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Meanings of Leisure in Coping and Adjustment after Hurricane Katrina among Japanese and Japanese American Survivors in New Orleans

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Abstract

This study explored the relationships among Hurricane Katrina-related stressors, coping/adjustment, and leisure among Japanese and Japanese American survivors in New Orleans. Nine semi-structured interviews were conducted in March 2012. Continuous uncertainty, along with Katrina-related stressful events, negatively impacted the survivors' psychological well-being. Leisure had four distinct meanings in their coping and adjustment processes, providing (a) a positive distraction, (b) an opportunity to stay optimistic and hopeful, (c) a source of new normalcy at both societal and individual levels, and (d) a context for positive inner changes. Additionally, Japanese unique perspectives and attitudes (e.g., quietness, humbleness, modesty) facilitated certain coping strategies. Overall, this study provided evidence for the role of leisure in meaning-making as a key function of coping and adjustment.

Keywords: *culture; disaster; leisure; meaning; stress*

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According to the Office of U.S. Foreign Disaster Assistance and Centre for Research on the Epidemiology of Disasters (OFDA/CRED; n.d.), the number of natural disaster occurrences has rapidly increased over the last century at the global level. Natural disasters in this study are defined as "ecological disruptions exceeding the adjustment capacity of the affected community" (Lechat, 1979, p. 11), and include hurricanes, floods, earthquakes, and tsunamis. Although natural disasters may result in many casualties, they also affect the survivors' psychological well-being by initiating a variety of stressors including bereavement, injury, fear of death, separation from family, property damage, financial loss, and displacement (Norris et al., 2002). However, previous studies also reported that the numbers of survivors who sought professional mental support after natural disasters were limited (e.g., DeSalvo et al., 2007). Therefore, there exists a pressing need to explore alternative ways to help disaster survivors' coping and adjustment processes.

The literature has suggested that leisure can help people cope with and adjust to negative life events that potentially include natural disasters (Hutchinson, Loy, Kleiber, & Dattilo, 2003; Kleiber, Hutchinson, & Williams, 2002). For example, leisure may help survivors keep their minds off negative disaster experiences as well as provide a sense of continuity after life-changing disaster experiences. Nonetheless, the relationships among disaster-related stressors, coping and adjustment, and leisure have heretofore been significantly underexplored. For instance, a review of the literature identified only one unpublished doctoral dissertation that focused on this subject (Jackson, 2011).

Hurricane Katrina, one of the largest natural disasters in U.S. history, struck southern states in August of 2005. According to the OFDA/CRED (n.d.), the hurricane and subsequent flooding resulted in the death of 1,833 people; in Louisiana, more than 288,000 residents lost their homes and more than 400,000 lost their jobs (Kent, 2005). In New Orleans, 74% of all housing units were damaged by Katrina (U.S. Census Bureau, 2011), and 71,280 evacuated because of the hurricane (Singer & Donato, 2005).

Although previous studies examined stress coping among Katrina survivors in New Orleans (e.g., Kishore et al., 2008; Spence, Lachlan, & Burke, 2007), few studies focused on roles of leisure in their coping processes. Moreover, these studies appear to lack in an in-depth understanding of relationships between racial/ethnic diversity in the city and coping/adjustment after Katrina. Whereas a few studies did examine, for instance, Vietnamese American Katrina survivors in the city (e.g., Li, Airriess, Chen, Leong, & Keith, 2010), they did not directly examine their psychological coping or adjustment processes. Because stress is generated in "a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being" (Lazarus & Folkman, 1984, p. 19), racial/ethnic factors (e.g., language) may lead to different levels of perceived stress. Furthermore, the availability of coping resources may vary across racial/ethnic groups (e.g., community support). Japanese and Japanese Americans living in New Orleans were racial/ethnic minority groups who were affected by Katrina but unexplored. The 2000 U.S. Census reported that there were 283 Japanese Americans in the city (the total population was 343,829). The purpose of this study, therefore, is to explore the relationships among Katrina-related stressors, coping and adjustment, and leisure through the cases of Japanese and Japanese American survivors in New Orleans.

Literature Review

Because the subject of leisure coping and adjustment after natural disasters remains underdeveloped, three relevant streams of research were reviewed: roles and meanings of leisure

in coping with and adjusting to negative life events, leisure as a coping resource or strategy after Katrina, and Japanese people, stress, and coping.

Roles and Meanings of Leisure in Coping with and Adjusting to Negative Life Events

Based on a review of previous studies on individuals with spinal cord injuries (SCI; Hutchinson & Kleiber, 2000; Lee, Dattilo, Kleiber, & Caldwell, 1996), Kleiber et al. (2002) proposed four distinct roles that leisure could play in helping people cope with and adjust to negative life events: (a) providing a positive distraction, (b) generating hope and optimism, (c) enhancing a sense of normalcy or continuity, and (d) facilitating personal transformation. Hutchinson et al. (2003) analyzed two qualitative datasets from individuals with various injuries and illness (e.g., SCI, multiple sclerosis), and found that leisure provided a mental distraction and escape, a sense of hope and optimism, a structure and purpose in one's life, a sense of belonging and acceptance, and perceptions of competence, independence, and continuity of self. In a qualitative study with women in a transitional homeless shelter, Klitzing (2003, 2004) revealed that physical activities (e.g., walking), diversionary activities (e.g., reading, watching TV), being alone (e.g., taking a hot bath), and being with others (e.g., spending time with children) helped the women cope with chronic stress, providing relaxation, getting away, and social support. Hutchinson and Kleiber (2005) also highlighted the importance of such ordinary, or casual, leisure in facilitating self-protection, preservation of a sense of self, and positive growth amid negative life events (e.g., SCI, divorce). Among older female participants of the Red Hat Society, Hutchinson, Yarnal, Staffordson, and Kerstetter (2008) found that the membership in the society and activities served as a context for social support, emotional regulations, coping sustaining efforts, and meaning-focused coping (e.g., reappraisal) in the middle of chronic stressors (e.g., health concerns) and life events (e.g., divorce, bereavement). Through in-depth interviews with people with SCI, Chun and Lee (2010) indicated that leisure expedited post-traumatic growth (PTG; Tedeschi & Calhoun, 1996, 2004), helping them find personal strengths and latent abilities, build companionship and friendships, make sense of negative experiences and find meaning in life, and perceive positive emotions.

In addition, some researchers have argued for the importance of meanings of leisure in influencing one's psychological well-being. Porter, Iwasaki, and Shank (2010) defined leisure meaning as "a socially and contextually ground [*sic*] psychological/emotional experience that holds inner significance for an individual that evolves from, or within, the context of leisure" (p. 172), and identified five distinct meanings of leisure, namely connection/belonging, identity, freedom/autonomy, control/power, and competence/mastery. Based on a phenomenographic research (Watkins, 2000), Schulz and Watkins (2007) developed the Leisure Meanings Inventory, which consists of four distinct leisure meanings: passing time, exercising choice, escaping pressure, and achieving fulfillment. Iwasaki (2007, 2008) conducted a comprehensive literature review on leisure meanings in an international context, and suggested that leisure contributes to quality of life through five distinct pathways: (a) positive emotions and well-being; (b) positive identity, self-esteem, and spirituality; (c) social/cultural connections and harmony; (d) human strengths and resilience; and (e) learning and development. Unruh and Hutchinson (2011) found that individuals living with cancer and chronic diseases echoed spiritual meanings of daily gardening experiences. The importance of cultures and social identities in studying leisure's contributions to well-being was also observed in a series of empirical studies of Aboriginal people with diabetes, individuals with disabilities, and sexual minorities by Iwasaki and colleagues (Iwasaki & Bartlett, 2006; Iwasaki, Bartlett, & O'Neil, 2005; Iwasaki, MacKay, Mactavish, Ristock, & Bartlett, 2006). From a therapeutic recreation (TR) perspective, Hutchinson, Bland, and Kleiber

(2008) argued that individual differences in leisure's contributions to well-being should be reflected in TR practices.

Leisure as a Coping Resource or Strategy after Katrina

Although the relationships between leisure and coping remain underexplored in post-disaster contexts, previous studies appear to have implications in leisure's roles as a coping resource or strategy in the post-Katrina context. As for coping resources, the disaster literature has indicated that social support played a significant role in stress coping after Katrina (e.g., Henderson, Roberto, & Kamo, 2010). For example, Spence et al. (2007) found that female Katrina evacuees who used sharing experiences as a coping strategy perceived a greater reduction of stress. However, seeking social support was found correlated with negative psychological outcomes in other studies (e.g., Lemieux, Simon, Plummer, Ai, & Richardson, 2010). Previous studies also suggested that the effectiveness of a sense of control as a coping resource could be significantly limited in post-Katrina situations (e.g., Sneath, Lacey, & Kennett-Hensel, 2009). Spence et al. revealed that Katrina survivors in emergency shelters experienced difficulty in engaging in physical activities and that struggles to participate in activities, conversely, increased stress levels.

