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Resilience Ecological Stress Model: Putting Resilience in Action

Resilience can be a vague term, have multiple definitions, and refer to an array of behavioral adaptations (Gordon & Song, 1994). However, risk and resilience theory has become increasingly advanced, and resilience is now understood to have a great impact on the recovery process during and after adverse events. Are you prepared to put resilience in action? If so, it is important to recognize resilience when you see it (Rosenberg, Starks, & Jones, 2014). What do people say and do that suggests they are resilient? What characteristics do people demonstrate that indicate they may be able to bounce back effectively from adversity or severe stress? What help can you provide to foster this process?

The purpose of this book is to present the theories, skills, and techniques of the resilience ecological stress model (RESM). Building on an earlier framework (the resilience-enhancing model) (Greene, 2007), RESM is an ecological systems-based metatheory that you can use in helping individuals, families, and communities return to effective functioning after an adverse event (Greene, 2014).

This chapter outlines the RESM. It explicates risk and resilience theory's terms and assumptions, translating them into assessment and intervention strategies that responders can use to help people in recovery. Among the case studies are real-life stories that demonstrate the resiliency of three older adults as they faced hardship after Hurricane Katrina. Toolboxes illustrate resilience concepts that can be applied in assessment and intervention. The statements included in the toolboxes bring to mind what practitioners can say and do to identify and promote resilience when responding to clients under stress.

CASE STUDY: JERRY

The first case study is that of Jerry, who looked back on his experience during Hurricane Katrina and told the social worker about how he and his neighbors outran the storm.

Jerry, an African American man (in his late fifties) with HIV/AIDS, was homeless until three days before Hurricane Katrina hit New Orleans. He recalled, "I was under the Ryan White program. They got me Social Security and found me a senior citizen's apartment. I was so tired of sleeping at the Salvation Army or on the street. Three days later I learned the hurricane was going to hit."

"The electric power went out before the hurricane struck. The residents of my senior citizens' building decided to band together to 'save' the food in their refrigerators. A firefighter got us a grill. So we started to bring food down from our apartments and cook it on the grill. The dudes that was looting sold us barbeque charcoal, lighter fluid, and water. We had to pay \$5 a gallon for water. People in the complex got together to put all their food, milk, and vitamins/medicines in ice chests. So we pitched in and bought a lot for the older people. People were handicapped. . . . We was cooking. We was eating. The wind was just blowing."

Because his mother had told him stories about Hurricane Betsy, which had hit New Orleans during the mid-1960s, Jerry knew the levee would break. He and others knew they would have to have a plan. He recalled that a lady who helped organize them said, "Man, we ain't gonna survive this here cause the Coast Guard ain't coming down." Residents collaborated to bring all of the apartment's residents to the highest floor. "I helped those people in wheelchairs up the steps." Apartments were flooded and furniture and clothing destroyed. Jerry "hid" on his mattress on the floor. "Some [of the other apartment residents] were dead."

At daybreak, the building looked like "a peeled banana. Everybody done looted. Took milk and everything. The police whipped us. They didn't just hit you on the head, but they beat you everywhere you have a joint." Residents were able to remain in their apartments until after the storm, when the building was condemned and they were sent to the Superdome. Ten days later, they were bused to a Texas city receiving evacuees. "When I arrived at the city shelter, I don't know what heaven is, but I imagined that was heaven." (Greene, 2007, p. 60)

CASE STUDY: KATHERINE

Katherine's reflections after Hurricane Katrina provide practitioners with insight into how she overcame risk using her natural capacity to be resilient after a severe disruption in daily life:

Katherine, a white American woman in her late seventies with limited mobility, lived at a senior citizen housing development in an upper-middle-class neighborhood of New Orleans. She said she loved to watch the tourists pass by on the

streetcars. A day before the storm struck, her son and his family called her to ask if she wanted to leave with them and drive north. She said it was not necessary, “Mom will be okay—the storm will probably turn away.”

“We [the residents] decided to have a hurricane party; to get together to eat a common meal and listen to music. At the same time, the sound of the wind made it clear a storm was going to hit.”

The apartment managers told Katherine and the other residents that they would have to leave for shelter. Katherine does not remember being told where to go for shelter. She decided to join up with a younger man with disabilities who also lived in the building; he knew where they had to go to get to the Superdome. Katherine spoke with pride about how she carefully “packed a rolling grocery cart with one day’s clothes and sanitary necessities.” She tried to keep up with “her angel,” who told her directions to the Dome. She quickly fell behind because of shortness of breath and the heat.

