Hurricane Sandy, Disaster Preparedness, and the Recovery Model

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OBJECTIVE. Hurricane Sandy was the second largest and costliest hurricane in U.S. history to affect multiple states and communities. This article describes the lived experiences of 24 occupational therapy students who lived through Hurricane Sandy using the Recovery Model to frame the research.

METHOD. Occupational therapy student narratives were collected and analyzed using qualitative methods and framed by the Recovery Model. Directed content and thematic analysis was performed using the 10 components of the Recovery Model.

RESULTS. The 10 components of the Recovery Model were experienced by or had an impact on the occupational therapy students as they coped and recovered in the aftermath of the natural disaster.

CONCLUSION. This study provides insight into the lived experiences and recovery perspectives of occupational therapy students who experienced Hurricane Sandy. Further research is indicated in applying the Recovery Model to people who survive disasters.


Hurricane Sandy landed on the East Coast of the United States on October 22, 2012. It was the second largest and costliest hurricane to pummel multiple states and communities in U.S. history. Many lives were lost, businesses were disrupted or destroyed, and homes and communities, especially those in the New York and New Jersey regions, were obliterated. Flooding occurred in the New York City subway system, and tunnels in the New York City and New Jersey area became impassable. Affected communities and households were left with little to no food, gasoline, or energy of any kind, some for months. Recovery and restoration of communities, homes, and lives continue. Although physical restoration has been ongoing, less attention has been paid to the mental, emotional, and psychological recovery of hundreds of thousands of people affected by this natural disaster. The full psychosocial consequences of Hurricane Sandy continue to be undetermined.

This article addresses mental health and recovery from both an occupational perspective and a disaster preparedness response and recovery perspective framed by the Recovery Model. The article fills a gap in the current literature by addressing these perspectives through an analysis of the narratives of occupational therapy students in one New York City occupational therapy program who experienced Hurricane Sandy and its aftermath.

Literature Review

The effects of any natural disaster, particularly on the mental health of individuals and communities, may not be apparent for years. Psychological impairment postdisaster may be more pronounced when one suffers bodily harm or...
the death of a loved one. The more intense a disaster, the greater the likelihood of mental health disruption (Neria & Shultz, 2012). Posttraumatic stress disorder (PTSD) and depression, in particular, may result from stressors such as the need for relocation, loss of resources and community, and devastating financial strain (Herrman, 2012; Neria, Nandi, & Galea, 2008). Although PTSD symptoms may subside after a disaster, other mental health challenges may emerge necessitating intervention (Substance Abuse and Mental Health Services Administration [SAMHSA], 2014). In one study, participants with preexisting anxiety experienced cognitive challenges severe enough to impair their judgment relative to disaster preparedness: “Even if anxiety-prone persons perceive the risk, they may not necessarily adopt protective action” (Mishra & Suar, 2012, p. 1070). Many residents who needed to take action to protect themselves from Hurricane Sandy and were warned of the impending hurricane and its potential devastation refused to leave their communities.

A study of schoolchildren who experienced Hurricane Katrina, which hit the Gulf Coast in August 2005 and was the costliest natural disaster in U.S. history, found that children who had preexisting mental health needs, including anxiety disorders, experienced heightened risk for substance abuse and suicide after the storm (Kataoka et al., 2009). In particular, changes in routines resulted in instability in their daily lives. The study concluded that community-based mental health promotion is needed immediately after natural disasters such as devastating hurricanes. The study described a mental health provider who referred to herself as a “wounded healer”; this provider found that her own coping diminished over time as she cared for people affected by Hurricane Katrina. Compassion fatigue clearly demands described a mental health provider who referred to herself as a “wounded healer”; this provider found that her own coping diminished over time as she cared for people affected by Hurricane Katrina. Compassion fatigue clearly demands intervention, prevention, and building of long-term capacity and self-reliance in those affected by disasters; intraprofessional support is emphasized. AOTA’s (2011) position paper, citing McColl (2002), stated, “Participation in occupation facilitates restoration of adaptive habits, supports a person’s sense of identity, and helps establish a spiritual connection in a disaster situation” (p. S18).

