Disaster Hits Home: A Model of Displaced Family Adjustment After Hurricane Katrina Journal of Family Issues 32(10) 1371–1396 © The Author(s) 2011 Reprints and permission: http://www. sagepub.com/journalsPermissions.nav DOI: 10.1177/0192513X11412496 http://jfi.sagepub.com



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Abstract

The authors explored individual and family adjustment processes among parents (n = 30) and children (n = 55) who were displaced to Colorado after Hurricane Katrina. Drawing on in-depth interviews with 23 families, this article offers an inductive model of displaced family adjustment. Four stages of family adjustment are presented in the model: (a) family unity stage, (b) prioritizing safety stage (parents) and missing home stage (children), (c) confronting reality stage (parents) and feeling settled stage (children), and (d) reaching resolution. This research illustrates that parental and child adjustment trajectories are dynamic and may vary over time, thus underscoring the importance of considering the perspectives of both adults *and* children in research and disaster policy interventions.

Keywords

Hurricane Katrina, disasters, displacement, children, parents, family adjustment

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Hurricane Katrina forced the evacuation of approximately 1.2 million Gulf Coast residents (U.S. House of Representatives, 2006). Three months after the storm, more than 770,000 persons remained displaced; survivors were scattered across all 50 states (The White House, 2006). Most displaced persons initially sought refuge close to home, with about 80% evacuated to Texas, Alabama, Georgia, and other parts of Louisiana and Mississippi (Appleseed, 2006). More than 4,500 Gulf Coast families relocated to Colorado after Hurricane Katrina (Montero, 2006). The majority of these families settled in Denver and Colorado Springs (Sterett, Reich, & Wadsworth, 2006). Despite the scope and historical significance of the displacement generated by Hurricane Katrina, few researchers have explored the dynamics of familial adjustment in the aftermath of the storm (Kilmer, Gil-Rivas, Tedeschi, & Calhoun, 2010). To address this knowledge gap, we conducted in-depth interviews with families with children who were displaced from New Orleans to Colorado after Katrina.

Family Stress Theory

Family stress theory informed this study (Boss & Mulligan, 2002). Boss (2002) defines family stress as pressure or tension in the family system—a disturbance in the steady state of the family. Stress within families is inevitable, normal, and in some cases even desirable. Yet when an event of significant magnitude occurs, such as a natural disaster, family stress may evolve into a family crisis (Fothergill, 2004; Morrow, 1997). A family crisis involves a disturbance in the equilibrium that is so overwhelming, a pressure that is so severe, or a change that that is so acute that the family system is blocked, immobilized, or incapacitated (Boss, 2002).

One of the earliest models of family crisis, originally developed by Koos (1946) and refined by other scholars (Boss, 1987; Hansen & Hill, 1964; Hill, 1949), uses the roller coaster as a metaphor for familial adjustment. According to the roller coaster model, a family may plunge into crisis, or a period of disorganization and dysfunction, following a highly stressful situation or event (picture a roller coaster car in a sharp downward trajectory on a track). Recovery is characterized by a turnaround marked by improving levels of postcrisis family functioning (again, picture the roller coaster car, now climbing steadily upward on the track). Although a pathway toward recovery is assumed, the model accounts for the fact that families may achieve different recovery states, which may be lower than, equal to, or higher than their precrisis levels of functioning (Boss, 2002).

Building on this earlier work (Boss, 1987; Hansen & Hill, 1964; Hill, 1949; Koos, 1946), and drawing on qualitative and quantitative assessments of 51 families who had experienced a major crisis, Burr and Klein (1994) introduced five potential recovery models. The *roller coaster model* mirrors the trajectory described above, with families experiencing a deep decline in functioning and then gradually recovering. The *mixed model* entails an increase in functioning immediately after a crisis followed by a subsequent decline. The *increase model* is characterized by families who experience increases in the quality of family functioning, and no marked decline, after a crisis. Conversely, the *decrease model* is evidenced by a steady and consistent decline in family functioning, with no discernable improvements. Finally, families who experience neither decreases nor increases in functioning exemplify the *no change model*.

When evaluating family stress, it is imperative to remember that the stress level of the whole is qualitatively different from the sum of the stress levels of individual family members (Boss, 2002). The prior point is especially important for disaster researchers, given that most people respond to hazards and experience disasters as members of households (Blinn-Pike, 2010; Fothergill, 2004; Morrow, 1997). Yet the study of postdisaster family recovery has been largely neglected (Knowles, Sasser, & Garrison, 2010), and research designed to assess recovery trajectories from the perspective of both adults *and* children is exceptionally rare. Indeed, much available research on the effects of disaster on families draws on "head of household" surveys or interviews where one adult speaks for the entire household (Bourque, Shoaf, & Nguyen, 2002) or secondary data (Cohan & Cole, 2002).

In one of the few available studies of postdisaster family stress involving sampling of children and caregiver dyads, Gil-Rivas, Kilmer, Hypes, and Roof (2010) examined the contribution of child characteristics, caregiver symptomatology, and the quality of the caregiver–child relationship to post-traumatic stress symptoms (PTSS). The research team conducted face-to-face interviews in Louisiana and Mississippi with 68 children ages 7 to 10 years and their primary caregiver 1 year after Katrina. One third of the caregivers reported PTSS symptoms of clinical significance and one-fifth of the children obtained PTSS scores suggesting the presence of a probable posttraumatic stress disorder (PTSD) diagnosis. Children's self-reported hurricane exposure (i.e., child was in a badly damaged home, was injured, lost favorite toys, lost friends), exposure to hurricane-related violence (i.e., child was physically abused or witnessed a family member being abused), and secondary adversity (i.e., child was separated from family, was displaced to a

different school) were positively associated with reported PTSS. In addition, caregivers' self-reported psychological distress and hurricane-related reexperiencing and avoidance symptoms were associated with higher levels of PTSS among children.