When Katherine got to the Superdome, she joined with an interracial family who she felt would “protect her from a rapist.” Katharine had brought her only cash with her (\$14 and quarters left over from the laundromat). She shared this money with the family she befriended so they could buy food for the children. Initially, Katherine had cut garbage bags into “sleeping mats” to keep from getting dirty in the Superdome. Gradually, that became impossible, and “the place stunk.”

Katherine remained in the Superdome for two weeks. When the military finally arrived with evacuation airbuses and helicopters, Katherine thought they looked like troops from the days of Adolf Hitler and Benito Mussolini. “Only the strongest” were able to get to those evacuation vehicles. People who remained “took food,” but were told by a police officer that it was not a crime to steal food. “It was a requisition.” Eventually, Katherine and some of the others were helicoptered out of New Orleans.

Katherine remembers her relief in arriving at the city shelter to which she was evacuated. She just wanted to rest. She was so tired, and a police officer told her that she could rest because he was watching out for her. The case manager found her an apartment, where she became active as a member of the hospitality committee.

Katherine remembered that the unsanitary conditions at the New Orleans Superdome were among her most unpleasant experiences during Katrina, because she had to go out into the field at night to relieve herself while her “family friend” stood guard. She ended her narrative as follows: “This was the best time of my life, because of the people who helped me.” (Greene, 2007, p. 58)

RESM: DEFINITIONS OF RESILIENCE

Evidence-Based Definitions

Over time, researchers have taken a number of different avenues to arrive at a scientific understanding of resilience, providing a substantial evidence-based theoretical foundation. This research gives the service provider ideas on how to identify resilience: For example,

early research studies explored which traits were prevalent among those children who were relatively more successful in overcoming adversity (Werner & Smith, 2001). The findings provided a list of traits and environmental factors, such as creativity, humor, and mentorship, that can contribute to resilience. This research suggested that service providers strengthen such traits to prevent or reduce people's exposure to risks.

Researchers later examined developmental processes that can lead to effective adaptation, helping people to overcome stress and regain balance after critical events (Masten, 1994; Masten & Coatsworth, 1998). These studies explored processes, such as problem solving, that are important factors in recovery. Their findings point to the use of interventions that can help people return to a state of stability. Still another wave of research identified the motivational forces and belief systems within individuals and groups that enhance people's self-actualization (Richardson, 2002). These studies identified which factors influence people's growth after hardship and suggested that intervention strategies can promote people's ability to grow after adversity.

The most recent research on resilience has drawn attention to the interlocking nature of the adaptive systems in which people live (Greene, 2014; Masten, 2007, 2015). It has focused on how people function effectively during and after stress and has sought to identify what constitutes a resilient behavioral, functional response to life's difficulties (Galea, 2014; Greene, 2014). The definition of resilience that focuses on it as an effective response to stress is emphasized here because it suggests that service providers use interventions that enhance the ability of a person or a system to successfully balance the demands of stress and regain effective function (Greene, 2014; Vaillant, 2011). Depending on the circumstances of individuals and communities involved in a critical event, all of these approaches to resilience can aid the responder in understanding and assisting in people's recovery.

Illustrating Definitions of Resilience

The case studies of Jerry and Katherine provide examples of these definitions of resilience:

- Resilience as a trait, such as optimism, is expressed by Katherine: She did not leave her senior citizen apartment building to evacuate with her family. You learn she is optimistic when she says she told her family that "Mom will be okay—the storm will probably turn away" and "that same evening we [the residents] decided to have a hurricane party; to get together to eat a common meal and listen to music" (Greene, 2007, p. 58).
- Resilience as a process, including problem solving, is exhibited by Jerry. He said, "The residents of my senior citizens' building decided to band together to 'save' the food in their refrigerators. A firefighter got us a grill. So we started to bring food down from our apartments and cook it on the grill" (Greene, 2007, p. 58).
- Resilience as a motivational force and belief system, involving the capacity to construct productive meaning, is expressed by Katherine, who said of Hurricane Katrina, "This was the best time of my life, because of the people who helped me" (Greene, 2007, p. 58).