Other disaster-related occupational therapy literature has described the role of occupational therapy on a mental health disaster relief team deployed by the U.S. Public Health Service (Oakley, Caswell, & Parks, 2008) and has called for increased visibility and use of occupational therapy services in disasters (Stone, 2006). One article described disruption in occupational habits, roles, and routines among graduate occupational therapy students after Hurricane Ike (Smith, Drefus, & Hersch, 2011); Smith and Scaffa (2014) noted that 1 yr after the hurricane, the same students engaged in three fewer valued roles than before the storm. Taylor, Jacobs, and Marsh (2011) discussed the impact of Hurricane Katrina on the occupational performance and emotional responses of 143 adults in the New Orleans area. Their study found diminished satisfaction with occupational performance and disrupted mental health immediately after the hurricane, with slow recovery over the next year.

Other health professions have focused on addressing trauma and wound care and maintaining standards of practice (Edgar, Wood, & Goodwin-Walters, 2005; Waldrop, 2002), building social capital for sustainable disaster relief and management (Mathbor, 2007), and defining competencies that can be applied to all health professions (Everly, Beaton, Pfefferbaum, & Parker, 2008). All health professions, including occupational therapy, focus on helping people and communities reconstruct a sense of normalcy and reestablish health and well-being after natural disasters. The health and well-being of individuals, populations, and communities can be reestablished and redesigned through the involvement of occupational therapy on interdisciplinary teams (AOTA, 2011; Rosenfeld, 1982, 1989).

5. Reconstruction period, in which recovery on both a physical and psychological level takes place over a period of years.

People facing occupational disruption because of disasters require the attention of professionals who understand the complexity of recovery. Historically, occupational therapy has been involved with disaster recovery to a limited degree and has focused on the physical and psychosocial aspects of occupational living (McDaniel, 1960). The World Federation of Occupational Therapists (2010) statement on disaster preparedness calls for physical and psychosocial intervention, prevention, and building of long-term capacity and self-reliance in those affected by disasters; intraprofessional support is emphasized. AOTA’s (2011) position paper, citing McColl (2002), stated, “Participation in occupation facilitates restoration of adaptive habits, supports a person’s sense of identity, and helps establish a spiritual connection in a disaster situation” (p. S18).

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Recovery Model

The Recovery Model provides a 10-component structure for mental health promotion (SAMHSA, 2009, 2012; Stoffel, 2013); Table 1 lists the components. Recovery is “a process of change through which individuals improve their health and wellness, live a self-directed life, and strive to reach their full potential” (SAMHSA, 2012, p. 3). This definition of recovery and the components of the Recovery Model are directed primarily at helping people with substance abuse and chronic mental health issues. I teach these same model components as applying to all people recovering from any mental or physical health challenge. Any life in recovery is filled with occupational disruption and occupational challenges (Rosenfeld, 1982, 1989; SAMHSA, 2012); Stoffel (2008, 2013) noted that lives in recovery and occupational disruption can also be empowered lives that are filled with a sense of resilience and hope for a less challenging future.

Occupational therapy practitioners and other health professionals support the four major recovery dimensions of health, home, purpose, and community (SAMHSA, 2012) by
- Promoting health through empowering engagement and enabling participation in meaningful life tasks and roles,
- Exploring home and other environmental supports and barriers and ensuring safety and security for participation and recovery,
- Assisting clients in exploring their purpose and providing opportunities for realizing their purpose, and
- Helping clients reintegrate successfully into their community.

Practitioners can help populations in recovery through mental health promotion, including strengthening resilience to prevent potential future mental health challenges (Herrman, 2012). Preventive interventions can assist in limiting the mental and emotional challenges clients face and promote the recovery process.

This study focused on the phenomenon of students’ personal experiences of Hurricane Sandy 1 mo post-disaster and applied the Recovery Model to frame their responses. It answers the following research questions:
- What do occupational therapy students describe as their lived experiences of Hurricane Sandy?
- How do the students’ lived experiences relate to the Recovery Model?

Method

This phenomenological study involved 24 (of a possible 29) occupational therapy students who lived in central or northern New Jersey or the metropolitan New York City area. They were in the 1st semester of their 2nd year of a 3-yr combined bachelor and master of science program in occupational therapy at a New York City university and were taking a mental health theory class I taught. The students were culturally and ethnically diverse and ranged in age from early 20s to early 30s. At the time of the study, the students were in Stages 4 (recovery) and 5 (reconstruction) of the stages of disaster; they were beginning to make sense of the disaster and reorganizing their lives. Because of the storm, 1 wk of their classes was rescheduled.