The disaster literature has also suggested that some leisure-like behaviors could function as coping strategies after Katrina. For example, Henderson et al. (2010) found that leisure-like activities including shopping, exercising, reading, and doing crossword puzzles had positive distractive effects among older Katrina survivors. However, in other studies, distractive coping was negatively correlated with psychological well-being (e.g., Glass, Flory, Hankin, Kloos, & Turecki, 2009). Another leisure-like activity prevalent after Katrina was volunteering (e.g., Henderson et al.). Lemieux et al. (2010) found that 93.7% of local student respondents engaged in volunteer activities after Katrina. Self-destructive behaviors were also prevalent in Katrina's aftermath (Lemieux et al.; Sneath et al., 2009). For example, Kishore et al. (2008) reported that among university students, faculty, and staff, 15.7% increased their alcohol consumption and 13.2% increased their non-prescription drug use after Katrina. The other leisure-like coping strategy often employed after Katrina was religious activity (e.g., Tausch et al., 2011). Wadsworth, Santiago, and Einhorn (2009) found a mixed result that whereas some religious coping strategies (e.g., social support from religious community) had positive outcomes, other religious coping styles (e.g., pleading for intercession) had negative outcomes.

Japanese People, Stress, and Coping

The literature has suggested that there exist several unique factors that could affect coping and adjustment processes among Japanese and Japanese Americans. One of these factors is fatalism. In a cross-cultural study, Kawanishi (1995) found that Japanese people were more likely to attribute stressful life events to bad luck and successful coping to good luck, compared with Anglo Americans. Among second-generation Japanese Americans interned during World War II, Nagata and Tsuru (2007) discovered that "an external attribution of control to chance/fate was associated with lower self-reported coping" (p. 228). Another important factor in stress generation and coping among Japanese people is familism, which means "strong normative feelings of loyalty, dedication, reciprocity, and attachment of family members to their family and familial relationships" (Sayegh & Knight, 2010, p. 3). In a cross-cultural study of ethnic caregivers, Knight et al. (2002) found that familism was positively correlated with depression scores among Japanese Americans. On the contrary, Sakamoto, Tanaka, Neichi, Sato, and Ono (2006) indicated that middle-aged and older Japanese living in rural settings were more likely to cope with depression and suicide wishes when they sought familial social support.

In addition, certain coping strategies may be particularly important for Japanese people. Tweed, White, and Lehman (2004) discovered that Japanese university students used more internally targeted coping strategies (e.g., waiting, self-control, reappraisal, denial, repression) than their Euro-Canadian counterparts. The researchers attributed this trend to collectivism, fatalism, and Buddhism /Taoism influences in Japanese culture. Among female domestic violence survivors, Yoshihama (2002) found that compared with their U.S.-born counterparts, Japan-born women were less likely to employ active coping strategies (e.g., confrontation, help-seeking). Yoshihama attributed this tendency to "a stronger degree of cultural proscription against these 'active' acts for the Japan-born" (p. 446).

In short, the reviewed studies appear to support the roles and meanings of leisure as a resource and strategy for coping and adjustment in the post-Katrina context, such as mobilization of social support (e.g., Hutchinson et al., 2003; Spence et al., 2007) and distraction from postdisaster stressors (e.g., Henderson et al., 2010; Kleiber et al., 2002). Moreover, among Japanese and Japanese American Katrina survivors, these roles and meanings of leisure could be influenced by culturally-unique factors (e.g., Kawanishi, 1995; Knight et al., 2002) as well as tendencies to use certain coping strategies (e.g., Tweed et al., 2004; Yoshihama, 2002).

Method

Given the exploratory nature of this study, phenomenology was employed as a guiding methodology. It allows leisure researchers to take participants' roles and study a phenomenon of interests through their lived experiences (Howe, 1991). A data-collection method was in-depth interviewing that also allows for a deeper understanding of a topic through participants' accounts (Ragin & Amoroso, 2011). Hence, the methodology and method were selected to explore how Japanese and Japanese American Katrina survivors made sense of their disaster experiences and to examine the roles and meanings of leisure in their coping and adjustment processes.

Recruitment and Participants

Purposeful sampling (Patton, 2002) was used to recruit individuals directly affected by Katrina and to seek adequate heterogeneity (e.g., gender, age, income) among participants (Maxwell, 2009). Potential participants were limited to those who self-identified as Japanese or Japanese American. Japanese individuals in this study were Japanese nationals who lived in the U.S., whereas Japanese Americans were those who had American citizenships and self-identified as having Japanese ancestor(s). Interviewees were recruited with the help of key informants working in a community club for Japanese and Japanese Americans in New Orleans. Interviewees received a recruitment letter along with the club's monthly newsletter. The recruitment letter was available in Japanese and English. Additionally, the key informants individually contacted other potential participants.

Although I attempted to reach an approximately even number of men and women by employing snowball sampling (i.e., asking interviewees to introduce potential interviewees of the underrepresented gender), seven out of nine interviewees were women. This might have been because social and recreational activities held by the community club were mainly targeted at women and families and, therefore, women paid more attention to the newsletter and recruitment letter. Another possible explanation is that Japanese men might have felt a sense of *haji* (shame), or avoided feeling so, by sharing private negative experiences and emotions as a function of Japanese masculinity and exposure sensitivity (Lebra, 1983). Indeed, several older men who were contacted via snowball sampling showed reluctance to be interviewed. Table 1 summarizes the nine participants' demographic information.

Table 1

The Participants' Demographics

Pseudonym	Nationality	Sex	Age	Relationship	Household Income	Yeas in the U.S.	Years in N.O.	Job	Education
Akira	Japanese	Male	50-64	Married	$100,001-	30	15	Full-time	Graduate
Ayana	Japanese	Female	65-	Widowed	Declined	50	50	Part-time	Grade 12
Donna	American (3rd)	Female	30-49	Single	$30,001-60,000	32	13	Full-time	Bachelor
Fumiko	Japanese	Female	50-64	Married	$80,001-100,000	32	29	Full-time	Graduate
Harley	American (3rd)	Female	18-29	Dating	$30,001-60,000	29	7	Full-time	Bachelor
Haruka	Japanese	Female	30-49	Married	Declined	11	11	Housewife	Bachelor
Keiko	Japanese	Female	30-49	Married	$60,001-80,000	18	15	Part-time	Associate
Tosh	American (2nd)	Male	50-64	Married	$60,001-80,000	47	40	Retired	Bachelor
Ume	American (4th)	Female	30-49	Living with a partner	Declined	34	19	Full-time	Grade 12

Note. Ordinal numbers in the nationality column for Japanese Americans indicate their generations. As for job, full-time means 35-hour or longer work per week; part-time means 10 to 35-hour work per week.

Data Collection

Eight of the interviews were conducted face to face in New Orleans and one was conducted by telephone in March of 2012. The interviews lasted approximately 50 to 95 minutes (75 minutes on average). All of the interviews were audio-recorded except for three cases in which the interviewees declined to be recorded. This decision may have been because, in Japanese culture, people often feel embarrassed talking about personal stories and emotions to others, especially when they are negative in tone (Lebra, 1983). This speculation gains further support given that the three interviewees who declined were all Japanese nationals who were arguably more influenced by Japanese culture. Detailed notes were taken during each of these interviews. The interviewees chose which language (i.e., English or Japanese) they wished to respond in. Consequently, the interviews with Japanese nationals were in Japanese whereas the interviews with Japanese Americans were in English.

A list of questions was generated based on Iwasaki and colleagues' (e.g., Iwasaki et al., 2006) qualitative studies on a similar topic (i.e., stress coping). Questions about daily hassles were modified to fit disaster experiences. Questions regarding the four distinct roles of leisure proposed by Kleiber et al. (2002) were added because the context in which the researchers conceptualized these roles (i.e., negative life events) appeared most applicable to postdisaster contexts. These questions include "What were things that made you stressed related to Katrina?"; "What were things that helped you cope with stress from Katrina?"; "What were, if any, things that helped you (a) distract your mind, (b) become more optimistic about the future, (c) feel continuity or normalcy, and (d) personally grow from traumatic experiences?" Given the exploratory nature of the study, it was important not to begin with the term leisure to unearth narratives on experiences that might not be explicitly associated with this word. These interview questions were asked across a broader timeframe, that is, from evacuation to the time of the actual interviews.

