How a Hurricane Affected the Residential Interior Design of Mississippi’s Gulf Coast

Jamie L. Jelinski

University of Southern Mississippi

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How a Hurricane Affected the Residential Interior Design of Mississippi’s Gulf Coast

by

Jamie Jelinski

A Thesis
Submitted to the Honors College of
The University of Southern Mississippi
in Partial Fulfillment
of the Requirements for the Degree of
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ABSTRACT

This study analyzes the interior design choices made by homeowners of Mississippi’s Gulf Coast who rebuilt after Hurricane Katrina, in order to determine how the natural disaster of the hurricane affected residential interior design aesthetics. The aim of the study was to determine if there was a correlation between homeowner’s disaster experiences and their interior design choices following the disaster. Survey results were collected from 128 homeowners of the Mississippi Gulf Coast whose homes were affected by Hurricane Katrina. The data was analyzed quantitatively and qualitatively, with little significance found during cross-analyses. Overall, the most prominent design changes were more a testimony to maintenance of materials than to aesthetic choice. The results of this study did not support the hypotheses that interior design is affected by a major regional change such as a natural disaster and that homeowners with similar disaster experiences would also choose similar design changes to their home. Instead, the results indicate that the aesthetic choices of a home are a personal reflection and rely on each individual’s tastes, rather than relying on generalized information.

Key Words: interior design, natural disaster, Hurricane Katrina, homeowner, residential design, Mississippi Gulf Coast, survey
ACKNOWLEDGEMENTS

This project began when I was 13 years old, when Hurricane Katrina destroyed my neighborhood and my home. It has been a long journey to bring it to fruition, and many people have helped me along the way. This was possible because of their support, and I owe them a great deal of thanks: Mrs. Claire Hamilton, for her incredible understanding and never-ending patience—from the many meetings and discussions to the personal pep talks, she has been the most caring adviser imaginable. Mrs. Nancy Bounds, for providing wonderful advice in creating a survey as professional as possible. Dr. J. T. Johnson, for his expert statistical analysis and words of encouragement—he was instrumental to this project, and I truly could not have done this without him. All the wonderful faculty and staff at the Honors College, in particular the ever-enthusiastic Mrs. Paula Mathis, for answering every impossible question I could ask. My family, for showing me that hard work and perseverance can help me weather anything. My mother, Lydia Jelinski, for her unwavering support and invaluable assistance throughout my entire process, from brainstorming research topics to proofreading the final draft. Henry Shepard, for keeping me strong through my bouts of uncertainty and never doubting me for a second. Countless classmates and college friends over the years, for listening to my worries and giving me their confidence when I had misplaced my own. Finally, the friends, neighbors, and members of the community who have personally felt the effects of Hurricane Katrina, for sharing their stories and helping us continue to build a better future.
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INTRODUCTION

A natural disaster makes a large impact. Not only does it ravage landscapes and destroy towns, but also it devastates the communities in its path, forever altering the lives of the people left in its wake. The remnants of that disaster are carried with its victims as they move forward to cope with their losses. While recovery remains a hopeful and achievable destination, the disaster will in some form or another always stay with the victims.

Disaster remnants can be obvious. Memorials, pictures, and other physical reminders of the event can serve as a public testimony to the disaster’s influence on the lives of the victims. However, these remnants are often less recognizable to the outside eye. Memories never truly disappear, and can manifest themselves as told stories or personal preferences. And what preferences are more personal than what a person is surrounded with at home?

A person’s home is an extension of his personality. If that person was a victim of a natural disaster, his home would reflect that disaster in some way. The easiest way to examine an individual’s personal choices in his home is by analyzing the interior decoration of the space. This study analyzes the interior design choices made by homeowners of Mississippi’s Gulf Coast who rebuilt after Hurricane Katrina, in order to determine how the natural disaster of the hurricane affected residential interior design aesthetics.

Natural disasters affect environments. The home is one of the most important environments in an individual’s life. Therefore, the effect that a natural disaster may have on the home environment is worth investigating. Analyzing this from an interior design
standpoint, as opposed to an architectural one, is more indicative of personal choices. Interior design, by its nature, is more connected to the human side of a building’s purpose, because people dwell in the building’s interior. To further hone the study, the emphasis is on the aesthetic choices made in the home (such as floor coverings and color schemes rather than building layouts), since those are generally the elements over which a homeowner has the most control.

For this type of study to be most effective, it should include as wide a variety of people as possible, while maintaining the common variable of the disaster. For this reason, Hurricane Katrina was chosen as the natural disaster to examine. The devastation of Hurricane Katrina was widespread and fairly consistent in its damage to businesses and homes. People from all walks of life had their homes torn apart in similar ways, and by now, ten years after the disaster, most of those people have completed the rebuilding process. The time is ripe to look back on the aesthetic choices that homeowners made with enough distance to recognize which choices were following fads and which choices were a reflection of the disaster experience.
REVIEW OF LITERATURE

THE DISASTER

The date of August 29, 2005 has special meaning for the people of the Mississippi Gulf Coast. Early that morning, one of the worst natural disasters in the history of the United States loomed over the coastline: Hurricane Katrina had arrived.

According to the National Hurricane Center’s Tropical Cyclone Report: Hurricane Katrina, 23-30 August 2005, the system dropped from a Category 5 to a Category 3 on the Saffir-Simpson hurricane scale before coming ashore in Louisiana and Pearl River, MS. The Saffir-Simpson hurricane scale, states the National Institute of Standards and Technology, labels storms according to wind speed and provides an estimate for storm surge (2006). However, being officially downsized to a Category 3 out of 5 did not mean the hurricane’s damage was trivial. Richard Knabb and the other authors of the report (2005) state that a large portion of the storm surge was generated while the system was a Category 5, sustained by the sheer size of the hurricane. In fact, Katrina was “far and away the costliest hurricane in United States history,” creating a total of approximately $108 billion in damages (p. 13, Knabb et. al, 2005). On the Mississippi Coast alone, the hurricane’s forces wrecked nearly 130,000 homes and killed over 200 people, as noted by Christopher Eamon and the American Society of Civil Engineers in 2007. The storm leveled homes, businesses, and historical buildings (Knabb et. al, 2005), in some cases wiping out entire communities on the coast. The photographs in Figures 1-5 illustrate the range of damage in various Mississippi coastal communities (all photographs circa 2005 courtesy of L. Jelinski, personal communication, April 2, 2015).
Figure 1. Entire structures were destroyed.

Figure 2. The storm surge broke apart buildings, slabs and streets on the beach.
Figure 3. The debris from an entire housing complex was deposited in this backyard.

Figure 4. Flooded residents piled ruined carpet and appliances by the street for pickup.
Katrina devastated with both water and wind. In both cases, Mississippi’s most heavily affected counties were its five coastal counties: Jackson, Harrison, Hancock, Stone and Pearl River (“New Building Code for Upcoming Hurricane Season,” 2006). Data from the Tropical Cyclone report indicates that in a 20-mile path splitting Hancock and Harrison Counties, the storm surge reached from 24 feet up to 28 feet. Communities in that path included Waveland, Bay St. Louis, Pass Christian, and Long Beach (Knabb et. al, 2005), as well as Diamondhead and the Kiln. Figure 6 shows a house in Diamondhead that flooded up to 26 feet, washing away the porches and staircases. Further to the east, from Gulfport to Pascagoula, the water reached upwards of 22 feet. In several places the waves crossed Interstate 10 and penetrated as much as 12 miles inland (Knabb et. al, 2005). This storm surge was much higher than the Saffir-Simpson hurricane scale predicted, based on Katrina’s 125 mph wind speed (National Institute of
Standards and Technology & U.S. Department of Commerce, 2006). Those winds tore roofs off buildings and sent trees into others. And with a radius of 75 miles, Katrina’s winds made it one of the largest and most ferocious hurricanes to ever strike the Gulf Coast (Knabb et. al, 2005).

Figure 6. A raised home in Diamondhead was flooded and gutted by 26 ft. storm surge.

For the communities in Katrina’s path, this storm was catastrophic. People everywhere were left homeless, as shown in Figure 7, or at the very least without power for up to several weeks (Knabb et. al 2005). The Federal Emergency Management Agency, or FEMA, states in a 2006 report that on September 5, 2005, at the height of the Katrina devastation, the American Red Cross was housing 15,000 evacuees across 129 shelters on the Coast. Over the next several months, FEMA provided almost 33,000
emergency travel trailers as temporary housing to approximately 88,952 people (FEMA, 2006). It was clear that recovering from this devastation was going to take many years and require great effort from the victims themselves and the entire nation.

LEARNING FROM THE STORM

All the architects and city planners agree that the United States and especially the Gulf Coast has much to learn from the disastrous wake of Hurricane Katrina. Upon observations of the structures that remained standing in the destruction, several things became evident.

Firstly, Mississippi needed new building codes. Katrina’s forces had overcome the building codes of 2005 (Eamon, Fitzpatrick, & Truax, 2007). The reconnaissance report on Performance of Physical Structures in Hurricane Katrina and Hurricane Rita lists bridges, casino barges, pre-cast parking garages, and industrial facilities such as sea
ports among the structures damaged by storm surge across the hurricane-affected coasts of Texas, Louisiana, and Mississippi. In light of the widespread destruction, architectural standards were raised, not just for the Mississippi Gulf Coast, but also for the other regions prone to hurricanes (National Institute of Standards and Technology & U.S. Department of Commerce, 2006). A 2007 field inspection of the Mississippi Gulf Coast by the American Society of Civil Engineers (Eamon, Fitzpatrick, & Truax) found that structures that were built of precast concrete or light frame wood were more susceptible to damage, while structures of reinforced concrete, steel frame such as the church shown in Figure 8, and heavy timber better withstood the hurricane. Overall, structures without adequate connection strength fell to Katrina’s wrath.