Another study conducted between 3 and 7 months after Katrina compared a sample of 279 displaced mother–child dyads from New Orleans and surrounding areas and 96 nondisplaced mother–child dyads from Baton Rouge (Kelley et al., 2010). There were no significant differences between the displaced and nondisplaced sample in terms of prevalence of PTSD. Hurricane exposure predicted severity of PTSD symptoms in the displaced sample. Hurricane exposure, corporal punishment, and parenting strategies associated with guidance and structure were identified as significant correlates of PTSD symptoms in the nondisplaced sample (Kelley et al., 2010).

The present study responds to calls for more longitudinal postdisaster research (National Research Council, 2006) that values the subjective meanings and perceptions of individual family members and families as a whole (Boss, 2002; Phillips, 2002). Specifically, we analyze qualitative interviews with children and adults to investigate the nature of postdisaster adjustment *within* households. The following research questions were addressed:

Research Question 1: Did parents and children vary in their adjustment in the aftermath of Katrina? If so, how?

Research Question 2: What factors aided or hindered adjustment among displaced families in Colorado?

Method

Participants

The current research focused on families who were displaced to Denver after Hurricane Katrina. Purposeful (Creswell, 2007) and theoretical (Corbin & Strauss, 2008) sampling strategies were used to recruit participants. The research team chose a racially diverse sample of single- and two-parent families with school-aged children who resided in New Orleans prior to Katrina. Participants were recruited in person at Katrina-related meetings and events, via social networking sites, and through flyers distributed at three local churches and the largest disaster aid distribution center in Denver.

A total of 23 families (15 African American, 6 White, and 2 Latino) participated in the research. The lead author conducted, recorded, and transcribed face-to-face qualitative interviews with all adults in a household, as well as all children in the household between the ages of 5 and 18 years. The final sample included 30 parents (22 mothers, 8 fathers) and 55 children (33 girls, 22 boys).

Procedure

Following institutional review board approval at Colorado State University, data collection commenced. The first wave of data collection occurred from October 2005 to August 2006. The second wave of follow-up interviews took place from October 2007 to August 2008. All interviews were conducted in the participants' homes.

Parents were interviewed first within each family. All parents were asked to sign an informed consent form and were given a packet of information that included contact information for local mental health professionals and disaster relief organizations. The parent interview schedule was informed by the disaster recovery literature (Phillips, 2009) and family stress theory underpinning the research. Open-ended questions addressed: (a) life pre-Katrina, (b) disaster impacts, (c) the evacuation experience, (d) sources of social support, and (e) challenges and opportunities associated with resettlement in Colorado. The parent interviews lasted an average of 2.5 hours.

At the end of the parent interview, the interviewer asked permission to speak with any child(ren) in the household who was 5 years or older. After receiving permission from the adult, and in accordance with institutional review board protocol, the interviewer obtained verbal assent from each individual child. The child interviews, which lasted between 0.5 and 1.25 hours, focused on (a) the child's experience in Katrina; (b) the family's transition to Colorado; (c) friends, schooling, and extracurricular activities; (d) sources of social support; and (e) strengths and capacities of the child. Most of the child dren seemed pleased to participate in the study, and none declined to be interviewed. To ensure anonymity, the names of all participants and some identifying features have been changed. Pseudonyms are used throughout the article.

Qualitative Analysis

Our qualitative analysis followed procedures formulated by Strauss (1987) and Corbin and Strauss (2008), which require that empirical data and theory be constantly compared and contrasted throughout the data collection and analysis process. This iterative approach allows researchers to "identify relevant concepts, follow through on subsequent questions, and listen and

observe in more sensitive ways" (Corbin & Strauss, 2008, p. 57). In adhering to this approach, the lead author analyzed the transcripts after the completion of each set of family interviews, searched for emergent themes, and identified questions in need of further empirical and theoretical elaboration. This initial analysis informed subsequent interviews.

After both waves of formal data collection ended, all interview transcripts were uploaded to a qualitative analysis software program. All three authors coded the interview transcripts, drawing on Strauss's (1987) three-stage process. First, open coding was performed to identify general themes and patterns. This first set of descriptive codes included a number of short category labels that answered "who, what, where, when, and how" types of questions (Cope, 2005). During this early stage of coding, the three authors met regularly to verify emergent categories and to discuss coding differences and discrepancies, thus enhancing the rigor of the analysis (Morse, Barrett, Mayan, Olson, & Spiers, 2002).

Second, axial coding techniques were used to focus the data on the specific theme of interest—postdisaster family adjustment among children and adults. During this phase of coding, our research team shifted from descriptive open coding to a process-oriented analysis (Corbin & Strauss, 2008). Specifically, we developed a number of new analytic codes meant to "dig deeper" into the dynamic process of familial adjustment and upward and downward trajectories of resettlement (Cope, 2005). During this coding phase, we searched for connections between the participants' expressed feelings of being "settled" and the broader social context. As we were recoding the data during this second phase, we asked ourselves why the participants wanted to stay in Colorado or wanted to leave, what factors shaped those sentiments, and how these feelings changed over time among children and adults.