Data Analysis and Trustworthiness

The interview notes taken during the nonrecorded interviews were sent to the interviewees on the following days to verify their accuracy. I transcribed the recorded interviews verbatim in Japanese, and then translated into English. It should be noted that I am a Japanese native who completed graduate education in North America. To minimize the risk of misinterpretation, all translations of the interview transcripts were attested to by two independent Japanese scholars who are also proficient in English. The constant comparative method was employed (Strauss & Corbin, 1998), which means that while conducting the interviews, I constantly compared the content of each interview and examined emerging themes. When themes emerged, they were explored further in the following interviews by adding probes and changing wordings of the questions. The coding process was threefold: open, axial, and selective (Strauss & Corbin). First, I read through all the transcripts multiple times to obtain an overall understanding of the contents and to identify key words and recurrent phrases. Next, the recurrent words and phrases were clustered to create major themes. Finally, selective coding led to the reduction and identification of themes and subthemes.

Member checking was employed to enhance trustworthiness (Schwandt, 2007). Verbatim transcripts and the interview notes were sent to the seven interviewees who agreed to verify their content and to review my interpretation of their accounts. In each transcript or note, parts particularly relevant to the emerging themes were highlighted and my interpretation was added. Although the interviewees were asked to focus on the highlighted parts, they were given two weeks to review the entire transcript and provide any feedback. Interviewees' feedback was regarded not only as validation but also as "one more opportunity to gather data about the integrity of the inquirer's findings" (Schwandt, p. 188).

Results

The analysis of the interviews identified three themes: (a) Katrina-related stressors; (b) leisure and coping/adjustment after Katrina; and (c) Japanese ethnicity, stress, and coping after Katrina. Each theme consists of subthemes. Table 2 summarizes the themes and subthemes.

Katrina-Related Stressors

Two main subthemes emerged regarding Katrina-related stressors: continuous uncertainty as an underlying stressor and Katrina-related stressful events. These subthemes were not mutually exclusive but rather closely interrelated.

Continuous uncertainty as an underlying stressor. Virtually all of the interviewees mentioned uncertainty as a major stressor related to Katrina. When asked about the strongest stressor related to Katrina, Donna described how unexpected and stressful uncertainty was, saying, "I guess just uncertainty, just not knowing. … You don't consider that being a stressful thing until it happens to you. I think people were just so shaken out of [their] normal routine." Uncertainty was distinct from the following Katrina-related stressful events in that it was not a single event but a continuous stressful situation. Harley elaborated on this point, noting, "I think [uncertainty] was the biggest stress from Katrina. It wasn't necessarily one event." The following subordinate subthemes explain how the nature of uncertainty changed after the disaster.

Uncertainty at an early stage. At an early stage of displacement, the interviewees felt stressed from uncertainty because of the unprecedented level of devastation caused by Katrina. Interestingly, both those who had experienced multiple hurricanes in the past and those who had not perceived a strong sense of uncertainty. Tosh, who had lived in New Orleans for 40 years, described how new the Katrina experience was even to him:

Table 2

A Summary of Themes and Sub-Themes in Results

Themes	Subthemes	
Katrina-related stressors	Continuous uncertainty as an underlying stressor	Uncertainty at an early stage
		Uncertainty about the future
		Lingering uncertainty
	Katrina-related stressful events	Displacement/multiple relocations
		Destruction of New Orleans
		Damage to property
		Long drives and severe traffic jams
		Interruption to children's education
Leisure and coping/adjustment after Katrina	Leisure as a positive distraction	
	Leisure as an opportunity to stay optimistic and hopeful	
	Leisure as a source of new normalcy at societal and individual levels	
	Leisure as a context for positive inner changes	
Japanese ethnicity, stress, and coping after Katrina	Japanese ethnicity and Katrina-related stress	
	Culturally unique perspectives/attitudes and coping	

> After the storm hit, most of the local news and people left. There was very little information. … You knew the levees broke. But where? What areas were affected? No idea. So, really from that point on, it was very stressful because I had a home. I had no idea [about] the state of my house. I didn't know [if] it'd been damaged or it'd been flooded.

Likewise, Harley, who had moved to New Orleans a week before Katrina hit the city, perceived a strong sense of uncertainty:

> We thought we would be gone for a weekend. We didn't know anything about hurricanes 'cause I'm from California. … [The strongest stressor was] not knowing what was going to happen, if you would have a job, where we would be, and if you would come back to New Orleans. … I think there was so much of uncertainty.

Thus, at the early stage of their disaster experiences, the interviewees perceived a particularly strong sense of uncertainty because of the unprecedented level of the devastation caused by Katrina as well as a lack of information, experience, and preparation.

Uncertainty about the future. Even after evacuation, most of the interviewees still experienced uncertainty. For example, after she evacuated to Kentucky, Keiko still "could not see the future" and felt uncertain about whether and when her family would return to New Orleans. Similarly, Ume, who evacuated to Lafayette, Louisiana, with her partner, had uncertainty about where they would go next: "Are [we] gonna end up in Lafayette for the rest of our lives? [Are we] gonna go back to California for the rest of our lives? What in world are we gonna do?"

As time passed, this uncertainty also became more specific to certain aspects of life, such as uncertainty about one's work and the possibility of future hurricanes. Akira, who was a university professor in New Orleans, said that the future was so uncertain that he considered relocating to another university because his institution was severely affected by Katrina. Haruka, who evacuated to Japan for about a year, remembered feeling stressed from uncertainty about the strength of restored levees. This was because she heard that they could only hold back category-4 hurricanes. Thus, the initial uncertainty in the aftermath of Katrina changed into the one about the future and specific aspects of life including risk of unemployment or protection from future major hurricanes.

Lingering uncertainty. Even seven years after the disaster, the Katrina-related uncertainty still lingered among the interviewees. When asked about whether the uncertainty was gone, Donna described how people in New Orleans might feel in every hurricane season:

> I don't know if it is really [gone]. … There's still little bit of uncertainty, especially the protection from the next hurricane. … [The city is] still trying to build a big levee, walls and things. [People] constantly hear about the story of what [the city is] gonna do. … So, right before spring people get thinking about, "Okay, where am I gonna go this spring if I have to go?"

The interviewees' narratives clearly indicated that Katrina was not a past event for them, but something that still affected their lives. The following poignant comment from Fumiko elaborated on this point:

> Even now I don't really think 2005 was a long time ago. Everybody feels it was like a recent event. People in New Orleans call pre-K and post-K when they measure the time span. The pre-K … means the time before Katrina. … I would say Katrina is already inscribed in our daily life, in history. I think it will never disappear from our memories.

Hence, uncertainty caused by Katrina still lingered in the interviewees' minds, and fear of future hurricanes continued to cause them stress every hurricane season.

Katrina-related stressful events. Although the uncertainty caused by Katrina created the continuous stressful situations, the interviewees also mentioned five specific Katrina-related stressful events including displacement/multiple relocations, destruction of New Orleans, damage to property, long drives and severe traffic jams, and interruptions to children's education.

Displacement/multiple relocations. Virtually all of the interviewees were displaced from New Orleans because of the hurricane, and were relocated multiple times. For instance, Tosh, who lived in his friend's camper for 11 months after the hurricane, stated:

> It was hard to live in a camper. … We had been to [camping] in the camper, too. But, when it's [the] only place for shelter, it becomes different. That was not fun. In the camper, you don't have enough food, too cold, too hot. It's just frustrating.

Some of them were forced to stay outside of the city for an extended period of time. Ume described negative psychological impacts of prolonged displacement and multiple relocations in relation to the uncertainty:

> I was in a couple different states. I was in Massachusetts. I was in California. I came back to Louisiana for a while. Then, I backed [*sic*] to the Bay area and I backed [*sic*] to New Orleans. I think moving was kind of traumatic. Just all that uncertainty. We didn't know whether we could come back or not for a while.

Although I acknowledge the conceptual differences between stress and trauma, I interpreted Ume's use of the term traumatic as a lay expression to illustrate dramatic changes in her situations (i.e., relocations), a perceived lower sense of control over the situations, and acute negative psychological impacts.

Destruction of New Orleans. The interviewees expressed their strong sense of attachment to New Orleans, which was well stated in the following quotation from Ume:

> People see me and say, 'Why do you stay in New Orleans?' … Well, you don't understand the depth of my attachment to the place! Even though maybe logic tells me, 'Go somewhere else. Just start around somewhere else,' the emotions are very deep. I can't find this place anywhere else. There's no other New Orleans.

The sense of attachment was echoed by the Japanese nationals including Fumiko, who had lived in the city for 29 years. The following comment illustrated how stressful it was for Fumiko that Katrina destroyed the city in which her identity in the U.S. was rooted:

> The most stressful thing was to face the possibility that the city I love would be destroyed completely. I only know this place, and I am the sort of person who lives here because I love this city. It was really stressful to face a realistic possibility that I could have lost my roots in the U.S.

