post*, September 3, 2005, <http://www.washingtonpost.com/wp-dyn/content/article/2005/09/03/AR2005090300165.html>.

<sup>8</sup> Manuel Pastor, *In the Wake of the Storm: Environment, Disaster and Race After Katrina* (New York: The Russell Sage Foundation, 2006), 1–60.

<sup>9</sup> Pastor, *In the Wake of the Storm: Environment, Disaster and Race After Katrina*, 1–60.

<sup>10</sup> Amy L. Ai, Carol Plummer, Grace Heo, Catherine M. Lemieux, Cassandra E. Simon, Patricia Taylor, and Valire Carr Copeland, "Racial Identity-Related Differential Attributions of Inadequate Responses to Hurricane Katrina: A Social Identity Perspective," *Race and Social Problems* 3 (March 2011): 13–24.

organizations and agencies responsible for emergency planning and response. Conflicts between communities and governmental and non-governmental agencies, distrust of law enforcement and the justice system, and social and political isolation are among the barriers that impair the ability of some minority communities to withstand natural or manmade disasters.<sup>11</sup> Contributing to these vulnerabilities are factors, such as language, housing patterns, building construction, and cultural insensitivities, by the general public, as well as those servicing the needs of the affected community.<sup>12</sup> Trust issues among low-income populations are barriers to traditional risk communication systems and limit the effectiveness in reducing factors that lead to an unstable information environment.<sup>13</sup>

The EJ movement has advocated a broad definition of the environment as the place “where we live, work, and play,” and thus, considers not only the allocation of costs but also the distribution of benefits. Environmental inequities by race and income seem to be an established part of the American urban landscape, and in disasters, can create what might be termed as “acute risks” that, like the chronic risks targeted by EJ analysis, are often distributed in a way that reflects established divisions of power. This uneven distribution of risk may impose heavy and unfair costs on certain populations and seem to lead to an overall underinvestment in prevention and preparedness.<sup>14</sup>

The problems faced by minority communities are a complex set of issues that are compounded when placed together in the context of the “whole problem.” Conflict between minority communities and local agencies and governments, particularly involving law enforcement, restrict the lines of communication between vulnerable populations and those charged with providing emergency relief. Diminished social and resource capital for institutions serving minority populations extend to an institutional level and correlate between social capital, race and ethnicity. Agencies that serve

---

<sup>11</sup> Toby Moore, “Institutional Barriers to Resilience in Minority Communities,” *Institute for Homeland Security Solutions*, May 2010, 1–8.

<sup>12</sup> Xanthia James, Anita Hawkins, and Randy Rowel, “An Assessment of the Cultural Appropriateness of Emergency Preparedness Communication for Low Income Minorities,” *Journal of Homeland Security and Emergency Management* 4, no. 3, art. 13 (2007): 1–26.

<sup>13</sup> Randy Rowel et al., “A Guide to Enhance Grassroots Risk Communications Among Low-Income Populations,” *Health Promotion Practice* 13, no. 1 (July 2011): 124–132.

<sup>14</sup> Pastor, *In the Wake of the Storm: Environment, Disaster and Race After Katrina*, 1–60.

predominantly minority communities may lack the capacity of their better-funded counterparts, which creates an inherent conflict reinforcing the “haves” and “have-nots” philosophy. Isolation can be a source of conflict in these communities in which communication breaks down and the community remains in isolation due to these barriers. Lastly, poor linkages between levels of bureaucracy, as in cases of poor relationships between local and state government agencies, further the problem and can lead to an adversarial environment and slow response.<sup>15</sup>

These perceptions are not shared by all. For example, Wellington Boone, an African-American minister, commented that “the looting and trashing of property speaks to the basic character of the people.... who are doing this to themselves.”<sup>16</sup> This view was further reinforced in the media by the overwhelming number of reports of looting involving African-Americans and the cessation of air evacuations due to helicopters being shot at by residents in African-American communities.<sup>17</sup> These comments represent a segment of the population that continues to propagate the belief that minority communities are not worthy of assistance because of their own actions. These anecdotal examples, however, have not been quantified to actually enable a determination as to their validity or that the positive relief efforts in these communities are not appreciated or even that the negative behaviors are overwhelmingly pervasive.

Often, minority populations have an increased risk and vulnerability to natural disasters because of having settled where land is less expensive, and is consequentially, disproportionately vulnerable to flooding, and in some cases, poor construction. These groups also find it more difficult to prepare and recover from a disaster due to lower incomes, fewer savings, greater unemployment, less insurance, and less access to communication channels and information.<sup>18</sup> Barriers, such as financial constraints and

---

<sup>15</sup> Moore, “Institutional Barriers to Resilience in Minority Communities,” 1–8.

<sup>16</sup> Pamela Reed, “From the Freedman’s Bureau to FEMA: A Post-Katrina Historical, Journalistic and Literary Analysis,” *Journal of Black Studies* 37, no. 4 (March 2007): 555–567.

<sup>17</sup> Jason Rivera and DeMond Miller, “Continually Neglected: Situating Natural Disasters in the African American Experience,” *Journal of Black Studies* 37, no.4 (2007): 502–522.

<sup>18</sup> James, Hawkins, and Rowell, “An Assessment of the Cultural Appropriateness of Emergency Preparedness Communication for Low Income Minorities,” 1–26.

fear of crime and violence upon leaving one's property, are also important issues when addressing preparedness and evacuation in these communities.<sup>19</sup> Literature related to assessing the cultural sensitivity and appropriateness of risk communication materials and resources in the African-American community and other communities of color appears to be insufficient. A review of related literature found no assessments of the accessibility and readability of emergency preparedness materials for African-Americans, which is imperative to conducting an accurate assessment of the cultural appropriateness of written materials to ensure the proper message, is being relayed, and more importantly, understood.<sup>20</sup>

---

<sup>19</sup> Keith Elder et al., "African-Americans' Decisions Not to Evacuate New Orleans Before Hurricane Katrina: A Qualitative Study," *American Journal of Public Health* 97, no. S1 (2007): 5124–5129.

<sup>20</sup> James, Hawkins, and Rowell, "An Assessment of the Cultural Appropriateness of Emergency Preparedness Communication for Low Income Minorities," 1–26.

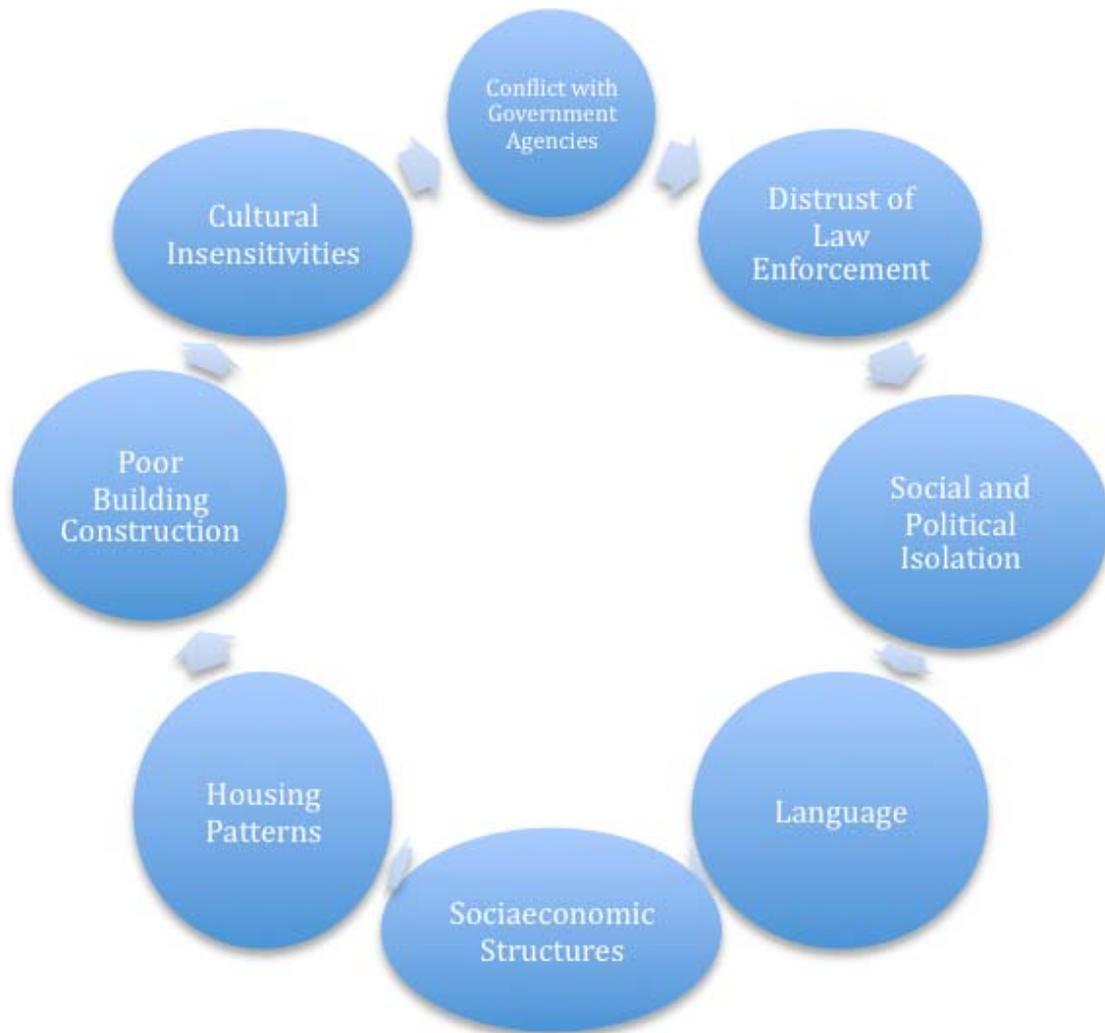


Figure 2. The Whole Problem

A prerequisite for community disaster preparedness according to Reilly Morse, “is to gather and record the basic history that created their community and the sequence of events that has led to health and environmental conflicts.”<sup>21</sup> Understanding this history recognizes the uniqueness of each community and can help to inform disaster-planning decisions, suggest coalitions of organizations and communities with common interests, and guide future development decisions so that the impacts of future disasters are both

---

<sup>21</sup> Riley Morse, “Environmental Justice Through the Eye of Hurricane Katrina,” *Joint Center for Political and Economic Studies* (2008): 7–9.

minimized and more equitably felt.<sup>22</sup> Connecting to minority communities and socially disadvantaged groups by assessing their needs and acknowledging their limitations and diversity will add consistency in planning solutions and aid in avoiding variances in plan implementation.<sup>23</sup> If community members are included in the planning process, they will be more aware of the dangers they will confront, will be more likely to respond to guidance consistent with the plan because they understand it better, will have greater trust in it, and will feel a level of ownership of the plan.<sup>24</sup> The process of achieving racial and ethnic justice is a pre-condition to establishing the level of trust and understanding to bridge local racial and ethnic divisions in communities to ensure an equitable response to future disasters.

Minority and disempowered populations are at great disadvantage in securing favorable policy decisions from elected and appointed official bodies through conventional processes because political power tends to be asymmetrical.<sup>25</sup> In contrast, faith-based communities are plentiful and have helped form African-American identity based on a sense of deep interconnectedness, and continue to be a meaningful, empowering, and resource-laden dimension of life that is a factor in the collective capacity of communities.<sup>26</sup> Black churches have been largely overlooked in public policy disaster management circles despite serving as crucial community-based partners. Current disaster and emergency response planning at the local, state and federal level illustrates how little understanding there is of the important role churches can play in responding to natural or man-made catastrophes, especially in communities of color. Helping the “least of these,” the most vulnerable populations, is seen as a biblical mandate and which can drive the role of first responder when responding to areas in need

---

<sup>22</sup> Wenger, “No More Katrinas: How Reducing Disparities Can Promote Disaster Preparedness,” 1–18.

<sup>23</sup> Rivera and Miller, “Continually Neglected: Situating Natural Disasters in the African American Experience,” 502–522.

<sup>24</sup> Wenger, “No More Katrinas: How Reducing Disparities Can Promote Disaster Preparedness,” 1–18.

<sup>25</sup> Morse, “Environmental Justice Through the Eye of Hurricane Katrina,” 7–9.

<sup>26</sup> Ai et al., “Racial Identity-Related Differential Attributions of Inadequate Responses to Hurricane Katrina: A Social Identity Perspective,” 13–24.

consisting of minority populations. Psychologists dealing with survivors of Hurricane Katrina acknowledged the level of religiosity and realized how vital the African-American churches' role can be in disaster preparedness and response.<sup>27</sup> The recruitment of religious organizations in the emergency management process will assist in enlisting members of the community through trust and rapport building.

The negativity surrounding emergency preparedness and response in African-American communities is intertwined with their ability to engage in a trusting relationship with officials and magnifies other issues, such as socioeconomics and cultural differences. This factor resonates in many members of these communities, and unless resolved, can be detrimental to any preparation or recovery effort. Utilizing the past to ensure that history does not repeat itself, as well as engaging assessment tools to gauge message delivery while enlisting community leaders in the process, can begin to diminish the adversarial feelings in these particular communities. President George W. Bush stated in 2005, "This poverty has roots in generations of segregation and discrimination that closed many doors of opportunity."<sup>28</sup> The factors that led to poor response, unreasonable expectations and certain failures can be addressed providing all involved participate.

Enlisting an all-inclusive approach to disaster preparation and response, will help ensure that a progressive and effective method of service delivery will be developed. Gaining the trust of those who are to be served should be the focal point of the discussion and creating a program that emphasizes a bottom-up approach would be the most meaningful. Increasing stakeholder input and connectivity will help build capacity in these communities and effectuate long-term change that is beneficial to all involved.

### **C. AN ARGUMENT FOR CHANGE**

According to Victoria Jennison, the formation of networks is one of the most commonly considered strategies for addressing collective human (community) need in

---

<sup>27</sup> Karyn Trader-Leigh, "Understanding the Role of African-American Churches and Clergy in Community Crisis Response," *Joint Center for Political and Economic Studies* (2008): 1–22.

<sup>28</sup> Reed, "From the Freedman's Bureau to FEMA: A Post-Katrina Historical, Journalistic and Literary Analysis," 555–567.

emergencies.<sup>29</sup> The actions taken by these networks are a common thread present in communities exhibiting well-defined preparedness models and an ability to provide immediate response to emergencies. These networks offer a community an opportunity to build social capital, which creates collective value and a commitment to work together towards a common goal. This social capital facilitates the flow of information, mutual aid, and collective action that form the basic foundation for community resiliency, which is defined as “the developmental characteristic of a community that functions as a protective factor against vulnerability in disaster and for sustainable recovery afterwards.”<sup>30</sup> These factors contribute to a better-prepared community, which, in turn, creates a level of resiliency that leads to less vulnerability for the stakeholders.

Community capacity building refers to the means by which a community can tap its own strengths and abilities rather than being overwhelmed by problems or feelings of powerlessness. Capacity building is not likely unless the community has the assets and the will to mobilize these assets.<sup>31</sup> The ability to build and maintain capacity results in community resiliency. Resiliency can be improved via the simple strategy of increasing community protective factors (ability to maintain resources) and decreasing risk factors before disaster strikes. Increasing resiliency can lessen the infrastructure damage communities sustain during disaster and shorten the post-event recovery period. This ability to protect and more quickly regain important elements of infrastructure can go a long way toward preventing many of the devastating economic, health and social problems common in the aftermath of disaster.<sup>32</sup>

As illustrated in Figure 3, Kulig’s Community Resiliency Model builds a level of trust and respect between the community and local government, and acts as a bonding agent for individuals within the community.<sup>33</sup> This concept is built on the premise that

---

<sup>29</sup> Victoria Jennison, “Networking to Improve Community Resiliency in Disaster Planning,” *International Journal of Public Policy* 3, no. 5/6 (November 2008): 338–353.

<sup>30</sup> Jennison, “Networking to Improve Community Resiliency in Disaster Planning,” 338–353.

<sup>31</sup> Naim Kapucu, “Planning for Disasters and Responding to Catastrophes: Error of the Third Type in Disaster Policy and Planning,” *International Journal of Public Policy* 3, no. 5/6 (2008): 313–327.

<sup>32</sup> Jennison, “Networking to Improve Community Resiliency in Disaster Planning,” 338–353.

<sup>33</sup> *Ibid.*

the community working together acts and does for the community as a whole, which results in action creating a more resilient community that can be utilized as a model both pre and post disaster.



Figure 3. Kulig's Community Resiliency Model

Initiation of these efforts to develop networks and increase resiliency in strict top-down methodology could fail to leverage resources effectively that could be useful and perhaps critical in any given emergency operation.<sup>34</sup> In Emergency Management (EM), little emphasis has been placed on capacity building including human resource development and reinvention efforts from a grassroots level. Hurricane Katrina exposed numerous deficiencies in the existing national framework for emergency management that included specific mistakes that delayed an appropriate federal response. Confusion

<sup>34</sup> Wendy A. Schafer et al., "Emergency Management Planning as Collaborative Community Work," *Journal of Homeland Security and Emergency Management* 5, no. 1 (2008): 1-19.

accompanied the implementation of the National Response Plan (NRP) by government officials, which resulted in key elements of the plan being executed late, ineffectively, or not at all,<sup>35</sup> which is problematic in that the NRP was created in 2004 as a national plan to respond to emergencies, such as natural disasters or terrorist attacks. EM capacity should be built from the ground up by utilizing neighborhood and community-based programs, which will increase individual and community responsibility for risk reduction and decrease reliance upon state and federal assistance that may not arrive for hours or days after an event.<sup>36</sup> To achieve this goal, inclusiveness of all group leaders must add consistency in coordinating prevention and response strategies and planning solutions while aiding in the avoidance of variances in plan implementation.<sup>37</sup> Research has shown that community members who are active participants in the planning process will be more aware of the dangers they will confront, will be more likely to respond to guidance consistent with the plan because they understand it better, will have greater trust in it, and will feel a level of ownership of the plan.<sup>38</sup>

Several key components are required for effective community mobilization to occur, which include creating a shared vision, a common understanding of the problem, leadership in establishing collaborative partnerships, increased community participation, and sustainability.<sup>39</sup> A critical element in both community capacity building and mobilization is the leadership required to bring the key community players together, to capture their imagination, and to energize them to action. Such leadership in community capacity building need not come from established hierarchies, but can emerge from the community itself. Several studies concluded that response operations by faith-based

---

<sup>35</sup> Department of Homeland Security, Federal Emergency Management Agency, *A Failure of Initiative*, 2007, 146.

<sup>36</sup> Sang Ok Choi, "Emergency Management: Implications from a Strategic Management Perspective," *Journal of Homeland Security and Emergency Management* 5, no. 1 (2008): 1–23.

<sup>37</sup> Rivera and Miller, "Continually Neglected: Situating Natural Disasters in the African American Experience," 502–522.

<sup>38</sup> Wenger, "No More Katrinas: How Reducing Disparities Can Promote Disaster Preparedness," 1–18.

<sup>39</sup> Kapucu, "Planning for Disasters and Responding to Catastrophes: Error of the Third Type in Disaster Policy and Planning," 313–327.

initiatives and volunteer organizations were much faster and effective compared to the federal government's responses in implementing new programs at the organizational and community level.<sup>40</sup>

#### **D. EXPECTED OUTCOMES**

It has been recognized that emergency management encompasses more than just the management of emergencies and many also argue that more must be done to prevent disasters and minimize their impacts.<sup>41</sup> Repeated threats of disaster without the occurrence of an actual event can cause numbness within a community, which results in underestimation and under-preparedness; hence, increased public exposure to imminent dangers, which in turn, may lead to additional loss of life and property, and a slower rate of recovery.<sup>42</sup> A more resilient, connected and engaged community has more social capital, i.e., more resources to help withstand or recover from difficult events.<sup>43</sup> Building capacity is the enhancement of resistance and resilience, which has been previously discussed.<sup>44</sup>

The research and analysis contained in this paper attempts to define the complexities that exist in minority communities and the factors hindering their ability to effectively deal with disasters. The concept of creating resilient communities is discussed, as well the potential to reduce vulnerabilities because of capacity building. Lastly, recommendations are offered that advocate a community-based approach that utilizes trusted stakeholders as the most effective method of bridging the trust gap and building resiliency in these communities to change the narrative that creates the story lines of those in minority communities. This change is presented using “positioning

---

<sup>40</sup> Kapucu, “Planning for Disasters and Responding to Catastrophes: Error of the Third Type in Disaster Policy and Planning,” 313–327.

<sup>41</sup> David McEntire, A Critique of Emergency Management Policy: Recommendations to Reduce Disaster Vulnerability, *International Journal of Public Policy* 3, no. 5/6 (2008): 302–310.

<sup>42</sup> Naim Kapucu, “Collaborative Emergency Management: Better Community Organising, Better Public Preparedness and Response,” *Disasters* 32, no. 2 (2008): 239–262.

<sup>43</sup> Jennison, “Networking to Improve Community Resiliency in Disaster Planning,” 338–353.

<sup>44</sup> McEntire, “A Critique of Emergency Management Policy: Recommendations to Reduce Disaster Vulnerability,” 302–310.

theory,” which enables a change in the behavior and actions of individuals. Additionally, by utilizing active children’s programs specifically developed for these communities, it is believed that not only the family structure can be positively affected but also the next generation will be more prepared.

THIS PAGE INTENTIONALLY LEFT BLANK

## **II. LITERATURE REVIEW**

### **A. INTRODUCTION TO LITERATURE REVIEW**

The effects of disasters strike hardest at communities that are ill prepared or equipped to handle the devastating circumstances and long-term aftermath. Minority communities have been considered to be especially at risk and multiple factors have been present that exacerbate the situation. Research has been conducted that indicates that resilient communities can recover easier and be more sustainable when facing these situations. By utilizing grassroots efforts and enhanced communication sets based on research and assessment, these negative long-term effects can be avoided and mitigated.

A review of the literature has been conducted to examine the relationship between the level of interoperability between groups and service providers and issues involving community preparedness in minority areas to determine what if any issues exist, and to explore potential solutions to effect a positive change in structure and action.

### **B. BEHIND THE PROBLEM: A HISTORY OF MINORITY COMMUNITIES AND DISASTER**

Post Civil War racial bias has been a part of the American landscape in many forms; inadequate protections, the rise of the Klu Klux Klan, and poor opportunities for work have had profound life altering implications in the African-American community. Jason Rivera and DeMond Miller describe in detail the impact of natural disasters on this segment of the population.<sup>45</sup> The authors identify a pattern of overt neglect and an ineffective and uncaring response by government officials in treatment of these communities. This research begins to lay the groundwork for understanding the fundamental foundation of distrust and skepticism that minority populations inherently have towards the government and its processes. Rivera and DeMond construct their argument with examples of three disasters spanning 78 years.

---

<sup>45</sup> Rivera and Miller, "Continually Neglected: Situating Natrual Disasters in the African American Experience," 502–522.

In 1927, a massive flood occurred in New Orleans wherein African-Americans were only given supplies and provisions after first being provided to white citizens. In isolated cases, even animals were rescued from devastated areas before any consideration was given to black settlers.<sup>46</sup> To save the city, a radical plan was developed where 39 tons of dynamite was used to blow up a levee and release the floodwaters into a marshland area inhabited largely by African-Americans. Evacuations were conducted; however, casualties and devastation still occurred. Compensation was promised to the survivors of the devastated area although records indicate that affected persons received on average \$274 if anything at all due to the legal process needed to complete claims.<sup>47</sup> In an ironic twist, loose knit allegations by several individuals, most notably Spike Lee, were made during Hurricane Katrina, that the levees surrounding the Ninth Ward were destroyed to save “other neighborhoods,” which were predominately white.<sup>48</sup>

---

<sup>46</sup> Rivera and Miller, “Continually Neglected: Situating Natural Disasters in the African American Experience,” 502–522.

<sup>47</sup> Jim Bradshaw, “Great Flood of 1927,” *KnowLA Encyclopedia of Louisiana*, 2011, <http://www.knowla.org>.

<sup>48</sup> Lisa Myers & the NBC Investigative Unit, “Were the Levees Bombed in New Orleans?,” *NBCNews.com*, December 7, 2005, [http://www.msnbc.msn.com/id/10370145/ns/nbcnightlynews-nbc\\_news\\_investigates/t/were-levees-bombed-new-orleans/](http://www.msnbc.msn.com/id/10370145/ns/nbcnightlynews-nbc_news_investigates/t/were-levees-bombed-new-orleans/)



Picture 2. Blowing the Poydras Levee in 1927<sup>49</sup>

---

<sup>49</sup> Nicholas Mirzoeff, "The Sea and the Land: Biopower and Visuality from Slavery to Katrina," *Culture, Theory and Critique* 50, no. 2 (2009): 289–305.



Picture 3. Displaced Persons from the 1927 Levee Breach<sup>50</sup>

Researchers point to errant communication as a poignant example of how the African-American community has continued to view the government in a distrustful and skeptical light.<sup>51</sup> An example occurred in the 1940s. The largest World War II federal housing project, Vanport, was constructed just outside the city limits of Portland, Oregon. Although segregation was not permitted under federal housing regulations, African-Americans were placed in housing units so poorly constructed that they were readily referred to as “crackerbox houses.” Situated in low-lying, reclaimed swamps, the units housed over 18,000 residents. On Sunday, May 30, 1948, residents were advised that they were not in imminent danger from an approaching storm and that the housing project was safe.<sup>52</sup> The next day the levees were breached, which caused irreparable damage to the project and the deaths of 15 residents.

---

<sup>50</sup> Mirzoeff, “The Sea and the Land: Biopower and Visuality from Slavery to Katrina,” 289–305.

<sup>51</sup> Rivera and Miller, “Continually Neglected: Situating Natural Disasters in the African American Experience,” 502–522.

<sup>52</sup> *Ibid.*

When discussing the effects of Hurricane Katrina, the authors bring parallels of the previously documented examples together to further illustrate the negative views perceived in the African-American community about disaster management. Discussion of racial separation, manifestation of biased imagery against African-Americans, and social indifference and neglect are the main points of discussion. As evidence of this bias and indifference, the authors cite U.S. Representative Richard Baker's comment about New Orleans public housing being "cleaned up" by God, as an indicator of the divide present in the management of incidents in minority communities.<sup>53</sup>

The authors make the claim that these examples represent "zones of sacrifice," in which a segmented population is left to fend for themselves to deal with disaster with little or no hope of returning home, which leaves internal displacement as the only option. Furthermore, in what is viewed as a tragic irony, the population is perceived to be under the care of a government that at times has caused their displacement, which marginalizes their ability to enjoy the dignity of being a citizen.<sup>54</sup> The examples presented in the piece did not present any contrasting views, however. The authors did not seek answers or opinions from those who may have viewed the situations differently or could provide an explanation of the circumstance. For example, the authors failed to discuss the white settlers also victimized by the 1927 flood, and were in fact, housed in the same location as African-American evacuees.<sup>55</sup> This type of one-sided view raises concern when utilizing the document in the research process. Through independent evaluation of their claims and a review of the author's notes and references, assertions appear to have validity. Without the opportunity to consider contrasting views, however, a researcher must consider other sources to determine if any of these issues could have been mitigated with "victim" participation or if issues were present on the part of the affected community that contributed to the perceived neglect or indifference.