Third, selective coding was used to confirm interpretations, assign final data labels, and identify quotes that best illustrated the major concepts of interest. The culmination of this three-stage coding process was the development of an inductive model of displaced family adjustment (see Figure 1). This model, which is ideal-typical in the sense that it highlights the most common adjustment pattern among the families observed in our study, entails four stages: (a) family unity stage, (b) prioritizing safety stage (parents)/missing home stage (children), (c) confronting reality stage (parents)/feeling settled stage (children), and (d) reaching resolution.

Displaced Family Adjustment

Below, we present the data that support our inductive model of displaced family adjustment. The model is based on three broad assumptions: first, that

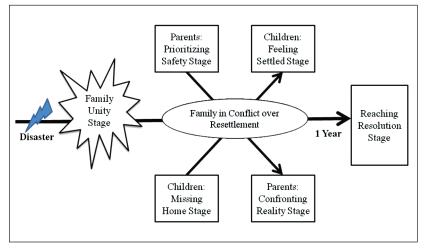


Figure 1. Displaced family adjustment model

the family as a unit, or system, as well as its individual members must be considered when assessing the dynamics of family stress and adjustment (Boss, 2002); second, that the length of time taken to proceed through the stages may vary from person to person and family to family (Burr & Klein, 1994); and third, that the model applies to a particular group of individuals in a specific social, geographic, and historical context and is not meant to serve as a universal model for all displaced disaster survivors during all time periods.

Family Unity Stage

Twenty-one of the 23 families had at least one adult and one child family member who described a period of intense family unity that lasted for 1 to 2 months following Hurricane Katrina. The family unity stage was explained by the constructs of refusing to allow parent–child separations during evacuation and displacement, committing to mutual survival, altering routines to ensure that children and parents could spend time together, and recreating family and cultural traditions during the displacement.

Prior to Hurricane Katrina making landfall, families prepared to evacuate as a unit. Eighteen families evacuated in advance of Katrina after receiving warning information and gathering all family members together. Some of these families had an evacuation plan in place; most did not. Regardless of whether families had a preestablished evacuation destination, the main priority was ensuring that all would "go to the same place together." The importance of evacuating as a unit and staying together was emphasized by a White mother of two children:

At the time, driving to Colorado, I was thinking "We are insane! Why are we going so far away from home when we're gonna have to turn around and go back?" And then we got here [and] it dawned on me that we were not gonna be able to go back for weeks, so where else would we go? We talked about going to Texas or someplace else, but the only thing is that we all go to the same place together. That becomes your main priority.

Five families were unable to leave before Katrina and the flooding of New Orleans. As a consequence, they experienced dangerous evacuations that threatened to break up the family unit. Parents became fiercely protective in the face of potential separation. After watching families being split apart in the New Orleans airport, Samantha, a Black single mother, would not board an airplane until there were enough seats for her and all her children:

Then there were planes leaving and I told them that I had five children and I don't want to be separated. I told them I will not be separated from my kids because there were people crying, mothers crying saying that their kids are missing. So this one plane was about to take off and they needed three or four more people and I was like, "No, no, we need six seats." So we missed that plane and we waited for another couple of hours until the next plane could leave.

Samantha could not have known it at the time, but her decision to wait for the next plane likely spared her family the suffering of separation that more than 5,000 children and their caregivers endured after Katrina (National Center for Missing and Exploited Children, 2006).

Family members who were not able to evacuate in advance of the storm described how they *had* to stay together to ensure their mutual survival. Russell, a 41-year-old Black divorced father, spent 5 nights sleeping on the streets of New Orleans with his two young daughters. He said that they all "thought they were going to die," but they "stuck together." Greg, a Black 17-year-old who was the oldest of five children and the only male in his family, became a self-described "protector" as he, his four sisters, and his mother made their way through the flooded streets. On their arrival at the New Orleans Convention Center, Greg and his family were stunned at the chaos and terrified when military personnel pointed guns at them and other stranded

residents. Greg recalled saying to his mom, "If we stay here, we are going to die." He convinced his family to leave the Convention Center and await rescue on a highway overpass instead.

The family unity stage continued on relocation to Colorado, as parents altered their schedules to allow for flexibility in terms of caregiving arrangements and day-to-day family activities. Parents also let children deviate from their "normal" routines during the early weeks of resettlement. This enabled family members to spend more time together while offering mutual comfort and support. Darrian and Terri, a Black couple who were the parents of four children between the ages of 6 and 16 years, were physically separated for nearly 3 weeks following Katrina. Darrian and his oldest son stayed behind in New Orleans to "defend their home" while Terri evacuated with the three younger children to a cousin's house in Colorado. When the family was reunited in Denver, Darrian described the children's need to be together:

You know, this is a big house, a nice house. All of the kids have their own space, but they choose nine times out of ten to be sleeping all together. They just choose to be together more after all this happened with Katrina. They'll stay together in either our master bedroom or in my daughter's room. Nine times out of ten, Kody [their 10-year-old son] will come sneak in the bottom of the bed in our room. It's okay for now, I think we all just want to be together.