Figure 8. A steel-framed church on the beach in Gulfport is left with only its roof intact.

Amidst the destruction, the loss of several historic buildings had a noteworthy impact. Across the nation, cries rang out and nearly $100 million in funds were allocated
to restore the damaged historic structures (FEMA, 2011). These historic buildings included Sullivan’s cottage in Ocean Springs, MS (“Sullivan’s cottage in Ocean Springs, Mississippi,” 2006) and Beauvoir, the last home of President of the Confederacy Jefferson Davis and a particular pride of Biloxi, MS (Preziosi, 2005 and Hoffman, 2006). These residences from America’s past were regarded as irreplaceable, so authors called for special attention to their details. However, because the rebuilding processes of these buildings were historic restorations, no changes were made to design choices; architects and designers were instead dedicated to recreating elements as closely as possible to the original structures of decades past.

On the other hand, governments and designers pushed to build back damaged communities stronger and better than before. One example of this effort is in a university-based design organization, the Gulf Coast Community Design Studio, or GCCDS (Perkes, 2009). David Perkes describes the studio’s mission and involvement with the recovery of East Biloxi, a particularly hard-hit area (2009). Each of the nearly 5,000 homes in the East Biloxi community was damaged, either flooded or destroyed beyond repair. Temporary shelters housed the homeowners while their houses were refurbished, and as of 2009, over half of those homes had not yet been rebuilt. In working on the devastated community, Perkes (2009) writes that the workers at the GCCDS learned an important lesson: “the satisfaction of future homeowners is directly proportional to their involvement in the design process” (p. 70). While the GCCDS strives to maintain homeowner involvement, the same could not be said for every other builder on the Gulf Coast.
In the overwhelming majority of these articles, the emphasis lies with the physical structure and external architecture of the buildings. Little to no commentary is given on the interior living space of Katrina’s victims.

LOOKING INWARD

The literature on the interior design of Hurricane Katrina’s recovering communities is limited. Among countless pieces about building codes, architectural structure, urban planning, and the high costs of rebuilding, two articles made conclusions about interior design.

In a separate article about the Gulf Coast Community Design Studio, or GCCDS, author James Russell includes some of the designers’ thoughts on the interior design of the new homes. Extended ceilings and ventilated, brightened interiors are explained by one phrase from David Perkes, head of the GCCDS: “We're not looking to make a sweetened vernacular. If anything, we're looking for something energetic or a bit more robust” (Russell, 2008). Nothing else is mentioned about the interior space.

One article examined the interior design of a recovering space. A piece published in the January 2007 edition of Hospitality Design featured the newly refurbished Grand Biloxi Casino Hotel & Spa, one of the many casinos that line the Mississippi Gulf Coast. The designers had a special inspiration for the interior of this commercial space: the waters of the Gulf of Mexico itself, which then lay calmly in view of the Hotel (“No More Biloxi Blues,” 2007). Perhaps the designers emphasized the calmness of the water as a way to forget the rolling surge that damaged the building the year before. The article goes on to mention the design elements of the hotel. “Suites are filled with original art from regional artists, while warm organic colors, natural stone finishes, and dark walnut casegoods are found throughout” (p. 27). This information is interesting to note, but it
only reveals the design opinions of these commercial designers and does not lead any insights to overall design changes in the community.

A NEW STUDY

Overall, the literature on the recovery of communities devastated by Hurricane Katrina is limited in respect to interior design. While several articles emphasize architecture, few authors mention interior design, and those do so very briefly. Examining interiors is a non-traditional approach to the study of a natural disaster, so the existing literature is weak. No experiments or analyses have been conducted to examine the design trends of the Gulf Coast following this disaster. This study helps fill this gap in the literature by concentrating on the interior design of the Hurricane Katrina recovery movement.

This study presents a look at the Hurricane Katrina recovery effort unlike anything before published. It is unique in that it provides the perspective of the homeowners who were victims of the disaster. By collecting data from homeowners only and not designers, this study is more accurate in that the choices are more likely a result of the natural disaster than a reaction to national design trends. This study can serve as a reference point in the future for an idea of the ways that natural disasters affect interior design preferences, a useful resource for both future disaster victims and designers hoping to assist devastated communities.

RESEARCH QUESTIONS AND HYPOTHESES

The literature about Hurricane Katrina’s impact on the Mississippi Gulf Coast and several years’ observation of the devastated areas firsthand prompted several questions:

1. Is interior design affected by natural disasters in a similar way that architecture is?
2. Did the homeowners’ experiences during and following the disaster affect their design changes?

3. How much did the amount of recovery (i.e., repairing versus rebuilding) affect the interior design?

4. What changes were made in respect to aesthetics and durability?

5. Did the homeowner’s age at the time of recovery affect the amount of change?

A hypothesis was formed that interior design is affected by a major regional change such as a natural disaster, and that homeowners with similar disaster experiences would also choose similar design changes to their home.
METHODS

This was a triangulated study, with both quantitative and qualitative elements. Data collection consisted of a survey questionnaire instrument administered to a sample of Mississippi Gulf Coast homeowners affected by Hurricane Katrina. The survey instrument provided quantitative data in the form of scaled ratings and qualitative data in the form of short answer comments. Statistical analyses were performed on the quantitative data, and the results were evaluated with regards to established interior design principles, using the qualitative data to supplement and further analyze the results.

For the purposes of this study, a homeowner is a person who has the freedom to make design changes to the interior of their dwelling. A design change refers to the selection of new wall colors, floor coverings, furniture, window treatments, finishes, and fabrics in the space. Only homeowners who lived in the state of Mississippi in August 2005, sustained damage to their home as a direct result of Hurricane Katrina, and remained living in Mississippi after Hurricane Katrina are included. In this study, damage is considered a direct result of Hurricane Katrina if it was caused by flooding, wind, rain, or falling trees on August 29, 2005. The study included a mix of homeowners who needed to repair their houses, rebuild their houses, or move to new houses. Repair means to fix an existing, damaged house, while rebuild means to start the construction process from the beginning on the same site as the destroyed house. Moving to a new house can mean either rebuilding on a different site or moving into an existing house on a different site.

Before distribution, this survey instrument was reviewed by experts who completed a validity questionnaire on its contents. See Appendix B for a copy of the
Validity Questionnaire. It was also approved by the University of Southern Mississippi Institutional Review Board. The only foreseeable risk of this survey was anxiety raised by questions dealing with the participant’s experience during the disaster. In the event that some of the questions caused the participant anxiety, the names and contact information of local counseling services were provided. Participants did not include their names on any of the survey materials. Participation in the survey did not have any direct benefits to participants, but results could become a resource for designers in disaster-prone areas and serve as a tool for helping homeowners such as the participants who have experienced natural disasters to redesign their homes effectively.

First, a sample group of homeowners was established to be participants in the survey. This was a non-probability, convenience sample. Beginning with the towns most devastated by Hurricane Katrina, the survey instrument was distributed to the participants via community networks such as churches, community centers, and online social media groups. Approximately half of the overall distributed surveys were distributed electronically, while paper copies were provided for large groups of participants and participants who preferred printed material. All of the returned survey instruments, whether completed electronically or on paper, held equal weight in the overall data.

To focus on changes in design as responses to disaster, the survey instrument presented questions regarding the difference of design choices in the home prior to and following Hurricane Katrina. See Appendix A for a copy of the paper version of the survey instrument. Participants were asked to identify what interior details were present in their home before the storm and after the storm. Next participants were asked to rate the truth of a series of statements about design changes to their home rate. They were
then asked to rate the warmth or coolness (meaning, degree of red colors or blue colors) of their home’s colors before and after the disaster. A short answer question asked the homeowner to describe any specific design choices they made regarding interior elements.

The survey instrument also included a series of multiple choice questions about the participant’s Hurricane Katrina experience. For example, did the individual repair their home, rebuild their home, or move to a new home? What were his living conditions following the storm (i.e., storm shelter, hotel, FEMA trailer, Katrina Cottage, with friends/relatives, at the damaged home, or in a new home)? How many people were living in his home at the time of the storm? What was his experience of the storm itself (evacuated, or remained at home)? In addition, the survey instrument asked if the participant consulted with a professional interior designer or architect to make design choices. Finally, for demographic purposes, the survey instrument asked participants to provide information about their gender, age, county of residence, and economic standing (in the form of how repairs were financed).

Once the completed survey instruments were collected, the following tests were performed on the data: frequency tests, one-way ANOVA tests, and Chi-square tests.
RESULTS

There were 167 total participants who returned the survey, collected through the online survey and paper copies (see example of a paper copy in Appendix A) distributed to various areas in several communities. Of these 167, 35 were not living in the Mississippi coastal counties (Hancock, Harrison, and Jackson) at the time of Hurricane Katrina. They answered “Other” on the question “What county did you live in at the time of Hurricane Katrina?” The data from these 35 survey participants was removed from all further reported results. This ensured that all data reported was from a Mississippi Gulf Coast homeowner, from Hancock County, Harrison County, or Jackson County, at the time of the storm.

There were 128 participants who met the requirement as a resident of the Mississippi Gulf Coast at the time of Hurricane Katrina. All data is reported in percentages of this sample of 128 participants.

The first analyzed section of the survey focused on the Hurricane and the participants’ personal data: “The following questions deal with your disaster experience during and after Hurricane Katrina (August 29, 2005).” Frequency tests were used.

Question 1 asked “What county do you live in?” (In the online version of the survey instrument, this was clarified to “What county did you live in at the time of Hurricane Katrina?” in efforts to reach residents who may have moved away.) 78 of 128 (60.9%) were from Hancock County, 35 of 128 (27.3%) were from Harrison County, and 15 of 128 (11.7%) were from Jackson County. See Figure 9. The majority of participants had lived in Hancock County, which was the county most damaged by Hurricane Katrina and also the most convenient sample.
Figure 9. Q1: What County Do You Live In?  Note: Responses for “Other” not pictured.