---

<sup>53</sup> Rivera and Miller, "Continually Neglected: Situating Natural Disasters in the African American Experience," 502-522.

<sup>54</sup> Ibid.

<sup>55</sup> Bradshaw, "Great Flood of 1927."

Reilly Morse, a senior attorney with the Biloxi office of Mississippi Center for Justice, analyzed historic patterns of environmental racism found in New Orleans and coastal Mississippi and the impact these factors had during Hurricane Katrina. Morse also provided a summation of the EJ movement, which highlights its relevance to creating effective disaster preparedness planning for the future.

Morse noted that after emancipation and the end of the Civil War, a “classic southern” pattern was developed whereby Whites forced African-Americans to reside in undesirable areas subjected to frequent flooding, unhealthy air and noise levels, and unsanitary water and sewage conditions. These undesirable areas included swamplands at the edge of the city, as well as areas adjacent to railway and industrial sites, in addition to other projects, such as the construction on the five-mile-long Inner Harbor Navigation Canal (the Industrial Canal), which isolated the predominantly Black Lower Ninth Ward from the rest of the city.<sup>56</sup>

Prior to 1964, discrimination in housing and transportation also shaped settlement patterns in New Orleans, coastal Mississippi and throughout the south in general. Public housing was segregated and many suburban subdivisions explicitly excluded African-Americans through deed covenants. When industrial and chemical plants were first built along the Gulf Coast in the 1960s, they were often constructed close to predominantly Black residential areas in large part due to the affordability of land. The toxic pollution and poisonous wastes produced by these plants caused high rates of cancer within the adjacent African-American communities.<sup>57</sup>

When evaluating the effects of Hurricane Katrina, Morse asserts that minorities and the poor bore a disproportionate brunt of the storm’s impacts. Evidence is presented to show that the percentage of Katrina’s victims who were African-American, renters, poor, and/or unemployed were larger than the representation of these groups nationwide and that this pattern recurs in comparisons between heavily damaged and lightly damaged

---

<sup>56</sup> Morse, “Environmental Justice Through the Eye of Hurricane Katrina,” 1–38.

<sup>57</sup> Ibid.

areas in the affected region.<sup>58</sup> Racial disparities in storm damage stems from centuries of White control over the characteristics of land occupied by African-Americans that often consisted of low elevations with high exposure to back-swamp flooding and poor access to transportation. These neighborhoods were built around infrastructure, such as railways and industrial canals, which increased isolation of these communities. Isolation produced by federal housing and transportation policy was disastrous for the 30% of households (over 105,000 residents) in Orleans Parish's flooded areas who lacked access to a car. The most striking example of racial disparity in the New Orleans experience of Hurricane Katrina is the relative lack of flood damage in what is referred to as the "White Teapot," the modern-day geographic relic of colonial white plantations along the natural levee of the Mississippi River. What these neighborhoods shared were high elevations and low exposure to riverside nuisances, such as industrial sites, railroads, and wharves, or back-swamp nuisances, such as floods, mosquitoes, unpaved roads, and dumps.<sup>59</sup>

In contrast to Morse's assertion, Liam Downey wrote in 2007, that a minimal, but not overwhelming, correlation existed between hazards and environmental racial inequality. The actual results of Morse's study "contradict the residential segregation and income inequality hypotheses."<sup>60</sup> Downey continues, "This does not mean that residential segregation plays no role in producing environmental racial inequality. After all, environmental racial inequality could not exist if blacks, Hispanics and whites were equally represented in all neighborhoods." His study shows that environmental racial inequality exists in most large metropolitan areas, "but it's not universal and the explanation for it is more complex than many people think." Racial income inequality plays a role in shaping environmental racial inequality, although environmental racial inequality cannot exist without at least some level of residential segregation. He further

---

<sup>58</sup> Morse, "Environmental Justice Through the Eye of Hurricane Katrina," 1–38.

<sup>59</sup> Ibid.

<sup>60</sup> Liam Downey, "US Metropolitan-Area Variation in Environmental Inequality Outcomes," *Urban Studies* 44, no. 5–6 (May 2007): 953–977.

states that residential segregation does not necessarily produce environmental racial inequality, and may in some cases, place minorities further than Whites from environmental hazards.<sup>61</sup>

Morse's article provides an overview of the pre-existing conditions that led to the catastrophic events resulting from Hurricane Katrina. His assertions are that these conditions are based on race, which resulted in minority communities suffering a fate worse than those of white residents who reaped the safety and security of residing in locations less susceptible to the floods resulting from the storm. Downey acknowledges the inequality of segregation in environmental hazards but states that this is not the primary or all encompassing factor leading to negative outcomes in poor communities.

### **C. COMMUNITY RESILIENCY: A TOOL TO REDUCE VULNERABILITY**

When discussing the effects of disaster on communities and the response needed for resiliency, researchers lean toward the argument that resiliency begins with community involvement and action. Two articles by Naim Kapucu, and Victoria Jennison, point to creating community capacity as a means to decrease vulnerability and minimize the long-term effects of disaster. The articles are similar in many respects as to the use of community as a way to create action; however, subtle differences exist.

According to Kapucu, leadership in building community capacity comes in many forms and not necessarily from traditional hierarchical ones. He references research by Comfort and Haase that communication processes occur more effectively along a diagonal that crosses jurisdictional and sectoral lines than in a standard hierarchical format.<sup>62</sup> The disaster response network shows the potential for a variety of self-organizing system that includes a well-designed communications and information infrastructure that contributes to achieving that goal. Enabling communities to manage their own risk more efficiently and effectively needs to be established as a primary goal of disaster risk reduction. Their study indicates that more effective and faster responses in

---

<sup>61</sup> Downey, "US Metropolitan-Area Variation in Environmental Inequality Outcomes," 953–977.

<sup>62</sup> Kapucu, "Planning for Disasters and Responding to Catastrophes: Error of the Third Type in Disaster Policy and Planning," 313–324.

emergencies were received via volunteer organizations and faith based initiatives.<sup>63</sup> These entities are born out of the communities themselves, are more efficient than governmental response, share an inherent knowledge of the community's vulnerabilities, and encourage active participation and diverse involvement.

Kapucu further states that the NRP and National Incident Management System (NIMS) are designed to improve local response to disaster operations and contribute to an effective partnership between the federal system and local government.<sup>64</sup> NIMS was designed as a comprehensive, national approach to incident management applicable at all jurisdictional levels and across functional disciplines that enables agencies to work together to prevent, protect against, respond to, recover from, and mitigate the effects of incidents. What these tools do not consider however, are the dynamics of the disaster and the collective behavior of the responding agencies. Failure to know who is immediately responsible for the emergency creates disorganization is tied to the author's claim that emergency management must come from the bottom up, state and local action, to be effective. Kapucu asserts that emergency management is additionally enhanced by the building of community resiliency wherein a shared vision is created between the government and community stakeholders. This vision provides a greater understanding of the problem, partnerships become established, and increased community participation develops a culture of preparedness among individual citizens, which increases the effectiveness of local government.

Victoria Jennison agrees with Kapucu that community involvement is necessary in response to an emergency situation. Her emphasis is on the use of network formation as the main element in building a framework for community resiliency.<sup>65</sup> She indicates that preparation in the form of community mapping, demographic assessment for vulnerabilities and resources allocation of entities at a community, state and national level before a disaster makes responding to and recovering from an event less

---

<sup>63</sup> Kapucu, "Planning for Disasters and Responding to Catastrophes: Error of the Third Type in Disaster Policy and Planning," 313–324.

<sup>64</sup> Ibid.

<sup>65</sup> Jennison, "Networking to Improve Community Resiliency in Disaster Planning," 338–352.

devastating.<sup>66</sup> The ability to be constructive in this process of using networks must be utilized in a manner that prevents disparities and is free of conflict and political agendas. These conflicts, as well as funding and logistical issues, influence the politics that impact the resiliency of the affected society. When considering this network approach, Jennison states that the non-reliance of local resources to prepare for and respond to disasters is critical for U.S. disaster policy. The author believes that the local entity that becomes overwhelmed by the disaster itself, and the ensuing disconnect between it and other resources can be more devastating than the original event.<sup>67</sup> For those reasons, the author advocates for creating and maintaining an open network in which all agencies equally share in the responsibility, which will allow for a more comprehensive response. Reliance on these collaborative networks will, in Jennison's estimation, offer the benefit of organization, resource exchange, risk reduction and an improved disaster response paradigm.<sup>68</sup>

Kapucu's argument for more community involvement and less reliance on the federal government is compelling, and by way of example, has not been validated. Whereas Jennison's concept of network formation has been shown to have failed in many situations due to the number of pieces that must come together to create a finely tuned program. Jennison states that when all entities work constructively together much can be accomplished and community effectiveness is achieved. This situation, however, is complicated by the fact that many steps must fall into place to achieve these results in contrast to Kapucu's assertion that a community that exhibits strength, leadership and abilities can overcome a feeling of helplessness to become empowered to solve its own problems. Additional research examining Kapucu's claims should be evaluated, including the addition of empirical data that correlates community interaction with lessening vulnerabilities and resiliency building.

---

<sup>66</sup> Jennison, "Networking to Improve Community Resiliency in Disaster Planning," 338–352.

<sup>67</sup> Ibid.

<sup>68</sup> Ibid.

#### **D. MENDING THE PAST AND CREATING RESILIENCY IN MINORITY COMMUNITIES**

After reviewing what physical and psychological situations have been created in minority communities, as well as looking at the merits of citizen participation in creating resilient communities, merging these two areas and creating a solution for the problem now becomes the focus. In “Understanding the Role of African-American Churches and Clergy in Community Crisis Response” Dr. Karyn Trader-Leigh asserts that little has been done to incorporate religious organizations into the emergency planning and response process, particularly in communities of color. The author asserts that the Association of Black Psychologists provide African-Americans clergy members to address mental health issues and be cultural intermediaries not only for individuals but also for entire families, as well as in some cases entire congregations.<sup>69</sup> In addition, they should be “field tested” and a knowledgeable and culturally competent partner if only emergency response providers would use them.<sup>70</sup> However, the article used as the basis of this assertion by the association is broad and provides scant empirical research to support this claim. In the words of one reviewer, “the small number of bivariate cross tabulations and frequencies do not do justice to the longitudinal data at their disposal.”<sup>71</sup>

The author advocates for the use of the clergy and religious organizations to reduce the trauma and re-traumatization of victims and survivors of catastrophic events and emphasizes their use in response to Hurricane Katrina; however, she indicates this effort was never publicized.<sup>72</sup> To achieve these goals, Trader-Leigh makes several policy recommendations including the inclusion of churches and clergy in pre-event dialogue,

---

<sup>69</sup> Trader-Leigh, “Understanding the Role of African American Churches and Clergy in Community Crisis Response,” 1–22.

<sup>70</sup> Ibid.

<sup>71</sup> Sandra Barnes, “Book Review,” *Journal for the Scientific Study of Religion* 43, no. 4 (2004): 562–563.

<sup>72</sup> Trader-Leigh, “Understanding the Role of African American Churches and Clergy in Community Crisis Response,” 1–22.

funding these participating churches to ensure their ability to meet the needs of those in their communities, and mandate culturally competent disaster response planning as a standard of practice.<sup>73</sup>

In contrast to Trader-Leigh's assertions, Pamela Joshi states in her research that during Hurricanes Katrina and Rita, local churches, unaffiliated with any national voluntary organization were serving disenfranchised groups stranded in places that traditional voluntary organizations, such as the American Red Cross, did not enter. She emphasized that the faith-based organizations did receive attention due to the sheer scale and speed of their response efforts, which resulted in these organizations being recognized in federal policies as being capable of leveraging their positions to assist in preparedness and response.<sup>74</sup>

An issue needing further evaluation is the ability of these organizations to sustain themselves and their willingness to participate if no funding exists. The article addresses funding as one of the points of need; however, it acknowledges that at times, it is not available and the bureaucratic process to obtain funding is not always conducive to a timely award.

Trader-Leigh fails to address those in low income communities who do not utilize faith based organizations (FBOs) or would be reluctant to do so if the government was involved. The author provides no alternative to utilizing other community-based sources, such as Job Corps, Urban League or other non-profit organizations that could provide service in an emergency. For the purposes of addressing all areas of providing service and communication, these alternatives need to be evaluated through further research.

Xanthia James indicates the importance of several factors when determining the cultural appropriateness of risk communication materials. These factors include content, format, and method of distribution. The readability of documents, which is an indicator of

---

<sup>73</sup> Trader-Leigh, "Understanding the Role of African American Churches and Clergy in Community Crisis Response," 1-22.

<sup>74</sup> Pamela Joshi, "Faith-Based and Community Organizations' Participation in Emergency Preparedness and Response Activities," *Institute for Homeland Security Solutions, RTI International* (2010): 1-76.

how the material will be received, must be assessed to determine how effective it will be. According to the authors, the material needs to correspond to the literacy level of the target audience. Studies have shown this level to be at the 6th grade when trying to communicate with individuals of low literacy.<sup>75</sup> When reviewing literature related to emergency management in Maryland, studies found no assessments on the readability of documents provided to minority communities have been conducted. A separate study showing that 31% of individuals throughout counties in Maryland had not obtained high school diplomas would raise the question of individuals being supplied the information can actually be read and understood by the target audience, and if an assessment, would produce better results.<sup>76</sup>

Dissemination of the material is another important strategy that determines how efficiently messages will reach a targeted audience. The manner and method of dissemination must meet the demands of the audience and appeal to the normal ways in which they obtain information. Attempting to force the information through uncommonly used media can substantially affect the number of persons receiving the information. To achieve success in providing effective, assessment-based information; emergency managers need to determine the socially acceptable medium that the targeted audience utilizes in daily transactions.

In a study undertaken at the Morgan State University School of Public Health and Policy, results indicated that low income African-Americans were less likely to utilize the Internet as an information-seeking mechanism due to a lack of access to computers. Participants of this study reported using friends and relatives, television, and radio as primary information sources and that less than half (40%) of the participants had access to computers. This type of research needs to be further contemplated on a wide-ranging scope to assess the manner in which information is best provided when emergency managers prepare for information distribution.<sup>77</sup>

---

<sup>75</sup> James, Hawkins, and Rowell, "An Assessment of the Cultural Appropriateness of Emergency Preparedness Communication for Low Income Minorities," 1–26.

<sup>76</sup> Ibid.

<sup>77</sup> Ibid.

A review of Dr. Randy Rowel's article on risk communication and community engagement provides review of the need for understandable emergency preparedness information and a direct focus on who should provide it. According to Rowel, poverty may influence the low-income populations' perception of risk, trust in the system, and personal motivation to obtain information. These factors, in addition to various other contextual situations, usually result in minority populations experiencing serious consequences during and after an emergency situation. Rowel suggests that having an effective risk communication system designed to address the unique situation that exists in low-income communities can prevent the consequences.<sup>78</sup> The article promotes the use of grassroots organizations, such as faith-based, business, and community-based that have ongoing relationships with vulnerable populations. By utilizing this approach, public health and emergency management practitioners can communicate more effectively with vulnerable populations when built in a systematic manner at the pre-disaster phase that maximizes the power of the collaboration. In addition, at the imminent danger and response stage, grassroots organizations can communicate valid information and distribute materials more quickly and effectively, i.e., by providing information about the availability of resources to repair their homes or by identifying temporary and permanent housing sources.

Rowel discusses research he conducted in 2007, wherein a content analysis was conducted on emergency preparedness risk communication materials collected from the 26 county and municipal emergency management offices in Maryland to determine their appropriateness in reaching low-income African-Americans and Latinos. The results illustrated a significant limitation in the amount of culturally tailored information available to these populations, and the need for improvement in developing and disseminating culturally appropriate emergency risk communications. Failure to do so results in their marginalization in all phases of disaster.<sup>79</sup>

---

<sup>78</sup> Rowel et al., "A Guide to Enhance Grassroots Risk Communications Among Low-Income Populations," 124–132.

<sup>79</sup> Ibid.

## **E. GRASSROOTS APPROACH TO DISASTER PLANNING**

A grassroots risk communication system is a partnership that enables emergency preparedness officers to involve grassroots organizations and businesses serving low-income populations to participate in risk communication activities. Risk communication in poor and public housing neighborhoods require effective risk consultation with local stakeholders trusted by the populations they serve.

The Grassroots Risk Communication Project for Low-Income Populations (GRC Project) provides an overview of its survey findings from the GRC Project, which was supported by focus group thematic analysis. Participants' perceptions of Hurricane Katrina disaster relief efforts were primarily negative and emphasized poorly delivered disaster-related services due to race (36%) followed by mental health of hurricane survivors (35%), failure to evacuate poor people from New Orleans (31%), treatment of people by law enforcement after the hurricane (26%), people not being able to come back to New Orleans (26%), and physical health of hurricane survivors (21%). More than half (52%) of participants felt that both racism and classism were the primary reasons for the inadequate provision of emergency management services while 14% felt poor management contributed to the failure. The majority of focus group participants indicated that lack of money and poverty are factors that hindered Hurricane Katrina victims' ability to prepare and evacuate.<sup>80</sup>

After presenting this information that links the use of grass roots organizations to the successful communication of emergency material in minority communities, Rowel discusses the challenges of a grassroots program, such as sustainability and the interaction between the government and these organizations during the three phases of disaster. He then outlines how to implement the programs in the following chapters and provides examples of material that can be utilized.<sup>81</sup>

---

<sup>80</sup> Rowel et al., "A Guide to Enhance Grassroots Risk Communications Among Low-Income Populations," 124–132.

<sup>81</sup> Ibid.

In summary, Rowel makes the connection between local organizations, minority communities, and appropriateness of materials very clear. The missing component in his research is the actual development of material, which is readable and informative for the concerned low-income groups. This gap in the report is significant as the assessment and preparation of materials for distribution is as much a key component of the process as the local organizations communication process. In reviewing the implementation, the author should have included a chapter or synopsis evaluating printed material and its preparation and distribution, and thus, create the much-needed tie-in to his formal process.

## **F. CONCLUSION**

The information contained in this literature review examines the underlying and historical issues present in African-American communities with respect to emergency planning and response issues. These literary examples outline the origins of distrust and disconnect between service providers and the communities they are attempting to serve. The second portion explored the concept of resiliency and the research that demonstrates that community involvement at the lowest levels will result in positive outcomes in disaster situations. This “bottom-up” approach replaces traditional hierarchical forms when information and action is mandated by government sources.

The last component considered is combining the two concepts of distrust and resiliency to create a framework for working toward interconnectivity and a resilient community. By looking at methods of assessing material and its distribution, the foundation for creating an effective model for minority community resiliency and connection can be drawn.

### **III. HURRICANE KATRINA—ONE STORM, MANY PERCEIVED INEQUALITIES, WHY?**

They have been trying to find a way to get rid of us. They had to do it in the way that wouldn't—wouldn't be known that they were trying to do it. . . .

-Anonymous<sup>82</sup>

Considered by most to be the United States' largest and most costly natural disaster, Hurricane Katrina created as much of a storm in terms of uncovering perceived racial bias and inequities as it did with the massive floods that covered portions of New Orleans. Studies have indicated that the disparities in the treatment of minorities and low-income residents in evacuation planning, response and recovery are systematic of "business as usual" within the construct of emergency management. This chapter considers the aspects of both pre- and post-hurricane landfall and the perceptions that have led academics to investigate and research perceived racial bias in emergency management efforts. The discussion focuses on the actual abilities of minorities and low-income participants to evacuate, the distrust felt by the individuals needing service, opposing views that the perceived racism is "made up," and lastly, what developments in service and support have succeeded since the storm occurred.

#### **A. THE STORM IS COMING**

Several studies of Katrina evacuees have been conducted to determine the mindset of those affected. This research is important in evaluating what can be done differently to effectuate change and reach positive outcomes to change perceptions and consider factors, such as race and socioeconomics, as criteria in emergency management.

Many people have stated that they cannot understand how race has anything to do with a natural disaster. However, as they explain how the hurricane has nothing to do with race, they use language highly charged with racism, which demonstrates how race is very much a part of U.S. culture, while color-blind ideology allows discussion of race to

---

<sup>82</sup> Elder et al., "African-Americans' Decisions Not to Evacuate New Orleans Before Hurricane Katrina: A Qualitative Study," 1–8.

be hidden in covert language that appears rational instead of emotional.<sup>83</sup> One infamous example was former First Lady Barbara Bush's comment that people in the Astrodome "were underprivileged anyway, so this is working out well for them."<sup>84</sup>

The notion that implications and consequences of a disaster affect all members of a community equally perpetuates the idea that stratification by socioeconomic status and race does not have an effect on damage experienced from such disasters. Damage to homes, immediate physical injury, type of temporary housing, and ability to receive compensation through insurance and government assistance vary by socioeconomic status and affects those from lower socioeconomic status groups the most, which in the United States, has ties related to race.<sup>85</sup>

This United States operates on the idea that everyone has an equal chance and an equal opportunity to succeed in life. Sweeney argues that this cultural argument points to a lack of values and hard work as leading to poverty, rather than structural arguments that focus on unequal opportunities and access to resources.<sup>86</sup> Bonilla-Silva agrees, "Public response to Hurricane Katrina revealed reliance on the myth of meritocracy and color-blind ideology, where individuals are blamed for their circumstances, while structural inequalities are not taken into account."<sup>87</sup> Types of color blindness most often used to discuss race in relation to Hurricane Katrina include: 1) abstract liberalism, in which

---

<sup>83</sup> Barbara Perry, "'White Genocide': White Supremacists and the Politics of Reproduction," in *Home-Grown Hate: Gender and Organized Racism*, ed. Abby Ferber (London and New York: Routledge, 2001), 75–85, as cited in Kathryn A. Sweeney, "The Blame Game, Racialized Responses to Hurricane Katrina," *Du Bois Review* 3, no. 1 (2006): 161–174.

<sup>84</sup> New York Times, "Barbara Bush Calls Evacuees Better Off," September 7, 2005, 22.

<sup>85</sup> Frederick L. Bates et al., *Recovery, Change, and Development: A Longitudinal Study of the 1976 Guatemalan Earthquake* (Athens, GA: University of Georgia, 1982).

<sup>86</sup> Kathryn A. Sweeney, "The Blame Game, Racialized Responses to Hurricane Katrina," *Du Bois Review* 3, no. 1 (2006): 161–174.

<sup>87</sup> Eduardo Bonilla-Silva, "Racism without Racists: Color-Blind Racism and the Persistence of Racial Inequality in the United States," in "The Blame Game, Racialized Responses to Hurricane Katrina," ed. Kathryn A. Sweeney, *Du Bois Review* 3, no. 1 (2006): 161–174.

equality is believed in, but an individual's success comes from individual values and hard work; and 2) minimization of racism, under the assumption that everyone has the same opportunities.<sup>88</sup>

Research indicates that individuals very confident in being rescued were more likely not to evacuate. Results further indicate that not having an evacuation destination identified was the most influential factor regarding the likelihood of not making the choice to evacuate.<sup>89</sup> In his study of hurricane evacuees, Elder determined that a by-product of not having a destination identified or not having the resources (financial or transportation) to get there, was a significant issue facing African-American evacuees when interviewed.<sup>90</sup> This factor is further verified by research in the findings of a 2005 national survey of preparedness by Redlener et al., where it was reported that 25% to 30% of the U.S. population indicate an inability to comply with mandatory evacuation orders without some assistance.<sup>91</sup>

Additional issues were also identified by the anonymous participants in subtopics contained in the survey, such as Optimism About Outcome. One except from this topic stated "Course it's always been that way with us. I have stayed through many storms, even through Hurricane Betsy. But the storm would come through; we have our flood and get back on track."<sup>92</sup> In the subtopic, Religious Faith and Coping and Lack of Credibility, repeated themes also impacted their perception of the hurricane's severity.<sup>93</sup> Further

---

<sup>88</sup> Bonilla-Silva, "Racism without Racists: Color-Blind Racism and the Persistence of Racial Inequality in the United States," in "The Blame Game, Racialized Responses to Hurricane Katrina," 161–174.

<sup>89</sup> Daniel R. Petrolia and Danjoy Bhattacharjee, "Why Don't Coastal Residents Choose to Evacuate for Hurricanes," *Coastal Management* 38 (2010): 97–112.

<sup>90</sup> Elder et al., "African-Americans' Decisions Not to Evacuate New Orleans Before Hurricane Katrina: A Qualitative Study," 1–8.

<sup>91</sup> Irwin Redlener et al., *Follow-Up 2005: Where the American Public Stands on Terrorism and Preparedness after Hurricanes Katrina & Rita, Greater Confusion, Decreasing Confidence, and Public Divisions. A Follow-Up to the 2005 Annual Survey of the American Public by the National Center for Disaster Preparedness, Columbia University Mailman School of Public Health* (New York, NY: Columbia University Mailman School of Public Health, 2005).

<sup>92</sup> Elder et al., "African-Americans' Decisions Not to Evacuate New Orleans Before Hurricane Katrina: A Qualitative Study."

<sup>93</sup> Ibid.

comments focused on factors that emerged as barriers to evacuation, such as neighborhood crime and violence, which caused a perception of the need to stay behind to protect valuables, and the perception of transportation availability in an evacuation. According to one interviewee, “You could not trust the police to protect your stuff. They were stealing too.” Another participant stated, “They didn’t get buses into the neighborhoods. Buses stayed on the line. But in the other neighborhoods buses went into to pick up, the white neighborhoods.”<sup>94</sup> Another interview participant was even more specific in reference to timing by stating, “At the last minute the mayor said evacuate, but he didn’t bring no buses or nothing.”<sup>95</sup>

These factors begin the cycle of perception of how these evacuees were different and how race may have played a part in their actions and the perception of those entities that they should have looked to for service. Participants expressed that historically, state and local governments have tolerated obsolete drainage systems and levees bordering the lower Ninth Ward where most of the participants resided. These comments led to related comments on the government’s lack of concern for the poor, particularly minorities located closest to the levees.<sup>96</sup> This distrust coincides with a report that African-Americans have substantially less favorable views and confidence levels in the ability of the government to protect the area that they live in (29% for African-Americans, 51% for Whites, and 47% for Latinos) and have a greater feeling that their community received less than a fair share of money to prepare for future disasters (56% vs. 36% for Blacks versus Whites, and 34% for Latinos).<sup>97</sup>

The Elder report supports a study by Brodie et al. of Hurricane Katrina evacuees, which showed that a combination of poverty and perceptions of racism and inequities influenced African-Americans not to evacuate, even after reaching the stage of high

---

<sup>94</sup> Elder et al., “African-Americans’ Decisions Not to Evacuate New Orleans Before Hurricane Katrina: A Qualitative Study.”

<sup>95</sup> Ibid.

<sup>96</sup> Ibid.