Denver, which is 1,400 miles from New Orleans, felt like "a whole different planet" to many of the survivors, and especially those who had never lived outside of Louisiana. Adults and children alike spoke about the many differences that made it so difficult to adjust to life in Denver. One way that families responded to the shock of the displacement was to recreate culturally familiar patterns within their households. Parents cooked New Orleans cuisine, such as gumbo and red beans and rice. Adults and children decorated their homes with the symbol of the fleur-de-lis, New Orleans Saints football gear, Mardi Gras beads, and other reminders of life "back home." Evoking these cultural symbols brought families together and further strengthened their bonds during the family unity stage (see Boss, 2006, for a discussion of the importance of reestablishing family traditions and cultural rituals in coping with loss and displacement).

Parents—Prioritizing Safety Stage

As time passed, it became clear to families that they would not be returning to Louisiana any time soon, if ever. With this realization, parents and their children moved in divergent directions in terms of their adjustment process (see Figure 1). For parents, the "prioritizing safety" stage was evident in their overwhelming desire to ensure the health and well-being of their children and to "stay put" in Colorado. Several factors influenced this decision, including the belief that New Orleans was no longer inhabitable or hospitable; the feeling that it would be too difficult to return to the Gulf Coast, even if return were possible; and the impression that Colorado's many positive characteristics were enough to keep the family rooted in place. For 26 of the 30 parents, this stage spanned the 3- to 6-month period after resettlement in Denver.

Hurricane Katrina affected 90,000 square miles of land and destroyed or heavily damaged an estimated 300,000 homes (The White House, 2006). With many communities along the Gulf Coast devastated, parents realized that the prospect of a quick return was highly unlikely. The 26 parents who wanted to "stay put" did not want to return to Louisiana because, as one Black mother said, "there's really nothing to go back to." With homes made unlivable and their children's schools closed, parents lamented how everything they had worked so hard for was gone. As a Black mother articulated, they had had no choice but to start anew:

To see this before your eyes and to know that some of your friends and loved ones was lost . . . and you was blessed because you was in another place. Fifteen hundred people, children, men, women, babies, died because of the lack of preparedness from all the city, state, and federal government. And they think it's an easy task for us to just pick up and move on in different states. It's not. It's not easy to just pick up and move on. Because everything I've worked for since I was 15-, 16-years-old is gone. I'm not tryin' to get it back, because I can't get it back. All I can do is start over.

As former residents returned to New Orleans to begin the long process of rebuilding (Appleseed, 2006), those in Colorado carefully monitored the progress to assess safety and other concerns. Parents received information from media coverage and from friends and family members who had already moved back. Some survivors had firsthand knowledge of the devastation because they had traveled to their former neighborhoods to survey the damage and to try to salvage treasured possessions from the wreckage.

The feeling that the odds were insurmountable increased parents' resolve to stay in Colorado. For example, Veronica, a White single mother with two young boys, initially evacuated to Baton Rouge. She had considered returning to New Orleans when the opportunity arose. She was deterred by the long lines at the grocery store, where you could "expect it to take three to four hours just to get a couple of items." Even more than the logistical issues, Veronica was haunted by the trauma on the faces of the people that she met: "And the people . . . [they looked like] when they show people during war time. Everybody just had these blank stares." Soon thereafter, Veronica made the decision to relocate her boys to Colorado, a place where she had always "dreamed of living."

During the prioritizing safety stage, parents were more able than their children to see some of the positive aspects associated with life in Colorado. Adult respondents reported that the schools were "better," the environment was "cleaner," the bureaucracies "more efficient," and the government "less corrupt" than in Louisiana. Furthermore, with its lower crime rates, Colorado felt "safer." A White father appeared truly delighted as he discussed how relieved he was to see his two young children playing in the front yard in Colorado:

I wouldn't trade [by going back to New Orleans]. We did what we had to do, and my family's safe. [Colorado] is a nice family place. It's beautiful, especially here. It's like stepping back 10 years, it really is. My kids can play in the front yard by themselves if I want them to.

Parents also felt safe in Colorado, because it is not subject to hurricanes and other extreme weather events that are commonplace in Louisiana. In fact, according to Federal Emergency Management Agency (2011) records, Louisiana is near the top (6th) and Colorado is close to the bottom (44th) of the 50 states in numbers of federally declared disasters. More than half of the parents (n = 19) indicated soon after Katrina that they would "never again" live along the Gulf Coast. They could not endure another evacuation, another flood, or another deadly storm. Two mothers detailed how they had researched Colorado's disaster history before agreeing to move to Denver. Veronica mapped every earthquake fault line in Colorado and made a decision not to rent an apartment in Golden, a city just west of Denver, due to her perception of the hazards risk. She found another apartment, further from the fault line, and only then could she feel that her family would be safe: "There are no hurricanes here. No earthquakes. I checked that. That's why we won't live in Golden, because the fault line goes right through there. I'm not goin' over there."

Children—Missing Home Stage

We now draw on interview data with the 55 children in the sample to describe the "missing home" stage, which was explained by children's general

unhappiness, their loss of contact with friends, their longing for familiar experiences, and the uncertainty of the move. Children, at least initially, were overwhelmed by a reported sense of sadness and loneliness (n = 42), a limited ability to perceive the potential benefits of living in Colorado (n = 44), and a strong desire to return home (n = 48). Before proceeding, it is important to acknowledge that parents also expressed many of these same emotions and sentiments. Yet parents and children were at odds during the first 3 to 6 months of resettlement. Although parents were focused on prioritizing safety, staying put, and "making a go of it" in Colorado, children were resolute in their desire to return to New Orleans.