Interestingly, Harley, who had spent only a week in New Orleans before evacuation, also showed deep attachment to the city when asked about displacement:

> [Displacement] was still really stressful because we were so concerned about what we were going to do next and actually about New Orleans itself. I think that was a big thing like what's happening to the city. Obviously, we hadn't been there for very long, but we still felt an emotional attachment to the city.

Hence, the interviewees, both Japanese and Japanese Americans, experienced a considerable amount of stress because of the destruction of the city to which they were emotionally attached.

Damage to property. Many of the interviewees suffered major damage to their property, especially to their homes. For instance, although Ayana's home was not flooded, she found it had been severely damaged when she returned from evacuation. She found the restoring process stressful: "When I came back, the floor was ripped off, roof was broken, and wall was so dirty. … I felt hectic to do this and that. [Renovation] took long. I wanted to restore home as soon as possible." Tosh, whose home was severely flooded, described how stressful it was to live in the camper right next to his damaged home: "It was almost a whole year. … It was terrible. That was tough 'cause you were next to the house in really bad conditions." Thus, damage to property, especially one's home as the foundation of his or her life, and repairing processes were major sources of stress.

The damage to property also entailed other stressors, such as negotiating with governmental organizations and insurance companies to obtain compensation. This experience was par-

ticularly stressful for Keiko, a Japanese national and nonnative English speaker. Keiko was in charge of her family's negotiations with the Federal Emergency Management Agency and an insurance company—a process complicated by all of the information only being available in either English or Spanish. Keiko reported she "felt strong mental pressures" because her negotiations determined "the amount of compensation [her] family would receive." As another accompanying stressor, Haruka mentioned anxiety about a possible decline in the value of her real estate because Katrina had shown it was vulnerable to major hurricanes and flooding.

Long drives and severe traffic jams. Many of the interviewees evacuated by car and had to endure severe traffic jams on their evacuation routes. For instance, Harley drove to Austin, Texas, to evacuate to her friend's home. It took her 15 hours because of traffic jams, twice as long as it usually takes. When asked if the drive for evacuation was stressful, she responded: "Yes! It was very stressful. And you can see cars that have been broken down on the side of road, and families. I was like, 'I don't know what's gonna happen to us.'" Tosh also described how "awful" his evacuation to Rayne, Louisiana, was particularly for his wife:

> The highway was very, very crowded for traffic. … Everybody just left. … So, we spent a lot of time in traffic. It was about 150 miles away from my house to a town called Rayne. … It wasn't very awful to me to live in my truck, but was awful for [my wife].

In Haruka's case, a long evacuation in a small car led to a strain in her lower back. She commented that it took her family approximately 20 hours to reach Shreveport, Louisiana, where they found a place to stay on the first night of their evacuation. Thus, a long evacuation drive in severely jammed traffic was another major stressor caused by Katrina.

Interruption to children's education. Four of the interviewees had school-aged children when Katrina hit New Orleans. These participants also mentioned interruption to their children's education as a stressor. Keiko, who evacuated to Lexington, Kentucky, with her two daughters, experienced stress in locating a school that could accept her daughters as soon as possible. Doing so was necessary because of a policy—left unchanged after Katrina—where students who were absent for more than three weeks could not advance to the next grade. Moreover, when they returned to New Orleans, the education system had changed and some procedural issues negatively affected Keiko's daughters' transcripts. Hence, Keiko had to negotiate with the New Orleans Board of Education and, because it was so slow to respond, she felt she had been mistreated possibly as a function of her racial/ethnic background. Fumiko felt anxious about the financial condition of the school her two children had attended because it experienced a rapid decrease in the number of total students. She also remembered being shocked when she talked with her son about his friend, who had been lost in the flood:

> [My son] told that sort of story as if it was one of the daily conversation topics for him. … I was really shocked as a parent about how my son made sense of the fact that his friend was wiped away from the rooftop and gone.

Therefore, the interviewees were concerned about negative impacts of Katrina on their children's education in a broader sense including school systems and children's mental development, which increased their stress levels. In relation to the continuous uncertainty, these Katrina-related stressful events negatively impacted the survivors' psychological well-being.

Leisure and Coping/Adjustment after Katrina

Although a few interviewees could not easily remember leisure experiences during their evacuation or displacement periods, as the interviews progressed all of the participants mentioned leisure-like behaviors they had engaged in after Katrina. Four distinct roles and mean-

ings of leisure were identified in helping the survivors cope with and adjust to Katrina experiences. They include leisure as (a) a positive distraction, (b) an opportunity to stay optimistic and hopeful, (c) a source of new normalcy at societal and individual levels, and (d) a context for positive inner changes.

Leisure as a positive distraction. The interviewees' narratives clarified that leisure served as a positive distraction from the stressful situations arising after Katrina. For example, during her year-long evacuation in Japan, Haruka "tried to fully enjoy being in Japan" participating in various activities, such as supporting her son's baseball, going to church, and socializing with Japanese friends who were also mothers. She found these activities keep her mind busy and refreshed. In Harley's case, social activity as well as work brought a distraction while being evacuated to Houston, where the non-profit organization she worked for provided education for student evacuees from New Orleans: "[Coping was] work, definitely school, and being a teacher. That was all that I did. … I would also say that the partying was a coping mechanism for sure. Just enjoy, have a good time." These comments indicate that unlike non-leisure activity, some leisure uniquely contributed to coping and adjustment by providing a *positive* distraction through enjoyable experiences. This was particularly important in their stressful and uncertain post-Katrina lives. Moreover, the following quotation from Donna indicates the further significance of leisure as a source of distraction in the post-disaster context where survivors lost their other sources of distraction including job:

> I wasn't working. I couldn't really have a computer for a while. You had to think of ways of occupying your mind. … In Georgia, when I was at [my friend's] house, I cleaned up the whole kitchen! Then, I vacuumed the whole house 'cause I didn't [have] anything else to do. … That would keep me from watching the news, too. … I wasn't thinking like, 'Oh my God. What's going on? What's gonna happen?'

As well, Donna used an interesting and heretofore unreported term—"hurrication"—meaning a feeling of being "on vacation" during evacuation after the hurricane:

> 'Hurrication' … was strange in a way because you feel like you are on a vacation, but you aren't really on a vacation 'cause you are always thinking about other stuffs back in your head. … But then, like 'When is this vacation gonna be over?'

Hence, enjoyable leisure-like activities appeared to serve as an important source of a positive distraction in the post-Katrina coping and adjustment processes. However, the state of "hurrication" implied that the Katrina-caused uncertainty affected the evacuees constantly and made it difficult for them to be fully absorbed in the activities and thus completely distracted.

Leisure as an opportunity to stay optimistic and hopeful. The survivors also found some leisure-like experiences as an opportunity to stay optimistic and hopeful about the future in the uncertain post-Katrina situations. During her one-year evacuation in Japan, Haruka realized that supporting her son's ability to play baseball, and seeing his smiles and growth, helped her become more positive about their future. For her, spiritual activities, such as going to church and Bible studies, also provided hope and allowed her to positively reappraise her Katrina-related experiences. Likewise, Ume acknowledged the importance of spirituality in providing hope and, indeed, explored various faiths especially after Katrina. Above all, she emphasized her unique way of meditation in adjusting to her disaster experiences:

> My meditation is writing a *haiku* [i.e., traditional Japanese poetry]. … You can say [meditation] doesn't mean anything, but when it gives people hope, it's something. …

> I don't think you can have an experience like [Katrina] and survive [without having] some kind of spiritual awakening. Just a healing factor of surviving.

Fumiko found watching television programs geared for teenagers, and the laughter the programs ensured, to be not only a source of optimism but also a contrast to her job as a lawyer:

> I watched funny TV programs for teenagers with my kids, and laughed a lot. It's somewhat good, isn't it? I didn't have to think about anything. … I stayed away from serious stuffs in my private life. My job is so serious.

Therefore, personally meaningful and enjoyable leisure-like activities functioned as an opportunity where the survivors retained optimism and hope in the stressful post-Katrina contexts.

Leisure as a source of new normalcy at societal and individual levels. After a life-changing experience like Katrina, it was important for the participants to regain a sense of normalcy both at societal and individual levels. At the societal level, the interviewees referred to symbolic local events in New Orleans as a source of normalcy. For instance, Ayana said, "There are a variety of events like a jazz festival in the city. I guess those events have got back to normal already, including Mardi Gras." Likewise, Donna explained that some post-Katrina events, such as the New Orleans Saints (i.e., a National Football League team) home game and Mardi Gras, brought normalcy, and they in turn led to stress release:

> [The first home game of the Saints after Katrina] was crazy. … I think that was a big stress release. It's like, 'Oh yeah! Now, we have something from our city back!' … Mardi Gras … felt like, 'Okay, we can still have parades!' That's a huge part of the city, culture. So, having that felt like, 'Okay, this is gonna make people feel more normal.'