<sup>97</sup> Redlener et al., *Snapshot 2005: Where the American Public Stands on Terrorism and Preparedness Four Years after September 11*.

threat perception.<sup>98</sup> This stance is quite troubling for a number of reasons including the belief that half of African-Americans in the United States are poor or near poor,<sup>99</sup> and hurricane activity is predicted to increase in the coming years in terms of the actual number of hurricanes;<sup>100</sup> and that the number of category 3 or higher severity events will rise.<sup>101</sup> In all disaster preparedness plans, federal, state, and local governments should emphasize clear and timely evacuation orders, needed resources and their allocation, decentralized voucher or cash distribution systems, and culturally sensitive logistic planning for facilitating the evacuation of minority, low-income, and underserved communities.<sup>102</sup>

## **B. PAST EVACUATION, IS EVERYTHING EQUAL?**

As V. O. Key has suggested, the South is the clearest U.S. example of government sanctioning of, and investment in, forms of racial inequality driven by an aristocratic and/or elite/corporate order. Slavery and the plantation system, post slavery agricultural peonage, the convict lease system; and emerging agribusinesses with their low-wage labor, and the globally driven industrial/retail sector, are examples of this

---

<sup>98</sup> Mollyann Brodie et al., “Experiences of Hurricane Katrina Evacuees in Houston Shelters: Implications for Future Planning,” in Keith Elder et al., “African-Americans’ Decisions Not to Evacuate New Orleans Before Hurricane Katrina: A Qualitative Study,” *American Journal of Public Health* 97, no. S1 (2007): 1–8.

<sup>99</sup> Marsha Lillie-Blanton, Osula Evadne Rushing, and Sonia Ruiz, “Key Facts: Race, Ethnicity and Medical Care, 2003,” in Keith Elder et al., “African-Americans’ Decisions Not to Evacuate New Orleans Before Hurricane Katrina: A Qualitative Study,” *American Journal of Public Health* 97, no. S1 (2007): 1–8.

<sup>100</sup> Phillip Klotzbach and William Gray, “Extended Range Forecast of Atlantic Seasonal Hurricane Activity and U.S. Landfall Strike Probability for 2006,” in Keith Elder et al., “African-Americans’ Decisions Not to Evacuate New Orleans Before Hurricane Katrina: A Qualitative Study,” *American Journal of Public Health* 97, no. S1 (2007): 1–8.

<sup>101</sup> P. Webster, G. Holland, J. Curry, and H. Chang, “Changes in Tropical Cyclone Number, Duration, and Intensity in a Warming Environment,” *Science*, 2005, in Keith Elder et al., “African-Americans’ Decisions Not to Evacuate New Orleans Before Hurricane Katrina: A Qualitative Study,” *American Journal of Public Health* 97, no. S1 (2007): 1–8.

<sup>102</sup> Elder et al., “African-Americans’ Decisions Not to Evacuate New Orleans Before Hurricane Katrina: A Qualitative Study,” 1–8.

social issue that has perpetually existed across the years.<sup>103</sup> The rhetoric surrounding the unevacuated “refugees” during Hurricane Katrina suggests an alien population that deserved no protection under American law.<sup>104</sup> This conversation further constructs evacuation compliance as a marker of good citizenship, and privileges the protection of evacuees’ empty homes over the care of people unable (and in some cases unwilling) to evacuate.<sup>105</sup>

Of those individuals and families not able to evacuate, were there inequalities? Did the government falter in its support of these cities? Many researchers have concluded that race and socioeconomic status played a large role in the recovery, and that in many respects, lessons have not been applied that could produce change in the future. With respect to the actual people affected, researchers have written about these disparities and commented on occurrences, such as “pictures of Black people waving flags as they waited days on their roof without food and water,” and of Whites “finding” food while Black people were “looting.” Sweeney argues that these are indicative of racial disparities in this country.<sup>106</sup> These indications by the media and the actual people affected in and of themselves portray dissimilarity in the treatment of minority victims. These outward portrayals by the media further the distrust amongst those needing to be served, who in many cases may have the greatest need. Distrust of authorities, among numerous other factors, appeared likely to have played a role in New Orleans residents’ reactions to evacuation warnings and public health authorities’ advice. Prior to Katrina,

---

<sup>103</sup> V. O. Key, Jr., *Southern Politics in State and Nation* (University Tennessee Press, 1984); Joel Williamson, *The Crucible of Race: Black-White Race Relations in the American South Since Emancipation* (Oxford University Press, 1984); Michael Goldfield, “The Color of Politics: Race and the Mainsprings of American Politics,” in *After Katrina: Racial Regimes and Human Development Barriers in the Gulf Coast Region*, ed. Jeffery S. Lows and Todd C. Shaw, *Project Muse*, 2009.

<sup>104</sup> Henry A. Giroux, “Reading Hurricane Katrina: Race, Class and Biopolitics of Disposability,” *College Literature* 33, no. 3 (2006): 171–196.

<sup>105</sup> Emily Rosenmann, “The Road Away from Home: Policy and Power in Post-Katrina New Orleans” (master’s thesis, University of British Columbia, 2011), 1–152.

<sup>106</sup> Sweeney, “The Blame Game, Racialized Responses to Hurricane Katrina,” 161–174.

72% of New Orleans residents were of minority race or ethnicity and minority groups in the United States have a long history of distrusting the medical and public health leadership.<sup>107</sup>

This distrust of authorities among New Orleans' impoverished residents in particular, is rooted in local history. In 1927, The Great Mississippi Flood was threatening to destroy New Orleans, including its crucial downtown regional financial institutions. To avert the threat, and in part to stabilize the financial markets, it was decided to perform a controlled break of the New Orleans levees, thereby selectively flooding poor areas and saving financial institutions.<sup>108</sup> This event lives on in the memories and oral history of the residents of the deliberately flooded areas.<sup>109</sup> The process of utilizing the past to ensure events of the future do not repeat themselves is evident in this example. Emergency planners should, therefore, be cognizant of the historical past and utilize this information to assist them in understanding the population they serve while ensuring the same types of issues do not manifest themselves either in reality or perception.

Given the importance of trust in disaster preparedness and communications, addressing existing distrust is critical to mounting effective responses in the future.<sup>110</sup> Each of these elements has specific implications for disaster planning and risk communication. The level of a community's distrust will be partially buffered based on the extent to which authorities display competency, fairness, empathy, honesty, and

---

<sup>107</sup> Kristina M. Cordasco et al., "They Blew the Levee: Distrust of Authorities Among Hurricane Katrina Evacuees," *Journal of Health Care for the Poor and Underserved* 18 (2007): 277–282.

<sup>108</sup> John M. Barry, "Rising Tide: the Great Mississippi Flood of 1927 and How It Changed America," in Kristina M. Cordasco et al., "They Blew the Levee: Distrust of Authorities Among Hurricane Katrina Evacuees," *Journal of Health Care for the Poor and Underserved* 18 (2007): 277–282.

<sup>109</sup> Douglas Brinkley, "The Great Deluge: Hurricane Katrina, New Orleans, and the Mississippi Gulf Coast," in Kristina M. Cordasco et al., "They Blew the Levee: Distrust of Authorities Among Hurricane Katrina Evacuees," *Journal of Health Care for the Poor and Underserved* 18 (2007): 277–282.

<sup>110</sup> S. C. Quinn, "Hurricane Katrina: A Social and Public Health Disaster," in Kristina M. Cordasco et al., "They Blew the Levee: Distrust of Authorities Among Hurricane Katrina Evacuees," *Journal of Health Care for the Poor and Underserved* 18 (2007): 277–282.

openness prior to a disaster.<sup>111</sup> The historical depth of fiduciary concerns highlights the necessity of improving trust now between public officials and vulnerable communities in which distrust may be long-standing and chronic.<sup>112</sup>

### C. AN OPPOSING VIEW

A truly deplorable aftermath of Katrina is the far left's attempts to stir up racial divisions and the news media's fanning of those flames . . . Do tornadoes in Kansas have a "racial dimension," a racial animus? Would the Washington Post ever dream up a headline for that? Apparently, America is so stacked with racism in the air that it's in the gale-force winds.<sup>113</sup>

Brian Bozell, President of the Media Research Center

One of the most striking phenomena to emerge in the aftermath of Hurricane Katrina has been a stark difference in perceptions of the role that racism has played in the disaster and recovery. For some, it is difficult to see events of Katrina "through any prism except the racial lens."<sup>114</sup> For others, claims about racism in the context of Katrina are "deplorable" acts of hatred mongering for political gain.<sup>115</sup>

By the end of 2006, scholarly analyses of the governments' failed responses to Katrina focused on issues identified by Congress and the White House: communications breakdowns, information gaps, lack of coordination across agencies, between levels of government, between government and the private sector, failure to initiate action, and management failures.<sup>116</sup> In the Katrina story, the puzzling condition, which was not

---

<sup>111</sup> Ricardo Wray et al., "Public Perceptions About Trust in Emergency Risk Communication: Qualitative Research Findings," in Kristina M. Cordasco et al., "They Blew the Levee: Distrust of Authorities Among Hurricane Katrina Evacuees," *Journal of Health Care for the Poor and Underserved* 18 (2007): 277–282.

<sup>112</sup> Cordasco et al., "They Blew the Levee: Distrust of Authorities Among Hurricane Katrina Evacuees," 277–282.

<sup>113</sup> Glenn Adams, Laurie T. O'Brien, and Jessica C. Nelson, "Perceptions of Racism in Hurricane Katrina: A Liberation Psychology Analysis," *Analyses of Social Issues and Policies* 6, no. 1 (2006): 215–235.

<sup>114</sup> A. Muhammad, "Is It Darfur Yet?," *BET*, September 2, 2005, <http://www.bet.com/Site+Management/Packages/askiablog1.htm?mb=1>.

<sup>115</sup> L. Brent Bozell, "Cheering on Racial Division," *Media Research Center*, September 7, 2005, <http://www.mrc.org/BozellColumns/newscolumn/2005/col20050907.asp>.

<sup>116</sup> Dwight Ink, "An Analysis of the House Select Committee and White House Reports on Hurricane Katrina," *Public Administration Review*, 2006.

demonstrated by government authorities, was the bureaucratic lack of initiative at all levels. The failure to step outside the rules and act to save lives and to secure those in dire need was a missing piece. This pattern is mysterious in light of evidence through literature that discretion, on balance, it is an asset rather than a problem in crisis situations.<sup>117</sup> One scholar (not in public administration) has suggested that in crisis situations, bureaucrats often summon the courage to step outside the rules if they receive signals from the top that “this must be done.” Very few such signals occurred during Katrina. No one sent the message to do what had to be done to save lives and reduce misery. “Those just below ... could not assume that their actions would be seen as ‘of course’ necessary.” To the contrary, many of the incidents described show just the opposite: leaders demonstrating in word and deed that nothing was more important than the rules, which left a widespread “default to literalness.”<sup>118</sup> This strict adherence to the rules was evident when small craft began massing on the edges of the flooded area. The Federal Emergency Management Agency (FEMA) refused to approve the volunteer rescue effort on the grounds that the situation was “unsafe... . ‘No s——,’ muttered a boat captain.” Members of the Florida Airboat Association repeatedly called FEMA to find out where to deploy. FEMA did not call back.<sup>119</sup> In another example of the rules hindering performance and where no modifications were considered, Andy Kopplin, chief of staff to the Louisiana governor, spent an entire day trying to get the Pentagon to release five helicopters sitting idle at Fort Polk. When he finally obtained the last required permission at 5:00 p.m., a major at the base told him that by sitting on the tarmac all day waiting for orders, the pilots had gone over their permitted flight time.<sup>120</sup>

---

<sup>117</sup> Camila Stivers, “So Poor and So Black: Hurricane Katrina, Public Administration and the Issue of Race,” *Public Administration Review* 67, no. 13 (2007): 48–56.

<sup>118</sup> Harvey Molotch, “Death on the Roof: Race and Bureaucratic Failure. Space and Culture,” in Stivers, “So Poor and So Black: Hurricane Katrina, Public Administration and the Issue of Race,” *Public Administration Review* 67, no. 13 (2007): 48–56.

<sup>119</sup> Jed Horne, “Breach of Faith: Hurricane Katrina and the Near Death of a Great American City,” 89, Stivers, “So Poor and So Black: Hurricane Katrina, Public Administration and the Issue of Race,” *Public Administration Review* 67, no. 13 (2007): 48–56.

<sup>120</sup> Christopher Cooper and Robert Block, “Disaster: Hurricane Katrina and the Failure of Homeland Security,” 173, in Stivers, “So Poor and So Black: Hurricane Katrina, Public Administration and the Issue of Race,” *Public Administration Review* 67, no. 13 (2007): 48–56.

The tendency for people from oppressed groups to perceive racism in society may occur not only because they apply relatively broad definitions of racism, but also because they have more knowledge about historically documented incidents of racism. Likewise, the tendency for people from dominant groups to perceive relatively little racism may occur not only because they apply a narrowed definition, but also because they are less aware of historically documented incidents.<sup>121</sup> This pattern suggests that rather than ignorance or distortion of reality, beliefs about the plausibility of racism in Katrina events may be associated with more *accurate* knowledge of racism in U.S. history. Likewise, quick dismissal of claims about racism is not a straightforward indication of greater objectivity, but instead may reflect greater *ignorance* about documented incidents of past racism.<sup>122</sup>

The specific self-protective motives associated with denial vary. On one hand, White Americans' denial of racism may be motivated by a need to be protected from threats to the legitimacy of the status quo or systems of privilege.<sup>123</sup> On the other hand, Whites may simply be distancing themselves from the perception that they are themselves racist. According to research by Sommers and Norton, the most common representation of White racism is old-fashioned racism, a label from which people tend to demonstrate a self-distancing motive by distancing themselves from the unpleasant thoughts and social affiliations particularly related to racism.<sup>124</sup> In a study by Unzueta and Lowery, Whites were less willing to acknowledge institutionally generated disparities as indicators of racism partly because they were trying to minimize their perceptions of White privilege.<sup>125</sup>

---

<sup>121</sup> Adams, O'Brien, and C. Nelson, "Perceptions of Racism in Hurricane Katrina: A Liberation Psychology Analysis," 215–235.

<sup>122</sup> Ibid.

<sup>123</sup> Nyla R. Branscombe, Michael T. Schmitt, and Kristin Schiffhauer, "Racial Attitudes in Response to Thoughts of White Privilege," in "Diversity Science: Why and How Difference Makes a Difference," ed. Victoria C. Plaut, *Psychological Inquiry* 21 (June 2010): 77–99.

<sup>124</sup> Samuel R. Sommers and Michael I. Norton, "Lay Theories About White Racists: What Constitutes Racism (and What Doesn't)," *Group Processes & Intergroup Relations* 9 (2006): 117–138.

<sup>125</sup> Miguel M. Unzueta and Brian S. Lowery, "Defining Racism Safely: The Role of Self-Image Maintenance on White Americans' Conceptions of Racism," *Journal of Experimental Social Psychology* 44 (2008): 1491–1497.

These resulting by-products form the thought processes that direct attention from oppressed group claims about the presence of racism to White American claims about the absence of racism. Rather than an unbiased reading of objective reality, the latter claims may reflect ideological motivations of White Americans to deny racism, especially as a systemic phenomenon embedded in American society.<sup>126</sup>

To understand contemporary racial dynamics that led to the post-Katrina social disaster, including the broader context that leads to the existence and perpetuation of isolated Black and Brown low-income communities like the Lower Ninth Ward across the United States, it is necessary to turn attention to Whites' racial attitudes and understandings. Drawing on a concept developed by Forman, it is argued that racial apathy is an increasingly central dimension in Whites' racial attitudes and plays a key role in the reproduction of ethno racial inequality. Forman defines racial apathy as "indifference toward societal racial and ethnic inequality and lack of engagement with race-related social issues."<sup>127</sup>

Individuals express indifference to racial inequality because they view ethno racial minorities who experience difficulty as lesser beings than themselves, and therefore, as deserving of inferior treatment. As a result, these individuals feel that they have little reason to care about the social circumstances of ethno racial minorities.<sup>128</sup> According to Blumer, "feelings of superiority" is an essential element of dominant racial groups' expression of prejudice.<sup>129</sup>

A secondary reason for the expression of racial apathy is ignorance about the persistent nature of racial and ethnic inequality. The construction of stories about U.S.

---

<sup>126</sup> Adams, O'Brien, and Nelson, "Perceptions of Racism in Hurricane Katrina: A Liberation Psychology Analysis," 215–235.

<sup>127</sup> Tyrone A. Forman, "Color-Blind Racism and Racial Indifference: The Role of Racial Apathy in Facilitating Enduring Inequalities," in *Changing Terrain of Race & Ethnicity*, ed. Maria Krysan and Amanda E. Lewis (Russell Sage Foundation, 2004).

<sup>128</sup> Tyrone A. Forman and Amanda E. Harris, "Racial Apathy and Hurricane Katrina: The Social Anatomy of Prejudice in the Post Civil Rights Era," *Du Bois Review* 3, no. 1 (2006): 175–201.

<sup>129</sup> Herbert Blumer, "Race Prejudice as a Sense of Group Position," in Tyrone A. Forman and Amanda E. Harris, "Racial Apathy and Hurricane Katrina: The Social Anatomy of Prejudice in the Post Civil Rights Era," *Du Bois Review* 3, no. 1 (2006): 175–201.

history that leave out much of the population are not accidental or inadvertent.<sup>130</sup> This condition of color-blindness allows for the dismissal of any systematic response or plan to root out and stem persistent racial inequities. This condition can be viewed through the lens of the Whites and well-off residents of and visitors to New Orleans: they know that the Lower Ninth Ward is there, they avoid going there, they avoid interacting with the people who reside there, and they remain at best abstractly sympathetic, perhaps apathetic or collectively indifferent. They view their lives as separate from those who live in these other places. They cannot be held responsible for the cumulative effects of past injustices, nor for the persistent consequences of ethno racial inequality today, because they do not “know” anything about them.<sup>131</sup> As it pertains to emergency management and preparedness, this type of indifference perforates planning whereby plans are created in a manner that symbolizes all persons as equal even though resources and environments are drastically different. For this reason, it is necessary to create plans while developing and changing behavior models in communities of color in regards to disaster planning so that all may be equal.

It can be argued that because the environment shapes racism over time, teaching about the source of racism as those aspects of the environment is more effective than teaching about deeply seated biases that reside within the individual. Those biases may never be changed; however, through a collective effort, indifference that results in the perception of racism can be positively affected to change how Americans look through the lens. A sociocultural approach recognizes both the individual’s psychological experience and behavior, as well as its social and cultural context in the form of cultural ideas and values that in conjunction with status relations, inform institutions and everyday practices shaping the individual’s psychological experience and behavior (see Figure 4). Inevitably, however, this type of approach is met with some unease.<sup>132</sup>

---

<sup>130</sup> James Loewen, “Lies My Teacher Told Me: Everything Your American History Textbook Got,” Tyron A. Forman and Amanda E. Harris, “Racial Apathy and Hurricane Katrina: The Social Anatomy of Prejudice in the Post Civil Rights Era,” *Du Bois Review* 3, no. 1 (2006): 175–201.

<sup>131</sup> Forman and Harris, “Racial Apathy and Hurricane Katrina: The Social Anatomy of Prejudice in the Post Civil Rights Era,” 175–201.

<sup>132</sup> Plaut, “Diversity Science: Why and How Difference Makes a Difference,” 77–99.

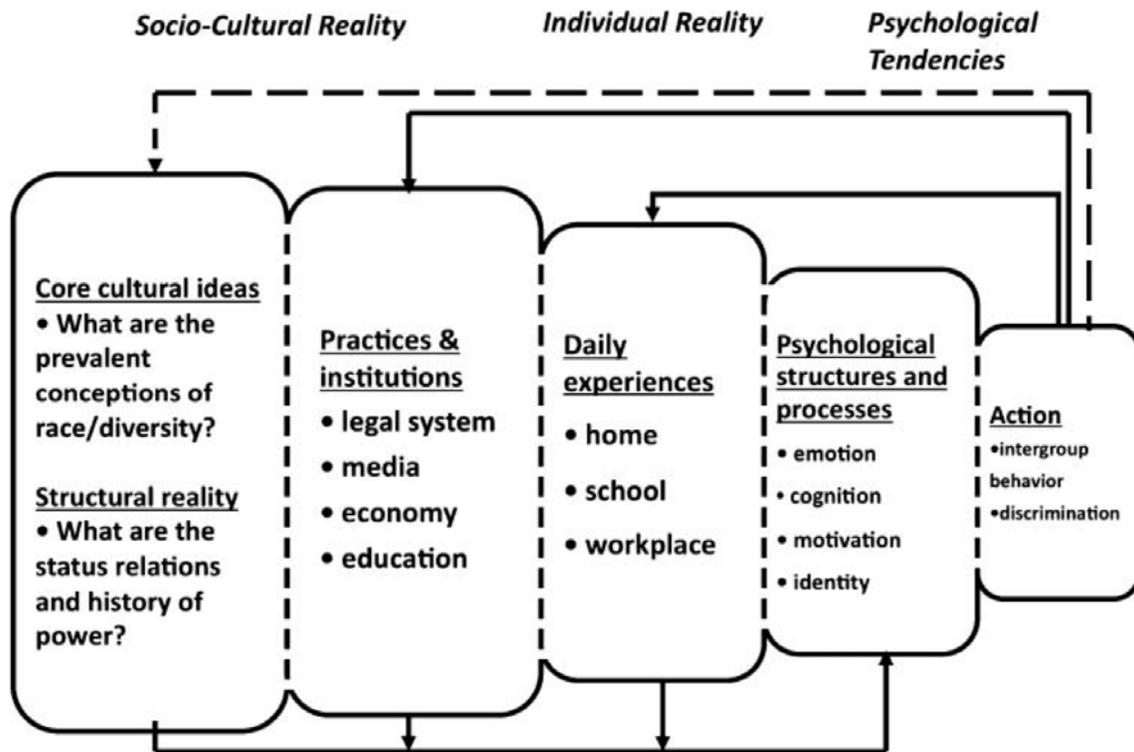


Figure 4. Sociocultural Framework for Intergroup Relations<sup>133</sup>

One set of motivations for White denial of racism concerns the need for positive social identity.<sup>134</sup> For White Americans, the perception of racism implies that one is (or could be) identified with a group responsible for perpetrating racism, which violates an increasingly prevalent normative standard.<sup>135</sup> Accordingly, White Americans may be motivated to deny the extent of racism to preserve an unprejudiced self-image and a positive sense of White or American identity. Consistent with a system justification perspective, Whites exposed to video clips arguing that the hurricane Katrina disaster response was due to racism displayed greater racial in-group attachment and in-group

<sup>133</sup> Hazel Rose Markus and Shinobu Kitayama, "A Collective Fear of the Collective: Implications for Selves and Theories of Selves," *Personality and Social Psychology Bulletin* 20, no. 5 (1994): 568–579.

<sup>134</sup> Henry Tajfel and John C. Turner, *The Social Identity Theory of Intergroup Behavior* (Chicago, IL: Nelson Hall, 1986).

<sup>135</sup> J. F. Dovidio and S. L. Gaertner, "Aversive Racism," in M. P. Zanna, *Advances in Experimental Social Psychology* 36 (2004): 1–52, in Glenn Adams, Laurie T. O'Brien, and Jessica C. Nelson, "Perceptions of Racism in Hurricane Katrina: A Liberation Psychology Analysis," *Analyses of Social Issues and Policies* 6, no. 1 (2006): 215–235.

love compared to Whites exposed to videos conveying that the government's incompetence was to blame for the disaster response. In contrast, Blacks displayed strong levels of in-group attachment and in-group love across both video conditions.<sup>136</sup> This research highlights how insights from social psychology are valuable in understanding psychological responses to social justice-related events and should be used as tools to educate and improve processes.

In 2004, Lawrence Bobo conducted a nationwide survey just prior to Hurricane Katrina and found that 34% of Whites believed that racial equality had already been achieved, which was in contrast to just 6% of Blacks.<sup>137</sup> Six years later, a study conducted in Jacksonville, Florida, found patterns of racial disparities in income, employment, housing, education, and health similar to the national patterns; however, in juxtaposition with these figures, the study also found a 32% racial gap among residents in beliefs that racism was a problem.<sup>138</sup> Specifically, over three fourths of Black residents but less than half of White residents surveyed believed that racism had been a problem in that city over the past year.

The response to Hurricane Katrina provides an even more compelling illustration of the racial gap in perceptions of racism. Whereas 76% of African-American respondents indicated that they believed that the events surrounding Katrina showed that racial inequality persists, only 36% of Whites did so (Table 1).<sup>139</sup>

---

<sup>136</sup> Cheryl R. Kaiser, Collette P. Eccleston, and Nao Hagiwara. "Post-Hurricane Katrina Racialized Explanations As a System Threat: Implications for Whites' and Blacks' Racial Attitudes," *Social Justice Research* 21, no. 2 (2008): 192–203.

<sup>137</sup> Lawrence Bobo, "Inequalities that Endure? Racial Ideology, American Politics, and the Peculiar Role of the Social Sciences," in *Changing Terrain of Race & Ethnicity*, ed. Maria Krysan and Amanda E. Lewis (Russell Sage Foundation, 2004).

<sup>138</sup> Jacksonville Community Council, Inc., "Race Relations Progress Report for Jacksonville, Florida," 2009, <http://www.jcci.org/jcciwebsite/documents/10%20Race%20Relations%20Progress%20Report.pdf>.

<sup>139</sup> Pew Research Center for the People & the Press, *Huge Racial Divide over Katrina and its Consequences* (Washington, DC, 2005).

## Perceived Racialization of Hurricane Katrina

	<i>Blacks (%)</i>	<i>Whites (%)</i>	<i>Difference</i>
Government response would be faster if victims were White ( <i>agree</i> = 1, <i>disagree</i> = 0)	70.68	17.88	52.82*
Disaster shows that racial inequality remains a major problem ( <i>agree</i> = 1, <i>disagree</i> = 0)	76.16	36.78	39.38*

Table 1. Perceived Racialization of Hurricane Katrina<sup>140</sup>

African-Americans across the country have had stronger reactions to the disaster in New Orleans and the Gulf Coast than have White Americans. According to the study, African-Americans make harsher judgments of the federal government’s response to the crisis, perceive the plight of disaster victims in a different light, and feel more emotionally connected to what has happened.<sup>141</sup> The disaster has had a far more significant personal impact on Blacks than Whites. African-Americans are nearly one quarter as likely as Whites to exhibit anger in reference to Hurricane Katrina. African-Americans are also more likely than Whites to report feeling depressed and angry because of what has happened in areas affected by the hurricane (Table 2).<sup>142</sup>

---

<sup>140</sup> Pew Research Center for the People & the Press, *Huge Racial Divide over Katrina and its Consequences*.

<sup>141</sup> Ibid.

<sup>142</sup> Ibid.

## Emotional Response to Hurricane Katrina by Race

	<i>Blacks (%)</i>	<i>Whites (%)</i>	<i>Difference</i>
Anger (Pew)	71.14	46.51	24.63*
Anger (Gallup/CNN/USA Today)	76.34	60.03	16.31*
Depression (Pew)	73.97	55.66	18.31*
Shock (Gallup/CNN/USA Today)	80.12	77.35	2.77
Sadness (Gallup/CNN/USA Today)	99.16	97.46	1.70

Note: Values are weighted means.

\* $p < .05$ .

Table 2. Emotional Response to Hurricane Katrina by Race<sup>143</sup>

In a 2009 study conducted at Tulane University involving White students, participants demonstrated a strong preference for an individualistic conception of racism over an institutional conception of racism. This result provides support for the argument that White Americans tend to conceptualize racism in terms of individual prejudices rather than as the result of institutional forces (Table 3).<sup>144</sup>

---

<sup>143</sup> Ismail K. White et al., “Feeling the Pain of My People: Hurricane Katrina, Racial Inequality, and the Psyche of Black America,” *Journal of Black Studies* 37, no. 4 (2007): 523–538.