One month after the hurricane, I gave the students an online assignment to write personal narratives applying the 10 components of the Recovery Model to their experiences related to Hurricane Sandy. They were able to use class notes and their readings and to obtain related information (e.g., from the SAMHSA website). They had learned

Table 1. Recovery Model: 10 Components of Recovery

<table>
<thead>
<tr>
<th>Component</th>
<th>Definition</th>
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<tr>
<td>1. Self-direction</td>
<td>One’s goals are defined through one’s own choices and realized through control over one’s own life.</td>
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<tr>
<td>2. Individualized and client-centered</td>
<td>Each person is unique, and thus recovery is unique for each individual.</td>
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<tr>
<td>3. Empowerment</td>
<td>Recovery can be made more achievable by enabling self-direction.</td>
</tr>
<tr>
<td>4. Holistic</td>
<td>One must embrace all aspects of one’s life to maximize well-being and health.</td>
</tr>
<tr>
<td>5. Nonlinear</td>
<td>The forward and backward movement of recovery must be honored.</td>
</tr>
<tr>
<td>6. Strengths-based</td>
<td>Identifying and working with one’s own capacities enable one to move forward in recovery and use them to build new life roles.</td>
</tr>
<tr>
<td>7. Peer support</td>
<td>A sense of mutuality and belonging aids the process of recovery.</td>
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<tr>
<td>9. Responsibility</td>
<td>Recovery requires acceptance of responsibility for oneself and one’s own self-direction and is a self-guided process.</td>
</tr>
<tr>
<td>10. Hope</td>
<td>The internalized sense that the future holds a better quality of life for individuals by overcoming barriers facilitates the recovery process.</td>
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</table>

Source. Substance Abuse and Mental Health Services Administration, 2009.
about the Recovery Model just before Hurricane Sandy struck; I taught the 10 components of recovery using the mental health textbook for the class for which the assignment was given. (The Recovery Model has been updated since then; the most current version as of this writing is SAMHSA, 2012.)

The students’ completed narratives were given to a graduate assistant (of another department at the same university) to deidentify to maintain confidentiality. The narratives were then entered into Nvivo software (QSR International, Doncaster, Victoria, Australia) by a public health researcher from another university skilled in qualitative analysis. I performed directed content analysis by looking for common words and phrases. The public health researcher developed by hand a codebook comparing key words and phrases. After two face-to-face meetings between the public health researcher and me, we reached consensus on the words and phrases that fit within the predetermined themes—namely, the 10 guiding components of the Recovery Model. The structure of theory-driven approaches increases the reliability of the data (Namey, Guest, Thairu, & Johnson, 2007). Although the model is not a theory, I found it useful as the guiding framework for the study. The university institutional review board approved this research.

Results

The sections that follow describe the results derived from the analysis of student narratives for the 10 guiding components of the Recovery Model. Sample narratives for some of the Recovery Model components are provided in Table 2.

Self-Direction

Most of the students felt a sense of altruism and an intrinsic need to help others. Those who were not affected materially (e.g., loss of home or other possessions) were self-directed in providing emotional, social, and psychological support to family members, friends, and even strangers. Many offered friends and extended family members shelter and food when power was lost for days and, in some cases, weeks. They viewed this assistance as being self-directed in that they were in control of their choices versus having the storm control their emotional well-being.

Many students cited being goal directed, a form of self-direction, as a personal quality that helped them cope with the aftermath of the storm. One student noted, “I was able to define my goals by doing what I believed was right. . . . I decided to help those in need.” Another said, “I felt I needed to take control back after the storm.” One student noted the negative effects of a lack of self-direction; this student wrote about “feeling lost” and not being able to summon self-direction because of the impact of the storm. This student stated, “As of today, I am still struggling to come to terms with my life and the trauma I am presently suffering from due to my physical displacement as well as the emotional impact.”

Individualized and Client-Centered

Students identified their own unique qualities and attributes in describing their role as client affected by the hurricane. Most students stated they drew on their positive coping skills to get through the impact stage and then the immediate postimpact, recovery, and reconstruction stages. Many cited the concept of resilience; one student said, “I feel that I am very resilient and adaptive. . . . I would be able to bounce back fairly quickly.” Students who were more affected discussed their own sense of resilience, adaptive capacities, and coping, noting that “keeping an open mind and staying hopeful” and “looking at the positive in every situation” helped them emotionally survive the storm.