- Resilience as functional capacity during and after stress, encompassing the ability to carry out life tasks, is articulated by Jerry, who said, “People in the complex got together to put all their food, milk, and vitamins/medicines in ice chests. So we pitched in and bought a lot [ahead of time] for the older people. People were handicapped. . . . We was cooking. We was eating. The wind was just blowing” (Greene, 2007, p. 60).

Why are these various research approaches to and definitions of resilience important? It is because they provide you with content for your first toolbox (see Table 1-1). A toolbox is an action-oriented practice guide that provides examples of assessment topics that you can listen for and behaviors you may observe. As a service provider, you can use observational and listening skills to uncover resilience in action, starting your assessment with where the client is on the road to recovery. The toolbox also gives examples of interventions and their possible outcomes. You may want to think about how to apply them in specific situations when helping people during or after adversity.

TABLE 1-1: Theory Toolbox: Apply Definitions

Practitioner's Assessment			Intervention	Outcome
Assumption to Put into Action	Listen: Comments to Hear	Observe: Behaviors to Detect	Action: Interventions to Make	Client Response: Reaction or Effect
Resilience is a trait.	“I know I am going to get out of this!” (optimism)	“Let me help you get a blanket.” (altruism)	“I see you are working together. Let’s figure out what supplies you can get.” (collaboration)	Enhancing clients’ natural tendencies to help
Resilience is a process.	“Did you see anyone else from our street?”	“Let’s get together and find Jim.”	“I see you know each other. What solutions may help here?”	Promoting a problem-solving process
Resilience is a motivational force and belief system.	“I believe we can get through this with prayer.”	“I see our pastor over there handing out supplies.”	“I will work with Pastor Jones to get you basic supplies.”	Forming a team approach
Resilience is a reaction to stress.	“I never heard such a loud, howling wind.”	“I felt like I would just curl up and go to sleep.”	“Is there someone who can sit with you for a while?”	Connecting people with others
Resilience is functional capacity.	“I thought I would never get out of my office.”	“I ran down stairs and went to the nearest shelter.”	“It seems like you knew just what you wanted to do.”	Underscoring effective functioning

RESM: BASIC TERMS

Risk Factors

Risk is a statistical concept that suggests that certain factors may contribute to people and the systems in which they interact having a higher probability of an undesirable outcome after adversity (Kirby & Fraser, 1997). The extent to which practitioners should emphasize risk or resilience in assessment is a matter of debate. Fraser, Richman, and Galinsky (1999) took a position compatible with RESM. They proposed,

The term resilience [should be] reserved for unpredicted or markedly successful adaptations to negative life events, traumas, stress, and other forms of risk. If we can understand what help some people need to function well in the context of high adversity, we may be able to incorporate this new knowledge into new practice strategies. (p. 136)

Risks may occur throughout anyone's (or a community's) lifetime. To overcome risks, aid needs to provide the basic elements of life: access to water, food production, health, and a "green" environment. When service providers arrive at the scene of a critical event, it is important that they assess individual and community risks. For example, because of the cumulative risks of poverty and substandard housing, people living in the Ninth Ward of New Orleans, primarily African American residents, were at higher risk during Hurricane Katrina (see chapter 2 for a case example and practice strategies).

However, D. B. Miller and MacIntosh (1999) have suggested that the power to overcome the risk of an oppressive environment is related in part to a family's "culturally unique protective factors" (p. 159) (see Protective Factors section). The case studies of Jerry and Katherine portray their natural struggle to regain effective functioning.

Vulnerability

The term *vulnerability* was first applied to individuals who have characteristics that make them susceptible to risks or who are predisposed to difficulty (Masten, 1994). The term also encompasses communities such as those located in a hurricane-prone area or an earthquake zone. In addition, minority populations and those living in poverty are less able to deal with the disruption caused by critical events (Garmezy, 1991; Zakour & Gillespie, 2013). Before Katrina, Jerry, Katherine, and Sally (discussed later) all had illnesses that made them more vulnerable to the event. To be more helpful, practitioners need to acquire such information from clients and constituencies at the onset of a critical event.

Buffer

Buffers protect individuals and communities at risk of undesirable outcomes after disruptive events. Levees, when properly built and maintained, were believed to buffer New Orleans from flooding.

Protective Factors

As stated earlier, the ability to overcome difficult life situations is bolstered by protective factors, or situations and conditions that help individuals and communities reduce risk and enhance adaptation. For example, protective factors in the cases of Jerry and Katherine included developing a plan for mutual aid and having a network of mutually caring people. When people perceive that they have a high level of social support, this sense of support can reduce the negative impact of critical events (Zakour & Gillespie, 2013). Therefore, when American Red Cross (ARC) caseworkers interviewed people during and after Hurricane Katrina, they learned that taking advantage of such supports could speed recovery.