<sup>144</sup> Laurie T. O’Brien et al., “Understanding White Americans’ Perceptions of Racism in Hurricane Katrina-Related Events,” *Group Processes & Intergroup Relations* 12, no. 4 (2009): 431–444.

	Time 1		Time 2	
	Mean	SD	Mean	SD
The U.S. Federal Government's slow response to New Orleans residents during the Katrina disaster.	3.40	2.00	2.71	1.67
The levee breaks that left the poorest areas of New Orleans devastated beyond repair while the affluent areas (i.e. French Quarter and Uptown) suffered minor damage.	2.10	2.14	2.25	2.04
Media use of the term 'refugees' to describe hurricane evacuees.	1.73	1.61	1.98	1.57
Gretna police refuse to let New Orleanians cross a bridge to the West Bank in order to escape the city.	3.44	1.73	3.13	1.86
Media descriptions of White Americans as 'finding' food while Black Americans were labeled 'looting'.	4.79	1.53	4.50	1.34
Leaving New Orleans residents trapped for days inside the Super Dome.	3.63	1.87	3.14	1.67
Composite	3.18	1.30	2.95	1.21

*Note:* Scores can potentially range from 0–6 with higher scores indicating higher levels of perceived racism.

Participants were instructed to indicate on a 7-point, Likert-type scale the extent to which they personally believed that racism played a role in each event. The possible range of scores was from 0 to 6 with higher scores indicating greater perceived racism. The measure showed acceptable reliability (Time 1  $\alpha = .81$ , Time 2  $\alpha = .81$ ).

Table 3. Item Mean for Perceived Racism in Katrina Related Events<sup>145</sup>

This finding builds upon the results of earlier research, which has demonstrated that, when provided with examples of potentially racist events, White Americans are less likely to perceive racism in institutional examples as compared to more individualistic examples.<sup>146</sup>

The present research suggests that White Americans are not neutral observers of racism but rather that they, like ethnic minorities, have a stake in the answer to the question, 'How much racism is there in American society?' White Americans' tendency to perceive little racism in Katrina-related events may largely be due to a tendency to disregard harm to ethnic minorities resulting from institutionalized forces as a form of

<sup>145</sup> O'Brien et al., "Understanding White Americans' Perceptions of Racism in Hurricane Katrina-Related Events," 431–444.

<sup>146</sup> Unzueta and Lowery, "Defining Racism Safely: The Role of Self-Image Maintenance on White Americans' Conceptions of Racism," 1491–1497.

racism. Furthermore, these low perceptions of racism may serve to buffer White Americans from the negative effects of perceived racism for White American private regard.<sup>147</sup>

#### **D. BLACK, WHITE AND OTHERS**

While the exploration of the perceptions, and some realities, of both Blacks and Whites has been discussed, additional factors influence the existing conditions that are prompted by outside sources including the government and media. These entities have a meaningful effect on the way in which events are interpreted and based on their actions, or lack thereof, and reporting, skew the images being presented, and more importantly, the service being provided.

Administrators in the Department of Homeland Security and FEMA justified their lack of emergency aid by claiming that they had not anticipated that “people would loot gun stores ... and shoot at police, rescue officials and helicopters.”<sup>148</sup> The flood of racialized images of a terrorized, crime-engulfed city prompted hundreds of White ambulance drivers and emergency personnel to refuse to enter the New Orleans disaster zone. Television reports quickly proliferated false reports about “babies in the Convention Center who got their throats cut” and “armed hordes” hijacking ambulances and trucks.<sup>149</sup> Baton Rouge’s Mayor Kip Holden imposed a strict curfew on its facility that held evacuees, and warned of possible violence by “New Orleans thugs.”<sup>150</sup> That none of these sensationalized stories was true hardly mattered. As Matt Welch of the online edition of *Reason* magazine noted, the “deadly bigotry” of the media probably helped to “kill Katrina victims.”<sup>151</sup>

---

<sup>147</sup> O’Brien et al., “Understanding White Americans’ Perceptions of Racism in Hurricane Katrina-Related Events,” 431–444.

<sup>148</sup> Manning Marable, “Katrina’s Unnatural Disaster,” *Souls: A Critical Journal of Black Politics, Culture and Society* (2006): 305–316.

<sup>149</sup> *Ibid.*

<sup>150</sup> *Ibid.*

<sup>151</sup> Matt Welch, “The Deadly Bigotry of Low Expectations? Did the Rumor Mill Help Kill Katrina Victims?,” *reason.com*, September 6, 2005, <http://www.reason.com/links/links09060S.shtml>.

Administrative practices can be infected with racism even though individual administrators do not bear conscious animus toward people of color. In this respect, racism is masked.<sup>152</sup> The events of Katrina suggest a need to probe the extent to which, and the circumstances under which, personal judgments might be skewed by race bias. In this instance, many decided to adhere strictly to bureaucratic rules while others were indifferent to claims of inequity. They decided to adhere to strict procedure rather than help those in need. In New Orleans, those in need were disproportionately African-American.<sup>153</sup> Shelby argues that a society's racist beliefs can infiltrate an individual's viewpoint and lead to actions that "perpetuate oppression whether or not they are performed with a racist heart." Beliefs, therefore, can also infect social decision making.<sup>154</sup>

By way of example, in his history of urban crisis, Thomas Sugrue notes that 20th-century White Americans widely assumed that African Americans were less intelligent than Whites, fit for physical labor, lazy, sexually promiscuous, and prone to dependence. These beliefs produced and supported race-based policies and practices in urban renewal, welfare, public housing, and government-backed mortgage lending.<sup>155</sup> These policy makers were not overtly racist; however, the belief systems and stereotypes guided policies in certain directions. The concept of masked evil could well be explained in the examples of the continual prevalence of Jim Crow laws at all levels of government, and in a more individualized example, the withholding of treatment of the Tuskegee airmen to study the effects of syphilis.

According to the Senate committee on Hurricane Katrina, the effect of the long-term failures at every level of government to plan and prepare adequately for a catastrophic hurricane in the Gulf was evident in the inadequate preparations before

---

<sup>152</sup> Stivers, "So Poor and So Black: Hurricane Katrina, Public Administration and the Issue of Race," 48–56.

<sup>153</sup> Ibid.

<sup>154</sup> Tommie Shelby, "Is Racism in the 'Heart'?", *Journal of Social Philosophy* 33, no. 3 (2002): 411–420.

<sup>155</sup> Stivers, "So Poor and So Black: Hurricane Katrina, Public Administration and the Issue of Race," 48–56.

Katrina's landfall, and then again, in the initial response to the storm.<sup>156</sup> Out of the entire incident, two success stories involving the Coast Guard and certain private sector business were identified as being worthy of note. These entities conducted extensive planning and training for disasters, and put that preparation into use when disaster struck. Both moved material assets and personnel out of harm's way as the storm approached, but kept them close enough to the front lines for quick response after it passed. Perhaps most important, both had empowered front-line leaders able to make decisions when they needed to be made.<sup>157</sup> While these examples were noteworthy, they occurred because of careful planning and with the blessing of the upper echelon, which is in contrast to the ideas presented earlier.

By far, the most inflammatory rhetoric during the event was the sounds and images captured and reported by the news media. The power of the media to sway public opinion, to polarize "in-groups," and to sensationalize opinions, greatly influenced the perception of those directly impacted by Katrina and the thoughts of observers throughout the world. One such example came from the Black conservative ideologue John McWhorter, a senior fellow at the Manhattan Institute. He ridiculed the accusations of racism as nasty, circular, and unprovable, adding, "It's not a matter of somebody in Washington deciding we don't need to rush [to New Orleans] because they're all poor jungle bunnies anyway."<sup>158</sup> By comparison, Mayor Ray Nagin, while addressing the fears of the city's black inhabitants and speculation about future development in the Ninth Ward, received stark criticism for proclaiming, "this city will be a majority African-American city. It's the way that God wants it to be. You can't have it no other way."<sup>159</sup>

For the purposes of this portion of research, one characterization of the media's power of influence can be demonstrated in two photos. Specifically, an *Associated Press*

---

<sup>156</sup> *Hurricane Katrina: A Nation Still Unprepared, Executive Summary*, Report of the Senate Committee on Homeland Security and Governmental Affairs, May 2006.

<sup>157</sup> *Ibid.*

<sup>158</sup> Lynne Duke and Teresa Wiltz, "A Nation's Castaways: Katrina Blew In, and Tossed up Reminders of a Tattered Racial Legacy," *Washington Post*, September 4, 2005.

<sup>159</sup> Times-Picayune, "Transcript of Mayor Nagin's Speech," January 17, 2006.

(AP) photo showed a Black man wading through chest-deep water with grocery store merchandise and described this action as “looting a grocery store” whereas a similar *Agence France-Presse* photo of two White people described this action as “finding bread and soda from a local grocery store.”<sup>160</sup>



Picture 4. “Man Looting”<sup>161</sup>

---

<sup>160</sup> Tania Ralli, “Who’s a Looter? In Storm’s Aftermath, Pictures Kick Up a Different Kind of Tempest,” *New York Times*, September 5, 2005, <http://www.nytimes.com/2005/09/05/business/05caption.html>.

<sup>161</sup> *Ibid.*



Picture 5. “Finding Food”<sup>162</sup>

Mr. Jack Stokes said the *Associated Press* had guidelines in place before Hurricane Katrina struck to distinguish between “looting” and “carrying.” Mr. Stokes said that Mr. Martin had seen the man in his photograph wade into a grocery store and come out with the sodas and bag, so by AP’s definition, the man had looted. The

---

<sup>162</sup> Ralli, “Who’s a Looter? In Storm’s Aftermath, Pictures Kick Up a Different Kind of Tempest.”

photographer for Getty Images, Mr. Graythen, said in an e-mail message that he had also stuck to what he had seen to write his caption, and had actually given the wording a great deal of thought. Mr. Graythen described seeing the couple near a corner store from an elevated expressway. The door to the shop was open, and things had floated out to the street. He was not able to talk to the couple, “so I had to draw my own conclusions,” he said.<sup>163</sup>

Despite the plausible reasons given for the titles to each photograph, it is the notion that the rationales behind each party’s actions drive the conversation that inevitably leads to discussion of race. The perception discerned by people viewing the photos will influence their belief system and intrinsically drive their thoughts words and actions. These beliefs carry over long after the photo has been discarded and remain as a disruptive force in problem solving and providing assistance.

The final “message” in this section is that a huge gulf exists between White and African-American feelings about the crisis and how it was handled with the Whites seeing it as more of an unfortunate incident and the minorities seeing it as a devastating example of deep structural and institutional inequality. To remedy these problems, the admission of a problem must occur first. These problems take the form of underlying issues and policy decisions that guide preparedness, response and recovery in communities of color. To serve these populations better, emergency management practitioners must develop ways to gain trust, encourage meaningful dialogue, and ultimately, change the thought process of these individuals in regards to disasters. This change comes in the form of engaging in the programs and actions that the government has implemented so successfully in less challenged communities. By acknowledging the issues present that may cloud judgments and enable perceptions to become reality, open and honest communication must be delivered. Once the lines of communication are opened, progress then can be made in structures and policies that can bring perceived inequities more in line with reality. Until dialogue and candor are present in these

---

<sup>163</sup> Ralli, “Who’s a Looter? In Storm’s Aftermath, Pictures Kick Up a Different Kind of Tempest.”

conversations, the institutionalization of bias and perception will persist in any future crisis situations and a true level of preparedness in these communities will not be realized.

## IV. CASE STUDIES

The previous chapters outlined the issues plaguing emergency response and communication in minority communities. These issues have both historical and distinct implications with regard to the perceptions and realities of disaster situations, and have a demonstrated and long lasting negative effect on these marginalized groups. This chapter discusses two projects undertaken in various localities that utilized “grassroots” efforts to bridge the divide between government authorities and communities of diverse populations. These projects sought to improve disaster preparedness and response by increasing communication and seeking input through a “bottom-up” approach.

Literature on disaster vulnerability indicates that pre-existing socioeconomic conditions play a significant role in the ability of individuals and communities to prepare for, respond to and cope with disasters.<sup>164</sup> According to Bolin, “People’s needs are grounded in the nature of their lives before the disaster began; specifically, in their employment status, financial resources, social supports, legal entitlements and housing situation.”<sup>165</sup> Other barriers faced by diverse populations that increase disaster vulnerability include: limited or lack of transportation for evacuation, financial resources to put together a disaster supply kits or take protective action, and low literacy and the related inability to comprehend disaster preparedness materials and warning messages fully. For racially and ethnically diverse communities, culture and language serve as significant barriers to effective preparedness, response and recovery from disasters.<sup>166</sup>

Generally, disadvantaged populations have fewer resources and face a number of daily challenges that affect their ability to respond to and recover from an emergency.<sup>167</sup>

---

<sup>164</sup> Michel Masozera, Melissa Bailey, and Charles Kerchner, “Distribution of Impacts of Natural Disasters Across Income Groups: A Case Study of New Orleans,” *Ecological Economics* 63, no. 2 (2007): 299–306.

<sup>165</sup> Robert Bolin and Lois Stanford, “The Northridge Earthquake: Community-based Approaches to Unmet Recovery Needs,” *Disasters* 22, no. 1 (1998): 21–38.

<sup>166</sup> Andrulis, Siddiqui, and Gantner, “Preparing Racially and Ethnically Diverse Communities for Public Health Emergencies,” 1269-1279.

<sup>167</sup> Alice Fothergill and Lori A. Peek, “Poverty and Disasters in the United States: A Review of Recent Sociological Findings,” *Natural Hazards* 32, no. 1 (2004): 89–110.

Traditional risk communication systems are often designed for the general population, which results in marginalized communities having difficulty actually receiving the information, understanding the message, and/or trusting the messenger. This population is also hard to reach through a traditional risk communication system due to the lack of a systematic relationship between government and the organizations from which marginalized communities most often receive their services.<sup>168</sup>

Crisis is generally defined as “a specific, unexpected, and non-routine event or series of events that create high levels of uncertainty and threaten or are perceived to threaten high priority goals,” including security of life and property or the general individual or community well-being.<sup>169</sup> Studies of communication have normally been regulated to non-dynamic and routine context with little consideration being given to emergency communication. Furthermore, the communication needs of racial minorities and the poor in crises have received even less attention, even though these populations are most often hit the hardest during a crisis.<sup>170</sup> Crises are also marked by high levels of potential danger (e.g., loss of life) and fast actions by public officials to counteract the potential threat of these unanticipated events that throw off the everyday patterns of life. Crisis communication aims at preventing or lessening the negative outcomes resulting from a crisis. Often, crisis communication has an informative function. Such messages encourage the receiver to take some action to avoid a possible threat or harmful effect and to create a rational understanding of the risk, a persuasive function.<sup>171</sup>

#### **A. CASE STUDY: EMERGENCY PREPAREDNESS DEMONSTRATION PROJECT**

A capacity building strategy for disaster resiliency achieves a balance between the engagement of local people to define needs and external authorities with access to outside

---

<sup>168</sup> Randy Rowel, “A Guide to Enhance Grassroots Risk Communications Among Low-Income Populations,” *Health Promotion Practice*, July 2011.

<sup>169</sup> Matthew W. Seeger, Timothy L. Sellnow, and Robert R. Ulmer, “Communication, Organization, and Crisis,” *Communication Yearbook* 21 (1998): 231–276.

<sup>170</sup> Patric Spence, Kenneth A. Lachlan, and Donyale R. Griffin, “Crisis Communication, Race, and Natural Disasters,” *Journal of Black Studies* 37, no. 4 (2007): 539–554.

<sup>171</sup> *Ibid.*

resources to meet those needs; expert knowledge and local ordinary knowledge, and proposed activities that fit values of underserved populations and accountability to broader community goals.<sup>172</sup> The purpose of the Emergency Preparedness Demonstration (EPD) Project was collaboratively to produce community-based disaster plans tailored to meet locally defined vulnerability issues and premised on local capacity to implement the plans.<sup>173</sup> This project was chosen as it attempted to close the gap in disaster planning focused on disadvantaged people and the disparities in resiliency. The effects of this project can be utilized as a basis for other programs that serve minority communities and build the foundation of increased communication and preparedness.

In 2004, MDC Inc. and the University of North Carolina (UNC) initiated a partnership and engaged in the EDP Project with support from FEMA. MDC has served as a mediating institution for over four decades on work that aims to strengthen underserved communities and foster relations with external organizations that can infuse communities with needed resources and expertise. The university group consisted of a core of investigators with expertise in anthropology, public health, and urban planning, and considerable experience in hazard vulnerability analyses and disaster planning.<sup>174</sup>

Between 2005 and 2008, the MDC/UNC partnership initiated and completed six community-based demonstration projects aimed at creating disaster plans and taking action to implement prioritized strategies.<sup>175</sup> The MDC/UNC partners chose to pursue a bottom-up, participatory action research approach to disaster planning based on the failures of systems of the past in distressed and diverse communities.

The Project implemented a planning team in six communities, employed three “coaches” to work with the teams, and provided financial support through grants totaling \$40,000 for each community. The community coaches had experience in community engagement and community building in minority communities; however, in most of the

---

<sup>172</sup> Philip Berke et al., “Building Capacity for Disaster Resiliency in Six Disadvantaged Communities,” *Sustainability* 3, no. 1 (2011): 1–20.

<sup>173</sup> *Ibid.*

<sup>174</sup> *Ibid.*

<sup>175</sup> *Ibid.*

related research, no mention was made that any of the coaches had a connection to the actual community served. The coaches served as technical advisers, facilitators, and catalysts for change, and integrated a diverse mix of skills (communication, consensus building, mediating, visioning, technical competence, advocacy) needed to motivate collective action and action of the planning teams. The planning teams represented the diverse interest of the community, provided historical knowledge about disaster issues, and formulated solutions based on their developed priorities.<sup>176</sup>

### **1. Site Selection**

Initially, disadvantaged communities within the 2003 Hurricane Isabel impact zone were identified using census data on socio-economic characteristics. Next, staff from state divisions of emergency management and FEMA developed and reviewed a preliminary list of communities to identify the best candidates based on potential barriers and opportunities to working with such communities, and the commitment and capacity of communities to participate in the demonstration project. The MDC/UNC team then conducted site visits, and included exploratory meetings with a diverse set of local representatives in potential communities, to determine the willingness and ability of the communities to participate in the Project (Table 4).<sup>177</sup>

---

<sup>176</sup> Berke et al., “Building Capacity for Disaster Resiliency in Six Disadvantaged Communities,” *Sustainability*, 1–20.

<sup>177</sup> Ibid.

Characteristics	Chester Co., PA	Dorchester Co., MD	Hampton City, VA	Hampshire Co., WV	Hertford Co., NC	Wilmington, DE	U.S.
Pop. size 2009	498,894	32,043	144,236	22,695	23,283	73,826	
Pop. growth 2000–09	15.1%	4.1%	-1.5%	12.3%	1.3%	0.6%	9.1%
Pop. profile 2009							
White persons	83.7%	68.0%	47.1%	96.2%	36.0%	30.7%	65.1%
Black persons	6.4%	27.8%	47.8%	1.4%	61.3%	58.2%	12.9%
Hispanic persons	5.5%	2.5%	4.1%	1.3%	2.1%	6.9%	15.8%
Other persons	7.4%*	1.7%	1.0%	1.1%	0.6%	4.2%	6.2%
Median HH income 2008	\$85,547	\$43,288	\$47,301	\$37,913	\$34,131	\$39,154	\$52,029
Poverty rate 2008	5.8%	14.3%	14.2%	14.9%	22.7%	24.2%	13.2%
Census area	Metro-county	Micropolitan county	Metro-city	Rural county	Rural county	Metro-city	

\*3.7% of residents include Asia persons. Other local jurisdictions have an Asian population of 1.8% or less.

Table 4. Cities Selected to Participate in EPD Project<sup>178</sup>

Table 5 reveals the pattern of results of the determined efforts to enhance participation and strengthen networks. Community-based participants were well represented by diverse participants at five of the six EPD sites (as noted, Hampshire County is the exception). Participation of formal external organizations was mixed as local chapters of humanitarian aid organizations (e.g., United Way and Red Cross) were active in four of the six sites, but state agencies were active in just Dorchester County and Wilmington.<sup>179</sup>

<sup>178</sup> Berke et al., “Building Capacity for Disaster Resiliency in Six Disadvantaged Communities,” *Sustainability*, 1–20.

<sup>179</sup> Ibid.

<b>PARTICIPANTS</b>	<b>Chester Co., PA</b>	<b>Dorchester Co., MD</b>	<b>Hampton City, VA</b>	<b>Hampshire Co., WV</b>	<b>Hertford Co., NC</b>	<b>Wilmington, DE</b>
<b>Internal to Community</b>						
<i>Community-Based Org.</i>						
Econ Dev			X		X	X
Emergency						X
Church	X	X	X		X	X
Health Care			X		X	X
Neighborhood Group	X	X	X		X	X
Child Care					X	
Housing					X	X
<i>Business Reps.</i>						
Small Business Assoc.						
Individual Business					X	
<i>Unaffiliated Residents</i>	X	X			X	
<i>Elected Officials</i>			X		X	
<i>Other Local Institutions</i>						
Educational			X		X	
Health Clinics					X	X

<b>PARTICIPANTS</b>	<b>Chester Co., PA</b>	<b>Dorchester Co., MD</b>	<b>Hampton City, VA</b>	<b>Hampshire Co., WV</b>	<b>Hertford Co., NC</b>	<b>Wilmington, DE</b>
<b>External to Community</b>						
<i>Local Gov't Agencies</i>						
Emergency Mgmt.	X	X	X	X	X	X
Elderly Services				X	X	X
Health	X			X	X	
Social Services		X	X	X	X	
Coop Extension	X	X	X		X	
Police		X			X	
Neighborhood Dev.	X		X		X	
Housing	X		X			
Planning		X				
<i>State Agencies</i>						
Emergency Mgmt.						X
Social Services						X
Health		X				
<i>NGOs</i>	X	X	X			X

\*Attendance lists, meeting notes, and follow up post-plan making interviews were used to identify the groups that were most active and participated in most meetings.

Table 5. Most Active Participants on the Emergency Planning Team<sup>180</sup>

<sup>180</sup> Berke et al., "Building Capacity for Disaster Resiliency in Six Disadvantaged Communities," *Sustainability*, 1–20.

A fundamental strategy of the EPD planning process was the work of coaches as “relational organizers,” to borrow Warren’s term, in bringing together key participants to build trust and agree on a course of action.<sup>181</sup> This process built on the concept of “bottom-up” trust building by involving key stakeholders from local government and service providers who may have had a higher level of trust with community members through various projects already underway within the respective communities. The ability for the “coaches” to leverage relationships already formed through the routine forces of local government were used as a conduit for the discussion on capacity building within the community to reduce vulnerability.

The goals of the coaches were to bridge the divide that existed in these communities by building trust in a direct and formal setting. Coaches engaged in relational organizing that emphasized face-to-face contact, and minimized disconnected and formal means of contact like bulletins, newsletters, email and phone calls. Coaches continuously worked at targeting those who had divergent perspectives often defined by suspicion and mistrust, and requested them to come together.<sup>182</sup>

Building and keeping the trust of marginalized communities has long been an unresolved issue for federal, state and local authorities. In this project, coaches provided what Sirianni terms “translation services” between the grassroots understanding of disaster risks and solutions, and agency cultures that embrace bureaucratic and professional norms that reflects how they perceive risks and the efficiency, equity, and effectiveness of solutions.<sup>183</sup> By explaining the specifics of each other’s concerns and drawing all groups together into a collaborative viewpoint, the coaches became viewed as trusted sources of information to the communities at large and a helpful facilitator of information by the local authorities. Through this creation of mutual trust partnerships, commitments by the local governments and civilian stakeholders to work together in a

---

<sup>181</sup> Mark R. Warren, *Dry Bones Rattling: Community Building to Revitalize American Democracy* (Princeton University Press, 2011).

<sup>182</sup> Berke et al., “Building Capacity for Disaster Resiliency in Six Disadvantaged Communities,” 1–20.

<sup>183</sup> Carmen Sirianni, “Neighborhood Planning As Collaborative Democratic Design,” *Journal of the American Planning Association* 73, no. 4 (2007): 373–387.

participatory and asset-based approach to serving these communities were achieved. A snapshot of programs realized through the EPD project is encapsulated in Table 6.

- In Hampshire County, multiple organizations with no (or limited) experience in disaster planning became actively engaged. The well-established Committee of Aging, for example, became a primary partner in the county's newly established Preparedness Education and Assistance Project which identifies and engages community organizations that work with target elderly groups. An MOU between the Potomac Valley Transportation Authority and Christ Church of Romney was created that certifies the church as a secondary shelter.
- In Dorchester County, the Office of Emergency Management and a representative of the Hispanic community collaborated on a Spanish language CERT training that has been a success. The office is touted it as the first (if not only one) in the state of Maryland. The Community Emergency Response Team (CERT) program is sponsored by Citizens Corps which helps train people to be better prepared to respond to emergency. The CERT course is taught in the community by a trained team of first responders who have completed a CERT Train-the-Trainer course conducted by their state training office for emergency management, or FEMA's Emergency Management Institute (<http://www.citizencorps.gov/programs/cert.shtm>, accessed 8/7/08).
- In Hampton, the planning process created an opportunity for the new emergency management director to learn about underserved neighborhoods on a personal level, and to enact an education campaign aimed at their particular learning styles and culture.
- In Hertford County, the topic of disasters was a vehicle for building new relationships within the community or strengthening existing relationships. Many people who participated already knew each other, and were able to come together as a part of the EPD since they shared a common history and, in some cases, common goals. The process improved the relationships between residents and county emergency management director. They had a better understanding of the emergency manager's job and limitations, and became allies in the search for additional resources (see below for discussion about \$8,500 grant).

Table 6. Promising Practices that Extend the Network of Allies<sup>184</sup>

## 2. The Plan

The EPD projects utilized four steps in their process of engagement and eventual capacity building in the participating communities. Recruitment was found to be a primary component of the project to obtain the necessary engagement to begin the program and energize the participants. It was determined that engagement and recruitment are most effective in disadvantaged communities when tailored to the strength of local networks and ensure that all relevant stakeholders are engaged early on.<sup>185</sup> The project's recruitment focused on personal contact rather than authority relying on informal structures of knowledge and reverent power of stakeholders within the

<sup>184</sup> Berke et al., "Building Capacity for Disaster Resiliency in Six Disadvantaged Communities," 1–20.

