# Reflections on the Katrina Experience: Library and Information Science Students' Stories

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### Abstract

This study examined the Hurricane Katrina-related narratives of 72 LIS students. Narratives were collected in fall 2005 and spring 2006 semesters from students in four online courses and coded for themes related to problems and coping strategies using qualitative NVivo7 software. Textalyser software was used to rank frequently-occurring terms related to problems, emotional states, and coping strategies. Frequently-cited problems included: lack of electric power, water, gasoline, information, and communication. Frequently-cited emotional states included: worry, stress, fear, and feelings of being threatened and trapped. Frequently-cited coping strategies related to resiliency included: making connections and exhibiting social skills through communication, giving and receiving help; reading; problem-solving and information skills; life skills, indicated by survival in catastrophic circumstances; taking care of others; and participation in recovery and relief efforts.

### Introduction

According to the National Hurricane Center (2005), Hurricane Katrina, which hit the Gulf Coast in August 2005, was one of the most devastating natural disasters in U.S. history. It was the costliest to hit the United States (estimated \$81 billion) and one of the largest, with an estimated 1.2 million people under evacuation order. Katrina was the third deadliest hurricane with an estimated 1,500 deaths directly attributed to the storm.

The Gulf Coast campus of The University of Southern Mississippi at Long Beach suffered significant damage and post-Katrina, classes were resumed in a leased space at

HealthMark Center, an old Gulfport building that was previously a hospital. Many students who lived on or near the Gulf Coast suffered significant or total loss of their property. Some students were forced to drop out of their academic program post-Katrina while others carried on despite the difficulties.

# **Purpose of the Study**

The purpose of this study was to document the problems identified by students affected by Hurricane Katrina as well as their coping strategies. Narratives of library and information science students relating their Hurricane Katrina experience while enrolled at the University of Southern Mississippi in Hattiesburg, Mississippi were collected in the fall 2005 and spring 2006 semesters.

## **Research Questions**

The study sought answers to the following research questions:

- 1. What were some of the Hurricane Katrina-related problems identified by students?
- 2. What descriptive terms did students use that indicate their feelings and emotional states post-Katrina?
- 3. What "resiliency indicator" terms (defined by Jones 2006) did students use that indicate coping strategies?

### Limitations

This study is limited to students' Katrina stories that were solicited as an option for extra credit from students in four library and information science graduate classes in

fall 2005 and spring 2006 semesters (two classes of a core requirement course, LIS 605: Library Management; LIS 558: Internet Resources and Applications; and LIS 656: Online Public Services). This was a convenience sample rather than a random sample, so the results of the study are not generalizable.

### **Definitions**

Resilience is "the ability to recover readily from illness, depression, adversity....; buoyancy" (Dictionary.com, 2007).

Narrative is "a story or account of events, experiences, or the like" (Dictionary.com, 2007).

# Assumption

It is assumed that the students' stories are accurate accounts of their Hurricane Katrina-related problems, emotional states, and coping strategies.

### **Importance of the Study**

While the results of this limited study are not generalizable, it is important to document the problems faced by university students after Hurricane Katrina as well as their coping strategies for the historical record. In addition, analysis of the students' Katrina-related narratives adds to the body of post-disaster research and can help to understand, to better prepare for and to aid in recovering from future devastating natural disasters.

### The Literature of Success and Resiliency

The literature of success has been attributed to Richard Covey. In 2005, he wrote that not only surviving, but thriving in the world of today means to "find your voice, and inspire others to find theirs" (Covey, 2005, 5).

The related term "resilience" is from the Latin *resilire*, meaning to spring back or rebound. Bernard (1991) lists five resiliency traits: social competence (responsiveness, cultural flexibility, empathy, caring, communication skills, and a sense of humor); problem-solving (planning, help-seeking, critical and creative thinking); autonomy (sense of identity, self-efficacy, self-awareness, task-mastery, and adaptive distancing from negative messages and conditions); a sense of purpose and belief in a bright future (goal direction, educational aspirations, optimism, faith, and spiritual connectedness).

Jones (2006) listed nine of the protective factors from the literature of resiliency research that can be taught and so are particularly relevant for educators and librarians:

- 1. Making connections and being mentored
- 2. Reading
- 3. Problem-solving and information skills.
- 4. Social skills
- 5. Life skills
- 6. Hobbies and interests
- 7. Careers
- 8. Taking care of others and volunteering
- 9. Participation at school, church, and community.