At the macro level, protective factors involve defending infrastructure against the changing natural environment. Among the key recommendations in a World Bank report on natural disaster hotspots (Dilley, Chen, Deichmann, & Arnold, 2005) was the suggestion that communities can reduce their vulnerability to natural hazards as an integral part of their (international) poverty reduction strategy. This reduced vulnerability can in turn affect growth, the distribution of income, and societal well-being. An important policy consideration to think about is how this recommendation to attend to infrastructure could have influenced and protected New Orleans from the devastation of Hurricane Katrina.

Adaptation

When a system is disrupted by a critical event, it causes temporary instability. But systems have a natural ability—termed “adaptation”—to return to a state of balance (Buckley, 1968). As stated in RESM, systems are poised to maintain stability and continually face environmental demands for growth and change by “structuring, destructuring, and restructuring” (Buckley, 1968, p. 494)—becoming more differentiated or complex.

The process of adaptation involves cycles of change:

It is not just adaptation—[but] change—in response to conditions. It is the ability of systems—households, people, communities, ecosystems, nations—to generate new ways of operating, new systemic relationships. If we consider that parts or connections in systems fail or become untenable, adaptive capacity is a key determiner of resilience. Hence in complex adaptive systems, resilience is best defined as the ability to withstand, recover from, and reorganize in response to crises. Function is maintained, but system structure may not be. (Martin-Breen & Anderies, 2011, p. 42)

As can be seen in their case studies, when Jerry and Katherine received word of Hurricane Katrina’s approach, they began to change how they responded to environmental conditions. They built on their prior relationships and formed new ones to adapt to the event. They made plans to obtain food and to secure a safe place.

Functionality

The goal of RESM is to maintain or restore people to effective social functioning (Galea, 2014; Greene, 2014). Effective social functioning is an individual's or community's ability to meet basic needs and perform major life tasks successfully. It is the match or fit between people's capacities, actions, and demands and the resources and opportunities the environment provides. Both Jerry and Katherine clearly exhibited an ability to modify their person-environment fit to be effective. As a practitioner, you can enable effective social functioning by carrying out practice strategies associated with the human behavior terms described in your toolbox (see Table 1-2).

RESM: BASIC ASSUMPTIONS

RESM draws on a number of assumptions about human behavior that address effective functionality. This section of the chapter emphasizes those most relevant to the recovery process.

Resilience Is a Reaction to Stress

Despite the variability in research on risk and resilience theory, concepts have coalesced (Greene, 2014), offering service providers a coherent definition and set of assumptions suitable for practice: RESM (Greene, 2014). This approach addresses resilience as people's ability to effectively overcome stress. For example, Masten (1994) defined *resilience* as "a pattern over time, characterized by good eventual adaptation despite developmental risks, acute stressors, or chronic adversities" (p. 5). Chandra et al. (2010) have extended that definition to encompass community, stating, "There is general consensus that community resilience is defined as the ability of communities to withstand and mitigate the stress [of a health emergency]" (p. 1).

In short, a core assumption of RESM is that resilience is a response to stress. Stress may be caused by the chronic wear and tear of everyday life events (Germain & Gitterman, 1996; Lifton, 1999), or it may result from an sudden acute event (Strumpfer, 2002). First, risk should be distinguished from stress. Risks are internal or external factors that compromise resilience, whereas stress is a subjective experience that may disrupt a person's or system's effective functioning.

Reaction to stress may be both positive and negative: Stress may cause chronic dysfunction such as posttraumatic stress disorder, anxiety, or depression (see chapter 4 for assessment and intervention). For example, a Princeton study of low-income mothers in the

Resilience is the human capacity to overcome stress.