<sup>185</sup> Ibid.

subject communities. These individuals provided the background and knowledge of social issues present that would potentially impact the objectives of the program. These participants brought credibility to the project and assisted in defining the problems and identifying groups of similar “power” and resources that may have been excluded. The project’s organizers also indicated that the recruitment strategy was made easier when pre-existing social networks were strong, and trust and communication links were high and engaged.<sup>186</sup>

Step two in the process involved information being developed by the stakeholders in the communities. The ability to identify disaster issues and select strategies in concert with local authorities created “buy-in” by the local participants. The project acknowledges that “while expert driven knowledge is crucial for scientifically sound planning, “ordinary knowledge” possessed by local people reflects local conditions and values.”<sup>187</sup> Reliance on ordinary knowledge reflects the perspectives and abilities of local people, and helped develop more accurate information about local vulnerabilities and options for solving them.<sup>188</sup> The study found that when information was not co-developed, as in Dorchester County, less opportunity existed to build a sense of ownership and commitment to the project, and increased hostility.<sup>189</sup> As Israel et al. argue, participation is more than just participating. It involves engagement, choice, and the possibilities of that choice being acted upon.<sup>190</sup>

The third phase of the project utilized the coaches as catalytic agents who offered support and planning developing unique processes built to serve the particular community. Coaches were accountable first and foremost to the underserved people but

---

<sup>186</sup> Berke et al., “Building Capacity for Disaster Resiliency in Six Disadvantaged Communities,” 1–20.

<sup>187</sup> Ibid.

<sup>188</sup> Robert B. Olshansky and Laurie Johnson, “Clear As Mud: Planning for the Rebuilding of New Orleans,” *American Planning Association*, 2010.

<sup>189</sup> Berke et al., “Building Capacity for Disaster Resiliency in Six Disadvantaged Communities,” 1–20.

<sup>190</sup> B. Israel et al., “Introduction to methods in community-based participatory research for health,” in *Methods in Community-Based Participatory Research for Health*, ed. B. Israel, E. Eng, A. Schultz, and E. Parker (John Wiley & Sons: San Francisco, CA, 2005), 1–26; Berke et al., “Building Capacity for Disaster Resiliency in Six Disadvantaged Communities,” 1–20.

also to standards to achieve the broader aims of the EPD project. They provided encouragement and guidance when teams were struggling or unclear on how to proceed, while serving as intermediaries skilled at building trust.<sup>191</sup> Acting as intermediaries, and guiding the process, the coaches supported informal webs of communication, coordination, mediation, and information exchange to strengthen relationships between the subject populations and formal authorities. Their duty was also to identify, engage, and access additional resources that the community's stakeholders could leverage. The study identified that when coaching was not followed; collaborative planning was more likely to underperform. Despite considerable urging, for example, a coach working in Hampshire County was unable to convince the core planning team to expand the diversity of participants on the team. Consequently, the team was better geared to work on formal organizational networking that did not spill over to grassroots organizing.<sup>192</sup>

The study determined that when disaster planning is inclusive and accountable, prospects improve in building commitment and capacity essential in implementation and, most importantly, fostering sustainable change in relations with underserved populations.<sup>193</sup> This phase included the realization that a multipronged approach must be undertaken to ensure the maintenance of the overarching strategy. Grant funding and accountability measures were also suggested as a means to encourage follow through by ensuring that the reporting procedures be met and the technical skills obtained via financial resources. These additional factors were emphasized to maintain the practices established and the partnerships achieved between the local authorities, coaches, and civilian participants to sustain the successes achieved during the project.

---

<sup>191</sup> Berke et al., "Building Capacity for Disaster Resiliency in Six Disadvantaged Communities," 1–20.

<sup>192</sup> Ibid.

<sup>193</sup> Ibid.

In sum, the projects' concepts support the ideal that communities can build power and leverage the support inherently present from government authorities. Grassroots disaster planning is not premised on a carefully scripted, linear, and orderly process that will meet the demands of each and every community. Community-based participatory planning is not fail safe despite the best efforts of planning practitioners.<sup>194</sup>

EPD's experiences in strengthening capacity highlights a long-term comprehensive approach to this work that focuses on flexible recruitment, recognition of experts and local people as equal partners in co-developing information, the role of coaches as relational organizers, and accountability that strengthen networks to sustain progress.<sup>195</sup> An important aspect further discussed in this work is that the difference in social makeup and culture between marginalized communities, and the general population in regards to disaster vulnerability and self-governance, are immensely diverse and "cannot be undone through a single participatory initiative."<sup>196</sup>

## **B. GRASS ROOTS COMMUNICATION PROJECT: OBSERVATIONS AND FINDINGS**

Grassroots organizations are user defined and based on participation from the end user in a bottom-up communications method, which allows for participation in problem solving and decision making. Research indicates that grassroots organizations, such as faith-based and nongovernmental organizations, are effective in addressing community needs during a disaster.<sup>197</sup>

Using the Hurricane Katrina experience as a backdrop, the GRC Project was developed as a continuation of the 2005 Special Population Bioterrorism Initiative between Maryland's Department of Health and Mental Hygiene and Morgan State University's School of Community Health and Policy (MSU SCHP). The GRC Project

---

<sup>194</sup> Xavier de Souza Briggs, "Social Capital: Easy Beauty or Meaningful Resource?," *Journal of the American planning Association* 70, no. 2 (2004): 151–158.

<sup>195</sup> Berke et al., "Building Capacity for Disaster Resiliency in Six Disadvantaged Communities," 1–20.

<sup>196</sup> Ibid.

<sup>197</sup> Rowel, "A Guide to Enhance Grassroots Risk Communications Among Low-Income Populations," 1–44.

was designed to assist in upgrading state and local public health jurisdictions' preparedness for and response to bioterrorism, outbreaks of infectious diseases, and other public health threats and emergencies. The GRC Project was conducted from June 2006 through August 2006.

The first phase consisted of collecting information from low-income minorities, mostly African-Americans, to assess further disaster service needs, perceptions about the avian flu pandemic, and the impact that Hurricane Katrina had on the community's perceptions about disaster preparedness, response, and recovery. Phase 2 consisted of meetings with community stakeholders to solicit input to develop and validate community participation as a meaningful strategy. This phase determined the opportunities and willingness of external organizations to participate in an enhanced communication system while developing a means to minimize the distrust of local authorities and low access to important information.<sup>198</sup>

The Phase One survey explored the impact of Hurricane Katrina among low-income African-Americans located in Maryland, through indirect exposure to the mass media. The survey instrument used scales developed to assess trust/confidence in government agencies that consisted of honesty, fiduciary responsibility, competency, and confidentiality as related to their perceptions about Hurricane Katrina and its impact on their own preparedness.

The results from the GRC Project demonstrated the potential unstable information environment that can develop in low-income communities.<sup>199</sup> The perceptions of past disasters coupled with distrust and poor information exchange can limit preparedness and response information in minority communities that is consistent with other research concerning minority groups and disasters. In a study by Hartman and Squires, it was noted that many participants felt racism and classism contributed to this problem and that low-income minority populations are distrustful of government agencies responsible for disaster and other public health services, and that Hurricane Katrina heightened the level

---

<sup>198</sup> Rowel, "A Guide to Enhance Grassroots Risk Communications Among Low-Income Populations," 1-44.

<sup>199</sup> Ibid.

of distrust among minority populations.<sup>200</sup> Four focus group sessions were conducted from a sub-set of survey participants. A total of 43 African-Americans participated in the sessions of which 23 were females and 20 males that while small in number is a representation of the concerns by those in the community.<sup>201</sup> Participants discussed what went wrong with Hurricane Katrina, who was to blame, the lessons learned, and how they would respond to risk communication messages. Table 7 provides a description of the five themes that emerged from the focus group session discussions. These findings suggest a need to engage trusted agencies and leaders in risk communication activities.<sup>202</sup>

---

<sup>200</sup> Chester Hartman and Gregory D. Squires, ed., *There Is No Such Thing As a Natural Disaster: Race, Class, and Hurricane Katrina* (New York: Routledge, 2006).

<sup>201</sup> Rowel, "A Guide to Enhance Grassroots Risk Communications Among Low-Income Populations," 1-44.

<sup>202</sup> Ibid.

**TABLE 3**  
**Thematic Analysis of Focus Group Data**

<i>Themes</i>	<i>Summary of Findings</i>	<i>Related Quotes</i>
1. Blame for Hurricane Katrina relief effort	Participants blamed the government, media, and citizens for the poor relief effort and were more critical of the governments' actions after the event	<p>"When this (Hurricane Katrina) happened they (government) should have been in there the next day . . . they should have sent somebody in to take those people out of there."</p> <p>"When they (citizens) heard a disaster was coming they didn't think . . ."</p> <p>"They (media) showed what they wanted people to see. They didn't show any positive stuff."</p>
2. Cultural implications of the Hurricane Katrina poor relief effort	Participants also felt race and poverty were factors contributing to the poor relief effort and it would have been different if the victims were not minorities and poor	<p>"Katrina exposed America for what it really is. And it took us back before the civil rights movement."</p> <p>"They are going to save their kind first."</p>
3. Distrust	Participants did not trust the government and that the media coverage distorted the truth. They also felt government and media were in cahoots with each other to mislead the public	<p>"They (media) blew it out of proportion because they wanted to take the power . . . so they could take the heat off of the President."</p> <p>"I think the government knew about the levy being so bad . . . Even when it broke they should have had a system there to remove those people."</p>
4. Likely response to risk communication messages	The majority of participants indicated they would respond positively to risk communication messages in the event of a public health threat and that the type of hazard and trust would be the determining factors	<p>"If they tell you a terrorist attack is coming, we gonna listen to it."</p> <p>"I wouldn't do it (in home shelter) knowing I don't have any tools; any medicine, food. So I have to go out and try to get something and then come back. I don't think I'd stay in the house with nothing."</p>
5. Post-Hurricane Katrina lessons learned	Many but not all participants acknowledged that lessons learned from Hurricane Katrina affected their preparedness behaviors. Since Hurricane Katrina many had (a) gathered some of the suggested preparedness kit items; (b) discussed with family members where they should meet or evacuate prior to a disaster; and (c) took steps to learn more about how to prepare for a disaster and to listen for warnings. However, many indicated they made no changes to be more prepared	<p>"I keep jugs of water. I have boxes of food. I buy batteries every week. I try to keep my prescriptions up. I have all my important papers in one place for the first time in my life. So if I have to leave, I can grab my little metal box and get out of there."</p> <p>"My plan is to first call my family out in Arkansas and tell them to prepare for me and my family and that we are coming."</p> <p>"We talk more about closeness and disaster . . . I think our families will be more prepared and listen to the media."</p> <p>"I don't have a plan. There isn't too much happening around here."</p>

Table 7. Thematic Analysis of Focus Group<sup>203</sup>

Phase two of the Project included the development of a Risk Communication Team that consisted of a principle investigator, project manager, and a consultant. The principal investigator administered the grant while the project manager coordinated logistics through all phases of the effort. The project consultant assisted with developing the grassroots risk communication system. This phase of the project also involved contracting with a grassroots outreach worker (GOW) to assist in coordinating the

---

<sup>203</sup> Rowel et al., "A Guide to Enhance Grassroots Risk Communications Among Low-Income Populations."

development of the grassroots system at the local level.<sup>204</sup> The GOW was to solicit local “grassroots” organizations actively, which would agree to participate in the distribution of risk communications. These organizations currently served the pre-determined minority populations and were chosen in an attempt to bridge the communication gap existing between these populations and local authorities.

During the three-month strategy development period, the GOW obtained 25 agreements from faith and community-based leaders and government agencies that served low-income minority populations. These grass-roots organizations agreed to be the points of distribution for risk-related information before, during, and after a disaster. The majority of agreements were signed by faith-based organizations (48%), followed by community-based organizations (32%) and city agencies serving low-income populations (20%). Most agencies (84%) agreed to disseminate awareness materials (i.e., flyers and brochures) before a disaster occurs, and 84% also agreed to disseminate materials during the imminent danger phase.<sup>205</sup> The intent of this step was to develop providers to disseminate information to high-risk groups and secure these providers prior to developing the “guide” in the next phase.

The authors of the guide define a “grassroots risk communication system” as a partnership that enables public health and emergency preparedness practitioners to involve grassroots organizations, such as faith-based, community-based, and business organizations serving low-income populations, in risk communication activities during imminent danger (warning), response and recovery phases of disaster.<sup>206</sup> This grassroots approach is further supported by studies conducted to assess current risk communication practices focused on at-risk populations including the one completed in Phase One. Key

---

<sup>204</sup> Rowel et al., “A Guide to Enhance Grassroots Risk Communications Among Low-Income Populations.”

<sup>205</sup> Ibid.

<sup>206</sup> Ibid.

findings noted in this study indicated that community-based participation strengthens emergency preparedness, response, and recovery for at-risk populations.<sup>207</sup>

Generally, disadvantaged populations, such as minorities and low-income individuals, have fewer resources and face a number of daily challenges that affect their ability to respond to and recover from an emergency.<sup>208</sup> “Sound and thoughtful risk communication can assist public emergency management and public health practitioners in preventing ineffective, fear-driven, and potentially damaging public responses to serious crises such as unusual disease outbreaks and bioterrorism.”<sup>209</sup> Figure 5 depicts the unstable information environment that risks communication systems are designed to minimize. This unstable information environment is prevalent among all populations, which however, can be exacerbated among low-income populations.<sup>210</sup>

---

<sup>207</sup> Lisa S. Meredith et al., “Analysis of Risk Communication Strategies and Approaches with At-Risk Populations to Enhance Emergency Preparedness, Response, and Recovery,” in “A Guide to Enhance Grassroots Risk Communications Among Low-Income Populations,” *Health Promotion Practice*, July 2011.

<sup>208</sup> Fothergill and Peek, “Poverty and Disasters in the United States: A Review of Recent Sociological Findings,” 89–110.

<sup>209</sup> U.S. Department of Health and Human Services, *Communicating in a Crisis: Risk Communication Guidelines for Public Officials*, 2002.

<sup>210</sup> Rowel, “A Guide to Enhance Grassroots Risk Communications Among Low-Income Populations,” 1–44.

**DEVELOPMENT OF RISK COMMUNICATION SYSTEM**



**Disaster**

**IMPLEMENTATION OF RISK COMMUNICATION SYSTEM**

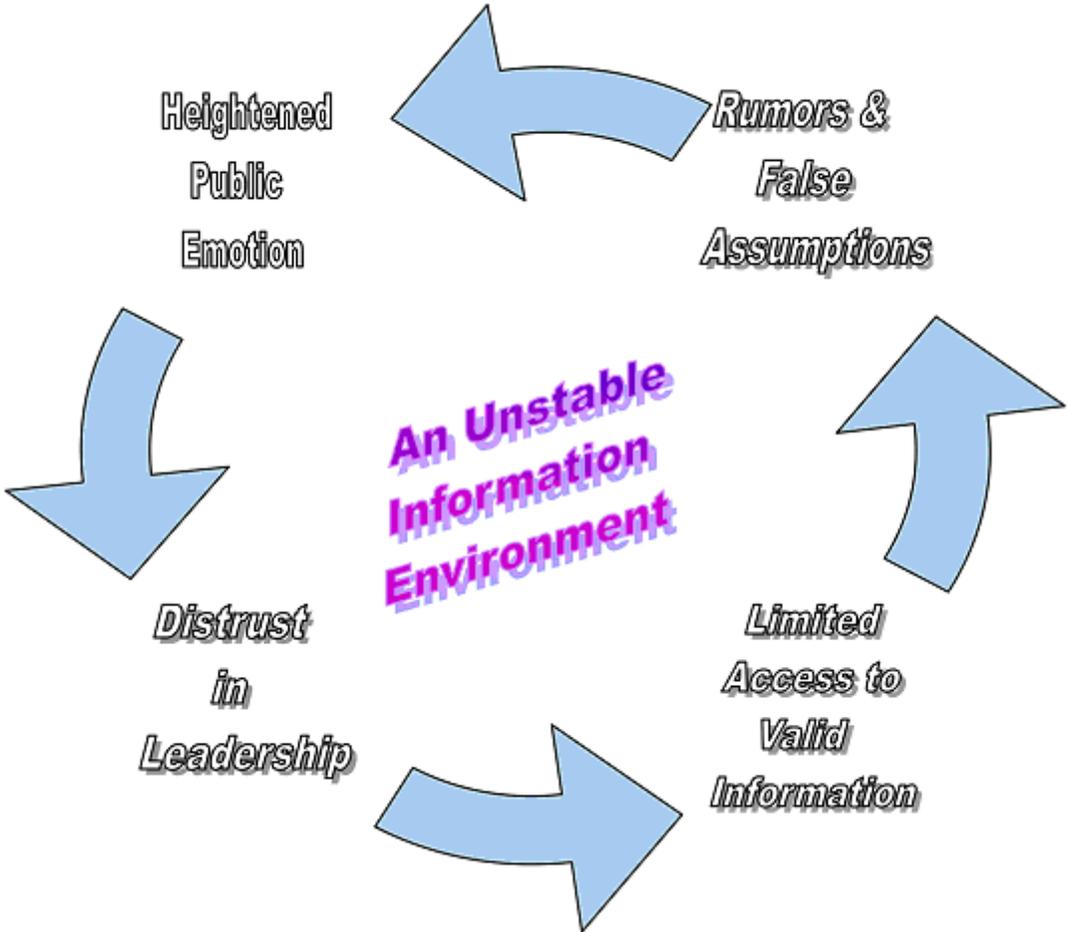


Figure 5. An Unstable Information Environment<sup>211</sup>

<sup>211</sup> Rowel et al., "A Guide to Enhance Grassroots Risk Communications Among Low-Income Populations."

The originators of the guide purport that a system that continuously delivers important messages to the community, and particularly vulnerable populations, may overcome many of the communication problems that exist among this group. However, the development of a grassroots risk communication system requires emergency management planners to initiate different activities at each disaster phase including pre-disaster, imminent danger, response, and recovery periods.

Traditional risk communication systems are often designed for the general population. As a result, marginalized communities that fall below the average literacy level may have difficulty understanding the information and/or trusting the messenger. This population is also hard to reach through a traditional risk communication system due to the lack of a systematic relationship between government and the grassroots organizations from which marginalized communities most often receive their services. By forming these liaisons, the communication process will improve, and as a by-product, create a “stable information environment” (Figure 6).

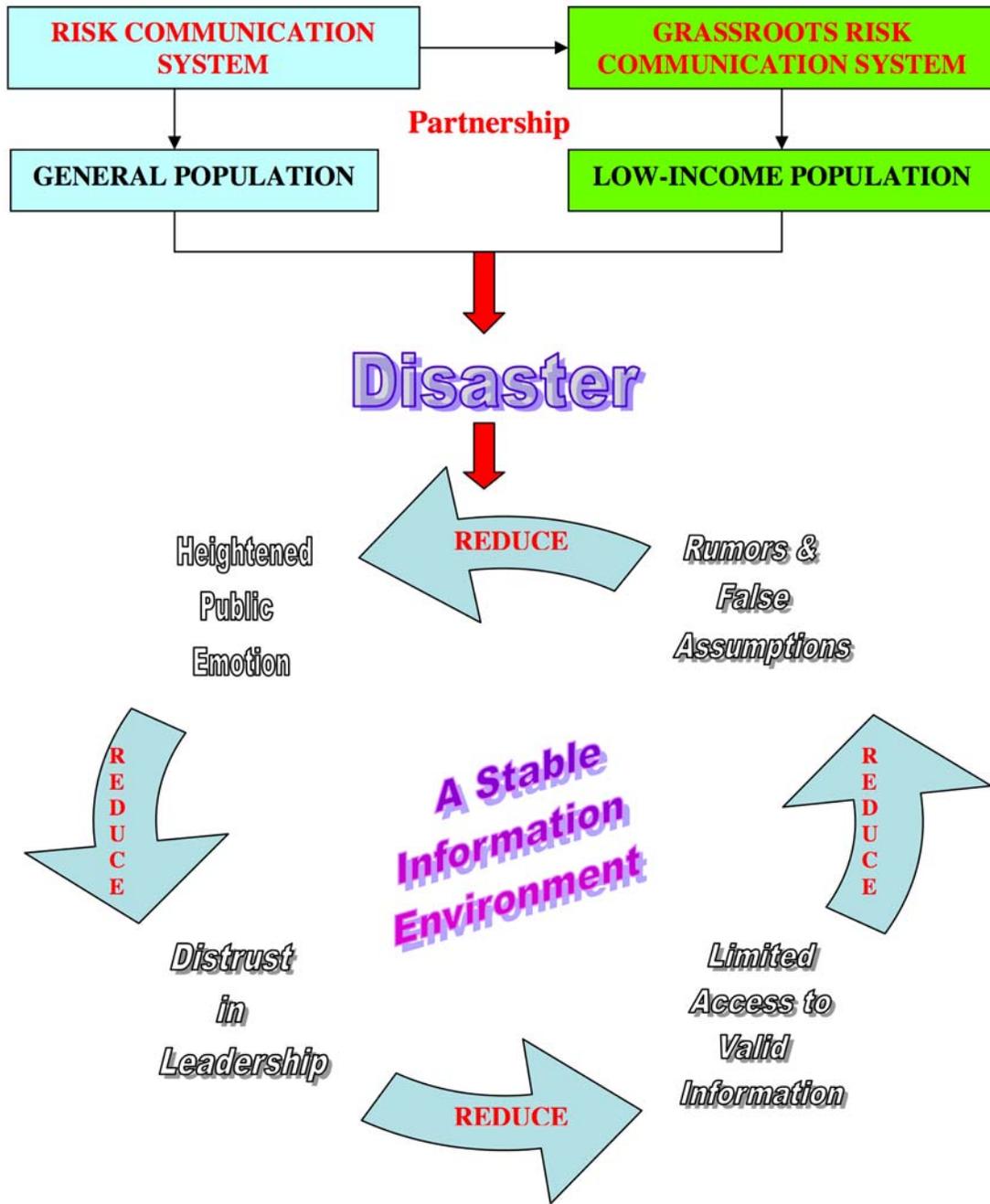


Figure 6. A Stable Information Environment<sup>212</sup>

<sup>212</sup> Rowel et al., “A Guide to Enhance Grassroots Risk Communications Among Low-Income Populations.”

Based upon meetings with local health department and emergency management partners, and on findings from the GRC Project, it was determined that designing a grassroots risk communication system must incorporate the following principles.



Figure 7. Grassroots Communications System Principles

For the communication system to be effective, it needs to be heavily relied upon by grassroots organizations that include community-based, faith-based, and business organizations that serve the low-income population in any given neighborhood.<sup>213</sup> The realization that these organizations and entities have already built trust in underserved communities had the intended effect of maximizing communications and enhancing the bridge of trust with local officials. The organizers sought to invest in the number and types of organizations involved, believing that limiting partnerships to one particular category of grassroots organizations may serve to limit outreach opportunities that might result in some low-income individuals not receiving the necessary information, and consequently, hindering their ability to act.

---

<sup>213</sup> Rowel, “A Guide to Enhance Grassroots Risk Communications Among Low-Income Populations,” 1–44.

Examples of each type of grassroots or business organization serving low-income populations include the following.



Figure 8. Examples of Grassroots Organizations Serving Minority Populations

Developing a grassroots risk communication system requires different priorities during different phases of disasters. Four basic phases in which risk communication activities should occur are: 1) pre-disaster, 2) imminent danger/warning, 3) response, and 4) recovery. In the analysis of the agency agreements for the GRC Project, 84% of the grassroots organizations were willing to disseminate awareness material before a disaster occurs and in the imminent danger phase (one week prior), while 96% also showed a willingness to display posters or other printed materials at all times.<sup>214</sup>

Agency agreement findings also indicated that 28% of the grassroots organizations were willing to participate on radio talk shows.<sup>215</sup> In addition, grassroots organizations should be included on various government list serve groups to stay abreast of necessary information and enhance their relationships with government agencies.

<sup>214</sup> Rowel, "A Guide to Enhance Grassroots Risk Communications Among Low-Income Populations," 1-44.

<sup>215</sup> Ibid.

Table 8 provides methods in which government agencies can enhance communication during the pre-disaster phase by working with grassroots organizations.

<b>Current Government Risk Communication Task</b>	<b>Role of Grassroots Organization</b>
Produce information and materials for minority and low-income populations	<ul style="list-style-type: none"> <li>✚ Provide input and feedback on the information and materials</li> <li>✚ Conduct pilot tests of the information and materials</li> </ul>
Use of “siren system” for the imminent danger or warning period which includes translation and distribution of different messages for different groups of people	<ul style="list-style-type: none"> <li>✚ Assess the clarity of messages, provide feedback, and disseminate the messages among hard-to-reach populations</li> <li>✚ Make sure sirens can be heard in areas where low-income populations reside</li> </ul>
Disseminate risk communication messages using the Internet, email lists, radio, television, local reporters, etc.	<ul style="list-style-type: none"> <li>✚ Provide input and feedback on the messages</li> <li>✚ Form a partnership with public health and emergency management agencies to begin the trust building process among populations served by grassroots organizations and to introduce the emergency management and public health agencies as a source of reliable information.</li> </ul>
Organize special events and health fairs on emergency preparedness	<ul style="list-style-type: none"> <li>✚ Participate in the special event</li> <li>✚ Serve as a partner for special events</li> </ul>

Table 8. Effective Ways for Government to Enhance Pre-Disaster Communication<sup>216</sup>

### 1. Outcomes

For many low-income populations, a disaster is considered a low probability event. Thus, other pressing issues, such as paying bills, family drug abuse, and crime in

<sup>216</sup> Rowel et al., “A Guide to Enhance Grassroots Risk Communications Among Low-Income Populations.”

their communities, may take precedence over becoming aware of disasters or creating an emergency preparedness kit.<sup>217</sup> The ability to work with grassroots organizations could lead to new strategies for preparing low-income populations and building disaster resiliency. This ability to build capacity and encourage resiliency would create an environment in which individuals can reduce risks, decrease vulnerabilities, and “bounce back” quicker to unfortunate events. At the national level, the concept of resilience was identified in the 2010 Quadrennial Homeland Security Review (QHSR) Report as one of three foundational elements essential to a comprehensive approach to homeland security. The report also defines ensuring resilience to disasters as one of five missions of the department.<sup>218</sup> Effective preparation during the pre-disaster period could serve to lessen the impact of an incident if government agencies work with grassroots organizations to identify threats and plan to minimize their effects, determine vulnerabilities, and give higher priorities to the appropriate interventions while identifying required resources available during an incident.<sup>219</sup>

The development of the system is not a substitute for existing governmental risk communication systems; instead, it serves as a complement to existing systems by making them more effective. A grassroots risk communication system also serves to diversify sources of information for those who traditionally lack trust in government agencies. In addition, establishing and maintaining relationships with organizations that work closely with low-income groups will provide additional opportunities for government agencies to assess the impact of their messages and materials, and improve their quality by making the messages and materials more culturally sensitive.

During the response and recovery period, grassroots organizations could serve as support to those affected and facilitate short- and long-term activities to return to normalcy. Some of the grassroots organizations may have resources, such as shelters,

---

<sup>217</sup> Rowel, “A Guide to Enhance Grassroots Risk Communications Among Low-Income Populations,” 1–44.

<sup>218</sup> *Homeland Security Advisory Council, Community Resilience Task Force Recommendations*, June 2011.

<sup>219</sup> Rowel, “A Guide to Enhance Grassroots Risk Communications Among Low-Income Populations,” 1–44.

food, clothing, etc., which could serve as additional community resources during the response or recovery periods. Also, these organizations may be willing to assist in organizing evacuation plans by communicating messages and taking leadership roles within the community.