Character traits such as resilience, optimism, kindness and self-efficacy are part of a body of literature known as positive psychology (Groden, et. al). Positive psychology promotes subjective happiness which is seen to assist with general coping strategies.

### Method

According to Fisher's narrative theory (1987), man is *Homo narrans* (man the storyteller). Humans are narrative beings and rationality is determined by "their inherent awareness of *narrative probability*, what constitutes a coherent story, and their constant habit of testing *narrative fidelity*, whether the stories they experience ring true with stories they know in their lives" (1985, 64).

Narratives from seventy-two library and information science students relating their experience of Hurricane Katrina while enrolled at the University of Southern Mississippi in Hattiesburg, Mississippi were collected in fall 2005 and spring 2006 semesters. Students were offered extra credit points for submitting their narratives in four classes, including two in library management, a core course required for the MLIS degree. Students were self-selected in that they volunteered to relate their experiences. Their identities were held in confidence.

These narrative texts were analyzed and coded using NVivo7 qualitative software for problems or difficulties experienced as a result of Katrina and also for coping strategies and resilience indicators. The resulting coded responses were compiled and analyzed to identify recurring patterns or themes.

The text was then analyzed for frequently-occurring words or terms. The frequencies of particular words or terms related to the identified themes were ranked by

number of occurrences, which may be one indicator of the relative importance of those words or terms to the interviewees.

### **Results**

Analysis with Textalyser software indicated that the 72 narratives contained 25,363 words and 3,511 different words. The narratives were composed of 1,579 sentences, with an average sentence length of 16.22 words. Average readability, as determined by the Gunning-Fog Index (1993) (6-easy to 20-difficult), was determined to be 7.9

# 1. What are some of the Hurricane Katrina-related problems identified by students?

Some Hurricane Katrina-related problems identified by coding the text using NVivo7 software were lack of essentials such as water, food, gasoline, and lack of electric power for days or weeks in the August heat. Another frequently-cited problem was lack of communication and information - cell phones did not work, telephone and electric lines were down. Some mentioned lack of money and some noted concern about lost jobs, continuing their education, about lost or damaged computers, and lack of access to computers.

Text analysis indicates frequently-used terms related to post-Katrina problems were: *power* or *electricity* (100 times); *water* (62 times); *gas/gasoline* (56 times); *Internet, radio, television,* or *information* (48 times); *phone/telephone* or *communication* 

(47 times); *food/foods* (31 times); *hot, heat,* or (lack of) *air conditioning* (22 times); *blocked road* or *debris* (14 times); *displaced* or *homeless* (9 times); and *money* (7 times).

Missing loved ones was mentioned by three students (the bodies of the aunt and uncle of one student were found weeks later). Three students were concerned about loss of jobs; two worked at libraries that were completely destroyed and one worked at a casino that was destroyed.

# 2. What descriptive terms did students use that indicate their feelings and emotional states post-Katrina?

Frequently used terms to describe students' feelings and emotional state included: worry/worried/worrying or concerned (17 times); suffer/suffering or stress (13 times); afraid, fear, or scared (12 times); tears, or cry/cried/crying (9 times); threatened or trapped (7 times); horror/horrible or nightmare (7 times); devastated/devastation/devastating (7 times); prepared (6 times); anxious or angry (5 times); and guilt/guilty (4 times).

# 3. What "resiliency indicator" terms (defined by Jones 2006) did students use that indicate coping strategies?

General themes in the narratives related to coping strategies or "resiliency indicators" were gratitude that their loss was not as severe as others, helping others, volunteering at or donating to area churches, the American Red Cross and community centers, and learning from the experience to become more prepared for future storms.

Word frequency analysis indicated the following frequently-used terms related to resiliency: survived, spared, rescued, escaped, safe or alive (32 times); thank/thanks/thanked/thankfully, appreciate, or gratitude (22 times); luck/lucky or fortunately (17 times); gave or donated/donations (17 times); read/reading (13 times); helped or shared (12 times); learn/learning (9 times); volunteer/volunteers (8 times); and pray/prayed/prayers (8 times).

## **Discussion and Examples**

### **Post-Katrina Problems**

According to word-frequency analysis, the rank order of terms indicating post-Katrina problems included:

- 1. (lack of) electrical power
- 2. (lack of) water
- 3. (lack of) gasoline
- 4. (lack of) information
- 5. (lack of) communication
- 6. (lack of) fresh food and food spoilage due to power outages
- 7. heat and lack of air-conditioning
- 8. blocked roads, debris
- 9. displaced or homeless
- 10. (lack of) money

Some examples of post-Katrina problems noted in students' narratives included:

"Our two biggest hardships were power outages and gas shortages."