Question 2 collected the genders of participants for demographical reasons. 30 of 128 (23.4%) were male. The majority of the participants were female, with 98 of 128 (76.6%). See Figure 10.

Figure 10. Q2: What Is Your Gender?
Question 3 asked “What was your age at the time of the storm?” 30 of 128 (23.4%) answered “under 18 in 2005,” 8 of 128 (6.3%) answered “18 to 24 in 2005,” 52 of 128 (40.6%) answered “25 to 44 in 2005,” 32 of 128 (25.0%) answered “45 to 64 in 2005,” and 6 of 128 (4.7%) answered “65 or older in 2005.” See Figure 11.

![Question 3: What was your age at the time of the storm?](image)

Figure 11. Q3: What Was Your Age at the Time of the Storm?

Question 4 asked “How many people were living in your home at the time of the storm?” 38 of 128 (29.9%) answered “1 to 2 people,” 78 of 128 (61.4%) answered “3 to 5 people,” 9 of 128 (7.0%) answered “6 to 8,” and 2 of 128 (1.6%) answered “9 or more.” 1 of 128 (.8%) did not answer the question. See Figure 12.

Question 5 determined the level of severity of participants’ disaster experiences by asking whether or not they evacuated. 24 of 128 (18.8%) stayed in their home during Hurricane Katrina. 78 of 128 (79.9%) did not stay, and 2 of 128 (1.6%) did not answer the question. See Figure 13.
The homes of 82 of 128 (64.1%) participants flooded during Hurricane Katrina, determined by Question 6, with 43 of 128 (33.6%) reporting their homes did not flood and 3 of 128 (2.3%) not answering the question. This is vastly higher than the 4 of 128 (3.1%) who indicated through Question 7 that their homes had flooded before Hurricane
Katrina. 122 of 128 (95.3%) participants had never experienced a home flood before, and 2 of 128 (1.6%) did not answer the question. See Figure 14.

![Figure 14. Q 6 & Q7: Did Your Home Flood? During v. Before Hurricane Katrina]

Question 8 judged the extent of damage to homes. 34 of 128 (26.6%) responded that their homes were “completely demolished by the storm (i.e. water, wind, or any other type of damage).” 90 of 128 (70.3%) said their homes were not completely demolished, and 4 of 128 (3.1%) did not answer. See Figure 15.

Question 9 was a follow-up question, asking, “If no, did you have to demolish what was left of your home?” 16 of 128 (12.5%) said Yes, 83 of 128 (64.8%) said No, and 29 of 128 (22.7%) did not answer the question. See Figure 16.

In response to Question 10, “If your home was completely demolished, did you build back on the same lot?” 25 of 128 (19.5%) who marked Yes, 46 of 128 (35.9%) who marked No, and 57 of 128 (44.5%) who did not answer the question. See Figure 17.
Figure 15. Q8: Was Your House Completely Demolished by the Storm?

- Yes: 26.6%
- No: 70.3%
- Did Not Answer: 3.1%

Figure 16. Q9: If No, Did You Have to Demolish What Was Left of Your Home?

- Yes: 22.7%
- No: 64.8%
- Did Not Answer: 12.5%
Question 10: If Your Home Was Completely Demolished, Did You Build Back on the Same Lot?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Did Not Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>19.5%</td>
<td>44.5%</td>
<td>35.9%</td>
</tr>
</tbody>
</table>

Figure 17. Q10: If Your Home Was Completely Demolished, Did You Build Back on the Same Lot?

Question 11 judged whether Hurricane Katrina forced homeowners to move. 43 of 128 (33.6%) of participants moved into another home in a different location as a result of the storm. 75 of 128 (58.6%) reportedly did not, while 10 of 128 (7.8%) did not answer the question. See Figure 18.

Question 11: Did you move into another home in a different location as a result of the storm?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Did Not Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.8%</td>
<td>33.6%</td>
<td>58.6%</td>
</tr>
</tbody>
</table>

Figure 18. Q11: Did You Move into Another Home in a Different Location as a Result of the Storm?
Question 12 asked “Were repairs made to your damaged home?” 91 of 128 (71.1%) reported Yes, 34 of 128 (26.5%) reported No, and 3 of 128 (2.3%) did not answer. See Figure 19.

![Figure 19. Q12: Were Repairs Made to Your Damaged Home?](image)

**Question 13** went into further detail. Participants asked “Who made repairs to your home?” and given a range of choices in which participants could check all that applied. Accounting for all the multiple responses, 68.8% of participants reported “builder/contractor,” 24.0% of participants reported “volunteers,” 47.9% of participants reported “friends/family,” and 46.9% of participants reported “yourself.” See Figure 20.

Question 14 asked “How long were you displaced from your damaged home?” 15 of 128 (11.7%) answered “less than 1 month,” 21 of 128 (16.4%) answered “over 1 month but under 6 months,” 25 of 128 (19.5%) answered “over 6 months but under 1 year,” 39 of 128 (30.5%) answered “over 1 year,” and 23 of 128 (18.0%) answered “I was not displaced.” 5 of 128 (3.9%) did not answer the question. See Figure 21.
Figure 20. Q13: Who Made Repairs to Your Home?

Question 13:
Who made repairs to your home?

- Builder/Contractor: 68.8%
- Volunteers: 24.0%
- Friends/Family: 47.9%
- Yourself: 46.9%

Figure 21. Q14: How Long Were You Displaced from Your Damaged Home?

Question 14:
How long were you displaced from your damaged home?

- Less than 1 Month: 11.7%
- Over 1 Month but Under 6 Months: 16.4%
- Over 6 Months but Under 1 Year: 30.5%
- Over 1 Year: 19.5%
- I was not displaced: 18.0%
- Did Not Answer: 3.9%
Question 15 judged living situations after Hurricane Katrina. Participants were asked “Where did you live following the storm?” and given a range of choices in which participants could check all that applied. Accounting for all the multiple responses, 2.5% of participants reported “storm shelter,” 8.5% of participants reported “hotel,” 35.6% of participants reported “FEMA trailer,” 2.5% of participants reported “Katrina Cottage,” 29.7% of participants reported “your damaged home,” 55.9% of participants reported “with friends/relatives,” 16.9% of participants reported “rented an apartment/house,” and 5.9% of participants reported “purchased a condo/house.” See Figure 22.

![Question 15: Where did you live following the storm?](image_url)

Some responses to Question 15 on the paper version also included write-in answers. One participant noted that while displaced, they lived in a mobile trailer.
provided by the Mississippi Home Corporation—not in a FEMA trailer. The most common answers were “FEMA trailer” (which the researcher would describe as a small mobile home that may or may not have been distributed by the FEMA Corporation) and “with friends/relatives.”

Question 16, “Did you consult with an interior designer and/or architect?” determined the level of outside influence on the homeowners when making design choices. 17 of 128 (13.3%) answered Yes, they had consulted with a professional, and 109 of 128 (85.2%) answered No. 2 of 128 (1.6%) did not answer the question. See Figure 23.

![Figure 23. Q16: Did You Consult with an Interior Designer and/or Architect?](image)

Question 17 aimed to determine homeowners’ financial situations. Participants were asked “How were the majority of the repairs/rebuilding financed?” 70 of 128 (54.7%) marked “insurance,” 13 of 128 (10.2%) marked “personal savings,” 9 of 128 (7.0%) marked “bank loans/finances,” 19 of 128 (14.8%) marked “federal grant,” and 7
of 128 (5.5%) marked “other.” 10 of 128 (7.8%) did not answer the question. See Figure 24.

Figure 24. Q17: How Were the Majority of the Repairs/Rebuilding Financed?

The remaining sections of the survey gathered information about participants’ interior design choices: “The following questions deal with the design of the interior elements of your home.”

Several interior elements were categorized into sections, with columns for participants to indicate whether the element was used in their home before Hurricane Katrina and/or after Hurricane Katrina. Participants were instructed to “Please check the appropriate box for each type of interior detail below if it was present in the public spaces of your home (such as your living room/family room, kitchen, dining room, and entrance hall) before or after Hurricane Katrina. Check all that apply.” The results of each interior element’s Before column were compared to the results of its After column. Percentage differences $\geq 20\%$ were significant, differences $< 20\%$ were not significant.
Under the category Wall Finishes, the elements of Paint, Plaster/venetian plaster, Paneling/wood, Wallpaper/wallcovering, and Other had no significant change. There were no answers for “Other: Before.” Answers for “Other: After” were “Sheetrock – painted” and an unspecified answer. Additional answers for “Other” were “bath rooms are still unfinished and not repaired/inside walls still not painted,” and “Before: Wood walls. After: Concrete Walls.” See Table 1.

<table>
<thead>
<tr>
<th>Wall Finishes: Before v. After by Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before</td>
</tr>
<tr>
<td>Paint</td>
</tr>
<tr>
<td>Plaster/venetian plaster</td>
</tr>
<tr>
<td>Paneling/wood</td>
</tr>
<tr>
<td>Wallpaper/wallcovering</td>
</tr>
</tbody>
</table>

Table 1. Wall Finishes: Before v. After by Percentage.

Under the category Floor Finishes, the elements of Wood/laminate, Tile (ceramic, stone, etc.), Concrete, and Other had no significant change. The element of Carpet had a 32% drop in use, from 66.4% Before to 34.4% After. Answers for “Other: Before” were “Vinyl plank flooring” and “linoleum.” Answers for “Other: After” were “Luxury vinyl tile (Ceramic tile cracked so went with vinyl tile in new house),” “Vinyl,” “Vinyl plank flooring,” and “linoleum.” Additional answers for “Other” were “vinyl bamboo” and “wooden floors remain broken and unfinished.” See Table 2.
Table 2. Floor Finishes: Before v. After by Percentage.