At the individual level, the narratives indicated that leisure experiences brought a greater sense of normalcy in several ways. For Harley, continued participation in the same leisure activities with the same companions as well as resumption of work at school allowed her to retain a sense of normalcy while being displaced in Houston:

> I think opening up the school was a help to bring us back to a sense of normalcy, and the work. We were out of work for an extended amount of time. … Also, probably having close friends as well helped with the normalcy and continuity to play sports and party.

Although Donna perceived an increased sense of normalcy when her favorite bars and restaurants reopened, she also observed that people who were present at these places after Katrina were different from those before the hurricane:

> [You feel normal] when your favorite bars and restaurants would be open. … It's like connecting back to where you were before. … [I went there on] the exact days they were reopened! … But, it was different because it wasn't the same people. All the people you were with two months ago were not here.

A feeling of "normal but different" was echoed by other interviewees including Tosh, who mentioned the phrase new normalcy when asked if his life had returned to normal:

> I don't know if you could [go] back to normal. It's new normal. There's old normal and new normal. In a daily life when you talk to your friends, there's always before Katrina or after. … It's gonna be … a time-mark. 'Do you remember when it [was]? Was it before Katrina or after Katrina?' Everything is gonna be judged by the hurricane.

Hence, the interviewees appeared to struggle coming to grips with the loss of what had once been considered normal before Katrina's massive devastation. Nonetheless, the resumption of local events, continued participation in activities, leisure-generated friendships, and reopening of favorite leisure sites all helped the participants perceive a certain level of normalcy both at the societal and individual levels.

Leisure as a context for positive inner changes. Finally, the interviewees referred to some leisure experiences as a context for positive inner changes. For example, Ume tried to have more leisure, or unstructured, time after Katrina, which allowed her to realize the importance of things she had previously taken for granted: "I am much more grateful … for being able to breathe, just have food, have shelter, and have people around, the same people you see every day. … You have more time for people that are in your vicinity." This sort of gratefulness was echoed by other interviewees including Tosh, whose leisure was primarily home-based. He perceived a greater sense of appreciation for his home after it was flooded and reconstructed:

> I appreciate my house more. I really enjoy it. … I sit in a living room and watch TV. Before, I took it for granted that I would have that room, watch TV there. … I have a closer connection to my home now because I thought I lost it. … It's almost you care for it. You have to clean it every day now.

Interestingly, several interviewees explored their ethnic identity after Katrina through engaging in culturally unique leisure activities. For example, during her year-long displacement in Japan, Haruka enjoyed cherry blossom viewing with Japanese friends, which has symbolic meanings in Japanese culture. Haruka, in effect, became aware that she was "still Japanese." Moreover, such social leisure was a good opportunity for her to discuss Katrina-related stressors in her native tongue and thus to obtain empathetic social support. She explained that this was because her Japanese friends understood what she meant by "*a* and *un* breathing" (i.e., chemistry or attunement), without her elaborating on it. Fumiko, another Japanese national who had spent half of her life in the U.S., enjoyed reading Japanese novels during her displacement and after returning to New Orleans. Doing so, she said, helped her rediscover her Japanese identity:

> I started to read Japanese novels. I felt like I came back to who I was before because I didn't do my job in Japanese. It's all in English, right? That's why [reading the novels] reminded me of my roots. … I felt, 'Oh, I can still read Japanese.'

Surprisingly, Ume, a fourth-generation Japanese American, also reported strengthening her ethnic identity after Katrina. Ume expressed this through a Japanese traditional leisure activity, writing a *haiku*: "This is a kind of funny 'cause I saw something about Japanese American and Japanese [after Katrina], *haiku*! … Just English *haiku* has been very healing for me."

Therefore, leisure time and activities served as a context for positive inner changes including a greater sense of appreciation among the interviewees. Interestingly, several interviewees explored and strengthened their Japanese identities through culturally meaningful leisure activities after Katrina.

Japanese Ethnicity, Stress, and Coping after Katrina

In addition to strengthening ethnic identity through culturally unique leisure activities, a few subthemes emerged specifically related to Japanese ethnicity: Japanese ethnicity and Katrina-related stress and culturally unique perspectives/attitudes and coping.

Japanese ethnicity and Katrina-related stress. Although my initial expectation was that the survivors' racial/ethnic background negatively affected their stress levels related to Katrina, their narratives did not support this speculation except for a few aforementioned instances in-

cluding a language barrier. Rather, the majority of the participants clearly denied the association between their race/ethnicity and Katrina-related stress. For example, Harley stated, "There wasn't anything specifically caused by Katrina that affected me more because I'm Japanese American." Similarly, Fumiko said, "I didn't feel annoyed or being discriminated because I am Asian." Moreover, some interviewees including Ayana stated that stress from Katrina "wasn't a personal issue, but rather a societal issue" when they illustrated the difference between daily stress and Katrina-related stress. This implied a possibility that Katrina experiences were very devastating and negatively impacted various racial/ethnic groups to some extent, so the participants did not perceive differences in stress levels across racial/ethnic groups.

Culturally unique perspectives/attitudes and coping. The narratives indicated that some culturally unique perspectives and attitudes facilitated certain types of coping among the participants. For instance, for Tosh, it was his quiet and humble personality that helped him "not dwell on" negative disaster experiences: "I wasn't going to display a lot of negative emotions. That's Japanese personality. You are not gonna go through your neighborhoods, shout and scream. That's a better way to handle stress. Japanese Americans are very quiet and humble." Humbleness was echoed by Ayana in explaining her view on the relationship between human and nature:

> We have to be humble in face of nature. So, once [a natural disaster] occurs, we realize how happy it is to enjoy good weather and live without hurricanes. … We have to live in harmony with nature. This might be Japanese way of thinking.

As additional Japanese unique perspectives and attitudes, Harley mentioned modesty and respect for others that helped her establish quality interpersonal relationships and access to rich social support when she was displaced in Houston:

> I was not perceived as a threat to the community. I think that's about my personality. That is, I think, very Japanese characteristic. … I have a lot of respect and humanity for others. … I'm not like 'Oh, I'm so great,' which is very non-Japanese. I think it just helps when you are in a new situation, meeting different people, to have that because you are able to build close relationships that end up in support, and a way to cope.

Despite some variety in the types of perspectives and attitudes, these narratives appeared consistent in that the interviewees considered the perspectives and attitudes as related to their Japanese background and they facilitated certain types of coping (e.g., regulating negative emotions, accepting natural threats, and mobilizing social support).

Discussion and Conclusion

The purpose of this study was to explore the relationships among Katrina-related stressors, coping and adjustment, and leisure among the Japanese and Japanese American Katrina survivors in New Orleans. This study revealed that whereas Katrina experienced negatively influenced their psychological well-being, leisure appeared to contribute to their coping and adjustment processes after the disaster.

The interview analysis identified the continuous uncertainty as the underlying stressor caused by Katrina. The survivors perceived a particularly strong sense of uncertainty during and immediately after Katrina because of the considerable level of Katrina's devastation as well as a lack of information, experience, and preparation. As they learned more about the situations, they felt uncertain about the future and specific issues including unemployment. The Katrina-related uncertainty still lingered among the interviewees at the time of the interviews. Among previous studies on Katrina, Badakhsh, Harville, and Banerjee (2010) found that every female survivor

participant who was pregnant at the time of the hurricane became frustrated with "not knowing the answers to questions about her life" (p. 492). The prolonged uncertainty could undermine the quality of survivors' leisure experience. For instance, those who were unsure of future relocations could not plan structured leisure activities. The uncertain situations might make survivors reduce spending on leisure and save their money for contingency. Moreover, as the term "hurrication" indicated, the uncertainty could prevent survivors from being absorbed into leisure experiences and fully enjoying them.

In addition to the uncertainty, various stressful events were caused by Katrina, such as multiple relocations, destruction of New Orleans, damage to property, long evacuation drives, severe traffic jams, and interruption to children's education. These findings appear congruent with previous Katrina studies. Li et al. (2010) reported that more than 70% of African American Katrina survivors relocated multiple times. As a Katrina survivor herself, Dugan (2007) pointed out that disaster-caused displacement from a place where one's identity has been developed could cause identity crisis among survivors. Kishore et al. (2008) found that 24.6% of local student respondents experienced graduation delays and 67.8% were forced to change their course load after Katrina. One can suspect that culturally-unique familism (Knight et al., 2002; Sayegh & Knight, 2010) may have caused the Japanese survivors to perceive a strong sense of responsibility for their children, which subsequently led to a higher level of stress. Kishore and colleagues also revealed that about 60% of their respondents experienced severe damage to their homes because of flooding and winds. Henderson et al. (2010) found that traffic jams and long-distance driving during evacuation were major stressors for older Katrina evacuees. One of this study's contributions is the finding of the relationship between the continuous uncertainty and stressful events such that negative impacts of the events were exacerbated by the uncertainty.