"Realizing that we definitely wouldn't have any power for a while because the tree that fell broke our power pole, we started looking for flashlights, candles, batteries, glow in the dark gidgets and gadgets, etc."

"All the trash and rubbish looks awful. The roads are just full of it and everywhere you look it's the same ole thing. Trees, trees, and more trees... I have never seen so many downed trees. Some places look like a bomb just blew up."

"We worked steadily from 7:30 to 3:30 clearing a path in the driveway. With no electricity and no air conditioning, we decided to camp out at the barnhouse since it would be a little cooler. We heard very little news about Lucedale on the radio as the local station wasn't on the air, and neither was Biloxi. News from Mobile indicated that Biloxi and Gulfport were practically leveled. I worried about friends there, but there was still no cell phone service. Exhausted from road-clearing, we tried to sleep in the heat."

"... then became nomads for the next five weeks. We rent a small house in.....

The western edge of the storm passed through this area, leaving a wide path of destruction... All power, phones, gas and other utilities were completely wiped out. .... (We were) under mandatory evacuation and we were not allowed to return until almost three weeks after the storm. ... I still do not have a refrigerator. Mine was ruined by mold and bugs that set in during our weeks away and my landlord continues to put off replacing it."

"A result of the power being out was that I had to throw away everything in my freezer, which I absolutely hated to do knowing so many people were without food. But it was spoiled so did what we had to do."

"It was a very unusual feeling to be without power, water and phones (even the cell phone towers were down) and have no idea when they would be restored."

### **Post-Katrina Emotional States**

According to word-frequency analysis, the rank order of terms indicating post-

Katrina feelings and emotional states noted in their narratives were:

- 1. worry, concern
- 2. stressed, suffering
- 3. fearful, scared
- 4. cried, crying
- 5. feeling threatened and trapped
- 6. feelings of horror and in a nightmare
- 7. feelings of devastation

- 8. feeling prepared
- 9. anxious, angry
- 10. feelings of guilt

Some examples of post-Katrina feelings and emotional states noted in students'

### narratives included:

"Lacking power, phone use, and extensive provisions, and with reports that weeks might pass before power was restored, we grew very concerned about our own wellbeing"

"I have been driven by stress, anxiety, and emotions for the past several weeks watching the place I love most dearly in the world collapse before my eyes and the PEOPLE I love get slighted by the insurance companies they've been religiously feeding premiums for supposed "full coverage" homeowner's insurance. I don't know how they will all recover under the circumstances. We are all really broken right now... And I feel guilty being in Hattiesburg at school."

"Hurricane Katrina was a nightmare for me. We were extremely blessed in that our home was safe, but it left emotional scars and frustrations that I pray time will ease. We did evacuate, and returning home was told that the power would only be out for a few hours. The few hours turned into 5 days. The torture for me was mental and emotional. I have 3 children, 2 of whom have health problems. Without power, the heat was stifling and I had to make sure they had enough water to drink, yet be concerned that the water supply we did have would not last. The nearest store had no water or ice, and even though we went to other places there was no water, or ice. To ease the tension on my kids, I would take them into the car, and we would sit for about 15 minutes with the air conditioner on, just to give them a few minutes of relief. We were also without any type of communication from cell phones, or home phones. This problem continues. I am an overprotective Mom, and fearing that my kids would become ill and there was no hospital near was tough."

According to word-frequency analysis, the rank order of terms indicating post-

Katrina coping strategies noted in their narratives included:

- 1. survived, rescued, escaped
- 2. thankful, grateful
- 3. lucky, fortunate
- 4. gave, donated

- 5. read
- 6. helped, shared
- 7. learned
- 8. volunteered
- 9. prayed.

Some examples of post-Katrina coping strategies noted in students' narratives included:

"My town looks like a war zone, but there is a wonderful sense of community that has come from this. Neighbors are helping each other and visiting because there was no TV or electricity for so long. It really makes you sit back and appreciate the small things in life. We were so excited when the power came on even though we still could not run AC, we didn't have to fight for gas. Now that the creature comforts have been restored, I still see the community coming together to help each other and the tremendous amount of church groups helping."

"When Katrina hit and it actually registered with me how bad this hurricane was going to be, I knew right away I was going to keep a journal of the things I experienced during this time. So I did just that.... I wrote each day some of the things I wanted to remember most."

"At first, no school and eating and reading by flashlight and candle was a novelty."