The students all recognized that people had their own way of coping with the aftermath of the storm and that people who were less resilient and adaptive and who coped poorly required more assistance, possibly through occupational interventions. As one student remarked, “Some lives were changed forever due to the loss of everything they owned [whereas others were] not . . . affected by it at all.” Another stated, “It depends on what is important to the individual, which will foster a unique path [of recovery] that the individual will embark on.”

Empowerment

Empowerment was revealed as an enabling factor for self-direction. Many students cited a motivation to re-create order out of chaos and direction of their energies in a positive, forward fashion as enabling them to be or feel empowered despite the storm. Several students mentioned feeling a loss of control and power but felt that available social and material resources aided them in reestablishing a sense of control. Helping others was empowering to many of the students, and this effort provided them with a sense of structure, control, and power. The students described participating in activities such as being a resource for others, providing shelter, donating goods and clothes to those who had lost everything, helping with physical recovery efforts in their communities, and being emotionally available. Students became goal directed and occupationally engaged.
Table 2. Examples of Student Narratives for Some Recovery Model Components

<table>
<thead>
<tr>
<th>Component</th>
<th>Student Narrative</th>
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<tbody>
<tr>
<td>Empowerment</td>
<td>In the aftermath of Sandy, I lost control of elements in my life. I was limited in what activities I could engage in, and I lost some structure. I had to regain the structure and create a new way of accomplishing my goals.</td>
</tr>
<tr>
<td>Holistic</td>
<td>As a community, it was very comforting how people were quick to help out those who were affected by the storm. Communities and families came together to help people. It truly shows how society plays a very important role in making sure that people have access to great opportunities for survival. During Hurricane Sandy, all the chaos in the environment affected my mental health. My education was hindered as classes were canceled, and [lack of] means of transportation prevented community participation as well as health care treatment and other services.</td>
</tr>
<tr>
<td>Nonlinear</td>
<td>There have been many setbacks to recovering from the storm and getting back to daily routines. Personally, I was happy to get back to school . . . but learned that I may have difficulty completing my fieldwork placement as it was indefinitely closed due to flooding during the storm. Rather than following my normal routine of going to my assigned supervisor every Thursday, I now had to make new arrangements for the remaining 4 wk of fieldwork. Despite being upset, I remained hopeful that everything would work out and continuously reminded myself that this loss was minor in comparison with what others lost.</td>
</tr>
<tr>
<td>Strengths-based</td>
<td>To overcome the negative impact of the storm, we had to realize that our strength is in being together and supporting each other. Being together as a family helped us support each other in all possible aspects.</td>
</tr>
<tr>
<td>Peer support</td>
<td>Especially relevant with my new occupational therapy family, we give each other support in any way we can, even with non-school-related things. Everybody lent a hand toward those in the class affected by the hurricane, in one way or another.</td>
</tr>
<tr>
<td>Hope</td>
<td>Hope was essential in my emotional recovery from the storm. By demonstrating hope, I wanted to inspire others to have positive feelings about everything eventually returning back to normal. In this case, normal meant that the homes that we saw destroyed by Sandy would be rebuilt and that we would be able to get back to our daily roles of students, workers, health professionals, friends, and family members. Although I am still in the grieving process because of what I lost, I am always hopeful for a better day. I know my future will be brighter one day, because I clearly understand that as we breathe, we hope. That is what keeps me going.</td>
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</table>

**Holistic**

Many students related the term *holistic* with establishing and feeling a deeper and stronger sense of community. Most students felt a need to help others in their communities and used their own physical and emotional resources to occupy their time engaged in meaningful occupations and life tasks. Their sense of community aligned with their awareness of how environmental influences (e.g., the storm’s impact on their community) can support or create barriers to occupational performance and behaviors for individuals and groups.

Several students exhibited a holistic perspective when they noted that the increasing shortage of supplies over time and the unavailability of gas and electricity altered not only their own but also the community’s health and well-being. One student revealed that going shopping for neighbors was important so they could “eat a proper meal,” and another examined the personal toll the hurricane took on her whole being. Students became acutely and personally aware of how the health of their community was influenced by occupational deprivation, and several decided that the health and well-being of their community were as important as their own.