Forty-two of the 55 children in the sample used words like "sad," "unhappy," and "depressed" to describe how they felt after coming to Colorado. Desiree, who was 17 years old, captured this theme when she said, "Because the whole Katrina thing had me depressed. So I tried to find every excuse in the world to go back home after that happened."

The discontent that the children expressed was rooted, in part, in the disruption of crucial familial and friendship networks. In Colorado, the children confronted the harsh reality of separation from loved ones. They could no longer walk down the street to see a beloved grandmother or an aunt, as they could back home. Nor could they go see their friends, an issue that Taneisha, a Black 12-year-old, discussed:

It was like everyone in the neighborhood [in New Orleans] was friends. I lived right across the street from all my friends, like, I lived right here and they lived right there and down the street, around the corner. So we were all just right there. We'd just meet at one person's house and just play.

Like Taneisha, most of the other children described the impact of losing contact with their friends and not knowing where they were or if they were even alive. Desiree commented: "Because a lot of the people that I knew, I don't know where they are. I don't even know how to begin to find them." Brianna also wondered where her loved ones were:

Yeah, now we don't have to worry about, are they alive? Because the people that you do talk to, they just think everyone's dead if they haven't talked to 'em. They just assume they're dead. It's like, "I talked to so-and-so last night. They're not dead."

Even though he was only 7 years old, Derrick understood the feeling of losing a friend in the storm: "My best friend, Danielle, I don't know where she is. I think she died."

Children's unhappiness during this stage was also shaped by a longing for familiar cultural traditions. Children spoke of how much they missed Cajun food. Block parties were common in New Orleans, where children and their friends enjoyed crawfish, oysters, and black beans. Not only were these traditions nonexistent in Colorado, the ones that did exist were "different" and "not as fun" as what the children experienced in Louisiana. Even the physical layout of Colorado's neighborhoods seemed to prohibit the "good times" from happening in the same way. A 9-year-old White girl compared the differences in celebrating Halloween in New Orleans versus in Colorado:

It was fun. . . . I think it was fun to trick-or-treat in Louisiana, because the houses, the cities were close together. Here, it's all spread out, like, you have to go with your parents. In Louisiana, we would go out with our friends on our own and stuff to trick-or-treat, because my aunt would know the houses are close together and you wouldn't get lost.

The adolescents, more so than the younger children in the study, focused on all the things that they were going to miss back home because of the displacement: school dances, prom night, senior pictures, and high school sports seasons. Of course, most of the Colorado schools where they were enrolled after the storm offered these same opportunities, but the traditions "just weren't the same." As a result, teens resisted accepting new traditions and sometimes refused to adhere to new rules:

In New Orleans for gym class, you just sit around. You don't do nothing. But out here, they made you run, and climb stuff, and do jumping jacks. I'm like, "Are you serious?" I couldn't stand it when I first got here.

It was during the missing home stage that children struggled most seriously with adjustment to their new schools. Pre-Katrina, almost all the Black children in the sample attended racially segregated schools. After attending predominantly African American schools, and then being displaced to new schools in Colorado that were overwhelmingly White, the students felt racially out of place and isolated. The majority (n = 49) of all children, regardless of race, reported that they had a hard time focusing on their studies during the early months of displacement. Seven reported that they actually engaged in academic self-sabotage in Colorado, in hopes that their parents might allow them to go back to their former schools in New Orleans:

When I first got here [to Colorado] it was hard to learn. It was hard to really catch on. It was hard to catch up. It was hard transitioning so I became a flunk. I just stopped doing my work. I stopped paying attention. I stopped really caring because I thought that maybe that would be some incentive for my mom to say, "Oh, you need to go back home since the schools have started opening back up."

Temporary living arrangements also took a toll on the children. Adrian, a 13-year-old African American, described the apartment she lived in during the relocation: "Oh it was my mama, me, my little sister, my grandma, auntie, my cousin, and then here they come . . . Jaquee, and her mama, and her sister, and my other auntie. So it was ten of us up in there." Although the crowded environment was difficult for all involved, the teenagers in this study had an especially hard time adjusting to altered living conditions. Not only had they and their families lost their material possessions in the storm, they also lost any semblance of privacy.

The uncertainty associated with permanent resettlement in Colorado also contributed to the missing home stage. The children who believed they would be returning to Louisiana soon refused to meet new people, make friends, or become involved in activities. Erica discussed her transition to Colorado and why she struggled with making new friends initially:

I was just in my own little shell, instead of opening up and allowing people to get to know me. I thought for so long that I was going to go back home. So why make friendships with these people, long-term friendships which aren't going to be long term?

Erica continued to explain why she lacked the motivation to make new friends:

Because I was scared. I didn't want to hang out with the cliques. I didn't want to be involved. I didn't make myself be involved. But it was hard for me because I expected something different out of these people that I went to school with. Instead of me just putting myself out there and

saying, "Can I come with y'all to the homecoming game?" or "Can I come with y'all to the dance?" I just stayed at home.

Parents—Confronting Reality Stage

Although the parents in the study initially expressed a desire to stay in Colorado, the reality of resettling in such a distant and unfamiliar place in the aftermath of a catastrophic disaster was absolutely overwhelming. As the months passed, and the challenges displaced families faced continued to mount, 23 of the 30 parents began a downward adjustment trajectory that we refer to as the "confronting reality" stage (see Figure 1). During this stage, parents struggled to find secure employment, child care, and affordable housing options in Colorado. Meeting these basic needs was especially difficult for the single mothers (and one single father) in the study, as they had no additional financial or emotional support from partners (also see Tobin-Gurley, Peek, & Loomis, 2010).