New Orleans area in 2012 revealed that four years after Katrina, about 33 percent reported mental health issues (Ramsey, 2015). Stress can be perceived as uncontrollable and can upset people's basic life suppositions, making the world no longer seem comprehensible (Antonovsky & Sourani, 1988). However, research

TABLE 1-2: Theory Toolbox: Apply Terms

Practitioner's Assessment			Intervention	Outcome
Assumption to Put into Action	Listen: Comments to Hear	Observe: Behaviors to Detect	Action: Interventions to Make	Client Response: Reaction or Effect
Risks can produce poor outcomes.	"I was just getting out of debt."	"I can't stop crying."	"It sounds like you had some stress even before Katrina."	Acknowledging prior difficulties
Vulnerabilities make people and communities more susceptible to risks.	"We were right in the path of the flood."	"We climbed to the roof to yell, but we knew no helicopters would stop where we lived."	"I think you felt you were left alone to your own devices."	Asking about feelings of discrimination
Buffers cushion people from stress.	"The levee was supposed to hold."	"I am leaving; I don't believe the Superdome is safe."	"It seems you don't feel safe here. Officials will keep us informed. Let me know how you are doing."	Affirming feelings of fear; showing care
Protective factors are conditions that reduce risks and improve adaptation.	"I was able to use my credit card one more time before the storm."	"I ran to the store and got milk and bread for me and my neighbor."	"It sounds like you look after your neighbor."	Declaring client's connection
Adaptation involves people making changes to fit a different environment.	"I made a survival kit to take to the Superdome."	Wringing hands, she said, "I'll need to know what is happening. Can you give me updates on the storm?"	"It sounds like you are trying to figure out what comes next."	Fostering future solutions
Functionality refers to carrying out daily tasks.	"I hope my office will reopen soon."	Looking around, she says, "I am keeping a close eye on my grandkids in the Superdome."	"I hear you saying you would like things to get back to normal."	Promoting normal behavior

has also suggested that, rather than experiencing chronic dysfunction, most people return to various levels of effective functioning after critical events. According to Galea (2014), this effective functioning is what defines resilience. Feelings of stress usually decline over time, with only some people needing to seek professional help (DeWolf & Nordboe, 2000). Consequently, triage—a practitioner assessment that identifies and attends to those people most in need because of overwhelming stress—is necessary.

In sum,

1. People experience stress when they feel unable to cope or feel that they have insufficient resources to meet demands.
2. When people feel they are under stress, they do, however, begin to try to cope and adapt.
3. Stress can be reduced when professionals and volunteers bolster innate resilient tendencies. That is, practitioners can help people manage stressors by reinforcing their natural problem-solving skills.
4. People under stress can learn to improve their response to the environment. Their stress can also be reduced by receiving needed resources.
5. Stress is either decreased or increased as people interact with social systems. Connecting people with others to whom they are attached usually supports resilience, as does linking them with another person who is coping well.

Define Stress

Ecological theory rests on the assumption that people (at all systems levels) innately respond well to stress by using adaptive coping strategies (Greene, 2007; Searles, 1960; Selye, 1956). Think about these assumptions:

- Resilience is a natural healing process or a self-righting human capacity.
- Resilience is based on a foundation of human needs.
- Resilience is a biopsychosocial phenomenon.
- Resilience involves person–environment exchanges during which people strive for goodness of fit. However, stress can disrupt effective functioning.
- People have the capacity to successfully reestablish adaptive, functional behavior after experiencing stress. Risk and resilience theory explains how people and the communities in which they live adapt to stress and maintain their daily functioning.
- Risk and resilience occur “across the life course of individuals, families, and communities experiencing unique paths of development” (Greene, 2012, p. 41).
- Resilience varies on the basis of cultural context. People may use different adaptive strategies to cope with stress depending on their community or cultural group (Masten & Coatsworth, 1998).
- Risk and resilience theory involves systems of all sizes and is nested within multiple layers of individual and collective adaptive factors.

- Resilience research has suggested that the correlates, characteristics, and causes of people's resilience range from genetic to societal factors.
- Risk and resilience is a global phenomenon and is related to the availability of environmental and human resources.

Nonetheless, transactions between people and the environment are expected to precipitate life stress. This classic understanding of stress emphasizes the reciprocal nature of people's relationship with their environment—each influencing the other. According to Germain and Gitterman (1996), at any time over the life course people have to cope with the natural stresses of everyday life, some requiring interventions involving mental health services or resource allocation. Stressors that may cause chronic problems in living, especially among marginalized populations, include

- difficult life transitions involving developmental or social changes;
- traumatic life events, including grave losses or illness;
- environmental pressures, such as poverty and violence.

When critical events happen, they may be compounded by natural stresses of everyday life that were present even before the event occurred. Service providers should be on the alert for such earlier difficulties during assessment. For example, Jerry was living on the streets only a few days before the storm hit.