## **2. Barriers to Implementation of a Grassroots Risk Communication System**

In interviews with grassroots organizations,<sup>220</sup> most indicated enthusiasm about doing public activities. Distribution of the materials to the people they usually meet was mentioned as an easy and feasible activity, especially during the imminent danger phase. However, one of the major concerns when working with grassroots organizations is the sustainability of their services. As such, powerful incentives and ongoing relationships with these organizations should be established to ensure sustainability of these voluntary services. The grassroots organizations indicated that such incentives from government agencies would prove beneficial in keeping the organizations motivated to provide the promised services. One particular incentive mentioned included being recognized at special events, in newsletters, or on websites. In this regard, regular updating of organizational profile data and communicating the organizations' expectations or concerns with government agencies is essential. In addition, it would be helpful for government agencies to establish relationships with additional grassroots organizations that could serve as backup partners when the main grassroots organizations are not available or are not performing as expected. Finally, establishing strong relationships with grassroots organization during the pre-disaster period could serve to ensure better services from these organizations.

## **C. CONCLUSIONS**

Research studies have concluded that the participation of key stakeholders in disaster preparedness and planning will increase participation in emergency preparedness and information flow. Organizations that include community representatives drawn from

---

<sup>220</sup> Responses and anecdotes are not necessarily offered as indicative of the majority of the population's concerns about an issue, rather as a representative sampling of issues commonly discussed or of concern in the affected community.

churches, social clubs, schools, or labor unions are assumed to increase communication and build trust in marginalized communities. The success of involving churches in African-American communities in other public health endeavors buttresses this recommendation.<sup>221</sup> Ensuring that authorities are viewed as honest requires addressing both the completeness of information, as well as its accuracy.<sup>222</sup> People are more likely to trust authorities whom they view as genuinely concerned about the welfare of others.<sup>223</sup>

The missing aspect of each of these plans and organizational structures is the individual component of being prepared and accepting personal responsibility for themselves and their families. The aforementioned cases created an environment like many others that creates a “middle man” to connect to the stakeholder/citizen to the government authority. These programs emphasize sharing, collecting, and facilitation of information to the end user without creating a deliverable that can functionally exist without an intermediary. This effort is disconcerting when considering the number of people expecting service and the small number of organizations engaged in the process. The small numbers of organizations facilitating awareness pale in comparison to those actually needing service. While even one more person being prepared is significant, it is of much more importance and gravity to stress individual resiliency and enhance the level of responsibility at the personal level without reliance on third parties.

Enabling the end users to facilitate their means of information exchange and preventive action will decrease vulnerability, and thereby, increase resiliency. A process for direct engagement is discussed in the next chapter whereby individual responsibility is highlighted as a means for direct action and trust building to assist in an emergency.

---

<sup>221</sup> Cordasco et al., “They Blew the Levee: Distrust of Authorities Among Hurricane Katrina Evacuees,” 277–282.

<sup>222</sup> Thomas A. Glass and Monica Schoch-Spana, “Bioterrorism and the People: How to Vaccinate a City Against Panic,” *Clinical Infectious Diseases* 34, no. 2 (2002): 217–223.

<sup>223</sup> Richard G. Peters, Vincent T. Covello, and David B. McCallum, “The Determinants of Trust and Credibility in Environmental Risk Communication: An Empirical Study,” *Risk Analysis* 17, no. 1 (1997): 43–54.

The ability to build self-reliance in these communities will not only have a positive effect in times of disaster, but also in building self-esteem and confidence that may extend into other areas impacting these socioeconomically challenged areas.

## V. RECOMMENDATIONS

In the preceding chapters, a condition of perceived distrust by the citizens, and abandonment by government officials, led to an atmosphere that has created a drain on resources, in that individuals, for a variety of reasons, have not taken the proper steps to prepare, and in essence, create a state of resiliency for themselves and their families. This condition, along with varying socioeconomic factors, and in some cases apathy, has emerged as a lasting foundation of which a construct of helplessness and a general disconnect in regards to disaster and emergency response has been formed in these communities. By way of two case studies, the actions undertaken in various locations to engage these “marginalized” communities using third party grassroots or local organizations were evaluated. These programs were specifically designed to build trust and communication with intermediaries that would provide information and facilitate fundamental processes.

The research indicates that success in reaching out to these populations through these programs has occurred; however, the programs themselves depend on Non-Government Organizations (NGOs), money, and the interaction with the end user. Additionally, a measure or evaluation of success has not been developed to adequately assess if these programs are working and what percentages of affected populations are actually being reached through these programs. Limited research or information is available that places the responsibility for preparedness and active response at the feet of the end user. Creating a culture of individual preparedness to empower individuals within a segment of the population would be more meaningful and effective in reaching the larger group and having lasting effects.

This chapter discusses recommendations for implementing a program of individual preparedness and reliability based on changing the way individuals view their level of responsibility to result in self-sustainment and limit the drain on traditional resources while increasing relations, creating resilience, and minimizing conflict and hostilities based on the perception of racial discrimination. The recommendations put forth are to use “positioning theory” to heighten awareness within the African-American

community. Harré and Davies developed positioning theory to open up a new dimension in the psychology of interpersonal encounters, through explicit attention to the role of rights and duties in the management of personal action. People are positioned or position themselves to act within evolving story lines, and based on claims about relevant personal attributes, the discursive process of prepositioning.<sup>224</sup> Positioning theory can clarify how parties might reinterpret their roles such that destructive acts can be set aside and acts “appropriate to [new] rights and duties are recalibrated.”<sup>225</sup> A shift in conversation can produce a dramatic shift in negotiating shared meanings. Jessie Sutherland states that learning how to engage dynamically across differences to “create shared pictures is a critical skill in today’s world.”<sup>226</sup>

Scholars believe that positioning theory is a “powerful tool” for understanding and resolving conflict, which involves a temporal relationship with a constructed, contested social reality.<sup>227</sup> “Positioning Theory illuminates how meaning-making practices ... lie at the heart of conflict.”<sup>228</sup> By establishing an individual position, working within the social forces and creating an individual story line, an individual’s place in any given situation can become clear. To that extent, a negative situation can turn positive with a modification of those elements, and conversely, a positive situation can evolve due to changes or conflict.

The development of a defined position by the head of household will delineate this person’s personal responsibility, stimulate preparedness, educational development, and increase the value of the individual’s role in preparing and maintaining personal and

---

<sup>224</sup> Rom Harré et al., “Recent Advances in Positioning Theory,” *Theory & Psychology* 19, no. 1 (2009): 5–31.

<sup>225</sup> Daniel Rothbart and Tom Bartlett, “Rwandan Radio Broadcasts and Hutu/Tutsi Positioning,” in *Global Conflict Resolution Through Positioning Analysis*, ed. Fathali M. Moghaddam, Rom Harré, and Naomi Lee (New York: Springer, 2008), 227–246.

<sup>226</sup> Jessie Sutherland, *Worldview Skills: Transforming Conflict from the Inside Out* (Worldview Strategies, 2005).

<sup>227</sup> Winnifred R. Louis, “Intergroup Positioning and Power,” in *Global Conflict Resolution Through Positioning Analysis*, ed. Fathali M. Moghaddam, Rom Harré, and Naomi Lee (New York: Springer, 2008), 21–39.

<sup>228</sup> Fathali Moghaddam, Rom Harré and Naomi Lee, “Afterword,” in *Global Conflict Resolution Through Positioning Analysis*, ed. Fathali M. Moghaddam, Rom Harré, and Naomi Lee (New York: Springer, 2008).

family safety. Additionally, by using other members of the household, namely children, and initiatives within the community, the family's responsibility will be better defined and effective. The proposed action will also use the interaction of government agencies, NGOs and FBOs to facilitate this information building and sustainment activity.

#### **A. POSITIONING THEORY**

Regardless of their intent, people can be barriers to implementation of a new way of problem solving.<sup>229</sup> The actions or inactions of people can affect the way in which change is brought to a community. The ability for individuals to change singularly has a greater effect when done collectively, and conversely, can have an even more negative effect if actions are used as a barrier to change that also influences the group as a whole. Solving problems and true continuous improvement requires people to focus their inquisitiveness freely on understanding problems and crafting solutions to address the issue. Leaders need to inspire people to make this focused effort and take action to accomplish improvements.<sup>230</sup>

When considering how to eliminate barriers and enable change to create a more dynamic level of personal responsibility for emergency preparedness using positioning theory, consideration should be given to the following.

- Providing a basis to understand parity and power through the discourse that unfolds. As an example, an individual taking personal responsibility for personal planning raises the level of power and equality.
- Offering a way to understand the difficulties encountered in the change process. By understanding that no easy fix exists, and by assuming personal responsibility, value in changing the process can be realized and achieved.
- Demonstrating that interpersonal shortfalls need to be resolved before people can move to a *new way*. Creating a partnership to dispel myths and years of distrust will enable open dialogue and a sincere learning environment.

---

<sup>229</sup> Lionel J. Boxer, 'Barriers to Implementation of TQM', *AIC TQM '93 Continuous Improvement in a Service Environment—Fourth Annual Event*, Sydney, The Sydney Marriott Hotel, February 17–19, 1993.

<sup>230</sup> Lionel J. Boxer, "'Do It'," *Corporate Revise*, K&D Media, Sydney, March 1998.

As a society, individuals are thought to place themselves in positions or mindsets that encourage a belief that a certain situation or condition exists based on actions or perceptions. Although indeterminateness or ambiguity may persist to some degree, by positioning themselves and others within conversations, people can give meaning to their behavior and make it intelligible in the light of the story line of the conversation.<sup>231</sup>

As evinced in Figure 9, positioning theory is based upon the interconnectedness of the following factors.

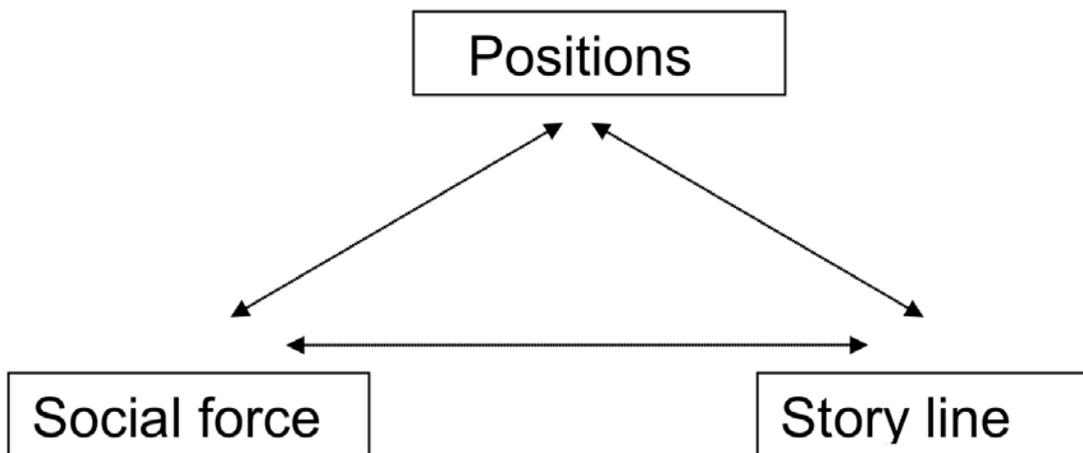


Figure 9. Positioning Triad<sup>232</sup>

---

<sup>231</sup> Luk van Langenhove and Rom Harré, "Introducing Positioning Theory," in *Positioning Theory: Moral Contexts of Intentional Action*, ed. Rom Harré and Luc van Langenhove (Oxford: Blackwell, 1999).

<sup>232</sup> Ibid.

## 1. Positions

A position is a “loose set of rights and duties that limit the possibilities of action,”<sup>233</sup> while positioning is the “dynamic construction of personal identities relative to those of others.”<sup>234</sup> Language is used, differing by context, to position or construct a vantage point.<sup>235</sup>

According to Boxer, “Positioning is an ever-negotiable definition of self.”<sup>236</sup> It is through positions that a person’s moral and personal attributes are defined, strengthened, or diluted.<sup>237</sup> Positions are relational, flexible, and dynamic, and vary to the extent to which they are consensual and to which they are intentionally chosen.<sup>238,239</sup> Individual positioning is formed through actions and experiences that create the foundation of being.

## 2. Social Force

Social force links semantics and human action. “Social force” can be defined as what is accomplished socially through conversation and symbolic exchange<sup>240</sup> that in many respects define the focus of interaction. In considering the application of social forces, it can be said that the meaning of words, not words themselves, actually frame the conversation and subsequent action or inaction.

---

<sup>233</sup> Rom Harré and Fathali M. Moghaddam, ed., *The Self and Others: Positioning Individuals and Groups in Personal, Political, and Cultural Contexts* (Praeger Publishers, 2003).

<sup>234</sup> W. Gerrod Parrott, “Positioning and the Emotions,” in *The Self and Others Positioning Individuals and Groups in Personal, Political, and Cultural Contexts* (Praeger Publishers, 2003).

<sup>235</sup> Daniel Druckman, *Doing Research: Methods of Inquiry for Conflict Analysis* (Sage Publications, Incorporated, 2005).

<sup>236</sup> Lionel Boxer, “Assessment of Quality Systems with Positioning Theory,” in *The Self and Others Positioning Individuals and Groups in Personal, Political, and Cultural Contexts* (Praeger Publishers, 2003).

<sup>237</sup> Steven Sabat, “Malignant Positioning and the Predicament of People with Alzheimer’s Disease,” in *The Self and Others Positioning Individuals and Groups in Personal, Political, and Cultural Contexts* (Praeger Publishers, 2003).

<sup>238</sup> Russell L. Stockard and M. Belinda Tucker, “Subverting Social Vulnerabilities and Inequality in Disaster Survival,” *Narrating the Storm: Sociological Stories of Hurricane Katrina* 3 (2007): 62.

<sup>239</sup> Louis, “Intergroup Positioning and Power,” in *Global Conflict Resolution Through Positioning Analysis*,” 21–39.

<sup>240</sup> Nikki R. Slocum-Bradley, “Discursive Production of Conflict in Rwanda,” in *Global Conflict Resolution Through Positioning Analysis*, ed. Fathali M. Moghaddam, Rom Harré, and Naomi Lee (New York: Springer, 2008), 207–226.

### 3. Story Lines

Stories are “the driving force of human understanding and action” according to Pearce and Littlejohn.<sup>241</sup> Similar to a script, story lines can be actively constructed and contested.<sup>242</sup> However, story lines are more open and fluid than scripts, because within any one story line, different scripts can evolve. In the story line, people can accept, reject, be forced into, be displaced from, and be refused access to positions. People locate themselves in stories to feel cohesion and connection. Shared story lines may involve “shifts in power, access, or blocking of access, to certain features of claimed or desired identity.”<sup>243</sup>

These factors could contribute to the emergency preparedness discussion in that trusted members of the community could assign duties and responsibilities. In turn, a collective among all individuals is created wherein their shared responsibility is viewed through one shared lens. By turning their difficulties and conflict into positive energy by directing specific roles, a more dynamic and positive shift in duties can be achieved.

An action becomes socially significant by providing meaning to the unfolding conversation.<sup>244</sup> How a conversation unfolds depends on all three elements of the “positioning triad,” the interplay between positions, story line, and speech-acts.<sup>245</sup> A change of the story line affects both position and speech-act. The presence or absence of certain positions may or may not allow for certain speech-acts; hence, altering the story line or not and so forth. It is, therefore, imperative that all aspects of the “positioning triad” be consistent and share the same message. Alleviating dissent and distrust are important factors in changing the belief systems that have been previously present.

---

<sup>241</sup> Stephen W. Littlejohn and W. Barnett Pearce, *Moral Conflict: When Social Worlds Collide* (Sage Publications, Incorporated, 1997).

<sup>242</sup> Louis, “Intergroup Positioning and Power,” in *Global Conflict Resolution Through Positioning Analysis*, 21–39.

<sup>243</sup> Bronwyn Davies and Rom Harré, “Positioning: The Discursive Production of Selves,” *Journal for the Theory of Social Behaviour* 20, no. 1 (2007): 43–63.

<sup>244</sup> Rom Harré and Fathali M. Moghaddam, “Introduction,” in *The Self and Others: Positioning Individuals and Groups in Personal, Political, and Cultural Contexts*, ed. Rom Harré and Fathali M. Moghaddam (Praeger Publishers, 2003).

<sup>245</sup> Ibid.

The perception that minority populations, and African-American communities, in particular, have become marginalized has become a reality and a persistent mindset. The “positioning” being assumed is one of helplessness, disconnect, and unfair treatment by government authorities, which has resulted in a discourse that has created malaise and distrust in government action causing further inaction by these affected communities. As a group, a general “position” has been assumed that fewer services are available to these communities, and therefore, they will suffer in comparison to other more affluent and racially non-diverse areas. By changing the position, speech actions and story line, the individuals in the community can begin to place themselves in the conversation and the discourse of distrust can be altered to one of personal responsibility that leads to empowerment, developing into action, and eventually, garnering the trust that is so lacking.

“Positions” are features of the local moral landscape. People are assigned positions, or acquire, or even seize positions via a variety of prior implicit and explicit acts that, in the most overtly “rational” positioning acts, are based on personal characteristics, real or imaginary.<sup>246</sup> The positions that individuals place themselves in are built on experiences and influenced by patterns seen and heard, and may sometimes be built on erroneous or inconclusive facts. Despite the veracity of the experiences and perceptions, individuals living in their position, which may be ascribed to a negative event, can overcome this disposition and change the landscape of their situation.

This change can be achieved because positioning practices vary with 1) the particular cultural ideals persons desire to move toward through positioning, 2) the particular dimensions that persons find relevant in positioning themselves and others in discourse, and 3) with the preferred forms of autobiographic telling, which may influence the types of stories people tell themselves about themselves in the process of positioning.<sup>247</sup> If through shared experiences or individual desire, an individual chooses

---

<sup>246</sup> Harré et al., “Recent Advances in Positioning Theory,” 5–31.

<sup>247</sup> Siu Lan Tan and Fatahli M. Moghaddam, “Reflexive Positioning and Culture,” *Journal for the Theory of Social Behaviour* 25, no. 4 (1995): 387–400.

to change a position and assume a role and duty not previously ascribed to this person's discourse, the position changes, speech-acts begin to evolve, and the story line becomes different.

## **B. STRATEGY**

### **1. Changing An Individual's Position**

By recognizing that roles and duties can be changed within an individual's position, recommendations for creating those factors are discussed to improve preparedness and response to disaster events. A three-pronged effort is suggested to change the focus, level of responsibility, and eventually, the belief system of those in minority communities. The degree of change is personally defined and quantified by the level of participation by the individual as self, and by the community, as a whole. The three areas of change advocated by the author are 1) increasing personal responsibility, which is guided and informed, and not supplanted, by NGOs and FBOs, 2) utilizing children's programs to reach family units, and 3) creating subgroups within the Community Emergency Response Team (CERT) program in individual communities to share common experiences and provide identity and a like "story-line" for its participants.

The formation of networks is one of the most commonly considered strategies for addressing a collective human (community) need that can also support integrated strategies. Networks offer opportunity to build social capital, which in turn, creates collective value and a commitment to work together. Social capital facilitates information flow, mutual aid, and collective action foundational for community resiliency. Community resiliency can be improved via the strategy of increasing community protective factors (assets) and decreasing risk factors before disaster strikes. Emergency management capacity should be built from the ground up by utilizing neighborhood and community-based programs to create personal responsibility for individuals and families who may have to stand on their own because assistance may not arrive for hours or days, which will increase individual and community responsibility for risk reduction and less

reliance upon state and federal assistance.<sup>248</sup> Research has shown that community members included in the planning process and who build trust in a collective environment will be more aware of the dangers they will confront, will be more likely to respond to guidance consistent with the plan because they understand it better, will have greater trust in it, and will feel a level of ownership of the plan.<sup>249</sup> What is different about these recommendations to effectuate change is the manner in how they are achieved.

Several key components are required for effective community mobilization to occur that include creating a shared vision, a common understanding of the problem, leadership, establishing collaborative partnerships, and increased community participation and sustainability.<sup>250</sup> A critical element in both community capacity building and mobilization is the leadership required to bring the key community players together, to capture their imagination, and to energize them to action. Such leadership in community capacity building need not come from established hierarchies, but can emerge from the community itself. Several studies concluded that the response operations by the faith-based initiatives and volunteer organizations were much faster and effective compared to the federal government's responses in implementing the new ideas and concepts, as well as establishing trust and buy-in from the intended audience.<sup>251</sup> Under this proposal, it is recommended that these entities be leveraged to create policy, encourage buy-in, and incentivize the community at large to "be prepared," and take the focal point of emergency preparedness inside their homes.

To accomplish this goal, the government must be on the outside looking in and provide guidance through officials given the resources and authority to make this change. The PPD-8 and "whole community" documents put forth do not speak to the socioeconomic, ethnic, and resource driven needs of these underserved communities. These documents are written in one-size fits all manner that does not encourage an

---

<sup>248</sup> Choi, "Emergency Management: Implications from a Strategic Management Perspective."

<sup>249</sup> Wenger, "No More Katrinas: How Reducing Disparities Can Promote Disaster Preparedness."

<sup>250</sup> Kapucu, "Planning for Disasters and Responding to Catastrophes: Error of the Third Type in Disaster Policy and Planning," 313–324.

<sup>251</sup> Ibid.

African-American single mother to create her own “narrative” or story line in regards to emergency preparedness. By funding, empowering, and developing independent offices that focus on emergency management within underserved communities, the federal government could outreach to these groups and encourage individual change.

The initial groups educated and encouraged to begin the process of changing story lines by way of education and development to build personal growth in community members should be comprised of organizations that have an intimate relationship with the stakeholders being targeted. Government authorities should draw from neighborhood watch groups, homeowners’ associations, the business community, and faith-based organizations. Each of these organizations represents a vital component to the process by having the ability to outreach to their respective communities and knowing the intricacies of their respective areas. In particular, the faith-based organizations have the ability to reach a large number of individuals on a consistent basis. Psychologists dealing with survivors of Hurricane Katrina acknowledged the level of religiosity and realized how vital the African-American churches’ role can be in disaster preparedness and response.<sup>252</sup> The recruitment of religious organizations in the emergency management process will assist in enlisting members of the community through trust and rapport building.

The inclusion of a variety of groups is important as studies have shown that conflict between minority communities and local agencies and governments, particularly involving law enforcement, restrict the lines of communication between vulnerable populations and those charged with providing emergency relief. Diminished social and resource capital for institutions serving minority populations extend to an institutional level and correlate between social capital, race and ethnicity.<sup>253</sup> These social forces coincide with the individual’s position and work to form the triangle that eventually creates the “story line” resulting in a feeling of victimization.

---

<sup>252</sup> Trader-Leigh “Understanding the Role of African-American Churches and Clergy in Community Crisis Response.”

<sup>253</sup> Moore, “Institutional Barriers to Resilience in Minority Communities,” 1–8.

The goal of these community units will be to initiate contact with individuals within their communities vulnerable to disaster and provide guidance in line with community needs to build both personal and community resiliency. According to Kulig, the first component of community resiliency includes evidence of getting along, a sense of belonging, and networks. The second component derives from the first and includes a sense of community, both in mentality and outlook (hope, spirit). The third component is a combination of the first two into a community cohesiveness necessary for collective action, specifically, that action of coping, problem solving, and recovery.<sup>254</sup>

This “community mobilization effort” will utilize Kulig’s Community Resiliency Models to mold a program that can build a level of trust and respect between the members, and eventually, the local government body.<sup>255</sup>

Effectiveness is achieved when the organizations from different sectors interact with one another prior to a disaster. Pre-disaster communication is a key aspect of truly effective community preparedness and response (Figure 10).<sup>256</sup>

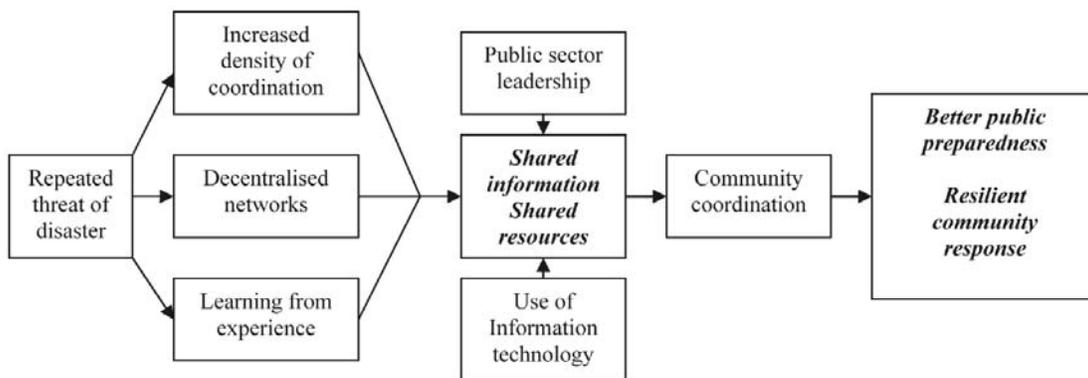


Figure 10. Pre-Disaster Communication Flow<sup>257</sup>

<sup>254</sup> Jennison, “Networking to Improve Community Resiliency in Disaster Planning,” 338–352.

<sup>255</sup> Ibid.

<sup>256</sup> Kapucu, “Collaborative Emergency Management: Better Community Organising, Better Public Preparedness and Response,” 239–262.

<sup>257</sup> Ibid.

In this portion of the proposed strategy, local authorities working with the groups previously described will attempt to reach members of their community through common and ordinary interactions. Upon doing so, a detailed and designed interaction toward the agenda of preparedness will be provided to the individuals for personal implementation. Various entities, such as FEMA and the local government authority, will provide the materials utilized for the effort.

Both the community provider and the government authority should maintain a schedule of distributions, talks and activities to enable successful follow through for additional services, information, and coordination of events designed to bridge the trust and communication gap between the end user and the providers.

Follow-up via emergency service registrations, participation in civic programs and basic knowledge of readiness will be indicators that the affected population is ready and able to prepare for and sustain themselves in an emergency. Continual advisement by the community providers will enhance this effort, and through partnerships with the local government authority, which can be accomplished by community events and teambuilding exercises in which it is demonstrated that as a collective, the authorities, providers and individuals can work together toward a common goal, and a more prepared community and individual.

These activities can take the form of CERT activations in smaller more defined communities in which individuals can become part of a more inclusive group of people who share the same needs and issues. Faith-based organizations and the business communities can foster preparedness by initiating “build an emergency kit” drives and by offering incentives to their members who display a commitment toward preparedness both at home and in their community.

## **2. Building the Future Through Children**

While strategies geared toward involvement and motivating adults and heads of households to change their “story lines” is an important and effective means of engaging stakeholders in preparedness, children are also a viable untapped resource who can have both immediate and future long-term effects. Children’s intellect and life skills begin

formation during their early school years. Influences created by their environment and experiences will shape many of their adult processes and also influence patterns at home. Children can be an influence in the home and through education. It is recommended that an intense effort be utilized to educate children and provide resources to enable a learning environment about preparedness, and to also be a means of influencing and empowering the entire family unit. According to Dunst et al., family empowerment means, “the ability of families to manage life events effectively as well as gain mastery over their affairs requires that we empower families to become competent and capable rather than dependent upon professional helpers. This is accomplished by creating opportunities for families to acquire the necessary knowledge and skills to become stronger and better able to manage and negotiate the many demands and forces that impinge upon the family unit in a way that promotes individual and family well-being.”<sup>258</sup> Viable parent-child feedback arrangements are based on a context in which mutually supportive interactions have been established. When parents and children communicate with each other regularly in responsive ways, they perceive feedback as a valuable part of their growth and development.<sup>259</sup>

**a. *Starting in the Schools***

The manner suggested to facilitate some of this feedback is through an extensive emergency preparedness program geared toward children. Efforts to place preparedness programs in schools must be followed through to educate and develop processes for children and adolescents to begin acquiring personal responsibility that they can transfer into adulthood and bring into their homes. In 2010, FEMA commissioned a study to identify research and evaluations of youth education interventions for emergency preparedness to use the findings to develop recommendations that can be used to assess current programs and to enhance the provision of youth preparedness education

---

<sup>258</sup> C. J. Dunst, C. Trivette, and A. Deal, *Enabling and Empowering Families: Principles and Guidelines for Practices* (Cambridge, MA: Brookline Books, Inc., 1988).