A small number of participants (n = 6) who worked for corporations (such as Wal-Mart or Enterprise Rent-A-Car) prior to Katrina arrived in Colorado after receiving a job transfer. The remaining 24 adults lost their jobs. As these individuals searched for work, they faced logistical challenges and structural barriers. Many had lost their social security cards, educational transcripts, and other forms of professional and legal identification. Even after managing to recreate their résumés, they encountered problems during the reference check process. Natalia, a Black single mother, made it to the interview stage, but lost a job after the potential employer could not locate her references: "I had an employer that said, 'Well, there's nothing in New Orleans, so how can I check your references?' I don't even know if she tried to call."

Respondents encountered further problems in the employment sector because of their Katrina survivor status, region of origin, and race. Seven job seekers removed information from employment applications that would identify them as persons from New Orleans. Kathryn, a White single mother, said employers treated her like she was "stupid" and "uneducated" because of her Southern accent. Tabatha, a Black single mother, was told on two occasions that an employer was "out of applications" despite large "Now Hiring" signs in the windows.

When the parents were able to secure employment, they typically settled for whatever they could find so that they could support their families. This sometimes meant accepting low-paying jobs that lacked health insurance. Suzanne, a White single mother, had worked for several years in magazine editing and management. After the displacement to Colorado, she could not find a comparable job:

I've been in management. They don't even want to talk to you, so I haven't been able to get anything in editing here so I just took anything I could get on Craigslist. And the job started out selling cat litter. And the day I got the job I was crying to everybody. I called my mom and was like, "I don't even want to tell anybody I got a job selling cat litter boxes when I was a magazine editor for years." It's such a step down from what I was doing, it's so demeaning.

With low-paying or no jobs, parents struggled to feed their families. Suzanne said she had "been without groceries for 2 months." Although she had never been on public assistance, she finally broke down and decided to apply for food stamps. This proved to be a frustrating and humiliating endeavor: "The lady at the desk gets on the phone and she told me it could take up to 60 days. I said, 'We could starve in 60 days. We need food." Kathryn was shocked at the price of groceries in Colorado:

Here you're paying 7, 8 dollars for a gallon of milk. That gallon of milk I bought was 5 bucks. I was like, "No way! This is 5 bucks! No way!" And then I'm like, "I'm sorry, Holly [her daughter], you're not havin' chocolate milk."

Another major issue that emerged during the confronting reality stage was the difficulty associated with finding and paying for child care in Colorado. In New Orleans, parents reported that they relied on kin to watch their children when they needed to leave their homes. After the displacement, parents were truly on their own (also see Peek & Fothergill, 2008). Annika, a Black single mother, used to leave her two daughters with close friends or with the father of her children. After the storm, her friends were displaced to several different states and the father of her children ended up in Texas. Annika was thus alone in Colorado with her two girls:

Before Katrina, as long as the kids were happy you knew that you could always count on your friends or neighbors to watch your kids for a while if you just needed to get out of the house. I didn't need to worry if I wanted to get out if the house because I could always call their

father and he would come over for a little while. In Colorado, there is just no one around to help.

The loss of critical social support networks exacerbated the financial problems that displaced families faced and left the adults feeling increasingly stressed and emotionally isolated. As time passed, the men and women acknowledged how alone they felt. Several interviewees indicated that they had "trouble relating" to people in Colorado and they believed that no one from outside the affected region could fully understand all that they were going through. Sarah, who was married, knew she was "fortunate" to have a husband to turn to for comfort. But the rest of her support system was shattered. Carlos, whose family was deeply involved in the small but vibrant Latino-Catholic community in pre-Katrina New Orleans, described his and his wife's trouble adjusting to their new home in Colorado:

Over there [in New Orleans] it was more familiar. We had friends and knew people. [My wife] only has one person that she knows here. I go to work and she stays here bored out of her mind. Sometimes I will take her to my work, so that way she is not bored all the time.

Sarah felt "alone" in Denver and she referred to new people in her life as "acquaintances" rather than "friends." Kathryn shared a similar feeling:

I think the main thing that I needed in coming from Louisiana to here and not knowing a soul, was just someone to talk with. A best friend type thing. Material things I knew would come. But if there was someone who could have been with me to help me through.

Frustrated and exhausted, parents questioned whether living in Colorado was really best for themselves and their children. If they returned to New Orleans, they could be closer to family and their old support networks, but they would also have to raise their children in a higher risk, disaster-affected environment. As the bills piled up and the stress mounted, more parents seriously contemplated leaving Colorado and returning to the Gulf Coast.

Children—Feeling Settled Stage

The children in this study were well aware of the challenges that their parents were facing. The children also worried about their families' present and

future well-being, although they did not always express these fears to their parents as they did not want to "burden" them. At the same time, the children had reconnected with many of their old friends, had started to finally make new friends, and had found new sources of support through their schools and extracurricular activities. These aforementioned factors help illuminate the "feeling settled" stage, which is the period when most children (n = 51) started to think of Denver as "home."