**Nonlinear**

The concept of *nonlinear* refers to people’s movement among the components of the Recovery Model and the fact that recovery is not a linear process but a journey to well-being that may involve detours. Most of the students noted that they had already experienced setbacks in their own recovery from the storm, most notably in their attempts to normalize routines and habits related to school and family life. The students also reflected that remaining hopeful, staying optimistic, and understanding that there will be setbacks were part of daily life. One student stated, “It is unfortunate that this storm set back everyone financially by losing homes and materialistic things. On the other hand, the storm improved our community trust and made everyone work together to help one another.” Comments such as “Learning from prior experiences will help move forward in the recovery process” spoke to their need to create new experiences from former strategies they used to cope with setbacks.

**Strengths-Based**

The strengths-based component of the Recovery Model was reflected in students’ self-identification of their own strengths, especially as they relied on those strengths in coping with Hurricane Sandy. The students identified personal coping styles, resilience, provision of support to others, physical health, motivation, and family, among other factors, as personal strengths that had helped or could help in their own recovery trajectory. One student expressed how she was able to identify her own inner
strength: “I learned to self-motivate, and this is the best reinforcer that I use to keep going when things get tough.” Several students noted that family support was a personal strength.

The storm increased many students’ awareness of their adaptive abilities. Several discussed having experienced the need to take on unfamiliar roles (e.g., caregiving for elderly neighbors, being responsive to young children while providing shelter for them). One student viewed this adaptive capability as her major strength, stating, “I needed to engage in new life roles and put aside unnecessary roles” when her sister and nephew moved in for a short time after the hurricane.

**Peer Support**

Many students responded that their peers had provided much-needed emotional support through technology and other means. Several stated that communicating through technology, such as Facebook, was useful to reconnect with the world and regain a sense of normalcy. Several students cited “regaining a sense of belonging” and “feeling loved and cared for” as benefits of peer support. More than half of the students noted they were the ones providing peer support, which also gave them a sense of connectedness and belonging. Phone calls, text messages, and frequent visits were among the ways the students provided support to family, friends, and classmates. They recognized that engaging in the occupation of social participation was important.

**Respect**

The concept of respect as outlined in the Recovery Model is about self-acceptance and feeling valued. The students had difficulty writing about, or perhaps understanding, this definition of respect. All but 2 of the participants wrote about respect for others, acknowledging their emotional struggles and material losses or the support systems in place to aid physical recovery from the storm. Two students responded in terms of respect for oneself; one stated feeling a sense of “satisfaction with my own life” and possessing “abilities and strengths to overcome tough situations,” and the other discussed having “standards for who you are” and “being open-minded” as elements of respect for themselves.

**Responsibility**

Many students described a process of making meaning out of the hurricane and its impact. This mental activity was important for them to gain control of their life situation and accept responsibility for doing what they could. One student commented she had a deeper appreciation for life and what was important. Some clearly saw being responsible for others as their primary role during and immediately after the storm. Several students stated that taking on responsibility for others helped them cope better and “go on with our normal lifestyle” and diminished their feelings of anxiety and helplessness. Several students noted that being responsible to and for themselves enabled them to help others identify activities and roles in which they could develop responsibility.

Maintaining roles, routines, and habits promoted responsibility among the students. Several stated that it was difficult to be out of school for a long period because it disrupted their routine. Similarly, several stated they did not look forward to the increased workload they knew they would have; faculty created several online assignments to help students stay focused and connected.

**Hope**

The students connected having hope and being hopeful to reestablishing routines, moving on, finding self-direction, envisioning a better future, and managing negativity. One student, who had lost her home, car, and all her possessions, identified hope as a primary source of strength for her own recovery. Another student used hope to cope with emotional distress: “I remained hopeful that as time goes on, everyone would slowly go back to their normal routines and that the hurricane would be a memory in our past.” Many of the students described their hope that a better future was ahead for others, that others would rebuild their lives and homes, and that disaster preparedness would be promoted to maintain personal and community safety in the future.

**Discussion**

The perspectives of these occupational therapy students on disaster recovery related to Hurricane Sandy revealed how they were personally affected through narratives elicited just a month after the disaster. Their narratives were analyzed using the Recovery Model to frame the research that is the focus of this article.

The student narratives speak to the humanity of the students and provide insight into the emotional and psychosocial reactions of young people who survived one of the worst natural disasters to hit the United States. By framing their personal experiences using the Recovery Model, they were able to make sense, at least on a cognitive level, of the experience.