<table>
<thead>
<tr>
<th>Floor Finishes</th>
<th>Before</th>
<th>After</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wood/laminate</td>
<td>36.7%</td>
<td>53.1%</td>
<td>Not statistically significant</td>
</tr>
<tr>
<td>Carpet</td>
<td>66.4%</td>
<td>34.4%</td>
<td>32% Less</td>
</tr>
<tr>
<td>Tile (ceramic, stone, etc.)</td>
<td>44.5%</td>
<td>52.3%</td>
<td>Not statistically significant</td>
</tr>
<tr>
<td>Concrete</td>
<td>9.4%</td>
<td>13.3%</td>
<td>Not statistically significant</td>
</tr>
</tbody>
</table>

Table 3. Floor Color: Before v. After by Percentage.

<table>
<thead>
<tr>
<th>Floor Color</th>
<th>Before</th>
<th>After</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light Neutral</td>
<td>60.2%</td>
<td>57.8%</td>
<td>Not statistically significant</td>
</tr>
<tr>
<td>Dark Neutral</td>
<td>18.0%</td>
<td>25.0%</td>
<td>Not statistically significant</td>
</tr>
<tr>
<td>Warm tones</td>
<td>12.5%</td>
<td>11.7%</td>
<td>Not statistically significant</td>
</tr>
<tr>
<td>Cool tones</td>
<td>7.8%</td>
<td>16.4%</td>
<td>Not statistically significant</td>
</tr>
</tbody>
</table>

Under the category Floor Color, the elements of Light Neutral, Dark Neutral, Warm tones (reds, oranges, yellows), Cool tones (blues, blue-greens, purples), and Other had no significant change. With no indication for “Before” or “After,” answers for “Other” were: “gray,” and “light brown small wooden floors.” See Table 3.

Table 3. Floor Color: Before v. After by Percentage.

<table>
<thead>
<tr>
<th>Floor Color</th>
<th>Before</th>
<th>After</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2. Floor Finishes: Before v. After by Percentage.
Under the category Countertops, the elements of Solid surface, Ceramic, and Other had no significant change. The element of Granite/stone had a 24.2% rise in use, from 13.3% Before to 37.5% After. The element of Laminate had a 23.4% drop in use, from 52.3% Before to 28.9% After. There was one unspecified answer for “Other: Before.” There was one unspecified answer for “Other: After.” Additional answers for “Other” were: “Before: No countertops. After: Formica,” and “not repaired.” See Table 4.

<table>
<thead>
<tr>
<th>Countertops: Before v. After by Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td>Granite/stone</td>
</tr>
<tr>
<td>Solid surface</td>
</tr>
<tr>
<td>Ceramic</td>
</tr>
<tr>
<td>Laminate</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>

Table 4. Countertops: Before v. After by Percentage.

Under the category Cabinets, the elements of Stained wood, Paint, Laminate, and Other had no significant change. With no indication for “Before” or “After,” an answer for “Other” was “top cabinets stayed and we replaced the bottom ones.” See Table 5.

Under the category Window Treatments, the elements of Long (floor-length) draperies, Short curtains, Blinds/shutters, and Other had no significant change. There were no answers for “Other: Before.” Answers for “Other: After” were “Over the kitchen sink a Valance” and an unspecified answer. Addition answers for “Other” were “no blinds or shutters,” and “none.” See Table 6.
This Before/After method was also applied to the type of home the participants lived in. Under this heading “Type of Home,” the choices of “Single family detached,” “Apartment or multi-family,” “House trailer or mobile home,” and “Other” had no significant change. It is noteworthy, however, that 77% of the participants reported living in single family detached homes. There were no answers for “Other: Before.” Answers for “Other: After” were “Building new brick house” and “Modular home.” An additional answer for “Other” was “Multi-family home, and own home.” See Table 7.
Table 7. Type of Home: Before v. After by Percentage.

<table>
<thead>
<tr>
<th>Type of Home</th>
<th>Before</th>
<th>After</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single family detached</td>
<td>78.9%</td>
<td>77.3%</td>
<td>Not statistically significant</td>
</tr>
<tr>
<td>Apartment or multi-family</td>
<td>3.9%</td>
<td>4.7%</td>
<td>Not statistically significant</td>
</tr>
<tr>
<td>House trailer or mobile home</td>
<td>3.1%</td>
<td>1.6%</td>
<td>Not statistically significant</td>
</tr>
<tr>
<td>Other</td>
<td>Before: (none) After: “Building new brick house” “Modular home” Unspecified: “Multi-family home, and own home”</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A comment box was provided for participants to write their own thoughts on design choices. “Please write any comments on interior elements you purposely changed.” The responses varied in length and topic. Refer to Table 8 for responses.

Table 8. Participant Comments on Purposely Changed Interior Elements

<table>
<thead>
<tr>
<th>Response Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Dad bought trailer after Katrina.</td>
</tr>
<tr>
<td>2 Home had 9' water, gutted and rebuilt. Exterior of house not damaged only had to replace doors and windows. Interior completely redone.</td>
</tr>
<tr>
<td>3 Lived in a trailer while displaced - Mississippi Home Corp. (Not FEMA).</td>
</tr>
<tr>
<td>4 My son was given a free hand during reconstruction and he enthusiastically incorporated many of his interior design ideas.</td>
</tr>
<tr>
<td>5 Everything was destroyed as a result of the storm; home, employer, credit.</td>
</tr>
<tr>
<td>6 Bigger house, more closets</td>
</tr>
<tr>
<td>7 Moved out of state after Hurricane Katrina</td>
</tr>
<tr>
<td>8 Removed wall between kitchen and living room for an open concept.</td>
</tr>
<tr>
<td>9 No storage space</td>
</tr>
<tr>
<td>10 Only flooded the garage both before and during Katrina. I had 7 other family members move in with us for 6 weeks before they got 2 FEMA trailers.</td>
</tr>
<tr>
<td>11 I added a bathroom and I moved hot water heater to laundry room. I also added a bedroom.</td>
</tr>
<tr>
<td>12 Total loss to slab. I just bought a house undamaged approximately 9 months later. Made minor upgrades.</td>
</tr>
<tr>
<td>13 I stopped buying nicky nacks I didn't need. I only buy essentials to live. Katrina made us realize what's really important in life. Our faith and family and friends and of course your health. Dust to Dust!</td>
</tr>
<tr>
<td>14 Put in real wood floors and slate, very little carpet only two bedrooms out of four.</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>16</strong></td>
</tr>
<tr>
<td><strong>17</strong></td>
</tr>
<tr>
<td><strong>18</strong></td>
</tr>
<tr>
<td><strong>19</strong></td>
</tr>
<tr>
<td><strong>20</strong></td>
</tr>
<tr>
<td><strong>21</strong></td>
</tr>
<tr>
<td><strong>22</strong></td>
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<tr>
<td><strong>23</strong></td>
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<tr>
<td><strong>24</strong></td>
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<tr>
<td><strong>25</strong></td>
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<td><strong>26</strong></td>
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<tr>
<td><strong>27</strong></td>
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<tr>
<td><strong>28</strong></td>
</tr>
<tr>
<td><strong>29</strong></td>
</tr>
<tr>
<td><strong>30</strong></td>
</tr>
<tr>
<td><strong>31</strong></td>
</tr>
<tr>
<td><strong>32</strong></td>
</tr>
<tr>
<td><strong>33</strong></td>
</tr>
<tr>
<td><strong>34</strong></td>
</tr>
<tr>
<td><strong>35</strong></td>
</tr>
<tr>
<td><strong>36</strong></td>
</tr>
</tbody>
</table>

Table 8. Participant Comments on Purposely Changed Interior Elements.
The survey then presented a series of descriptive Design Statements with a 1-5 Likert scale. Participants were instructed to “Please rate these statements about your home on a scale from 1=Strongly Disagree to 5=Strongly Agree. If that part of your home did not change, rate 3 = Neutral.” Refer to Table 9 for a summary of responses. On average per descriptive statement, 15 of 128 (11%) did not rate the statement. Results displayed omit these missing data and reflect only the valid percent of participants’ responses. The statements are then ranked in order from highest mean to lowest mean in Table 10.

<table>
<thead>
<tr>
<th>Results by Number (in Valid Percentages) for Design Statements</th>
<th>Strongly Disagree -&gt; Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Descriptive</strong></td>
<td>1</td>
</tr>
<tr>
<td>I have a larger home (added more square footage).</td>
<td>27.4%</td>
</tr>
<tr>
<td>I have higher ceilings.</td>
<td>33.6%</td>
</tr>
<tr>
<td>I have more windows to bring in natural light.</td>
<td>20.4%</td>
</tr>
<tr>
<td>My bedroom is larger.</td>
<td>28.1%</td>
</tr>
<tr>
<td>I have more open furniture arrangements in my home.</td>
<td>21.2%</td>
</tr>
<tr>
<td>I invested more in my furnishings (including furniture, cabinets and accessories).</td>
<td>16.8%</td>
</tr>
<tr>
<td>I have better quality furniture in my home.</td>
<td>14.0%</td>
</tr>
<tr>
<td>My furniture is easier to maintain.</td>
<td>11.4%</td>
</tr>
<tr>
<td>I have more uncluttered surfaces in my home.</td>
<td>17.7%</td>
</tr>
<tr>
<td>I have more wallpaper/wallcovering in my home.</td>
<td>59.3%</td>
</tr>
<tr>
<td>I have more carpet in my home.</td>
<td>56.3%</td>
</tr>
<tr>
<td>I have more storage space within my home.</td>
<td>25.4%</td>
</tr>
<tr>
<td>I display more of my family heirlooms.</td>
<td>26.3%</td>
</tr>
</tbody>
</table>

Table 9. Results by Number (in Valid Percentages) for Interior Design Statements.
Ranking of Design Statements from Highest to Lowest