As described in the missing home section, one of the reasons that children were so depressed on their arrival in Colorado was due to the separation from loved ones. With the help of social media and cell phones, however, they were able to reconnect with old friends. Indeed, websites such as MySpace and Facebook served as invaluable tools that facilitated frequent communication, regardless of physical location. Taneisha, who was one of the children who thought her friends had perished in Katrina, was encouraged by one of her new friends in Colorado to build a MySpace page. Taneisha described how she developed her page:

My friend Becca, she was like, "Taneisha, make a MySpace." And she made it for me in December [2005]. Since December I've found, like, all my friends. I've found 95% of them already. Because MySpace, everyone has one now, so people that you haven't talked to since Katrina or before Katrina, you can find them on MySpace, most likely.

As children established ways to keep in touch with their peers from New Orleans, they also began to build new relationships in Colorado. Although their parents felt increasingly isolated as the months passed, the opposite occurred for the children. Because the children were enrolled in school, they were consistently surrounded by other young people. This opened up many opportunities to establish friendships, once they were ready to do so. Moreover, children encountered educators in Colorado who were sensitive to their special needs (Peek & Richardson, 2010). School personnel took additional measures to ensure the integration of the youth into their new schools. For example, some teachers set up a "buddy system" that paired a Katrina student with an "old student" from the school. Other teachers asked the children in their classes to sit with the new students at lunch or to play with them at recess.

Teachers and other supportive adults such as coaches, pastors, and youth group leaders also played an active role in the children's adjustment. Children reported that their teachers had spent extra time trying to help them get "caught up" with the school work that they had missed after the hurricane. Dedicated educators would come in early, stay late, and use their lunch breaks to tutor the students. Alisha, a 12-year-old Black girl, admitted that she had "trust issues" when she first came to Colorado. After she encountered supportive adults in her new school system, she began to thrive. She wrote "an A+ essay" about learning to trust others, and her principal subsequently asked her to speak at the middle school graduation ceremony. This was a tremendous honor for Alisha, and she used the opportunity to thank the many school personnel who had smoothed her transition following the displacement:

When I first came here I didn't really know everyone, and I wrote this paper about how I met a lot of people and how I learned to trust them. And how I finally became, like, integrated with the school. And like, with the principal, because she's really nice. And our math teacher, which was my regular teacher, and the assistant teacher, Miss Cougan, and I wrote about that, and I wrote about how nice all the teachers were, like my science teacher, Mr. K.

As the pain of the relocation subsided, the children became able and willing to acknowledge the benefits of living and going to school in Colorado. One teenage boy excitedly recounted how he had spotted a coyote—the first he had ever seen—in the foothills of the Rocky Mountains. Others talked about the beauty of the landscape and how much they enjoyed playing in the snow (even if it was "too cold"). The children recognized that the schools they were attending in Colorado were more racially integrated, had better facilities, and made more resources available to the students. The children began to change their outlooks on life and some even articulated new future goals that included attending college. Jahmil, a Black 10-year-old student, said that while he was living in New Orleans, he had never even thought about higher education. After moving to Colorado, his perception of his future potential had changed completely:

When I was in Louisiana I didn't think, like I didn't know about, you know, how people say it's proven that most African Americans don't finish college, and even if they do it's mostly the women. So, I didn't know about that when I was in Louisiana because they didn't mention it that much, but when I got to Colorado I was like, I'm gonna be. . . . I'm going to finish college, no matter how long it takes me, like if I were to fail sixth grade, seventh grade, all of that, I would still finish college.

Reaching Resolution Stage

Ultimately, the parents were the ones who were forced to make the decision regarding whether their families would stay in Colorado or return to the Gulf Coast. Of the 23 families in the current study, 18 decided to stay in Colorado as of August 2008. Of the remaining 5 families, 3 returned to New Orleans, and the whereabouts of the other 2 families are unknown. Those 18 families described various factors that allowed them to "reach resolution" and influenced their decision to stay, including the importance of maintaining stability, the unwillingness to return to a changed New Orleans, and the perception that staying in Colorado was best for their children.

In the first place, many parents wanted to stay in Colorado to maintain stability. Tabatha, a Black single mother of three, emphasized this point: "I really didn't want to move, because I think you should have some type of stability. Although the cost of living is high, my thing is having stability for the kids." After the massive disruption caused by Katrina, parents were concerned that suddenly moving their children again would amplify their emotional distress. Alana, a married mother with two children, said,

I just want them [the children] to know that things might not change so drastically any time soon. That's what I mean by stability. I don't think—a place to live, a place to go to school, really, that was it. I just wanted it to stay the same for a period of time so that I felt like they had a home.

Parents also had come to terms with the fact that even if they did move back to the "new New Orleans," life would not be the same. Alana observed that "everyone's lives have changed." She continued, "Nobody can go back to the way it was before. Everyone's affected. I mean, our lives changed. And that's the whole thing—recognizing that and moving on. We've just got to move on." Like their parents, children understood that New Orleans had changed after Hurricane Katrina. Brianna, a 16-year-old Black youth, told her mother that she did not want to return and "see FEMA trailers everywhere." Derron, an especially gregarious 12-year-old boy, said he "sat his parents down" and explained that he liked his new home better because he had a "computer, arts and crafts, PE, and drama" at his new school.

Parents observed the differences in the schools that their children were attending, and they were proud of the educational strides that their children had made. DeAndra, who admitted that she was "desperate" to get back to New Orleans, conceded that the Colorado schools could offer much help that was simply unavailable back home: "Right now today, if we would still have been in New Orleans, we would not have what we have today. We wouldn't have it. . . . Colorado has been good to us, really, seriously." DeAndra's words illustrate the personal sacrifices that parents were willing to make for their children; even if they, as individuals, would have preferred to have returned, they all wanted do what they perceived was best for their children. One married father put it this way, "My kids are my biggest—our biggest priority. My life is guided by what's good for my kids. Period. There's no second priority."