Another important finding was that leisure appeared to contribute to the survivors' psychological well-being by providing (a) a positive distraction, (b) an opportunity to stay optimistic and hopeful, (c) a source of new normalcy at societal and individual levels, and (d) a context for positive inner changes.

First, various leisure-like activities including partying, socializing, and doing housework allowed survivors to distract their minds from the Katrina-related stressors. This finding appears consistent with one of Kleiber et al.'s (2002) propositions that leisure can contribute to self-protection by providing distraction amid negative life events. It also appears congruent with one of the four distinct leisure meanings, escaping pressure, proposed by Schulz and Watkins (2007). Empirical evidence exists for the distractive role of leisure in coping and adjustment in the contexts of people with disabilities and illness (Hutchinson et al., 2003) and social minority groups (Iwasaki & Bartlett, 2006; Iwasaki et al., 2005). In the disaster literature, Henderson et al. (2010) supported the distractive effects of leisure-like activities in the post-Katrina context. One unique contribution of this study is the finding that enjoyable experiences in leisure contexts were particularly important in providing a *positive* distraction in the uncertain and stressful post-disaster contexts. Iwasaki's (2007, 2008) comprehensive literature review identified providing positive emotions as one major pathway through which leisure contributes to well-being. Hutchinson and Kleiber (2005) maintained that less taxing but relatively enjoyable casual leisure can provide a mental distraction. Although the disaster literature has shown mixed results regarding the effect of distractive coping behaviors in post-disaster contexts (Glass et al., 2009; Henderson et al., 2010), the effect of such coping may depend on whether it is enjoyable in its nature and accompanies positive emotions. Furthermore, some participants mentioned paid work as another form of distraction, as reported in previous studies (e.g., Badakhsh et al., 2010). However, this study

suggests that leisure can serve as an important source of distraction in post-disaster contexts where survivors lose their jobs and other tasks (e.g., housework, school work).

Second, enjoyable and personally meaningful leisure activities, such as watching television, spending time with family, and seeking spirituality, provided opportunities for the survivors to stay optimistic and hopeful under the uncertain and stressful post-Katrina circumstances. Kleiber et al. (2002) suggested that "positively-toned experiences create both an emotional uplift and an opening up for cognitive reappraisal" (p. 227). Iwasaki and colleagues (Iwasaki & Bartlett, 2006; Iwasaki et al., 2005; Iwasaki et al., 2006) found that laughter and humor played a culturally important role in coping and healing processes among Aboriginal interviewees. Likewise, the survivors in this study found positively toned leisure-like experiences provide uplifting feelings that sometimes accompanied laughter. The leisure literature has also suggested that leisure as something to look forward to can induce optimistic and hopeful attitudes among people, which in turn helps them sustain coping efforts (Hutchinson & Kleiber, 2005; Hutchinson et al., 2003; Hutchinson et al., 2008). It appears that the survivors found enjoyable and meaningful leisure experiences provide not only a distraction but also positive long-term perspectives on their lives, which kept them motivated to live through the stressful and uncertain post-Katrina situations. In addition, some participants found religious or spiritual activities, such as Bible studies, going to church, and meditation through *haiku*, helpful in reappraising their disaster experiences positively and making sense of them. This process appears congruent with the concept of meaning-based coping that holds people attempt to minimize gaps between global and situational meanings through reappraisal of meanings (Park & Folkman, 1997). In the leisure literature, Unruh and Hutchinson (2011) observed spiritual reappraisal through gardening among people living with cancer. Iwasaki and colleagues also indicated that spiritual meanings of leisure play an important role in coping and adjustment (Iwasaki, 2008; Iwasaki & Bartlett; Iwasaki et al., 2005; Iwasaki et al., 2006). Although the disaster literature has shown mixed findings about the effects of seeking spirituality on the survivors' well-being (Tausch et al., 2011; Wadsworth et al., 2009), the effectiveness of religious coping may depend on whether positive reappraisal concurs.

Third, the survivors found various leisure activities and events provide, at the both individual and societal levels, a sense of normalcy that Katrina once severely disrupted. Although the term new normalcy indicated that it was difficult, if not impossible, to achieve exactly what used to be normal before the disaster, the leisure-generated friendships, continued leisure participation, and reopening of favorite leisure sites brought certain levels of normalcy at the individual level. Kleiber et al. (2002) proposed that leisure allows people to perceive a sense of continuity in life, providing "a way for people to get back to 'normal'" (p. 228). Previous studies indicated that continued participation in the same or similar leisure activities brought a sense of "old self" among people who experienced negative life events (Hutchinson & Kleiber, 2005; Hutchinson et al., 2003). Similarly, Lee et al. (1996) observed that people with SCI regained, or hoped to regain, a sense of continuity through participating in "different but same" (p. 219) leisure activities. In line with the continuity theory (Atchley, 1989), Lee et al. argued for the importance of studying a sense of continuity from an experience perspective (e.g., fun, relaxation) "beyond the sameness of the contents, styles, and situations of activities" (p. 217). It appears that what brought a sense of normalcy for the survivors in this study was also not the exact sameness of friendships, activities, or leisure venues, but positive memories and feelings associated with them. This study uniquely contributed to the extant literature by finding the resumption of local leisure events to be a sense of normalcy at the societal level. This may have been because the study focused on a societal negative life event, namely disaster, unlike the aforementioned studies on relatively in-

dividual events, such as divorce, injury, and illness. It is also noteworthy that New Orleans is the city with distinctive local cultures (e.g., food, architecture, music, festivals, sports) and the participants expressed their strong sense of attachment to the city. Future research should explore relationships among negative societal events, a sense of attachment, and coping and adjustment in leisure contexts.

Finally, leisure provided the survivors with a context where they experienced positive inner changes, such as a greater sense of appreciation of life and strengthened ethnic identity. Given the difficulty in achieving exactly what was normal prior to Katrina, such PTG-like changes appeared to play a significant role in adjusting to their disaster experiences. Tedeschi and Calhoun (2004) defined PTG as a "positive psychological change experienced as a result of the struggle with highly challenging life circumstances" (p. 1). Consistent with the present study, Tedeschi and Calhoun (1996) identified a greater appreciation of life and increase in closer relationships as domains of PTG. In the leisure field, Chun and Lee (2010) showed the potential of leisure to "facilitate PTG" (p. 410) in various ways among individuals with SCI. The narratives in this study indicated that leisure *facilitated* positive transformation (e.g., more unstructured leisure time led to a greater sense of appreciation for close relationships) as well as helped them *express* such changes (e.g., cleaning home every day after recognizing its importance). Further analysis is needed to explore roles of leisure in facilitating and/or manifesting PTG in relation to factors, such as types of life events, timing, and demographic variables. Furthermore, the finding of increased awareness of one's ethnic identity was particularly interesting. The leisure literature has suggested that leisure can positively influence one's identity (Iwasaki, 2007, 2008; Porter et al., 2010). A series of studies by Iwasaki and colleagues (Iwasaki & Bartlett, 2006; Iwasaki et al., 2005) revealed the importance of culturally and ethnically meaningful leisure activities for Aboriginal people (e.g., dancing, sewing, reading) in coping with culturally bound stressors like racism. Although the survivors negated possible influences of racial/ethnic factors on perceived stress related to Katrina, the significance of ethnic identity development should be interpreted in the post-Katrina context where they felt uprooted because of the destruction of New Orleans. Hence, it could be an effective coping strategy to use culturally unique leisure experiences to strengthen one's ethnic identity when his or her place identity was threatened. The identity crisis and reconstruction among disaster survivors with multiple racial/ethnic backgrounds should be further explored.

It is noteworthy that significance of the leisure experiences that emerged in the survivors' accounts was deeply related to the post-Katrina contexts: a positive distraction while losing other sources of distraction, hope and optimism under the uncertain circumstances, new normalcy after the life-changing event, and exploration of ethnic identity when place identity was threatened. This appears consistent with Porter et al.'s (2010) definition of leisure meaning. In addition, it appears that the survivors found these leisure experiences meaningful at multiple levels including personal (e.g., TV watching at home), local (e.g., Mardi Gras), and ethnic (e.g., cherry blossom watching). As Iwasaki (2008) maintained, I argue that the positive impacts of these meaningful leisure could not be fully reduced to the concept of benefits. It should be also noted that there may have existed a different degree of meaningfulness of leisure experiences among the four distinct leisure meanings identified in this study. For example, for leisure as a positive distraction, the exact contents of leisure experiences may not have been that important as long as they provided the effect. On the contrary, for leisure as a source of new normalcy and a context for positive inner changes, the experiences themselves were deeply related to the survivors' personal life (e.g., reopening of favorite bars and restaurants, *haiku* writing) and appeared not

replaceable with any other leisure experiences. It is worth further researching the degrees of instrumentality and meaningfulness *within* leisure meanings and how more meaningful leisure can contribute to one's well-being differently from, or similarly to, relatively instrumental one.