<table>
<thead>
<tr>
<th>Rank</th>
<th>Descriptive</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I have better quality furniture in my home.</td>
<td>3.37</td>
</tr>
<tr>
<td>2</td>
<td>I invested more in my furnishings (including furniture, cabinets and accessories).</td>
<td>3.32</td>
</tr>
<tr>
<td>3</td>
<td>My furniture is easier to maintain.</td>
<td>3.27</td>
</tr>
<tr>
<td>4</td>
<td>I have more open furniture arrangements in my home.</td>
<td>3.11</td>
</tr>
<tr>
<td>5</td>
<td>I have more uncluttered surfaces in my home.</td>
<td>3.08</td>
</tr>
<tr>
<td>6</td>
<td>I have more windows to bring in natural light.</td>
<td>2.99</td>
</tr>
<tr>
<td>7</td>
<td>I have more storage space within my home.</td>
<td>2.91</td>
</tr>
<tr>
<td>8</td>
<td>I have a larger home (added more square footage).</td>
<td>2.90</td>
</tr>
<tr>
<td>9</td>
<td>I display more of my family heirlooms.</td>
<td>2.84</td>
</tr>
<tr>
<td>10</td>
<td>My bedroom is larger.</td>
<td>2.82</td>
</tr>
<tr>
<td>11</td>
<td>I have higher ceilings.</td>
<td>2.69</td>
</tr>
<tr>
<td>12</td>
<td>I have more carpet in my home.</td>
<td>1.89</td>
</tr>
<tr>
<td>13</td>
<td>I have more wallpaper/wallcovering in my home.</td>
<td>1.76</td>
</tr>
</tbody>
</table>

Table 10. Ranking of Interior Design Statements from Highest Mean to Lowest Mean.

The next set of questions dealt purely with color choice. Participants were instructed to “Think of the overall color of the following rooms in your home, including the color of walls, furniture, draperies, and accessories. Please categorize the color schemes in each room (remember warm colors are reds, oranges and yellows, and cool colors are blues, blue-greens and purples).” Participants were asked specifically about the following rooms: “Living Room/Family Room,” “My Bedroom,” and “Kitchen.” Participants were asked to respond with one of the following categories: “Bright & Cool,” “Muted & Cool,” “Neutral,” “Muted & Warm,” “Bright & Warm.” Refer to Tables 11 and 12 for a summary of Before and After responses, respectively. On average

36
per descriptive statement, 15 of 128 (11%) did not rate the statement. Results displayed omit these missing data and reflect only the valid percent of participants’ responses.

<table>
<thead>
<tr>
<th>Results by Category (in Valid Percentages) for Color Groups: Before</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Color Categories</strong></td>
</tr>
<tr>
<td>Bright &amp; Cool</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Living Room/Family Room</td>
</tr>
<tr>
<td>My Bedroom</td>
</tr>
<tr>
<td>Kitchen</td>
</tr>
</tbody>
</table>

Table 11. Results by Category (in Valid Percentages) for Color Groups: Before Hurricane Katrina.

<table>
<thead>
<tr>
<th>Results by Category (in Valid Percentages) for Color Groups: After</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Color Categories</strong></td>
</tr>
<tr>
<td>Bright &amp; Cool</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Living Room/Family Room</td>
</tr>
<tr>
<td>My Bedroom</td>
</tr>
<tr>
<td>Kitchen</td>
</tr>
</tbody>
</table>

Table 12. Results by Category (in Valid Percentages) for Color Groups: After Hurricane Katrina.

A cross-tabulation Chi-square test was performed comparing participants’ answers for each room “Before Hurricane Katrina” to their answers for the same room “After Hurricane Katrina.”

For their Living Room/Family Room, 27 of 128 (21.1%) changed to a warmer color after Hurricane Katrina, 63 of 128 (49.2%) did not change, and 23 of 128 (18.0%) changed to a cooler color after Hurricane Katrina. 15 of 128 (11.7%) did not answer. See Figure 25.

For their Bedroom, 31 of 128 (24.2%) changed to a warmer color after Hurricane Katrina, 66 of 128 (51.6%) did not change, and 15 of 128 (11.7%) changed to a cooler color after Hurricane Katrina. 16 of 128 (12.5%) did not answer. See Figure 25.
For their Kitchen, 28 of 128 (21.9%) changed to a warmer color after Hurricane Katrina, 61 of 128 (47.6%) did not change, and 24 of 128 (18.8%) changed to a cooler color after Hurricane Katrina. 15 of 128 (11.7%) did not answer. See Figure 25.

Figure 25. Room Color Changes from Before Hurricane Katrina to After Hurricane Katrina.
DISCUSSION

The first set of questions, which gathered information about participants’ disaster experiences, was used as variables for comparison. The aim was to draw conclusions about the findings to determine if there is a correlation (whether conscious or subconscious) between the participants’ disaster experiences and their design choices. However, none of the comparisons had any significant data shifts in regards to the interior design choices.

In some instances, such as Question 3 (“What was your age at the time of the storm?”) and Question 4 (“How many people were living in your home at the time of the storm?”), some of the response groups were too small to draw any valid conclusions. A more evenly spread data set may have helped round out the general information, but would likely not have caused an overall difference in the end result. When the data from the Design Statements was examined by age group using a one-way analysis of variance (ANOVA), no significant differences were found (\( p \leq .05 \) was significant, \( p > .05 \) was no consequence).

In general, the ANOVA comparisons between disaster experience questions and design choice questions simply did not reveal anything significant. For example, most participants evacuated for Hurricane Katrina, as shown by the results of Question 5 (“Did you stay in your home during Hurricane Katrina?”). It was hypothesized that the 19% that stayed behind might have had a unique enough disaster experience to affect their design choices; however, that hypothesis proved to be false. No significant data was found in a one-way ANOVA of Question 5 with the Design Statements.

A particular point of interest was whether the amount of recovery (i.e., repairing versus rebuilding) affected the overall design changes. The Design Statements were
analyzed using a one-way ANOVA with Question 8 ("Was your house completely demolished by the storm?") as well as Question 13 ("Were repairs made to your damaged home?"). No significant trends were found (p ≤ .05 was significant, p > .05 was no consequence).

It is clear from the results of Question 16 ("Did you consult with an interior designer and/or architect?") that 85.2% of the participants did not consult professionals on design choices. With this information in mind, the overall data collected provides a clearer picture of the homeowner’s design choices. Because they did not consult with an interior designer or architect, that 85.2% of the participants made choices uninfluenced by professionals who have a mind set to know the newest products and the latest trends.

For trends in product use, the “Before versus After” questions were intended for direct cause-and-effect comparison. The results for nearly every element showed no significant changes from Before Hurricane Katrina to After Hurricane Katrina (percentage differences ≥ 20% were significant, differences < 20% were not significant). The only significant trends were a decrease in use of carpet flooring, a decrease in use of laminate countertops, and an increase in use of granite or stone countertops. This data shows that most of the design choices were not made purely based on aesthetics—they were based on durability and maintenance. The largest example of this choice is the trend away from carpet, which becomes heavy with water and difficult to clean after a flood; homeowners instead opted for tile or wood, which are easier to maintain. In addition, these significant changes make sense within the broader scope of current interior design. The general trend of the industry is to use less broadloom carpet and more hard flooring. Granite and stone have also risen in popularity over laminate countertops.
While there were many varied comments made in the comment box (“Please write any comments on interior elements you purposely changed.”), some groups of design choices stood out over others. Qualitative data trends in the comments supported some elements of the quantitative data and also made additional points.

As directly related to the findings about a decrease in carpet use, several of the comments made by participants made reference to removing carpet. One participant indicated that he/she used “very little carpet” (Comment 14), while another indicated that he/she “Changed carpet to hard wood” (Comment 29). Or, more specifically, another participant noted: “We removed all of the existing carpeting and replaced with either hard wood flooring (in the bedrooms) or wood laminate flooring (in the kitchen and laundry room)” (Comment 30). One participant went into greater detail about the reasoning behind his/her choice: “Had to remove carpet ourselves. Swore that would be the last time. Mother lives there alone now. No more carpet anywhere” (Comment 27).

Several of the indicated changes were directly related to storm damage. Floors were chosen for durability: “Flooring from vinyl to ceramic in kitchen” (Comment 31) and “PVC Laminate type flooring that will last through rain getting in” (Comment 32). Vulnerable materials were exchanged for sturdier ones: “Replaced glass doors with French doors” (Comment 36). New purchases were made with future disasters in mind: “My furniture and most accessories we own are less costly than what we had before Katrina because of a Hurricane Risk of Loss” (Comment 15).

The general sentiment behind some comments was that homeowners were taking the repairs as an opportunity to make much-needed updates to their homes, whether related to damage or not. “Since we were in the process of repairing, things were done
that needed to be updated” (Comment 18). “I added a bathroom and I moved hot water heater to laundry room. I also added a bedroom” (Comment 11).

Some comments simply indicated that the homeowners were following current interior design fads. This information was not unexpected. Such comments included: “Removed wall between kitchen and living room for an open concept” (Comment 8). “Combined two rooms into one big room with a walk in closet and turned back porch into a sun room” (Comment 34). “My son was given a free hand during reconstruction and he enthusiastically incorporated many of his interior design ideas” (Comment 4).

However, amid all the comments about specific design changes, some homeowners showed that they were unable to make major changes or that they were still living in adverse conditions caused by Hurricane Katrina. One participant “had to tear down house and lived in mobile home and still do next to house demolished” (Comment 21). Another responded: “I have had no funds to repair the inside damage to the closets, both bathrooms, floors or walls. Just thankful I have a home” (Comment 20). Two participants who had chosen to buy entirely new homes found themselves unable to make major renovations: “Total loss to slab. I just bought a house undamaged approximately 9 months later. Made minor upgrades” (Comment 12). “Bought a new house and moved into it as is. Didn't have funds, time, tools to change any elements” (Comment 24).