Stress Appraisal

As stated earlier, not all people respond poorly to challenging events. Lazarus and Folkman (1984) were among the first theorists to point out that people in stress are not simply responding negatively to an event in their environment. "Rather, they are going through a subjective, cognitive process of appraising that event, such as asking what demands the event places on them" (p. 135).

Whether a person sees an event as a life stressor—something that triggers the person's perception that harm or loss may take place—is based on that person's appraisal of the event or its meaning to him or her. When arriving at the scene of a disaster, practitioners should consider the following:

- People engage in primary appraisal, evaluating the potential threat posed by a critical event. Practitioners should ask clients and constituencies what they perceive as the significance of a specific event that is underway. The practitioner should consider whether it is perceived as controllable, challenging, or difficult.
- Secondary appraisal involves people's use of coping mechanisms and resources available to deal with the ongoing situation. At the point of secondary appraisal, people decide individually and collectively what is at stake and what can be done to deal with their distress. Practitioners can ask their clients what solutions have already been considered.

In sum, an appraisal of stress involves how a person construes an event and how he or she responds to it. Therefore, service providers need to learn the meaning or significance a client has ascribed to a particular event.

Resilience and Natural Adaptation

For social work practice with RESM to be effective, practitioners must accept and believe that people have strength and a natural propensity to heal and grow. It is the practitioner who then co-creates a setting in which clients and constituencies get in touch with their sense of competence and obtain needed resources (de Shazer, 1985). As Jerry's and Katherine's actions illustrate, people often naturally go into action during critical events. When arriving at the scene, a responder's major assessment task is to identify and foster naturally occurring adaptive strategies or to identify who may be left behind without significant help.

Resilience and Basic Needs

Meeting people's basic needs has been said to be the bedrock of recovery after adverse events (Greene, 2012). To understand this assumption, it is helpful to review and incorporate Maslow's (1970) hierarchy of needs into the helping process. These needs include

- physical and life-sustaining needs, such as food, water, and shelter;
- physical safety, including protection from physical attack, bodily harm, and disease;
- love, involving the need to be cherished and supported;
- self-esteem, including the need for family members to have a sense of personal worth;
- self-actualization, or the need to be creative and productive.

As exhibited by their behavior, Jerry and Katherine overcame Hurricane Katrina by first keeping in mind what resources they needed. At the same time, they demonstrated creativity and productiveness on their paths to effective functioning.

Resilience: Biopsychosocial and Spiritual Processes

Resilience involves biopsychosocial and spiritual processes. Individual resilience is influenced by

- biological functioning, including genetic, health and medical, physical, nutritional, and vital life-supporting organ systems;
- psychological functioning, encompassing affective and cognitive dimensions of personality;
- social functioning, involving a person's cultural, political, historical, and economic life as a group member;
- spiritual functioning, referring to a personal quest for meaning (see Canda & Furman, 1999).

According to Richardson (2002), these intertwined functions may be disrupted by internal or external stressors. Once an interruption in biopsychosocial and spiritual processes occurs, a person's natural healing capacity or the tendency to reintegrate these functions comes into play. This variable capacity to reintegrate resilience falls on a continuum: A person may be able to achieve dysfunctional reintegration, reintegration with loss, homeostatic reintegration, or resilient reintegration. Despite risks and vulnerability in biological functions, both Jerry, who had HIV/AIDS, and Katherine, who had limited mobility, were able to attain resilient reintegration. What other biopsychosocial and spiritual processes do you think influenced their recovery?

It is important to note that interventions by service providers can make a difference in whether such successful outcomes are achieved. By keeping in mind Richardson's (2002) framework, the practitioner has a mental checklist that can be used to make a quick assessment. When necessary, the practitioner can make referrals to other members of the disaster recovery team, such as a health worker or chaplain.

Resilience across the Life Course

The life course approach to development uses the term "cohort" to describe a group of people born in the same era who have experienced similar events (Hareven, 1996). Using the cohort definition, the life course concept does not just look at events chronologically. Rather, it considers a person's life within multiple contexts, including sociopolitical and economic events (Greene, Hantman, Seltenrieck, Abbasi, & Greene, in press).