"Watching the trees swaying so far back and forth had my littlest one scared and my oldest son grabbed a blanket, flashlight and a book and hid them under the blanket and read to him on the way so he wouldn't notice the storm."

"I can only say I have learned a lot through this experience and I must thank the Lord for sparing my life and my home. I still have my family and a place to lay my head at night. I hope this is one thing I never have to live through again."

Seven of the nine protective factors that promote resiliency (Jones, 2006) were identified within the students' narratives: *making connections* and exhibiting *social skills* as indicated by communication, giving and receiving help; *reading*; *problem-solving and* 

information skills; life skills, indicated by survival in catastrophic circumstances; taking care of others and volunteering; and participation at school, church, and community.

# Librarianship and Service

Within the discipline of library and information science, service to others and the community has an honored role which dates back 200 years. The appeal of literature is focused on the values it holds for young adults, and reading focused on pleasure and information is a vehicle of understanding. Reading in childhood enlarges one's empathy for oneself and the human condition (Higgins, 2007). Reading in adulthood is an extension of interest and intellect.

Some library and information science students work in public libraries and many of their narratives focused on librarianship, including public service and promotion of reading, two factors that promote resiliency:

"The week after Katrina, our library was inundated with evacuees from Louisiana (mostly) and some from Mississippi. For two solid weeks, we consoled families as they tried to fill out the frustrating FEMA forms online, tried to get Red Cross aid, coddle scared children and grandparents, all while doing the normal feeding and living necessities. We understood how scared they were.... We bought snacks for the kids, water for the grownups and offered food and a shoulder to cry on as they navigated the horrendously busy FEMA web site. Everyone in the library was stressed, yet we knew exactly what the evacuees needed: they needed to talk about their experiences, whether it was good or bad. We heard about losses and we heard about rescued pets."

"... we dole out info to anyone who wants it. This is a part of the changing face of librarianship (I believe) and it's how I'm being taught to respond to information needs. Yes, I'm lucky. But think about it, we as librarians are the translators of information for those who are technologically challenged. We have to empower people with the information they need.... My director is ALSO making sure we are taking care of ourselves. She offered counseling services if we felt we needed it to help us to be able to let go and get some sleep without worrying about all the damaged lives we've encountered all day. One large reward for us is the smiles we get and the profuse thanks we get from our patrons. We remind them that it is a LIBRARY that has provided them with what they needed."

"The library I work at received very little damage. Some ceiling tiles were down and rain blew in the book drop, so we lost those books. We were very fortunate because the library has about 4 or 5 big windows across the side that could have easily been blown out....Now the aftermath at the library has been completely crazy. Our computers that are available for public use have been extremely full since we re-opened. We have a sign-in list a mile long most of the day. It's a great feeling to know you can help someone in the least of ways."

"(The) Library has been inundated with refugees... and inundated with a river of emotions. During afternoons of tearful drives home we have had to learn to accept the changes addition to our job descriptions: careful listeners and gentle reminders of hope: 'it will take a long time to recover from your experiences and losses, but you'll do it!' We offered our expertise with FEMA paperwork and computers, and a lot of local information.... It has been said that only time can heal but with the frequent occurrences and strengthen hurricanes, I think we will be continually reminded of the loss of life, homes, and property and consequently, will be slow to heal."

"The ... Branch was without air-conditioning, but was filled with ... evacuees from the (emergency shelter) next door ... who were willing to ignore the heat and humidity. We were trying to work as fast as we could to get evacuees on the library computers and to the FEMA sites. There were also many people trying to locate aerial photos online of their ... neighborhoods to see what became of their homes, as well as trying to locate missing family and friends."

"The infrastructure of the city is strained to the breaking point, and traffic is the easiest way to observe this fact. But, despite all of the changes and hardships, I feel a sense of pride and accomplishment that so many people were helped by the library for which I work and its employees. This experience proves that forced, rapid changes are not necessarily destructive to a library, but can, on the other hand, prove very beneficial."

### **Conclusion**

A thematic overview of the narratives indicated that the effects of Katrina on the individuals featured here was a story of courage in the face of adversity – not only for the individuals themselves, but as part of several communities. These students did find their voices and did their best to "inspire others to find theirs" (Covey, 2005). Clearly the resiliency traits of responsiveness, empathy, caring and communication skills, self-

efficacy, and a sense of purpose and hope helped the individuals to cope. It would seem to be no coincidence that these same characteristics are ideal indicators of not only positive psychology, but the service mentality indicative of professional librarianship.

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