Overall, the statements participants made in the comment boxes showed a variety of reasons for making their specific choices for design changes (or for not making design changes at all). From considering maintenance to following trends, each homeowner’s take on upgrades was different.
By examining the Design Statements through the order in which they were ranked, some ideas may be inferred about homeowners’ concerns. For purposes of discussion the Design Statements were divided into 3 groups: Mostly Agree (statements with means above 3.00), Mostly Neutral (statements with means between 2.00 and 2.99), and Mostly Disagree (statements with means below 2.00).

Mostly Agree (mean >3.00) were statements ranked 1 through 5: “I have better quality furniture in my home.” “I invested more in my furnishings (including furniture, cabinets and accessories).” “My furniture is easier to maintain.” “I have more open furniture arrangements in my home.” “I have more uncluttered surfaces in my home.” These mostly concerned furniture and quality of furnishings, indicating perhaps a heightened awareness of quality over quantity for the home.

Mostly Neutral (mean <2.99 and > 2.00) were statements ranked 6 through 11. “I have more windows to bring in natural light.” “I have more storage space within my home.” “I have a larger home (added more square footage).” “I display more of my family heirlooms.” “My bedroom is larger.” “I have higher ceilings.” With the exception of the statement about family heirlooms, these were all directly related to the house structure itself. In many cases the homeowner did not change this, and focused instead on the finishes within the home.

Mostly Disagree (mean <2.00) were statements ranked 12 and 13. “I have more carpet in my home.” “I have more wallpaper/wallcovering in my home.” Both wallpaper and carpet are messy materials to manipulate during repairs and remodeling. The unpopularity of these statements supports the notion that maintenance was a larger factor than pure aesthetics for homeowners rebuilding after Hurricane Katrina.
The questions about color change aimed to find those purely aesthetic design choices. When compared, however, the Before to After results showed that a majority of participants retained a similar color scheme, while those that shifted were fairly even on either side. The 18-24 age group tended toward warmer colors after the storm, but not enough to gain significant alteration on the data (Chi-square test). The colors were not affected by any other disaster experiences, an outcome which again indicates that color choice is simply a homeowner’s personal choice.

Through the examination of the survey, it became apparent that the formats of some questions caused confusion among participants and hindered aspects of analysis. Formatting was most confusing on the follow-up questions, such as Question 9 (“If no, did you have to demolish what was left of your home?”). Several participants who had already answered in Question 8 that Yes, their homes had been entirely demolished by the storm, still responded to this question when it was intended that they would skip it. A better choice for Question 9’s responses would have been to include the choice “My home was completely demolished by the storm” in addition to “Yes” and “No.”

A similar issue plagued Question 10 (“If your home was completely demolished, did you build back on the same lot?”). Again, it would have benefitted the survey to include an additional response “My home was not completely demolished” instead of just “Yes” and “No.”

Other questions would have also benefitted from clearer answer choices. One such was Question 15 (“Where did you live following the storm? (Check all that apply.)”). In addition to the responses on the provided options, there were also a few write-ins on this question, indicating that there was not enough variety to the survey’s
questions. One participant noted that while displaced, they lived in a mobile trailer provided by the Mississippi Home Corporation—not in a FEMA trailer. The term “FEMA trailer” was used as a common name to describe the type of small trailer or camper that participants may have lived in, but many of the trailers and campers were not tied to the FEMA Corporation in any way. Some participants, who lived in the same style of mobile trailers that were not provided by FEMA, but that would still have fit the description that the survey aimed to convey, did not mark that option.

In Question 17 (“How were the majority of the repairs/rebuilding financed?”) the issue was not the answer choices themselves, but how to answer. This question was not an issue for the online participants, because the software only allowed one choice to be selected. But it is clear that this question would have benefitted from either a clearer wording at the top (several participants who took the survey on paper glossed over the word “majority,” which indicated to mark only one answer) or from the option to check all answers that apply. There were multiple paper surveys with more than one answer marked. In addition, a better format of this question would have allowed the data from the repair financing to be cross-examined with types of repairs made. The “Check all that apply” format did not allow for the answers to be compared for correlations.

In the event of a repeat of this study, the format of the survey should be changed so that each individual question could be cross-examined. For example, Question 15, which was a “Check all that apply” response, should be broken into individual yes/no questions; a comparison could then be made between the experience of living in a camper and design choices to add more windows, create more storage, etc. The rating scale of 1
to 5 for design choices should be changed to yes/no answers, which would give the statistician more freedom to find correlations.

Through all the data that was collected, there was little correlation between disaster experience and design choices. Specific questions were asked, such as:

- Did the age of the homeowner at the time of the storm affect design choices?
- Did the age of the homeowner at the time of the storm affect room color changes?
- Did the length of time displaced affect design choices?
- Did the length of time displaced affect room color changes?
- Did the experience of staying in the home during the storm affect design choices?
- Did the experience of staying in the home during the storm affect room color changes?

Each of these questions prompted cross-question analyses, and all yielded the same result: no statistical significance. Overall, while looking for design trends of the Hurricane Katrina recovery movement, few generalities were found.
CONCLUSION

The results of this study did not support the hypothesis that interior design is affected by a major regional change such as a natural disaster, and that homeowners with similar disaster experiences would also choose similar design changes to their home. Instead, the results indicate that the aesthetic choices of a home are a personal reflection and rely on each individual’s tastes, and not relying on their disaster experiences.

Overall, the most prominent changes were more a testimony to maintenance of materials than to aesthetic choice: a decrease in carpet, as well as a shift away from laminate countertops in favor of granite or stone. The carpet flooring and laminate countertops were both very susceptible to water damage in Hurricane Katrina, whereas hard flooring, granite, and stone are more durable.

The information gathered by the survey results can help future interior designers anticipate which products to provide for homeowners who are affected by natural disasters. By installing durable materials right away, homeowners can reduce the overall hassle of dealing with interior damage. As far as aesthetic choices are concerned, designers in the wake of natural disasters should guide homeowners to follow their true tastes rather than to make hasty decisions in immediate reaction to their experiences.

Because this study was completed ten years after the disaster, it was apparent that ultimately personal choices prevailed. In the future, a study could be performed as a quick turnaround, examining people’s needs and wants within the first 2 years following the natural disaster. Information garnered from a 2-year survey would greatly assist local stores and disaster relief efforts to immediately provide products homeowners would need when settling back into their homes.
REFERENCES


APPENDIX A: Survey Instrument (Paper Version)

Dear Homeowner,

Hello, my name is Jamie Jelinski and I am a senior interior design student at the University of Southern Mississippi. As part of my requirements for graduation, I am writing a thesis called “Designs by Katrina: How a Hurricane Affected the Residential Interior Design of Mississippi’s Gulf Coast.” The purpose of my thesis is to determine if there is any correlation between people’s experiences during a natural disaster and any design changes they made to their homes after the disaster. In order to collect my data, I am sending this survey to homeowners 18 years and older across the coast of Mississippi who were affected by Hurricane Katrina.

Your participation is anonymous and completely voluntary. The survey will take 5 to 10 minutes to complete. The questions will ask about your home’s interior design and also about your experience during and after Hurricane Katrina. If the topic of Hurricane Katrina is uncomfortable to you, or if any of the questions make you uncomfortable, you do not have to answer those questions. You may withdraw from participating in the survey at any time without penalty. You must be 18 years or older to participate. By completing this survey, you are verifying you are at least 18 years of age and providing informed consent to be a participant in my study.

While there is no direct benefit for individual participants, this data will contribute to the nearly non-existent literature about natural disaster-related interior design. This could become a resource for designers in disaster-prone areas and serve as a tool for helping homeowners such as yourself who have experienced natural disasters to redesign their homes effectively.

The only foreseeable risk of this survey is possible anxiety associated with the questions about your experience during the storm. If you do experience anxiety as a result of this survey, you may want to take advantage of available counseling services in your area. The Coastal Family Health Center has clinics in the following areas:

- Hancock County: Bay St. Louis, 228-463-9666; Pass Christian Mobile Unit, 228-425-6284
- Harrison County: Biloxi and Long Beach, 228-374-2494; Gulfport, 228-864-0003
- Jackson County: Moss Point, 228-474-9311; Vancleave, 228-826-4711

This project has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 21, III), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure the risks to subjects are minimized.

If you have any questions concerning this survey, please direct them to Jamie Jelinski at jamie.jelinski@eagles.usm.edu. Thank you for your participation.

Sincerely,

Jamie Jelinski
DESIGNS BY KATRINA: An Interior Design Survey

This survey will ask questions relating to the design of your home before and after Hurricane Katrina, as well as your experience during and immediately following the storm. Please answer each question to the best of your knowledge.

The following questions deal with the design of the interior elements of your home. Please check the appropriate box for each type of interior detail below if it was present in the public spaces of your home (such as your living room/family room, kitchen, dining room, and entrance hall) before or after Hurricane Katrina. Check all that apply.

<table>
<thead>
<tr>
<th>Wall Finishes</th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paint</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plaster/venetian plaster</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paneling/wood</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wallpaper/wallcovering</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other - Explain:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Floor Finishes</th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wood/laminate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carpet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tile (ceramic, stone, etc.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concrete</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other - Explain:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Light Neutral |        |       |
| Dark Neutral  |        |       |
| Warm tones (reds, oranges, yellows) |        |       |
| Cool tones (blues, blue-greens, purples) |        |       |

<table>
<thead>
<tr>
<th>Countertops</th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Granite/stone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solid surface</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ceramic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laminate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other - Explain:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cabinets</th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stained wood</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paint</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laminate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other - Explain:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Window Treatments</th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long (floor-length) draperies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short curtains</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blinds/shutters</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other - Explain:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please rate these statements about your home on a scale from 1-Strongly Disagree to 5-Strongly Agree. If that part of your home did not change, rate 3 - Neutral.