This study also identified a few themes related to Japanese ethnicity. First, except for a few issues (e.g., language-related difficulty), the participants did not relate the Katrina-related stress to their racial/ethnic background. Rather, the majority of them clearly disagreed when asked if they perceived higher levels of stress as a function of their race/ethnicity. This finding appears inconsistent with the existing literature that indicates racial/ethnic minority groups are, in general, affected by disasters more negatively than majority groups (Norris et al., 2002). This might be because Katrina was so devastating that it negatively impacted both majority and minority racial/ethnic groups to some extent. This speculation is supported by the interviewees' comments that the Katrina experience was a societal issue that affected whole communities. Another possible explanation is that the participants, especially Japanese nationals, were highly acculturated into mainstream New Orleans' society. This possibility seems supported by the fact that the five Japanese interviewees had spent, on average, 24 years in New Orleans (see Table 1). Additionally, three of them were tenured university professors, which can be deemed as a socially well-respected occupation. Future researchers who examine the relationship between race/ethnicity and natural disasters' impacts should consider an acculturation level as a potential moderating factor.

Culturally unique perspectives and attitudes, such as quietness, humbleness, and modesty, facilitated certain coping strategies including regulating negative emotions, accepting natural threats, and mobilizing social support among the survivors. Previous studies found that Japanese people were more likely to use internally targeted coping (Tweed et al., 2004) and less active coping (Yoshihama, 2002) than their North American counterparts, but the researchers speculatively connected such propensities with social norms (Yoshihama) and social structures and religions (Tweed et al.). Given that the participants in this study belonged to American society and had various religious beliefs (e.g., Christianity), this study suggests that culturally unique perspectives and attitudes are the underlying mechanism of the relationship between Japanese ethnicity and coping tendencies. Although the literature suggests the importance of a few culturally unique perspectives and values, such as fatalism (Kawanishi, 1995; Nagata & Tsuru, 2007) and familism (Knight et al., 2002; Tanaka et al., 2006), a variety of perspectives and attitudes identified in this study indicate that future research should further investigate this topic among Japanese as well as other cultural groups (e.g., Africans, South Americans). Further, whereas the disaster literature has shown the limited effect of coping resources, such as social support (Lemieux et al., 2010; Spence et al., 2007) and a sense of control (Sneath et al., 2009), in post-disaster contexts, future researchers may want to investigate the effectiveness of coping resources in relation to survivors' cultural backgrounds and their perspectives and attitudes that may influence development and mobilization of coping resources.

This study has many practical implications as well. First, practitioners in disaster fields (e.g., social workers, counselors, volunteers) should focus should not only on relatively visible stressful events (e.g., property damage, economic loss), but also on the underlying stressor of uncertainty. There may be a reciprocal relationship such that continuous uncertain post-disaster situations make survivors negatively appraise other stressful events, whereas such events further lead to increased uncertainty. However, compared with some stressful events, uncertainty may be more manageable at an early stage of postdisaster situations by, for example, providing accurate information as soon as possible while correcting inaccurate rumors. Given the previous reports

on the small numbers of survivors who sought professional mental support (e.g., DeSalvo et al., 2007), the findings in this study indicate that leisure can be a potential alternative way to help survivors' coping and adjustment processes. It would be beneficial to incorporate the restoration of leisure sites, such as parks and community centers, into a long-term post-disaster reconstruction roadmap and provide leisure services tailored for survivors from a TR perspective (Hutchinson, Bland, & Kleiber, 2008; Hutchinson & Kleiber, 2000). Similar to Iwasaki and colleagues (Iwasaki, 2007, 2008; Iwasaki & Bartlett, 2006; Iwasaki et al., 2005; Iwasaki et al., 2006), this study supports the importance of culturally sensitive leisure interventions in post-disaster coping and adjustment. Recreation practitioners who know local cultures should collaborate with social workers and counselors. Nonetheless, practitioners in the fields should also note Hutchinson, Bland, and Kleiber's observation that advocating for leisure after negative life events like disaster can trivialize people's experiences.

Despite these contributions to the literature, this study also has limitations. Memory bias might have affected the interviewees' abilities to recall events, experiences, and feelings that occurred more than six years before. It is also possible that the interviewees' recollections were positively or negatively biased. Second, the participants were predominantly women. Although the existing literature appears inconsistent regarding whether gender can significantly affect stress generation and coping after disasters (Norris et al., 2002), it is possible that gender-unique experiences influenced the interviewees' narratives. Third, because participants were recruited from the community club, they might be positively biased samples in that they might have had more leisure opportunities than nonclub members. Fourth, given the potential applicability, I incorporated Kleiber et al.'s (2002) propositions into my interview questions. Whereas this led to the noteworthy findings, other meanings of leisure, such as connection/belonging and control/autonomy (Iwasaki, 2007, 2008; Porter et al., 2010; Schulz & Watkins, 2007), should be further explored in postdisaster contexts. Fifth, this study focused on positive aspects of leisure; future research should investigate possible negative influences of leisure on the survivors' well-being. Sixth, my cultural and academic background as a native Japanese who received graduate education in North America may have influenced processes including study design, recruitment, interview, data analysis, and writing process. Finally, some of the interviews were conducted in public spaces including cafés and libraries, where the interviewees might not have been comfortable disclosing their personal disaster experiences. However, the locations were chosen by the interviewees to accommodate their preferences.

In conclusion, this study found that leisure had the important meanings in the coping and adjustment processes among Japanese and Japanese American Katrina survivors in New Orleans. Future studies should investigate survivors of other types of natural disasters (e.g., earthquake, tsunami) and human-made disasters (i.e., technological disasters, mass violence). Ideally, this should be done by employing various research designs (e.g., large-scale survey, longitudinal design), as different types of disasters can affect the survivors' psychological well-being differently (Norris et al., 2002). Norris et al. also pointed out that disaster research is "a series of case studies" (p. 208), which necessitates meta-analysis and systematic review to integrate the literature. Finally, because disasters do not occur on a daily basis within a single country, international cooperation is necessary to further advance the literature on this topic.

References

Atchley, R. C. (1989). Continuity theory of normal aging. *The Gerontologist*, *29*(2), 183–190.

Badakhsh, R., Harville, E., & Banerjee, B. (2010). The childbearing experience during a natural disaster. *Journal of Obstetric, Gynecologic and Neonatal Nursing, 39*, 489–497.

Chun, S., & Lee, Y. (2010). The role of leisure in the experience of posttraumatic growth for people with spinal cord injury. *Journal of Leisure Research, 42*(3), 393–415.

DeSalvo, K. B., Hyre, A. D., Ompad, D. C., Menke, A., Tynes, L. L., & Muntner, P. (2007). Symptoms of posttraumatic stress disorder in a New Orleans workforce following Hurricane Katrina. *Journal of Urban Health, 84*(2), 142–152.

Dugan, B. (2007). Loss of identity in disaster: How do you say goodbye to home? *Perspectives in Psychiatric Care, 43*(1), 41–46.

Glass, K., Flory, K., Hankin, L. B., Kloos, B., & Turecki, G. (2009). Are coping strategies, social support, and hope associated with psychological distress among Hurricane Katrina survivors? *Journal of Social and Clinical Psychology, 28*(6), 779–795.

Henderson, L. T., Roberto, A. K., & Kamo, Y. (2010). Older adults' responses to Hurricane Katrina. *Journal of Applied Gerontology, 29*, 48–69.

Howe, C. Z. (1991). Considerations when using phenomenology in leisure inquiry: Beliefs, methods, and analysis in naturalistic research. *Leisure Studies, 10*, 49–62.

Hutchinson, S. L., Bland, A. D., & Kleiber, D. A. (2008). Leisure and stress-coping: Implications for therapeutic recreation practice. *Therapeutic Recreation Journal, 42*(1), 9–23.

Hutchinson, S. L., & Kleiber, D. A. (2000). Heroic masculinity following spinal cord injury: Implications for therapeutic recreation practice and research. *Therapeutic Recreation Journal, 34*, 42–54.

Hutchinson, S. L., & Kleiber, D. A. (2005). Gifts of the ordinary: Casual leisure's contributions to health and well-being. *World Leisure, 3*, 2–16.

Hutchinson, S. L., Loy, D. P., Kleiber, D. A., & Dattilo, J. (2003). Leisure as a coping resource: Variations in coping with traumatic injury and illness. *Leisure Sciences, 25*, 143–161.