<sup>259</sup> Ibid.; Aparajita Chowdhury, “Empowering At-risk Families through Effective Parenting and Family Learning Process,” *Studies on Home and Community Science* 5, no. 1 (2011): 51–61.

programs.<sup>260</sup> The study determined that at the end of the 20th century, an estimated 66.5 million children each year were affected by a disaster and that the number is likely to increase.<sup>261</sup> Despite this vulnerability, however, scant attention has been given to this particular population in emergency preparedness and planning. Both researchers and practitioners have traditionally overlooked children's needs and experiences in disasters, along with their role in disaster preparedness education and training.<sup>262</sup> Of particular relevance is the correlation of the need of a preparedness curriculum with lessons currently taught regarding fire safety. Studies have shown that appropriate educational programs can help reduce the risk of childhood burn injuries. Additionally, according to Corrarino, Walsh, and Nadel, while minority populations are less likely to take preventative measures against childhood burns as compared to their white counterparts, proper education and training could cause behavioral change to be more likely within these particular groups.<sup>263</sup>

Based on this information, the recommendation is to develop a curriculum for emergency preparedness in low-income and minority communities centered on empirical data taken from actual disaster situations, such as Hurricane Katrina, and applying lessons learned so that they become "lessons taught." Instituting this curriculum at the elementary level will foster empowerment and knowledge that can be taken into the home and will begin the trappings of a properly educated, trained, and ready next generation sure to encounter natural disasters.

The Citizen Corps, which is a program that provides training for the civilian population of the United States to assist in the recovery after a disaster or terrorist attack, ...has developed a comprehensive catalog of resources for programs related to

---

<sup>260</sup> Department of Homeland Security, Federal Emergency Management Agency, *Bringing Youth Preparedness Education to the Forefront: A Literature Review and Recommendations*, Summer 2010.

<sup>261</sup> Angela Penrose and Mie Takaki, "Children's Rights in Emergencies and Disasters," *Lancet* 367, no. 9511 (2006): 698–699.

<sup>262</sup> Department of Homeland Security, Federal Emergency Management Agency, *Bringing Youth Preparedness Education to the Forefront: A Literature Review and Recommendations*.

<sup>263</sup> Jane E. Corrarino, Pamela J. Walsh, and Edward Nadel, "Does Teaching Scald Burn Prevention to Families of Young Children Make a Difference? A Pilot Study," *Journal of Pediatric Nursing* 16, no. 4 (2001): 256–262.

youth preparedness. The solution is simple, just do it. What needs to be done is to create a team that can develop and implement a curriculum to be used regionally to educate and prepare for an “all hazards” approach. The panel can consist of emergency managers, NGOs, and educators that will develop the curriculum that could be taught during National Preparedness Month in September. This mandatory curriculum should tie in incentives for the family through private/public partnerships and build on the individual responsibility theme described previously. This curriculum cannot be a one size fits all, however. Buy-in and development must contain not only the attributes that are present in all communities, but include unique factors present in the local community as well or the effort will fail.

***b. Using Technology to Reinforce School Lessons***

As a supplement to the in-class curriculum, a Smartphone application should be designed for kids. Currently, the FEMA application is adult based and rather mundane. The creation of a working game, such as an age appropriate application for kids, could supplement the classroom learning and reinforce the teaching methods utilized in school. According to Flurry, an Internet consultancy, using apps to play games and visit social networking sites comprised 79% of a users’ time (Figure 11).<sup>264</sup> This graphic screams “consumption,” accessing and using media, and playing games.<sup>265</sup>

---

<sup>264</sup> Charles Newark-French, “Mobile Apps Put the Web in Their Rear-view Mirror (blog), *Flurry*, June 20, 2011, <http://blog.flurry.com/bid/63907/Mobile-Apps-Put-the-Web-in-Their-Rear-view-Mirror>.

<sup>265</sup> Cathleen A. Norris and Elliot Soloway, “Learning and Schooling in the Age of Mobilism,” *Educational Technology* 51, no. 6 (2011): 3–10.

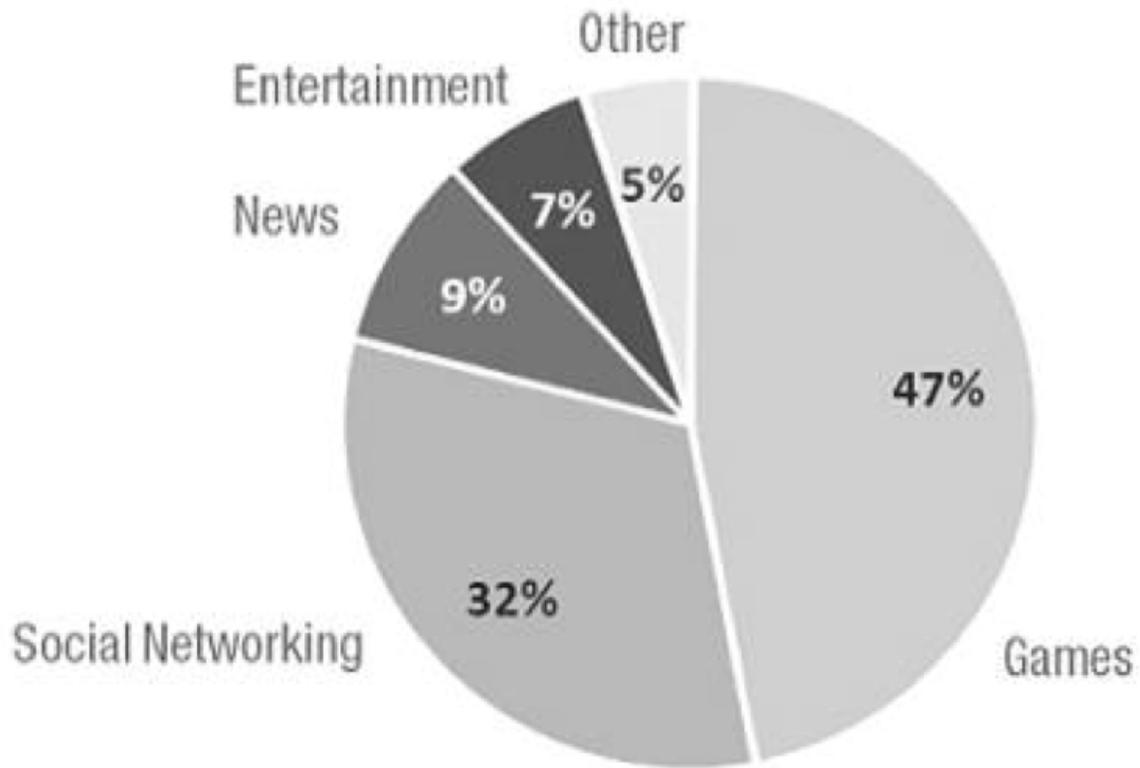


Figure 11. What Apps Are People Using?<sup>266</sup>

Additionally, it has been determined that African-American children ages 8 to 14 are exposed to about 13.5 hours of recreational media each day, Hispanic children more than 12.5, and White children about 8.5. These numbers show a difference of five hours of media exposure per day between Black and White children. These differences are not new; over the past five years, a steady increase has occurred in media exposure for all children, but especially, for Black and Hispanic youth exposed to media sources more than one hour more than White youth (Figure 12).

<sup>266</sup> Norris and Soloway, "Learning and Schooling in the Age of Mobilism," 3–10.

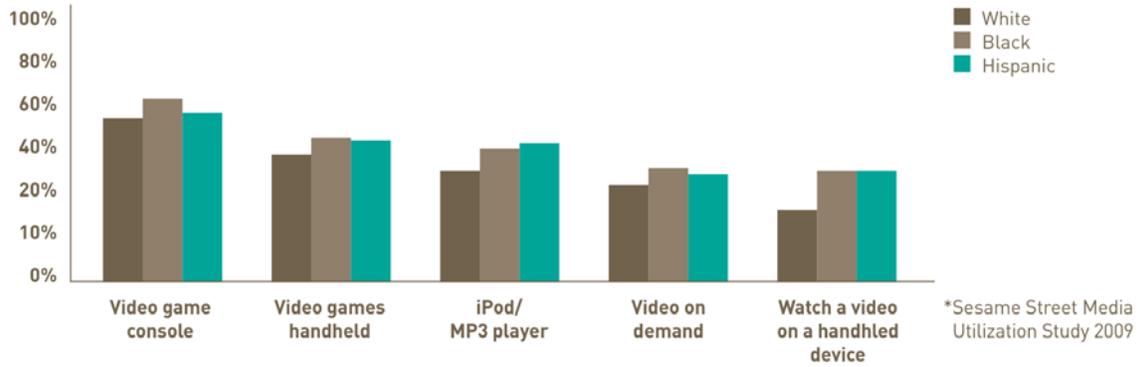


Figure 12. Participation in Media Activity by Race Children Ages 0–5<sup>267</sup>

Once lower-income and ethnic-minority families own a given technology, their children are just as likely to use it, if not more so. Across every digital platform, it has been found that Black and Hispanic children use far more media than White children (Figure 13).

<sup>267</sup> Aviva Gutnick et al., *Always Connected: The New Digital Media Habits of Young Children* (New York: The Joan Ganz Cooney Center at Sesame Workshop, 2010).

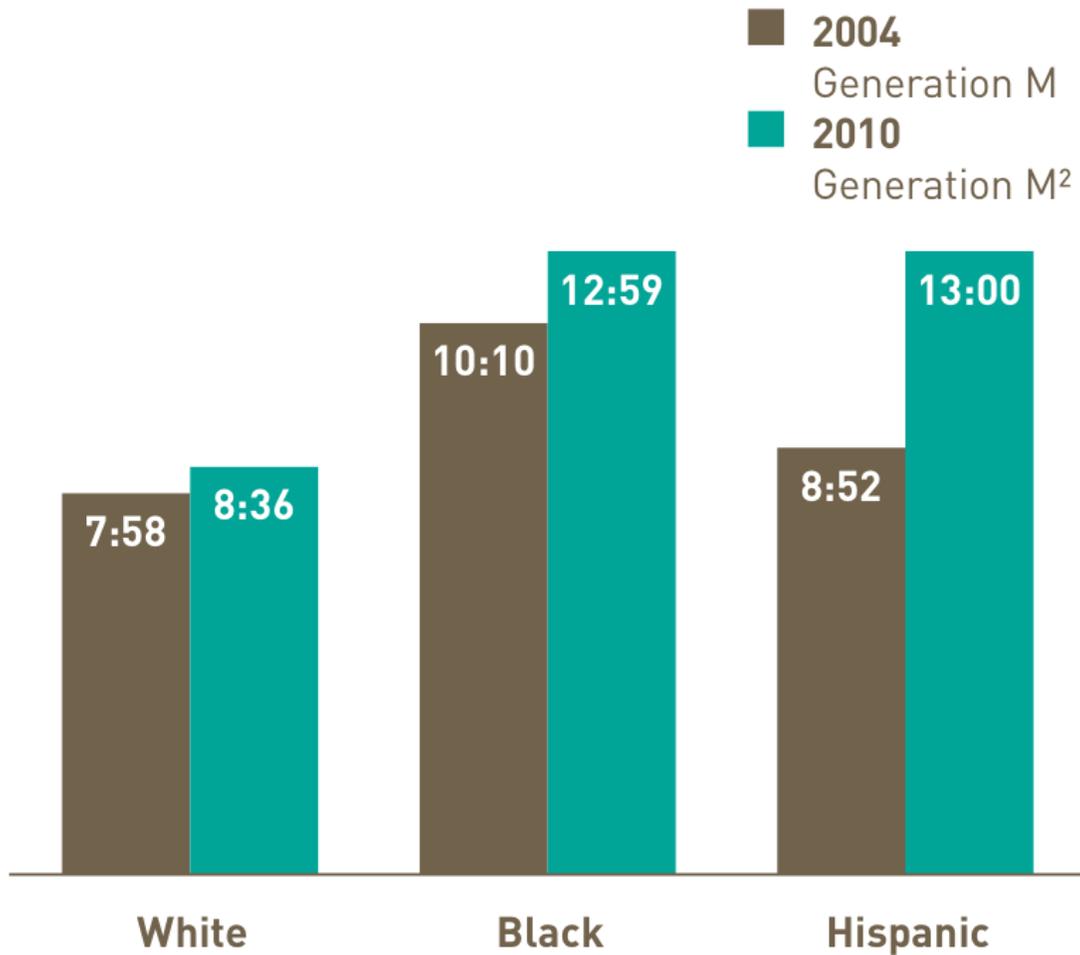


Figure 13. Total Media Exposure by Race<sup>268</sup>

Continuing a trend first identified in 2009, nearly two-thirds of African-Americans (64%) and Latinos (63%) are wireless Internet users, and minority Americans are significantly more likely to own a cell phone than are their White counterparts. Additionally, Black and Latino cell phone owners take advantage of a much wider array of their phones' data functions compared to White cell phone owners.<sup>269</sup> On average, White cell phone owners use 3.8 of the 13 activities measured, while Black cell owners

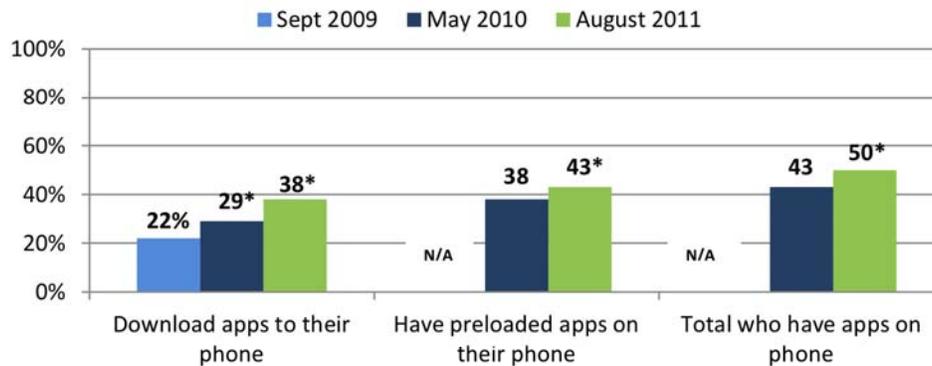
<sup>268</sup> Gutnick et al., *Always Connected: The New Digital Media Habits of Young Children*.

<sup>269</sup> Aaron Smith, "Mobile Access 2010," *Pew Research Center*, July 7, 2010, 1–32.

use an average of 5.4, and English-speaking Latinos use an average of 5.8 non-voice data applications.<sup>270</sup> In total, phone application use has steadily increased since 2009 (Figure 14).

**Figure 1: Cell phone app downloading has steadily increased since 2009**

% of U.S. adult cell phone owners in each year who...



**Source:** Pew Research Center's Internet & American Life Project, July 25-August 26, 2011 Tracking Survey. N=1,948 cell phone owners, margin of error is plus or minus 2.6 percentage points. Interviews conducted in English and in Spanish. May 2010 figures from April 29-May 30, 2010 Tracking Survey. N=1,917 cell phone owners, margin of error is plus or minus 2.7 percentage points. Interviews conducted in English only. September 2009 figures from August 18-September 14, 2009 Tracking Survey. N=1,868 cell phone owners, margin of error is plus or minus 2.7 percentage points. Interviews conducted in English only. An asterisk (\*) indicates a significant difference across years at the 95% confidence level.

Figure 14. Number of Cellular Phone Applications Downloaded<sup>271</sup>

Based on the above, it can be surmised that the use of educational apps can reinforce what children are already learning in school and at home. As identified in this document, these technological resources can support increased education in the area of preparedness and change the narratives in minority communities. Some parents in the Learning Study reported that they would reinforce the vocabulary words from the app in other real life situations, or that their child would talk about the app when they saw the

<sup>270</sup> Aaron Smith, "Mobile Access 2010," *Pew Research Center*, July 7, 2010, 1-32.

<sup>271</sup> Kristen Purcell, *Half of Adult Cell Phone Owners Have Apps on Their Phones* (Washington, DC: Pew Research Center's Internet & American Life Project, 2011).

related television show or characters in another setting<sup>272</sup> Thus, the learning opportunities for educational media producers may lie beyond just the app itself. The studies reported in this thesis suggest the power of apps as a supplemental tool, especially if the content is linked to other curriculum or situated learning that continues at home or in school.<sup>273</sup> By designing content focused on emergency preparedness, it becomes relevant to what the child is already learning. Parents in a Learning Study reported that they and their child would refer back to the materials in the app when they encountered similar content in another situation. Linking the content of newly developed apps to common early learning content domains or to seasonal themes, for example, might help reinforce adult-child interactions that will advance situated learning in school or in everyday life.<sup>274</sup>

A preparedness app should be fun and engaging while balancing the need to learn and pair lessons developed in a school setting. As reported in the Learning Study, the popular features were ones that were humorous and fun. Humor can capture children's attention and limit unnecessary waiting time. This principle builds on the time-tested elements pioneered by Sesame Street and other iconic educational media.<sup>275</sup> Additional considerations should be given to duration of use, providing goals and incentives, utilizing teamwork, creating scoring or achievement levels to empower the user, and engaging multiplayer/subscribers to maintain interest. Lastly, creating a story line that is interesting while being beneficial is critical; after all, the primary focus is to change the narrative through providing a story line needed for change.

Most importantly, a Smartphone application must involve parents. The ability to nurture the lessons learned in school, form positive behaviors leading to positive actions, and ultimately, galvanizing the family unit to self-sufficiency and responsibility is the goal. Developers should create apps that children of the same or differing ages can play together or with their parents in either co-located or remote and/or

---

<sup>272</sup> Cynthia Chiong and Carly Shuler, *Learning: Is There an App for That?.* "Investigations of Young Children's Usage and Learning with Mobile Devices and Apps" (New York: The Joan Ganz Cooney Center at Sesame Workshop, 2010), 1–34.

<sup>273</sup> Ibid.

<sup>274</sup> Ibid.

<sup>275</sup> Ibid.

asynchronous situations.<sup>276</sup> Prompts and introductory tasks for parents embedded in apps would not only motivate kids to keep playing, but would help parents see firsthand that the app is beneficial for their child.<sup>277</sup> Personalization, such as being able to name tasks, places or activities, can also assist in creating an identity for the users and further develop their social forces and story lines that change their narratives.

Based on this information, it is recommended that a dynamic and through process be developed to incorporate in-class education and technological advances to encourage and educate children about emergency preparedness. This process will not only benefit the child now and in the future, but has the potential to change practices and modify attitudes within the family home in terms of preparedness.

Targeted school events can also be an important tool in educating children. According to a 2010 FEMA study, the schools in the island nation of Grenada hold a “National Disaster Awareness Week Primary School Quiz” competition that allows children the opportunity to demonstrate their knowledge of hazards and disaster management.<sup>278</sup> Morris and Edwards found that the island of Jamaica holds “hazard awareness days” twice a year that have eventually been included on their schools’ official calendars in which schools prepare months in advance for these days, and create lesson plans and activities for children.<sup>279</sup> South Africa hosts school competitions on The International Day for Disaster Reduction at which children demonstrate their knowledge of disaster risk reduction through drama, art, and music.<sup>280</sup> If these countries see the importance of preparedness at the school age level, why is a more concerted effort not being undertaken in the United States?

---

<sup>276</sup> Chiong and Shuler, *Learning: Is There an App for That?.*” *Investigations of Young Children’s Usage and Learning with Mobile Devices and Apps*, 1–34.

<sup>277</sup> Cynthia Chiong, *Can Video Games Promote Intergenerational Play & Literacy Learning?*” (New York: The Joan Ganz Cooney Center at Sesame Workshop, 2009).

<sup>278</sup> United Nations, *Towards a Culture of Prevention: Disaster Risk Reduction Begins at School. Good Practices and Lessons Learned* (Geneva, Switzerland: International Strategy for Disaster Reduction, 2007).

<sup>279</sup> Kerry-Ann N. Morris and Michelle T. Edwards, “Disaster Risk Reduction and Vulnerable Populations in Jamaica: Protecting Children within the Comprehensive Disaster Management Framework,” *Children, Youth and Environments* 18, no. 1 (2008): 389–407.

<sup>280</sup> United Nations, *Towards a Culture of Prevention: Disaster Risk Reduction Begins at School. Good Practices and Lessons Learned*.

THIS PAGE INTENTIONALLY LEFT BLANK

## VI. CONCLUSION

This thesis has described the issues plaguing minority communities within the United States related to the effects of disaster. It documents the distrust, lack of communication and reasons why those in minority communities fail to plan and in return plan to fail. The reasoning behind this issue have been documented through use of surveys, anecdotal information, and from interviews by those most affected. Contrasting points of view as to why the perception of marginalization exists, or even if it does at all, has also been provided for further discussion. In sum, the analysis indicates that significant issues do exist within these communities collectively, and with the system as a whole.

The ability to look at the dynamics of what “went wrong” in Hurricane Katrina should enable policy makers to realize that change is needed. The perceptions felt by those most affected do become reality, and unless outreach is conducted, and those in underserved communities feel as if they matter, the missteps of the past are sure to be repeated. The realization that the perception of racism is believed to influence the decision-making process during emergencies becomes a grim reality of how individuals will react in the future. To provide solutions, meaningful dialogue must be developed with persons who have influence in minority communities and can sow the seeds of cooperation.

In reviewing the case study examples in Chapter IV, the aspect of involving others in the community at a grassroots level has proven to be effective. The issue remains, however, if these small groups are actually being effective in reaching the larger portion of those needing attention and education. To be successful, consideration should be given to a complete overhaul of how minority communities and emergency management are viewed. Specifically addressing the underlying problems in these communities that center around economics, education and other social factors, is what needs to occur before any real change can be made. To accomplish this goal, government officials must relinquish control and place authority in the hands of local partners who can reach those community members.

Upon identifying these individuals, the road to changing narratives and story lines must occur. Defining the position of not only self, but also the family unit, will become the social force that changes the way units within these communities prepare and eventually respond in disaster. It is only after these individuals realize that they hold their own destiny will they realize that they are part of the “whole community” and have achieved a level of trust in the government that is on the periphery of providing this change in their community through trusted leaders, but more importantly, themselves. Once this change is realized, the individual’s position evolves into self-reliance. In advocating in this change of position, the use of every member of the unit, including children, must be utilized. By creating change in children using education programs and technological advances, communities are not only changing for the present but for generations to come. The leaders in emergency management fields cannot ignore the symptoms that have been increasing through each disaster. To improve, lessons learned from the past must be brought to the forefront, analyzed, and utilized to create change. The “whole community” concept while worthwhile is limited in scope because it does focus on the “whole community.” The problem is this nation is not a whole community. As has been documented, it is whole in one sense that everyone is an American, and holistically different in that as citizens, come from different backgrounds, cultures, trust levels, and socioeconomic factors that influence an individual’s being. Until those responsible for these policies realize this concept, documents will continue to be produced that in the 32 pages of the December 2011 publication, “A Whole Community Approach to Emergency Management: Principles, Themes, and Pathways for Action,” only include the word “minority” twice. The lens from which those responsible for preparedness and response must change to realize the positive effect desired, but more importantly, needed in communities in which the stakeholders do not necessarily resemble the creators of documents and policies. Small steps have been taken through projects, such as those described in Chapter IV; however, these programs need to be expanded.

A concentrated effort needs to occur to reach the root of the problem utilizing the volumes of research compiled in respect to disaster effects in minority communities. This data must then be utilized to form the basis of a true call to action based on the underlying issues; a call that is specific and focuses on the heart of the problem affecting these communities that have unique issues and perceptions that a “one size fits all” policy cannot fix. This type of effort would begin to engender trust and communication that would enable lasting foundations to be built. Additionally, creating specific programs for children of these communities and making them a priority will not only shape the immediate response to disaster but empower and mold a future generation who will know what preparedness looks like and how to be self sufficient.

In this day and age, in which individuals are reluctant to establish specifics for one segment of the population over another, this situation is different. Through a set of circumstances, these “marginalized communities” have already been treated different, at least in their perceptions. Based on these perceptions, their narratives have been created that have negatively impacted their story lines, and consequently, their lack of preparedness and created a feeling of discrimination. It is now time to effectuate change and empower these community members to action by changing their stories, changing their outlook on government, and creating a society of inclusiveness and an actual “whole community.”

THIS PAGE INTENTIONALLY LEFT BLANK

## LIST OF REFERENCES

- Adams, Glenn, Laurie T. O'Brien, and Jessica C. Nelson. "Perceptions of Racism in Hurricane Katrina: A Liberation Psychology Analysis." *Analyses of Social Issues and Policies* 6, no. 1 (2006): 215–235.
- Ainsworth, Michael. *Dallas Morning News*, 2005.
- Amy L. Ai, Carol Plummer, Grace Heo, Catherine M. Lemieux, Cassandra E. Simon, Patricia Taylor, and Valire Carr Copeland. "Racial Identity-Related Differential Attributions of Inadequate Responses to Hurricane Katrina: A Social Identity Perspective." *Race and Social Problems* 3 (March 2011): 13–24.
- Andrulis, Dennis P., Nadia J. Siddiqui, and Jenna L. Gantner. "Preparing Racially and Ethnically Diverse Communities for Public Health Emergencies." *Health Affairs* 26, no. 5 (2007): 1269–1279.
- Barnes, Sandra. "Book Review." *Journal for the Scientific Study of Religion* 43, no. 4 (2004): 562–563.
- Barry, John M. "Rising Tide: the Great Mississippi Flood of 1927 and How It Changed America." In Kristina M. Cordasco, David P. Eisenman, Deborah C. Glik, Joya F. Golden, and Steven M. Asch. "They Blew the Levee: Distrust of Authorities Among Hurricane Katrina Evacuees." *Journal of Health Care for the Poor and Underserved* 18 (2007): 277–282.
- Berke, Philip, John Cooper, David Salvesen, Danielle Spurlock, and Christina Rausch. "Building Capacity for Disaster Resiliency in Six Disadvantaged Communities." *Sustainability* 3, no. 1 (2011): 1–20.
- Blumer, Herbert. "Race Prejudice as a Sense of Group Position." In Tyron A. Forman and Amanda E. Harris. "Racial Apathy and Hurricane Katrina: The Social Anatomy of Prejudice in the Post Civil Rights Era." *Du Bois Review* 3, no. 1 (2006): 175–201.
- Bobo, Lawrence. "Inequalities that Endure? Racial Ideology, American Politics, and the Peculiar Role of the Social Sciences." In *Changing Terrain of Race & Ethnicity*, edited by Maria Krysan and Amanda E. Lewis. Russell Sage Foundation, 2004.
- Bolin, Robert, and Lois Stanford. "The Northridge Earthquake: Community-based Approaches to Unmet Recovery Needs." *Disasters* 22, no. 1 (1998): 21–38.