Conclusions and Recommendations

Four stages of adjustment emerged from the experiences of displaced families in Colorado in the aftermath of Hurricane Katrina. During the family unity stage, parents and children directed their physical and emotional energy toward staying together and protecting and comforting one another. As parents and children moved into the second and third stages of adjustment, their response trajectories diverged. Parents followed what we refer to as a *downward adjustment trajectory*, whereas children followed an *upward adjustment trajectory*. For parents, the prioritizing safety stage eventually gave way to the overwhelming and emotionally exhausting stage of confronting reality. Children, on the other hand, were unhappy with the move to Colorado during the missing home stage, but as time passed and they received additional social support, they felt increasingly settled and content. The final stage in the model—reaching resolution—evolved as parents were forced to make a decision about whether they and their families should remain in Colorado or attempt to move back to New Orleans.

The roller coaster (Hill, 1949; Koos, 1946) and mixed models (Burr & Klein, 1994) introduced earlier in this article characterize *family systems* that follow a downward then an upward trajectory, or, respectively, an upward followed by a downward trajectory. The present study, through emphasizing the dynamic nature of postdisaster adjustment *within* households, highlights how *individuals* may follow divergent adjustment trajectories, which in turn shape the overall response and recovery trajectory of the family. Specifically, this research identifies a new pattern in the way that family systems respond to the stress of disaster and displacement. This pattern is exemplified by separate, but overlapping, downward and upward trajectories among parents and children.

Burr and Klein's (1994) research demonstrated that stress in family systems is far more complex and variable than most prior literature in the field suggested; yet their findings are limited because they only gathered data from adults within their target households. Our research underscores the importance of collecting data from both adults *and* children. These populations may experience stress and describe patterns of individual and family functioning over time in fundamentally different ways. To assume that one or even two adults within a household can identify a single recovery pattern for the entire family excludes the perspectives and experiences of the youngest members and may therefore fail to capture the full scope of family response.

This study contributes to the disaster literature in other important ways. Recovery is the most understudied phase in the disaster lifecycle (Phillips, 2009), and family recovery has received especially limited attention (Knowles et al., 2010). Moreover, longitudinal studies that gather data from the same respondents are rare in disaster research (Phillips, 2002). The present study adds to the limited knowledge base regarding how affected families adjust in the face of a prolonged disaster and displacement, while emphasizing the importance of tracking family recovery trajectories over time (Blinn-Pike, 2010).

Our findings suggest a general pattern of familial adjustment that can inform disaster planning for families. Disaster plans, like most disaster research, tend to rely on "head of household" models (Morrow, 1997). However, to understand and facilitate effective disaster response and recovery, case managers, volunteers, and others who work closely with disaster survivors must consider the family unit as a whole, as well as the needs of individual family members of different ages.

Disaster planning should recognize that individual and familial needs may shift dramatically during the response and into the recovery period. In the immediate aftermath of disaster and during the family unity stage, family members will likely express an overwhelming desire to "stay together." To facilitate this process, disaster evacuation and emergency response plans must keep families together when allocating transportation resources and assigning shelter space or temporary housing (Blinn-Pike, 2010). Moreover, disaster aid agencies and schools should be flexible out of respect for disasteraffected families. For example, after Hurricane Katrina, Children's Disaster Services (CDS), which provides free child care in disaster shelters, recognized that parents did not want to be separated from their children and siblings did not want to be separated from one another. Therefore, CDS allowed parents to stay and observe the child care area as long as they wanted, and they also cared for infants and older children that fell outside their usual caregiving age range so that siblings could remain together (Peek, Sutton, & Gump, 2008).

As time passes and the dynamics between family members shift, disaster professionals should rely on diverse strategies for supporting individual family members (Blinn-Pike, 2010). During the early stages of resettlement, children may need additional social, academic, and psychological support. Targeting these resources early on may facilitate a quicker transition to an upward adjustment trajectory among children. For parents in our research, downward adjustment trajectories were associated with resource scarcity and role overload. Therefore, resources—including support with housing, employment, child care, and education—should be allocated to families with an eye toward facilitating the adjustment of the entire family unit.

Although this study offers practical recommendations, it is limited methodologically. First, because of the study recruitment procedures and the lack of available data on persons displaced to Colorado, we have no way of assessing the level of representativeness of the sample. Second, because of the sampling frame, limited sample size, and focus on one specific geographic context, we are unable to generalize from these findings. Third, we relied solely on open-ended qualitative questions in the in-depth interview portion of the research. No rating scale data, structured diagnostic interviews, or other quantitative data were collected. Despite the aforementioned limitations, ours is one of the few available studies that draws on the voices and perspectives of parents and children in the aftermath of disaster. We hope that these findings will encourage future research that focuses on postdisaster family recovery among parents and children.

Acknowledgments

The authors would like to thank Tammy Henderson for her expert editorial guidance, Mary Comerio for the article title, and Ramonda Pitre, Krista Richardson, Laura Ridenour, Jennifer Tobin-Gurley, and Megan Underhill for their research assistance. Much gratitude is also extended to the Katrina survivors who participated in the study.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article:Funding

This research was supported by grants awarded to the first author from the National Science Foundation, the Midwest Sociological Society, and the Colorado State University College of Liberal Arts.

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