<table>
<thead>
<tr>
<th>Since Hurricane Katrina...</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have a larger home (added more square footage).</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>I have higher ceilings.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>I have more windows to bring in natural light.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>My bedroom is larger.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>I have more open furniture arrangements in my home.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>I invested more in my furnishings (including furniture, cabinets and accessories).</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>I have better quality furniture in my home.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>My furniture is easier to maintain.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>I have more uncluttered surfaces in my home.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>I have more wallpaper/wallcovering in my home.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>I have more carpet in my home.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>I have more storage space within my home.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>I display more of my family heirlooms.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>

Type of Home

<table>
<thead>
<tr>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single family detached</td>
<td></td>
</tr>
<tr>
<td>Apartment or multi family</td>
<td></td>
</tr>
<tr>
<td>House trailer or mobile home</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

Please write any comments on interior elements you purposely changed.
Think of the overall color of the following rooms in your home, including the color of walls, furniture, draperies, and accessories. Please categorize the color schemes in each room (remember warm colors are reds, oranges and yellows, and cool colors are blues, green and purples):

<table>
<thead>
<tr>
<th>Before Hurricane Katrina...</th>
<th>Bright &amp; Cool</th>
<th>Muted &amp; Cool</th>
<th>Neutral</th>
<th>Muted &amp; Warm</th>
<th>Bright &amp; Warm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Living Room/Family Room</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My Bedroom</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kitchen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>After Hurricane Katrina...</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Living Room/Family Room</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My Bedroom</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kitchen</td>
<td></td>
<td></td>
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</tbody>
</table>

The following questions deal with your disaster experience during and after Hurricane Katrina (August 29, 2005):

1. What county did you live in at the time of the storm?
   - Hancock County
   - Harrison County
   - Other

2. What is your gender?
   - Male
   - Female

3. What was your age at the time of the storm?
   - Under 16 in 2005
   - 16 to 24 in 2005
   - 25 to 44 in 2005
   - 45 to 64 in 2005
   - 65 or older in 2005

4. How many people were living in your home at the time of the storm?
   - 1 to 2
   - 3 to 5
   - 6 to 8
   - 9 or more

5. Did you stay in your home during Hurricane Katrina?
   - Yes
   - No

6. Did your home flood during Hurricane Katrina?
   - Yes
   - No

7. Had your home flooded before Hurricane Katrina?
   - Yes
   - No

8. Was your house completely demolished by the storm (i.e. water, wind, or any other type of damage)?
   - Yes
   - No

9. If yes, did you have to demolish what was left of your home?
   - Yes
   - No

10. If your home was completely demolished, did you build back on the same lot?
    - Yes
    - No

11. Did you move into another home in a different location as a result of the storm?
    - Yes
    - No

12. Were repairs made to your damaged home?
    - Yes
    - No

13. Who made repairs to your home?
    - Builder/contractor
    - Friends/family
    - Volunteers
    - Yourself

14. How long were you displaced from your damaged home?
    - Less than 1 month
    - Over 1 month but under 6 months
    - Over 6 months
    - Over 1 year
    - I was not displaced.

15. Where did you live following the storm? (Check all that apply)
    - Storm shelter
    - Katrina Cottage
    - Hotel
    - FEMA trailer
    - Your damaged home
    - Public services
    - With friends/relatives
    - Rent an apartment/house
    - Purchased a condo/house

16. Did you consult with an interior designer and/or architect?
    - Yes
    - No

17. How were the majority of the repairs/rebuilding financed?
    - Insurance
    - Bank loans/finances
    - Personal savings
    - Federal grants
    - Other

*Electronic version not included.
APPENDIX B: Validity Questionnaire

Designs by Katrina Survey

Validity Questionnaire

Thank you for volunteering your time to assist me in the development of this survey. Your input is very important with respect to the survey itself and the development of my thesis overall. Your willingness and consideration to participate in this study is greatly appreciated.

Please rate the included survey based on the following information:

1. Does the survey contain language that can be understood by homeowners who have experienced Hurricane Katrina?

2. Does the survey address specific and appropriate issues in the statements, as it relates to interior design changes due to Hurricane Katrina?

3. Do you find any of the questions offensive or obtrusive?

4. Are there any questions that you would exclude from the survey?

5. Are there any other statements that you would include that are not a part of the survey?

6. Please make any other comments or suggestions about the survey below:
APPENDIX C: Request for Approval of Research Involving Human Subjects

INSTITUTIONAL REVIEW BOARD
HUMAN SUBJECTS RESEARCH APPLICATION FORM

Use this form to apply for IRB review. IRB approval is required before human subjects research can begin.
- Before completing this form, review the information included on the sample consent forms and FAQ section of the IRB website: [http://www.usm.edu/research/institutional-review-board](http://www.usm.edu/research/institutional-review-board).
- Department chairs and, if applicable, research advisors must review the completed form and provide authorization where indicated.
- Submit this form along with all required attachments and authorizations to irb@usm.edu.

Last Edited November 18th, 2013

<table>
<thead>
<tr>
<th>SECTION 1: INVESTIGATOR INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Title: Designs by Katrina: How a Hurricane Affected the Residential Interior Design of Mississippi's Gulf Coast</td>
</tr>
<tr>
<td>Principal Investigator: Jamie Jelinski</td>
</tr>
<tr>
<td>Campus ID: 767683</td>
</tr>
<tr>
<td>Department Phone: 601-266-6437</td>
</tr>
<tr>
<td>Research Purpose (check one):</td>
</tr>
<tr>
<td>☑ Undergraduate project</td>
</tr>
<tr>
<td>☐ Graduate project</td>
</tr>
<tr>
<td>☐ Faculty or staff research</td>
</tr>
</tbody>
</table>

List USM affiliated investigators; completion of CITI Common and Human Subject Research Courses is required.

<table>
<thead>
<tr>
<th>Name</th>
<th>Faculty or Staff</th>
<th>Graduate Student</th>
<th>Undergraduate</th>
<th>Project Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jamie Jelinski</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>Principal Investigator</td>
</tr>
<tr>
<td>☐</td>
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</tr>
</tbody>
</table>

If other individuals will be involved in data collection, describe their role and their training.
Their will be no other individuals involved.

List all non-USM affiliated investigators.

<table>
<thead>
<tr>
<th>Name</th>
<th>University or Institution</th>
<th>Project Role</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

Describe your expertise and qualifications related to this research.
I have completed 3 years in the Interior Design Program and have a 4.0 in all ID coursework. I have completed the RCR training and have conducted a literature review on topics related to my study.
## SECTION 2: RESEARCH PROCEDURES

Briefly describe the project and its goal(s) in two to three paragraphs.

This project is an undergraduate honors thesis. The purpose is to determine if there is any correlation between people's experiences during a natural disaster and any design changes they made to their homes after the disaster. This study will focus on the natural disaster of Hurricane Katrina as it affected the Gulf Coast counties of Mississippi. This will serve as a narrowed sample from which to make generalizations about the broader topic of natural disaster-related interior design.

<table>
<thead>
<tr>
<th>Are any of the subjects under 18 years of age?</th>
<th>Yes ☐ No ☑</th>
</tr>
</thead>
<tbody>
<tr>
<td>Note: Parental consent is required for participants under the age of 18.</td>
<td></td>
</tr>
</tbody>
</table>

Describe subject population, number of subjects to be included, and criteria for selection.

This survey will be targeted toward homeowners who live in Hancock County, Harrison County, and Jackson County. The goal for minimum number of subjects is 50 participants. There is no maximum number in mind. The criteria for selection is that they are over 18 years of age and they owned or rented a home in the coastal counties during and after Hurricane Katrina.

**How will participants be recruited?**

- ☑ Class announcement  
- ☐ Oral Announcement  
- ☐ Posted campus advertisement  
- ☐ Television, Radio or Newspaper ad  
- ☐ Advertising Agency  
- ☐ Other (explain): Community centers such as churches

For adult subjects, how will you verify that individuals are over 18?

- ☑ Survey or interview  
- ☐ No adults will be participating in this research  
- ☐ Other (explain):

Indicate consent procedures (check all that apply):

- ☐ Oral presentation  
- ☐ Information letter  
- ☐ Short Consent Form  
- ☐ Long Consent Form  
- ☐ Assent form (children or subjects with disabilities)  
- ☐ Request for waiver of consent  
- ☐ Not applicable

**Detail procedures for obtaining participants' consent or justify request for waiver.**

Requesting a waiver for informed consent form. The survey is fully anonymous and the only breach in anonymity would be participants' signatures on the consent forms. There is low risk associated with the survey.

**How many interactions will be required with each subject?**

- ☑ 1  
- ☐ 2 - 3  
- ☐ 4 - 9  
- ☐ 10 or more

**Maximum length of each interaction:**

- ☑ Less than 10 minutes  
- ☐ Less than an hour  
- ☐ Less than three hours  
- ☐ Three hours or more  
- ☐ No direct interaction with subjects

**Where will interactions take place?**

- ☐ On campus  
- ☐ Off campus  
- ☐ Online

Indicate means of data collection (check all that apply):

- ☑ Personal interview  
- ☐ Questionnaire or survey  
- ☐ Audio or video recording  
- ☐ Behavioral Observation  
- ☐ Focus Group Inquiry  
- ☐ Other (explain below):

Do any of the following apply to your study?

- ☐ Use of human biological samples  
- ☐ Use of physical exercise  
- ☐ Medical examinations or procedures  
- ☐ Use of drugs or biological products

Give a step by step explanation of human subjects data collection procedures.
The investigator will travel door-to-door and to community centers (churches, businesses, universities, etc.) to give participants a hard copy of the survey instrument. Participants will complete the survey instrument and return it to the investigator. The investigator will also post a link to the online survey instrument (through SurveyMonkey) onto social media sites (Facebook, LinkedIn) and community listservs (USM Mailout) for participants to access. Lastly, the investigator will post advertisements (flyers, business cards) with a QR code link to the survey around the community and in local businesses.