- Bonilla-Silva, Eduardo. "Racism without Racists: Color-Blind Racism and the Persistence of Racial Inequality in the United States." In "The Blame Game, Racialized Responses to Hurricane Katrina," edited by Kathyryn A. Sweeney, *Du Bois Review* 3, no. 1 (2006): 161–174.
- Boxer, Lionel. "Assessment of Quality Systems with Positioning Theory." In *The Self and Others Positioning Individuals and Groups in Personal, Political, and Cultural Contexts*. Praeger Publishers, 2003.
- Boxer, Lionel J. 'Barriers to Implementation of TQM', *AIC TQM '93 Continuous Improvement in a Service Environment—Fourth Annual Event*, Sydney. The Sydney Marriott Hotel, February 17–19, 1993.
- . "Do It'." *Corporate Revise*. K&D Media. Sydney, March 1998.
- Bozell, L. Brent. "Cheering on Racial Division." *Media Research Center*, September 7, 2005. <http://www.mrc.org/BozellColumns/newscolumn/2005/col20050907.asp>.
- Bradshaw, Jim. "Great Flood of 1927." *KnowLA Encyclopedia of Louisiana*, 2011. <http://www.knowla.org>.
- Branscombe, Nyla R., Michael T. Schmitt, and Kristin Schiffhauer. "Racial Attitudes in Response to Thoughts of White Privilege." In "Diversity Science: Why and How Difference Makes a Difference," edited by Victoria C. Plaut, *Psychological Inquiry* 21 (June 2010): 77–99.
- Brinkley, Douglas. "The Great Deluge: Hurricane Katrina, New Orleans, and the Mississippi Gulf Coast." In Kristina M. Cordasco, David P. Eisenman, Deborah C. Glik, Joya F. Golden, and Steven M. Asch. "They Blew the Levee: Distrust of Authorities Among Hurricane Katrina Evacuees." *Journal of Health Care for the Poor and Underserved* 18 (2007): 277–282.
- Brodie, Mollyann, Erin Weltzien, Drew Altman, Robert J. Blendon, and John M. Benson. "Experiences of Hurricane Katrina Evacuees in Houston Shelters: Implications for Future Planning." In Keith Elder, Sudha Xirasagar, Nancy Miller, Shelly Ann Bowen, Saundra Glover, and Crystal Piper. "African-Americans' Decisions Not to Evacuate New Orleans Before Hurricane Katrina: A Qualitative Study." *American Journal of Public Health* 97, no. S1 (2007): 1–8.
- Chiong, Cynthia, and Carly Shuler. *Learning: Is There an App for That?.* *Investigations of Young Children's Usage and Learning with Mobile Devices and Apps*. New York: The Joan Ganz Cooney Center at Sesame Workshop, 2010.
- Chiong, Cynthia. *Can Video Games Promote Intergenerational Play & Literacy Learning?*. New York: The Joan Ganz Cooney Center at Sesame Workshop, 2009.

- Choi, Sang Ok. "Emergency Management: Implications from a Strategic Management Perspective." *Journal of Homeland Security and Emergency Management* 5, no. 1 (2008): 1–23.
- Chowdhury, Aparajita. "Empowering At-risk Families through Effective Parenting and Family Learning Process." *Studies on Home and Community Science* 5, no. 1 (2011): 51–61.
- Cooper, Christopher, and Robert Block. "Disaster: Hurricane Katrina and the Failure of Homeland Security." In Camila Stivers. "So Poor and So Black: Hurricane Katrina, Public Administration and the Issue of Race." *Public Administration Review* 67, no. 13 (2007): 48–56.
- Cordasco, Kristina M., David P. Eisenman, Deborah C. Glik, Joya F. Golden, and Steven M. Asch. "They Blew the Levee: Distrust of Authorities Among Hurricane Katrina Evacuees." *Journal of Health Care for the Poor and Underserved* 18 (2007): 277–282.
- Corrarino, Jane E., Pamela J. Walsh, and Edward Nadel. "Does Teaching Scald Burn Prevention to Families of Young Children Make a Difference? A Pilot Study." *Journal of Pediatric Nursing* 16, no. 4 (2001): 256–262.
- Davies, Bronwyn, and Rom Harré. "Positioning: The Discursive Production of Selves." *Journal for the Theory of Social Behaviour* 20, no. 1 (2007): 43–63.
- de Moraes, Lisa. "Kanye West's Torrent of Criticism, Live on NBC." *The Washington Post*, September 3, 2005. <http://www.washingtonpost.com/wp-dyn/content/article/2005/09/03/AR2005090300165.html>.
- de Souza Briggs, Xavier. "Social Capital: Easy Beauty or Meaningful Resource?." *Journal of the American planning Association* 70, no. 2 (2004): 151–158.
- Department of Homeland Security. Federal Emergency Management Agency. *A Failure of Initiative*, 2007.
- . *Bringing Youth Preparedness Education to the Forefront: A Literature Review and Recommendations*, Summer 2010.
- Dovidio, J. F., and S. L. Gaertner. "Aversive Racism." In M. P. Zanna, *Advances in Experimental Social Psychology* 36 (2004): 1–52, in Glenn Adams, Laurie T. O'Brien, and Jessica C. Nelson. "Perceptions of Racism in Hurricane Katrina: A Liberation Psychology Analysis." *Analyses of Social Issues and Policies* 6, no. 1 (2006): 215–235.
- Downey, Liam. "US Metropolitan-Area Variation in Environmental Inequality Outcomes." *Urban Studies* 44, no. 5–6 (May 2007): 953–977.

- Druckman, Daniel. *Doing Research: Methods of Inquiry for Conflict Analysis*. Sage Publications, Incorporated, 2005.
- Duke, Lynne, and Teresa Wiltz. "A Nation's Castaways: Katrina Blew In, and Tossed up Reminders of a Tattered Racial Legacy." *Washington Post*, September 4, 2005.
- Dunst, C. J., C. Trivetle, and A. Deal. *Enabling and Empowering Families: Principles and Guidelines for Practices*. Cambridge, MA: Brookline Books, Inc., 1988.
- Elder, Keith, Sudha Xirasagar, Nancy Miller, Shelly Ann Bowen, Saundra Glover, and Crystal Piper. "African-Americans' Decisions Not to Evacuate New Orleans Before Hurricane Katrina: A Qualitative Study." *American Journal of Public Health* 97, no. S1 (2007): 5124–5129.
- Forman, Tyron A., and Amanda E. Harris. "Racial Apathy and Hurricane Katrina: The Social Anatomy of Prejudice in the Post Civil Rights Era." *Du Bois Review* 3, no. 1 (2006): 175–201.
- Forman, Tyrone A. "Color-Blind Racism and Racial Indifference: The Role of Racial Apathy in Facilitating Enduring Inequalities." In *Changing Terrain of Race & Ethnicity*, edited by Maria Krysan and Amanda E. Lewis. Russell Sage Foundation, 2004.
- Fothergill, Alice, and Lori A. Peek. "Poverty and Disasters in the United States: A Review of Recent Sociological Findings." *Natural Hazards* 32, no. 1 (2004): 89–110.
- Frederick L. Bates, W. T. Farrell, L. A. Ferrate, S. D. Killian, W. G. Peacock, et al., *Recovery, Change, and Development: A Longitudinal Study of the 1976 Guatemalan Earthquake*. Athens, GA: University of Georgia, 1982.
- Giroux, Henry A. "Reading Hurricane Katrina: Race, Class and Biopolitics of Disposability." *College Literature* 33, no. 3 (2006): 171–196.
- Glass, Thomas A., and Monica Schoch-Spana. "Bioterrorism and the People: How to Vaccinate a City Against Panic." *Clinical Infectious Diseases* 34, no. 2 (2002): 217–223.
- Goldfield, Michael. "The Color of Politics: Race and the Mainsprings of American Politics." In *After Katrina: Racial Regimes and Human Development Barriers in the Gulf Coast Region*, edited by Jeffery S. Lows and Todd C. Shaw, *Project Muse*, 2009.
- Gutnick, Aviva, Michael Robb, Lori Takeuchi, and Jennifer Kotler. *Always Connected: The New Digital Media Habits of Young Children*. New York: The Joan Ganz Cooney Center at Sesame Workshop, 2010.

- Harré, Rom, and Fathali M. Moghaddam, ed. *The Self and Others: Positioning Individuals and Groups in Personal, Political, and Cultural Contexts*. Praeger Publishers, 2003.
- Harré, Rom, and Fathali M. Moghaddam. "Introduction." In *The Self and Others: Positioning Individuals and Groups in Personal, Political, and Cultural Contexts*, edited by Rom Harré and Fathali M. Moghaddam. Praeger Publishers, 2003.
- Harré, Rom, Fathali M. Moghaddam, Tracey Pilkerton Cairnie, Daniel Rothbart, and Steven R. Sabat. "Recent Advances in Positioning Theory." *Theory & Psychology* 19, no. 1 (2009): 5–31.
- Hartman, Chester and Gregory D. Squires, ed. *There Is No Such Thing As a Natural Disaster: Race, Class, and Hurricane Katrina*. New York: Routledge, 2006.
- Homeland Security Advisory Council, Community Resilience Task Force Recommendations*, June 2011.
- Horne, Jed. "Breach of Faith: Hurricane Katrina and the Near Death of a Great American City." In Camila Stivers. "So Poor and So Black: Hurricane Katrina, Public Administration and the Issue of Race." *Public Administration Review* 67, no. 13 (2007): 48–56.
- Hurricane Katrina: A Nation Still Unprepared, Executive Summary*, Report of the Senate Committee on Homeland Security and Governmental Affairs, May 2006.
- Ink, Dwight. "An Analysis of the House Select Committee and White House Reports on Hurricane Katrina." *Public Administration Review*, 2006.
- Israel, B., E. Eng, A. Schultz, and E. Parker. "Introduction to methods in community-based participatory research for health." In *Methods in Community-Based Participatory Research for Health*, edited by B. Israel, E. Eng, A. Schultz, and E. Parker. John Wiley & Sons: San Francisco, CA, 2005.
- Jacksonville Community Council, Inc. "Race Relations Progress Report for Jacksonville, Florida." 2009.  
<http://www.jcci.org/jcciwebsite/documents/10%20Race%20Relations%20Progress%20Report.pdf>.
- James, Xanthia, Anita Hawkins, and Randy Rowel. "An Assessment of the Cultural Appropriateness of Emergency Preparedness Communication for Low Income Minorities." *Journal of Homeland Security and Emergency Management* 4, no. 3, art. 13 (2007): 1–26.
- Jennison, Victoria. "Networking to Improve Community Resiliency in Disaster Planning." *International Journal of Public Policy* 3, no. 5/6 (November 2008): 338–353.

- Joshi, Pamela. "Faith-Based and Community Organizations' Participation in Emergency Preparedness and Response Activities." *Institute for Homeland Security Solutions, RTI International* (2010): 1–76.
- Kaiser, Cheryl R., Collette P. Eccleston, and Nao Hagiwara. "Post-Hurricane Katrina Racialized Explanations As a System Threat: Implications for Whites' and Blacks' Racial Attitudes." *Social Justice Research* 21, no. 2 (2008): 192–203.
- Kapucu, Naim. "Collaborative Emergency Management: Better Community Organising, Better Public Preparedness and Response." *Disasters* 32, no. 2 (2008): 239–262.
- . "Planning for Disasters and Responding to Catastrophes: Error of the Third Type in Disaster Policy and Planning." *International Journal of Public Policy* 3, no. 5/6 (2008): 313–327.
- Key, V. O. Jr. *Southern Politics in State and Nation*. University Tennessee Press, 1984.
- Klotzbach, Philip, and William Gray. "Extended Range Forecast of Atlantic Seasonal Hurricane Activity and U.S. Landfall Strike Probability for 2006." In Keith Elder, Sudha Xirasagar, Nancy Miller, Shelly Ann Bowen, Saundra Glover, and Crystal Piper. "African-Americans' Decisions Not to Evacuate New Orleans Before Hurricane Katrina: A Qualitative Study." *American Journal of Public Health* 97, no. S1 (2007): 1–8.
- Lillie-Blanton, Marsha, Osula Evadne Rushing, and Sonia Ruiz. "Key Facts: Race, Ethnicity and Medical Care, 2003." In Keith Elder, Sudha Xirasagar, Nancy Miller, Shelly Ann Bowen, Saundra Glover, and Crystal Piper. "African-Americans' Decisions Not to Evacuate New Orleans Before Hurricane Katrina: A Qualitative Study." *American Journal of Public Health* 97, no. S1 (2007): 1–8.
- Littlejohn, Stephen W., and W. Barnett Pearce. *Moral Conflict: When Social Worlds Collide*. Sage Publications, Incorporated, 1997.
- Loewen, James. "Lies My Teacher Told Me: Everything Your American History Textbook Got." In Tyron A. Forman and Amanda E. Harris. "Racial Apathy and Hurricane Katrina: The Social Anatomy of Prejudice in the Post Civil Rights Era." *Du Bois Review* 3, no. 1 (2006): 175–201.
- Louis, Winnifred R. "Intergroup Positioning and Power." In *Global Conflict Resolution Through Positioning Analysis*, edited by Fathali M. Moghaddam, Rom Harré, and Naomi Lee. 21–39. New York: Springer, 2008.
- Marable, Manning. "Katrina's Unnatural Disaster." *Souls: A Critical Journal of Black Politics, Culture and Society* (2006): 305–316.

- Markus, Hazel Rose, and Shinobu Kitayama. "A Collective Fear of the Collective: Implications for Selves and Theories of Selves." *Personality and Social Psychology Bulletin* 20, no. 5 (1994): 568–579.
- Masozera, Michel, Melissa Bailey, and Charles Kerchner. "Distribution of Impacts of Natural Disasters Across Income Groups: A Case Study of New Orleans." *Ecological Economics* 63, no. 2 (2007): 299–306.
- McEntire, David A. Critique of Emergency Management Policy: Recommendations to Reduce Disaster Vulnerability, *International Journal of Public Policy* 3, no. 5/6 (2008): 302–310.
- Meredith, Lisa S., Lisa R. Shugarman, Anita Chandra, Stephanie L. Taylor, Stefanie Stern, Ellen Burke Beckjord, Andrew M. Parker, and Terri Tanielian. "Analysis of Risk Communication Strategies and Approaches with At-Risk Populations to Enhance Emergency Preparedness, Response, and Recovery." In "A Guide to Enhance Grassroots Risk Communications Among Low-Income Populations." *Health Promotion Practice*, July 2011.
- Mirzoeff, Nicholas. "The Sea and the Land: Biopower and Visuality from Slavery to Katrina." *Culture, Theory and Critique* 50, no. 2 (2009): 289–305.
- Moghaddam, Fathali, Rom Harré, and Naomi Lee. "Afterword." In *Global Conflict Resolution Through Positioning Analysis*, edited by Fathali M. Moghaddam, Rom Harré, and Naomi Lee. New York: Springer, 2008.
- Molotch, Harvey. "Death on the Roof: Race and Bureaucratic Failure. Space and Culture." In Camila Stivers. "So Poor and So Black: Hurricane Katrina, Public Administration and the Issue of Race." *Public Administration Review* 67, no. 13 (2007): 48–56.
- Moore, Toby. "Institutional Barriers to Resilience in Minority Communities." *Institute for Homeland Security Solutions*, May 2010.
- Morris, Kerry-Ann N., and Michelle T. Edwards. "Disaster Risk Reduction and Vulnerable Populations in Jamaica: Protecting Children within the Comprehensive Disaster Management Framework." *Children, Youth and Environments* 18, no. 1 (2008): 389–407.
- Morse, Riley. "Environmental Justice Through the Eye of Hurricane Katrina." *Joint Center for Political and Economic Studies* (2008): 7–9.
- Muhammad. A. "Is It Darfur Yet?." *BET*, September 2, 2005.  
<http://www.bet.com/Site+Management/Packages/askiablog1.htm?mb=1>.

- Myers, Lisa, & the NBC Investigative Unit. "Were the Levees Bombed in New Orleans?." *NBCNews.com*, December 7, 2005.  
[http://www.msnbc.msn.com/id/10370145/ns/nbcnightlynews-nbc\\_news\\_investigates/t/were-levees-bombed-new-orleans/](http://www.msnbc.msn.com/id/10370145/ns/nbcnightlynews-nbc_news_investigates/t/were-levees-bombed-new-orleans/)
- New York Times. "Barbara Bush Calls Evacuees Better Off." September 7, 2005.
- Newark-French, Charles. "Mobile Apps Put the Web in Their Rear-view Mirror (blog). *Flurry*, June 20, 2011. <http://blog.flurry.com/bid/63907/Mobile-Apps-Put-the-Web-in-Their-Rear-view-Mirror>.
- Norris, Cathleen A., and Elliot Soloway. "Learning and Schooling in the Age of Mobilism." *Educational Technology* 51, no. 6 (2011): 3–10.
- O'Brien, Laurie T., Alison Blodorn, AnGelica Alsbrooks, Reesa Dube, Glenn Adams, and Jessica C. Nelson. "Understanding White Americans' Perceptions of Racism in Hurricane Katrina-Related Events." *Group Processes & Intergroup Relations* 12, no. 4 (2009): 431–444.
- Olshansky, Robert B., and Laurie Johnson. "Clear As Mud: Planning for the Rebuilding of New Orleans." *American Planning Association*, 2010.
- Parrott, W. Gerrod. "Positioning and the Emotions." In *The Self and Others Positioning Individuals and Groups in Personal, Political, and Cultural Contexts*. Praeger Publishers, 2003.
- Pastor, Manuel. *In the Wake of the Storm: Environment, Disaster and Race After Katrina*. New York: The Russell Sage Foundation, 2006.
- Penrose, Angela, and Mie Takaki. "Children's Rights in Emergencies and Disasters." *Lancet* 367, no. 9511 (2006): 698–699.
- Perry, Barbara. "'White Genocide': White Supremacists and the Politics of Reproduction." In *Home-Grown Hate: Gender and Organized Racism*, edited by Abby Ferber. 75–85. London and New York: Routledge, 2001, as cited in Sweeney, Kathryn A. "The Blame Game, Racialized Responses to Hurricane Katrina." *Du Bois Review* 3, no. 1 (2006): 161–174.
- Peters, Richard G., Vincent T. Covello, and David B. McCallum. "The Determinants of Trust and Credibility in Environmental Risk Communication: An Empirical Study." *Risk Analysis* 17, no. 1 (1997): 43–54.
- Petrolia Daniel R., and Danjoy Bhattacharjee. "Why Don't Coastal Residents Choose to Evacuate for Hurricanes." *Coastal Management* 38 (2010): 97–112.
- Pew Research Center for the People & the Press. *Huge Racial Divide over Katrina and its Consequences*. Washington, DC, 2005.

- Purcell, Kristen. *Half of Adult Cell Phone Owners Have Apps on Their Phones*. Washington, DC: Pew Research Center's Internet & American Life Project, 2011.
- Quinn, S. C. "Hurricane Katrina: A Social and Public Health Disaster." In Kristina M. Cordasco, David P. Eisenman, Deborah C. Glik, Joya F. Golden, and Steven M. Asch. "They Blew the Levee: Distrust of Authorities Among Hurricane Katrina Evacuees." *Journal of Health Care for the Poor and Underserved* 18 (2007): 277–282.
- Ralli, Tania. "Who's a Looter? In Storm's Aftermath, Pictures Kick Up a Different Kind of Tempest." *New York Times*. September 5, 2005.  
<http://www.nytimes.com/2005/09/05/business/05caption.html>.
- Redlener, Irwin, Dennis Johnson, David A. Berman, and Roy Grant. *Follow-Up 2005: Where the American Public Stands on Terrorism and Preparedness after Hurricanes Katrina & Rita, Greater Confusion, Decreasing Confidence, and Public Divisions. A Follow-Up to the 2005 Annual Survey of the American Public by the National Center for Disaster Preparedness, Columbia University Mailman School of Public Health*. New York, NY: Columbia University Mailman School of Public Health, 2005.
- Reed, Pamela. "From the Freedman's Bureau to FEMA: A Post-Katrina Historical, Journalistic and Literary Analysis." *Journal of Black Studies* 37, no. 4 (March 2007): 555–567.
- Rivera, Jason. "Continually Neglected: Situating Natural Disasters in the African American Experience." *Journal of Black Studies* 37, no. 4 (2007): 502–522.
- Rosenmann, Emily. "The Road Away from Home: Policy and Power in Post-Katrina New Orleans." Master's thesis, University of British Columbia, 2011.
- Rothbart Daniel, and Tom Bartlett. "Rwandan Radio Broadcasts and Hutu/Tutsi Positioning." In *Global Conflict Resolution Through Positioning Analysis*, edited by Fathali M. Moghaddam, Rom Harré, and Naomi Lee. 227–246. New York: Springer, 2008.
- Rowel, Randy. "A Guide to Enhance Grassroots Risk Communications Among Low-Income Populations." *Health Promotion Practice*, July 2011.
- Rowel, Randy, Payam Sheikhattari, Tanyka M. Barber, Esq., and Myrtle Evans-Holland. "A Guide to Enhance Grassroots Risk Communications Among Low-Income Populations." *Health Promotion Practice* 13, no. 1 (July 2011): 124–132.
- Sabat, Steven. "Malignant Positioning and the Predicament of People with Alzheimer's Disease." In *The Self and Others Positioning Individuals and Groups in Personal, Political, and Cultural Contexts*. Praeger Publishers, 2003.

- Schafer, Wendy A., John M. Carroll, Steven R. Haynes, and Stephen Abrams. "Emergency Management Planning as Collaborative Community Work." *Journal of Homeland Security and Emergency Management* 5, no. 1 (2008): 1–19.
- Seeger, Matthew W., Timothy L. Sellnow, and Robert R. Ulmer. "Communication, Organization, and Crisis." *Communication Yearbook* 21 (1998): 231–276.
- Shelby, Tommie. "Is Racism in the 'Heart'?" *Journal of Social Philosophy* 33, no. 3 (2002): 411–420.
- Sirianni, Carmen. "Neighborhood Planning As Collaborative Democratic Design." *Journal of the American Planning Association* 73, no. 4 (2007): 373–387.
- Slocum-Bradley, Nikki R. "Discursive Production of Conflict in Rwanda." In *Global Conflict Resolution Through Positioning Analysis*, edited by Fathali M. Moghaddam, Rom Harré, and Naomi Lee. 207–226. New York: Springer, 2008.
- Smith, Aaron. "Mobile Access 2010." *Pew Research Center*, July 7, 2010.
- Sommers, Samuel R., and Michael I. Norton. "Lay Theories About White Racists: What Constitutes Racism (and What Doesn't)." *Group Processes & Intergroup Relations* 9 (2006): 117–138.
- Spence, Patric, Kenneth A. Lachlan, and Donyale R. Griffin. "Crisis Communication, Race, and Natural Disasters." *Journal of Black Studies* 37, no. 4 (2007): 539–554.
- Stivers, Camila. "So Poor and So Black: Hurricane Katrina, Public Administration and the Issue of Race." *Public Administration Review* 67, no. 13 (2007): 48–56.
- Stockard, Russell L., and M. Belinda Tucker. "Subverting Social Vulnerabilities and Inequality in Disaster Survival." *Narrating the Storm: Sociological Stories of Hurricane Katrina* 3 (2007): 62.
- Sutherland, Jessie. *Worldview Skills: Transforming Conflict from the Inside Out*. Worldview Strategies, 2005.
- Sweeney, Kathryn A. "The Blame Game, Racialized Responses to Hurricane Katrina." *Du Bois Review* 3, no. 1 (2006): 161–174.
- Tajfel, Henry, and John C. Turner. *The Social Identity Theory of Intergroup Behavior*. Chicago, IL: Nelson Hall, 1986.
- Tan, Siu Lan, and Fatahli M. Moghaddam. "Reflexive Positioning and Culture." *Journal for the Theory of Social Behaviour* 25, no. 4 (1995): 387–400.
- Times-Picayune. "Transcript of Mayor Nagin's Speech." January 17, 2006.

- Trader-Leigh, Karyn. "Understanding the Role of African-American Churches and Clergy in Community Crisis Response." *Joint Center for Political and Economic Studies* (2008): 1–22.
- U.S. Department of Health and Human Services. *Communicating in a Crisis: Risk Communication Guidelines for Public Officials*, 2002.
- United Nations. *Towards a Culture of Prevention: Disaster Risk Reduction Begins at School. Good Practices and Lessons Learned*. Geneva, Switzerland: International Strategy for Disaster Reduction, 2007.
- Unzueta, Miguel M., and Brian S. Lowery. "Defining Racism Safely: The Role of Self-Image Maintenance on White Americans' Conceptions of Racism." *Journal of Experimental Social Psychology* 44 (2008): 1491–1497.
- van Langenhove, Luk, and Rom Harré. "Introducing Positioning Theory." In *Positioning Theory: Moral Contexts of Intentional Action*, edited by Rom Harré and Luc van Langenhove. Oxford: Blackwell, 1999.
- Warren, Mark R. *Dry Bones Rattling: Community Building to Revitalize American Democracy*. Princeton University Press, 2011.
- Webster, P., G. Holland, J. Curry, and H. Chang. "Changes in Tropical Cyclone Number, Duration, and Intensity in a Warming Environment." In Keith Elder, Sudha Xirasagar, Nancy Miller, Shelly Ann Bowen, Sandra Glover, and Crystal Piper. "African-Americans' Decisions Not to Evacuate New Orleans Before Hurricane Katrina: A Qualitative Study." *American Journal of Public Health* 97, no. S1 (2007): 1–8.
- Welch, Matt. "The Deadly Bigotry of Low Expectations? Did the Rumor Mill Help Kill Katrina Victims?." *reason.com*, September 6, 2005. <http://www.reason.com/links/links09060S.shtml>.
- Wenger, Michael R. "No More Katrinas: How Reducing Disparities Can Promote Disaster Preparedness." *Joint Center for Political and Economic Studies*, 2008.
- White, Ismail K., Tasha S. Philpot, Kristin Wylie, and Ernest McGowen. "Feeling the Pain of My People: Hurricane Katrina, Racial Inequality, and the Psyche of Black America." *Journal of Black Studies* 37, no. 4 (2007): 523–538.
- Williamson, Joel. *The Crucible of Race: Black-White Race Relations in the American South Since Emancipation*. Oxford University Press, 1984.

Wray, Ricardo, Jennifer Rivers, Amanda Whitworth, Keri Jupka, and Bruce Clements. "Public Perceptions About Trust in Emergency Risk Communication: Qualitative Research Findings." In Kristina M. Cordasco, David P. Eisenman, Deborah C. Glik, Joya F. Golden, and Steven M. Asch. "They Blew the Levee: Distrust of Authorities Among Hurricane Katrina Evacuees." *Journal of Health Care for the Poor and Underserved* 18 (2007): 277–282.

## **INITIAL DISTRIBUTION LIST**

1. Defense Technical Information Center  
Ft. Belvoir, Virginia
2. Dudley Knox Library  
Naval Postgraduate School  
Monterey, California