Most of the students cited being resilient, possessing coping skills, being goal oriented, helping others, and...
being occupied as the most important factors helping them with their own emotional recovery after the hurricane. Resilience, defined as the ability to “to bounce back from adversity, persevere through difficult times, and return to a state of internal equilibrium or a state of healthy being” (Edward, 2005, p. 142), was the theme of Susan Fine’s 1990 Slagle Lecture (Fine, 1991). Fine discussed many elements of recovery and coping that relate to the Recovery Model, notably the elements of nonlinear, hope, strength-based, and peer support, with an emphasis on development of positive coping with life situations to move forward in one’s recovery. Rosenfeld (1989) recognized that although occupational disruption occurred among his study participants, who had experienced a house fire, occupational adaptation and resilience were also in evidence. Similarly, the narratives of most of the students in the current study reflected their ability to adapt their personal coping strategies and develop resilience to enable their personal recovery from the impact of the storm.

The students gained new purpose and meaning in their lives from feeling and establishing a greater sense of community, being more community oriented, and having an urgent need to help others while also being helped. Although they were focused intently on preparing to become occupational therapists, the students suddenly faced occupational disruption that altered their role behaviors and the activities that supported those roles. As Rosenfeld (1982) noted,

Using activities to facilitate adaptive responses will minimize and reverse the destructive interplay of cognitive/emotional dysfunction with concrete problems of daily living and rebuild victims’ sense of effective interaction with their environment thereby improving the speed and extent of recovery (p. 235).

Many of the students noted that occupational engagement served as an anchor during and after the storm. They felt that occupational engagement promoted their mental health and strengthened their resilience. In the New York City area, many changes were needed in fieldwork placements and class schedules. Faculty, some of whom were more affected by the storm than others, found an increased need to attend to the emotional climate of the program. Several students described a general attitude of staying hopeful and adaptive while recognizing how others’ lives were affected.

The students used several components of the Recovery Model, including self-direction, empowerment, and hope, to support their alignment with new and different life circumstances. Although the students experienced disrupted routines and loss of stability, their relationships were strengthened, and they received support from multiple sources. Kataoka et al. (2009) noted similar results in their study on the impact of Hurricane Katrina on children.

The students also recognized that environmental influences can support or create barriers to occupational performance and behaviors, especially in the context of occupational roles such as friend, family member, student, and worker. The hurricane’s impact unexpectedly provided a real-world experience through which the students recognized the importance of occupation and its organizing influence in people’s lives. My assignment, while helping structure students’ reasoning, also helped them begin to recover their personal lives and cognitively make sense of the disaster. I checked in weekly with the students to determine who among them might need extra attention and who was resilient and adapting well. Their peers, the department, and the university wholly supported the students who needed more attention.

The Recovery Model is designed primarily to guide people with substance abuse and chronic mental health issues through the recovery process. The current research shows that this model can usefully be applied to individuals, in this case occupational therapy students, and to populations and communities affected by a natural disaster. Additional research is necessary to validate the experience of other communities who have undergone a disaster. The students had received instruction in the Recovery Model, and although they had never been exposed to its use in treatment, they were able to write about their personal experiences and use their clinical reasoning to demonstrate its usefulness as applied to disaster recovery.

Limitations and Future Directions

The data analyzed for this study were the personal narratives of occupational therapy students who lived through Hurricane Sandy 1 mo after having learned about the Recovery Model. This research cannot be generalized to other populations. This was also a one-time data collection of the narratives of only one senior-level theory class. Students were not randomized, and there was no control group to determine whether similar experiences may have been noted by, for example, students from other professions who had also been taught the Recovery Model. Learning the model only 1 mo before the hurricane struck could have also led to misinterpretations by the students of the model’s 10 components.

Further research in disaster recovery from the perspective of the people affected could benefit the
occupational therapy profession by providing more evidence to support the profession’s role in this area. It would also be interesting to further research the applicability of the Recovery Model in populations affected by both human-made and natural disasters, especially in light of the current adoption of this model in mental health practice. Potential research applying the Recovery Model to other populations (e.g., children who are bullied, cancer survivors, people with newly experienced physical disabilities) could be beneficial to determine its applicability to those populations.