Does your research involve non-anonymous surveys?  □ Yes  ☒ No  
Note: "Anonymous" means that research data cannot be associated identifiable with individual subjects and site visits. Electronic surveys must be conducted via websites that do not link responses to e-mail addresses or other identifiers. Personal interviews are not anonymous.

Does your research involve sensitive information?  □ Yes  ☒ No  
Note: Sensitive information may include (but is not limited to) information about sexual activity, drug usage, criminal behavior, financial or medical data, and religious views.

Does your research involve hidden video or audio recordings or deception?  □ Yes  ☒ No  
Note: Deception includes any information or procedure that misleads a subject intentionally.

### SECTION 3: RISKS AND BENEFITS

<table>
<thead>
<tr>
<th>Indicate all potentially vulnerable subjects involved in the study:</th>
<th>Detail the methods that will be employed to protect vulnerable subjects:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children</td>
<td>N/A</td>
</tr>
<tr>
<td>Nursing home patients</td>
<td></td>
</tr>
<tr>
<td>Pregnant females</td>
<td></td>
</tr>
<tr>
<td>Prone to abuse or neglect</td>
<td></td>
</tr>
<tr>
<td>HIV positive individuals</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

If your research involves prisoners, explain how it is directly relevant to prisoners or the prison system (check all that apply):  
- the causes and/or effects of incarceration  
- the process of incarceration  
- the conditions of prisons or prisoners  
- procedures for improving the wellbeing of prisoners  
- other (explain):  

Note: All research involving prisoners requires compliance with federal regulations pertaining to biomedical and behavioral research involving prisoners as listed in 45 CFR 46 Subpart C. Research must be directly relevant to prisoners or prisoners (e.g., the effects of incarceration, criminal behavior, prison infrastructures, etc.). Completion of the CIT Research with Prisoners Module is also required.

How will you maintain confidentiality?  
- Anonymous data  
- Electronic data will be password protected  
- Physical data will be locked in a file drawer  
- Other (explain):  

Describe final disposition of data.  
- The data will be maintained for 5 years and then destroyed.

Risks, inconveniences, or discomforts subjects are likely to experience (check all that apply):  
- Physical  
- Psychological  
- Social  
- Financial  
- Occupational  
- Legal  
- Other (explain):  

Detail potential risks, inconveniences and discomforts subjects are likely to experience, if any.  
- Some of the questions may trigger memories or flashbacks about participants’ experience during Hurricane Katrina, which could potentially cause anxiety.

Describe the methods that will be employed to mitigate any potential risks, inconveniences or discomforts.

Inform participants up-front about the possibility of anxiety, as well as providing contact information for local counseling services.
Describe any potential benefits subjects may gain as a result of participation.

While there is no direct benefit for individual participants, this data will contribute to the nearly non-existent literature about natural disaster-related interior design. This could become a resource for designers in disaster-prone areas and serve as a tool for helping homeowners who have experienced natural disasters to redesign their homes effectively.

List all incentives subjects will receive for their participation.

Subjects will not receive any incentives for participation.

Note: If class credit will be given for participation, describe what other options exist for non-participants to receive the same credit.

If individuals are unwilling or unable to complete their participation, how will their incentives be distributed?

☐ They will remain eligible for their incentives.
☐ They will be informed that they will receive no incentives.
☐ They will receive partial incentives (explain):

SECTION 4: CHECKLIST AND AUTHORIZATION

The following documents must be attached to this form:

☐ CTI Common Course Certificate
☐ CTI IRB Course Certificate
☐ Research proposal approved by dissertation or thesis committee (if applicable)
☐ Study recruitment documents (if applicable)
☐ Survey questions if applicable
☐ Permission letter from external organization participating in the project (if applicable) or official letterhead
☐ Assent form for minors (if applicable)
☐ Consent forms (long or short if applicable) and any related documents (such as an oral script or information letter)
☐ Letter to parents (if applicable)

Instructions for Attaching Documents:

1) Place the cursor where you want the attachment to appear.
2) Select the "Insert" tab at the top of MS Word.
3) Select "Object," located on the far right of the toolbar (PC) or the bottom of the list (MAC)
4) Select the "Create from File" tab and check the box that states "Display as Icon."
5) Browse to the location of your document, and double click on it.
6) Repeat these steps for each document to be attached.

Note for Mac Users: When for Mac is unable to attach pdf files, you will have to first save the CTI certificates or any other pdf files you intend to attach as a doc or .rtf file before attaching them. There are several ways to accomplish this. You may use Adobe to open the file and then select "File" and "Save as" and change the file type to an .rtf or .doc format. Alternatively, you may also download or create your own pdf to doc application.
Instructions for Authorization:

1) Type your name and date in the appropriate box.
2) Graduate students should email the form to their advisors, who should add their name and then send it to department chair for review. Department chairs should add their name and send the finalized form with all required authorizations to jhb@usm.edu.

By typing my name below, I acknowledge that I have read, understood, and approve of the information contained herein.

<table>
<thead>
<tr>
<th>Jamie Jelinski</th>
<th>Claire Hamilton</th>
<th>John Hannon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Investigator</td>
<td>Student Advisor (if applicable)</td>
<td>Department Chair</td>
</tr>
</tbody>
</table>
APPENDIX D: Institutional Review Board Approval Letter

THE UNIVERSITY OF SOUTHERN MISSISSIPPI

INSTITUTIONAL REVIEW BOARD
112 College Drive #5116 | Hattiesburg, MS 39406-0001
Phone: 601.266.5097 | Fax: 601.266.4377 | www.usm.edu/research/institutional-review-board

NOTICE OF COMMITTEE ACTION

The project has been reviewed by the University of Southern Mississippi Institutional Review Board
in accordance with Federal Drug Administration regulations (21 CFR 21, 111), Department of Health
and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following
criteria:

• The risks to subjects are minimized.
• The risks to subjects are reasonable in relation to the anticipated benefits.
• The selection of subjects is equitable.
• Informed consent is adequate and appropriately documented.
• Where appropriate, the research plan makes adequate provisions for monitoring the data
  collected to ensure the safety of the subjects.
• Where appropriate, there are adequate provisions to protect the privacy of subjects and to
  maintain the confidentiality of all data.
• Appropriate additional safeguards have been included to protect vulnerable subjects.
• Any unanticipated serious, or continuing problems encountered regarding risks to subjects must
  be reported immediately, but not later than 10 days following the event. This should be reported
  to the IRB Office via the "Adverse Effect Report Form".
• If approved, the maximum period of approval is limited to twelve months.

Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: 13120501
PROJECT TITLE: Designs by Katrina: How a Hurricane Affected the Residential Interior
Design of Mississippi's Gulf Coast
PROJECT TYPE: New Project
RESEARCHER(S): Jamie Jenelski
COLLEGE/DIVISION: School of Construction
DEPARTMENT: College of Science and Technology
FUNDING AGENCY/SPONSOR: NA
IRB COMMITTEE ACTION: Expedited Review Approval
PERIOD OF APPROVAL: 12/13/2013 to 12/12/2014

Lawrence A. Hosman, Ph.D.
Institutional Review Board
APPENDIX E: Institutional Review Board Continuing Review Application

INSTITUTIONAL REVIEW BOARD
HUMAN SUBJECTS CONTINUING REVIEW FORM

This form should be used only to request project renewals. Renewal projects that involve research modifications (including change in personnel) also require a Human Subjects Research Modification form.

- Requests for renewals must be submitted at least annually, but may be required more often by the IRB.
- Department chairs and, if applicable, research advisors must review the completed form and provide authorization where indicated.
- Department chairs must submit completed versions of this form with all necessary authorizations to irb@usm.edu using their Southern Miss email address.

Today's date: 11/25/2014

PROJECT INFORMATION

Project Title: Designs by Katrina: How a Hurricane Affected the Residential Interior Design of Mississippi's Gulf Coast

Protocol #: 13120501

Principal Investigator: Jamie Jelinski
Phone: 228-234-5356
Email: jame.jelinski@eagles.usm.edu

College: Science & Technology
Department: Construction

Campus Address: USM Box #5200

PROJECT INFORMATION

Briefly describe the reason for renewal request:
The Principal Investigator would like to use part of the Christmas holiday to continue collecting surveys that are still distributed to the community.

AUTHORIZATION

Instructions for Authorization:
1) Type your name and date in the appropriate box.
2) Graduate students should email the form to their advisors, who should add their name and then send it to department chairs for review. Department chairs should add their name and send the finalized form with all required authorizations to irb@usm.edu.

By typing my name below, I acknowledge that I have read, understood, and approve of the information contained herein.

Jamie Jelinski
Principal Investigator
11/25/2014

Claire Hamilton
Student Advisor (if applicable)
11/25/2014

Department Chair
APPENDIX F: Prospectus Approval Letter

THE UNIVERSITY OF SOUTHERN MISSISSIPPI

September 4, 2013

Jamie Lynn Jelinski
Jamie.Jelinski@eagles.usm.edu

Dear Jamie:

Congratulations! Your prospectus, “DESIGNS BY KATRINA: HOW A HURRICANE AFFECTED THE RESIDENTIAL INTERIOR DESIGN OF MISSISSIPPI’S GULF COAST,” has been approved. If the topic or nature of your research changes, you should prepare and submit a revised prospectus that accurately describes the project.

When preparing your thesis, you should ensure that it conforms precisely to the “proper thesis formatting” guidelines available in the Senior Honors To-Do List. Also, please adhere to the thesis submission and other deadlines available in the To-Do List.

Sincerely,

[Signature]

Paula Mathis
Coordinator of Senior Honors

cc: Mary Claire Hamilton
Mary.Claire.Hamilton@usm.edu