Hutchinson, S. L., Yarnal, C. M., Staffordson, J., & Kerstetter, D. L. (2008). Beyond fun and friendship: The Red Hat Society as a coping resource for older women. *Ageing & Society, 28*, 979–999.

Iwasaki, Y. (2007). Leisure and quality of life in an international and multicultural context: What are major pathways linking leisure to quality of life? *Social Indicators Research, 82*, 233–264.

Iwasaki, Y. (2008). Pathways to meaning-making through leisure-like pursuits in global contexts. *Journal of Leisure Research, 40*(2), 231–249.

Iwasaki, Y., & Bartlett, J. G. (2006). Culturally meaningful leisure as a way of coping with stress among Aboriginal individuals with diabetes. *Journal of Leisure Research, 38*, 321–338.

Iwasaki, Y., Bartlett, J., & O'Neil, J. (2005). Coping with stress among Aboriginal women and men with diabetes in Winnipeg, Canada. *Social Science & Medicine, 60*, 977–988.

Iwasaki, Y., MacKay, K. J., Mactavish, J. B., Ristock, J., & Bartlett, J. (2006). Voices from the margins: Stress, active living, and leisure as a contributor to coping with stress. *Leisure Sciences, 28*, 163–180.

Jackson, G. (2011). *The value of leisure in coping with natural disaster: A case study in the aftermath of Hurricane Katrina.* Retrieved from ProQuest Digital Dissertations. (UMI 3464546)

Kawanishi, Y. (1995). The effects of culture on beliefs about stress and coping: Causal attribution of Anglo-American and Japanese Persons. *Journal of Contemporary Psychotherapy, 25*(1), 49–60.

Kent, J. D. (2005). *Louisiana hurricane impact atlas.* Baton Rouge, LA: Louisiana Geographic Information Center.

Kishore, V., Theall, K. P., Robinson, W., Pichon, J., Scribner, R., Roberson, E., & Johnson, S. (2008). Resource loss, coping, alcohol use, and posttraumatic stress symptoms among survivors of Hurricane Katrina: A cross-sectional study. *American Journal of Disaster Medicine, 3*(6), 345–357.

Kleiber, A. D., Hutchinson, L. S., & Williams, R. (2002). Leisure as a resource in transcending negative life events: Self-protection, self-restoration, and personal transformation. *Leisure Sciences, 24*, 219–235.

Klitzing, S. W. (2003). Coping with chronic stress: Leisure and women who are homeless. *Leisure Sciences, 25*, 163–181.

Klitzing, S. W. (2004). Women living in a homeless shelter: Stress, coping and leisure. *Journal of Leisure Research, 36*(4), 483–512.

Knight, B. G., Robinson, G. S., Longmire, C. V. F., Chun, M., Nakao, K., & Kim, J. H. (2002). Cross cultural issues in caregiving for persons with dementia: Do familism values reduce burden and distress? *Ageing International, 27*(3), 70–94.

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping.* New York, NY: Springer.

Lebra, R. S. (1983). Shame and guilt: A psychocultural view of the Japanese self. *Ethos, 11*(3), 192–209.

Lechat, M. F. (1979). Disasters and public health. *Bulletin of the World Health Organization, 57*(1), 11–17.

Lee, Y., Dattilo, J., Kleiber, D. A., & Caldwell, L. (1996). Exploring the meaning of continuity of recreation activity in the early stages of adjustment for people with spinal cord injury. *Leisure Sciences, 18*, 209–225.

Lemieux, M. C., Simon, E. C., Plummer, A. C., Ai, L. A., & Richardson, R. (2010). Mental health, substance use, and adaptive coping among social work students in the aftermath of Hurricane Katrina and Rita. *Journal of Social Work Education, 46*(3), 391–410.

Li, W., Airriess, C. A., Chen, A. C., Leong, K. J., & Keith, V. (2010). Katrina and migration: Evacuation and return by African Americans and Vietnamese Americans in an eastern New Orleans suburb. *The Professional Geographer, 62*(1), 103–118.

Maxwell, J. A. (2009). Designing a qualitative study. In L. Bickman & D. Rog (Eds.), *The SAGE handbook of applied social research methods* (pp. 214–253). Los Angeles, CA: Sage.

Nagata, D. K., & Tsuru, G. K. (2007). Psychosocial correlates of self-reported coping among Japanese Americans interned during World War II. *American Journal of Orthopsychiatry, 77*(2), 221–230.

Norris, H. F., Friedman, J. M., Watson, J. P., Byrne, M., C., Diaz, E., & Kaniasty, K. (2002). 60,000 disaster victims speak: Part I. An empirical review of the empirical literature, 1981-2001. *Psychiatry, 65*(3), 207–239.

Office of U.S. Foreign Disaster Assistance and Centre for Research on the Epidemiology of Disasters. (n.d.). *International disaster database.* Retrieved from http://www.emdat.be/database

Park, C. L., & Folkman, S. (1997). Meaning in the context of stress and coping. *Review of General Psychology, 1*(2), 115–144.

Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc.

Porter, H., Iwasaki, Y., & Shank, J. (2010). Conceptualizing meaning-making through leisure experiences. *Society and Leisure, 33*(2), 167–194.

Ragin, C. C., & Amoroso, L. M. (2011). *Constructing social research: The unity and diversity of method.* Thousand Oaks, CA: Pine Forge Press.

Sakamoto, S., Tanaka, E., Neichi, K., Sato, K., & Ono, Y. (2006). Sociopsychological factors relating to suicide prevention in a Japanese rural community: Coping behaviors and attitudes toward depression and suicidal ideation. *Psychiatry and Clinical Neurosciences, 60*, 676–686.

Sayegh, P., & Knight, B. G. (2010). The effects of familism and cultural justification on the mental and physical health of family caregivers. *Journal of Gerontology: Psychological Sciences, 66B*(1), 3–14.

Schulz, J., & Watkins, M. (2007). The development of the Leisure Meanings Inventory. *Journal of Leisure Research, 39*(3), 477–497.

Schwandt, T. A. (2007). *The SAGE dictionary of qualitative inquiry.* Thousand Oaks, CA: Sage.

Singer, A., & Donato, K. M. (2005, September). In Katrina's wake, who will return? *Brookings*. Retrieved from http://www.brookings.edu/research/opinions/2005/09/27demographics-singer

Sneath, J. Z., Lacey, R., & Kennett-Hensel, P. A. (2009). Coping with a natural disaster: Losses, emotions, and impulsive and compulsive buying. *Marketing Letters, 20*, 45–60.

Spence, R. P., Lachlan, A. K., & Burke, M. J. (2007). Adjusting to uncertainty: Coping strategies among the displaced after hurricane Katrina. *Sociological Spectrum, 27*, 653–678.

Strauss, A. L., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Thousand Oaks, CA: Sage.

Tausch, C., Marks, L. D., Brown, J. S., Cherry, K. E., Frias, T., McWilliams, Z., … Sasser, D. D. (2011). Religion and coping with trauma: Qualitative examples from Hurricanes Katrina and Rita. *Journal of Religion, Spirituality and Aging, 23*, 236–253.

Tedeschi, R. G., & Calhoun, L. G. (1996). The posttraumatic growth inventory: Measuring the positive legacy of trauma. *Journal of Traumatic Stress, 9*(3), 455–471.

Tedeschi, R. G., & Calhoun, L. G. (2004). Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychological Inquiry, 15*(1), 1–18.

Tweed, R. G., White, K., & Lehman, D. R. (2004). Culture, stress, and coping: Internally- and externally-targeted control strategies of European Canadians, East Asian Canadians, and Japanese. *Journal of Cross-Cultural Psychology, 35*(6), 652–668.

Unruh, A., & Hutchinson, S. (2011). Embedded spirituality: Gardening in daily life and stressful life experiences. *Scandinavian Journal of Caring Sciences, 25*, 567–574.

U.S. Census Bureau. (2000). Profile of general demographic characteristics: 2000. Retrieved from http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk

U.S. Census Bureau. (2011, February). Census bureau releases first detailed data on Katrina damage to New Orleans area housing. *Newsroom.* Retrieved from http://www.census.gov/newsroom/releases/archives/housing/cb11-28.html

Wadsworth, M. E., Santiago, C. D., & Einhorn, L. (2009). Coping with displacement from Hurricane Katrina: Predictors of one-year post-traumatic stress and depression symptom trajectories. *Anxiety, Stress, and Coping, 22*(4), 413–432.

Watkins, M. (2000). Ways of learning about leisure meanings. *Leisure Sciences, 22*, 93–107.

Yoshihama, M. (2002). Battered women's coping strategies and psychological distress: Differences by immigration status. *American Journal of Community Psychology, 30*(3), 429–452.