Implications for Occupational Therapy Practice

The occupational therapy profession is built on the principle of transforming lives through rebuilding the skills, habits, and roles necessary for people to maximally participate in occupations that are meaningful to them. The personal narratives of people who have experienced a serious life event such as Hurricane Sandy contribute greatly to an understanding of the physical, psychological, and social skills necessary to rebuild one’s life. Possible occupational therapy interventions suggested by the study results are provided in Table 3.

The potential role of occupational therapy and other health disciplines in disaster preparedness and recovery has been discussed previously, but this study is the first the author is aware of that translates a conceptual understanding of disaster recovery and applies the Recovery Model to the real world. The findings of this study have the following implications for occupational therapy practice:

<table>
<thead>
<tr>
<th>Table 3. Recovery Model and Possible Occupational Therapy Interventions</th>
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<tr>
<td><strong>Component</strong></td>
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| Self-direction | • Guide clients in creating positive goals  
• Promote a sense of resilience in clients as a prevention strategy for mental health promotion |
| Individualized and client-centered | • Assess clients’ strategies for coping  
• Develop interventions based on clients’ adaptive capacity and coping strategies that worked with previous crises |
| Empowerment | • Develop routines and occupations familiar to the client  
• Assess clients’ motivation to engage in occupations that foster meaning and purpose |
| Holistic | • Examine environments, especially in the community, in which the multiple skills of an occupational therapy practitioner could be used  
• Understand the complex nature of recovery and of rebuilding lives |
| Nonlinear | • Educate clients and communities about the progress and setbacks to be expected in the recovery process  
• Develop clients’ mental, physical, social, and spiritual health skills to cope with setbacks |
| Strengths-based | • Assist clients and communities in identifying mental, physical, social, and spiritual strengths they possess or can develop and help them engage those strengths through occupation |
| Peer support | • Identify the social systems that enable and support clients  
• Develop communication strategies, including use of social media, to help clients maintain relationships through the recovery process |
| Respect | • Help clients embrace the positive and negative outcomes of the disaster and occupational disruption, which could lead to greater self-acceptance  
• Identify areas of clients’ lives that are barriers to feeling valued and help them find ways to feel satisfied with themselves |
| Responsibility | • Identify factors that promote clients’ responsibility for self and others  
• Understand clients’ disrupted responsibilities and develop strategies to enable them to regain engagement in responsible behaviors |
| Hope | • Teach clients cognitive reframing to manage negative outcomes  
• Help clients develop positive goals and visions for rebuilding their lives, both personally and as a community |
• Personal narratives about living through a natural disaster can assist in the recovery of affected people and provide valuable data about their experiences.
• The Recovery Model, a mental health model for recovery, can be used as a guideline for practice and a frame of reference for intervention and research in disaster recovery.
• Mental health practice can be enhanced by using the Recovery Model in real-world experiences other than substance abuse and mental illness, including recovery from natural disasters.
• The findings provide a foundation for future research into the lived experiences of people surviving a natural disaster.

Conclusion
As stated by Susan Fine (1991) in her Slagle Lecture, “The law of disruption and reintegration does not promise, or always deliver, a rose garden. Life events continually test the durability of the balance we try to maintain” (p. 494). This article describes the self-perceptions of occupational therapy students as they sought to reestablish balance after a natural disaster, Hurricane Sandy, and applies their insights to occupational therapy’s contribution to disaster preparedness and recovery. The narratives of these occupational therapy students provide insight into experiences of surviving a disaster and can help others recover from disaster. Occupational therapy practitioners can apply the Recovery Model as one way to elicit the voices of people who have experienced a natural disaster to supplement their skills and knowledge in occupation, habit training, and community reintegration to help communities recover from natural disasters. ▲

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References
Practical Applications for the Occupational Therapy Code of Ethics and Ethics Standards

Edited by Jaxie B. Scott, MA, OTR/L, FAOTA, and S. Maggie Reitz, PhD, FAOTA, OTR/L

This comprehensive resource provides occupational therapy practitioners and students with case studies to help promote ethical reflection and practice in their increasingly complex and varied professional roles.

The authors present models and approaches for resolving ethical dilemmas and provide realistic case studies and vignettes to assist readers in identifying solutions that range from taking no action or addressing the situation at the local level to involving organizations and agencies to promote ethical practice and protect the public and the profession. The goal is to help practitioners and students strive toward the principles articulated in the Code and Ethics Standards and to expand the dialogue around ethical practice.

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