RESM is applicable across the life course. Although children and older adults are said to be more vulnerable at times of disaster (Greene & Graham, 2006), service providers will have to make an on-the-spot assessment of whether this is the case in a specific situation. As seen in the stories of Jerry and Katherine as well as in the following quote from an older adult, practitioners should not make quick judgments about who is at risk:

Senior citizens today are a sturdy, reliable generation. We have proven time and time again our ability to survive everything from the Great Depression to world wars and the great nuclear holocaust. We have lived through droughts, floods, and all sorts of other natural disasters. We have given birth, supported our families, and stood by our loved ones through personal and financial losses. We are proud, tough, and resilient. (Project COPE, 1992, p. 10)

Resilience and Diversity

Resilience—and its meaning—can vary with culture and diversity. Culture is the way of life of a group: its mores, values, and beliefs. Consequently, the ways in which resilience is expressed can differ. Moreover,

the dimensions of diversity are understood as the intersectionality of multiple factors including but not limited to age, class, color, culture, disability, ethnicity, gender, gender identity and expression, immigration status, political ideology, race,

religion/spirituality, sex, sexual orientation, and tribal sovereign status. (Council on Social Work Education [CSWE], 2015, p. 4)

Each dimension may affect how resilience is experienced. What diversity issues do you believe affected Jerry and Katherine?

Relatedness and Social Supports

The term “relatedness” refers to interpersonal or collective behaviors involving people’s positive interactions with each other. Such collective attachments involve multilevel systems, including the family, school, peer networks, neighborhoods, community, and society (Bronfenbrenner, 1979). These social systems and relationships are a buffer against stress (Thoits, 1995). Furthermore, resilience is believed to increase through interaction in well-functioning social systems. Therefore, resilience-enhancing interventions often connect people with social support networks. Note how both Jerry and Katherine made new attachments to people they met on the road to recovery. In short, “the resilience process can be supported by facilitating contacts between people” (Zakour & Gillespie, 2013, p. 59).

Critical events set in motion a process in which resiliency and mutual aid take place. The fact that everyday people and professionals help one another as well as survivors at these times is important. For example, 95 percent of the ARC is made up of volunteers, and yet this agency deals with 70,000 events annually, including chemical spills, droughts, fires, earthquakes, floods, heat waves, and hurricanes (ARC, 2015c; Federal Emergency Management Agency [FEMA], 2010; World Health Organization, 2002).

COLLECTIVE RESILIENCE AND RECOVERY

As already stated, resilience is not limited to individuals; it is also a large-scale social phenomenon (Grotberg, 1995). Resilient systems are characterized by their ability to absorb disturbances and reorganize as they undergo change (Walker, Holling, Carpenter, & Kinzig, 2004). For example, disasters may be thought of as a form of collective stress (Zakour & Gillespie, 2013), disrupting community-level social, economic, and environmental systems and interfering with the provision of resources. Service providers should therefore understand that what can be an individual trauma, or a blow to a person’s personal well-being, can also be a collective trauma, or an insult to the fabric of social life (Oriol, 1999).

The stress of critical events affects all dimensions of community life. Different institutions should also be part of disaster preparedness. For example, before Hurricane Katrina, many public schools and hospitals in New Orleans were not operating effectively. These

Resilience occurs at all system levels.

shortcomings were not sufficiently taken into account during disaster preparedness planning in which multiple private sector and government agencies and trained professionals needed to construct a coordinated response to meet people’s needs (see chapter 2).

Social Systems

A social system is a structure of interacting and interdependent people that has the capacity for organized activity (Greene, 2008a). Bronfenbrenner (1979) has outlined systems at all levels:

- microsystems, including immediate, personal, daily activities and roles, such as in the family;
- mesosystems, which encompass the linkages between two or more settings involving the (developing) individual, such as the older adult and Medicare;
- exosystems, which include the linkages between two or more systems that do not involve the individual, such as parents and the workplace;
- macrosystems, which encompass overarching societal systems, such as cultural and societal attitudes.

The service provider keeps this visualization in mind when considering where to intervene in the life space of clients or constituencies. What people and geographical area are involved? What social systems should be included in the recovery plan? Schools, houses of worship, and police departments may take on various assignments.

Intervention or recovery plans should be ecologically based, involving pertinent social systems and their respective interconnections, including the global ecology (see chapter 2). The ability to function effectively in the environment can be said to be “nested within multiple layers of individual and collective adaptive factors” (Walsh, 1998, p. 12), opening the door to resilience-enhancing practice with families, workplaces, neighborhoods, communities, societies, and their ecosystems.

Family Systems

Family resilience is based on systems theory and refers to how a family unit responds to stress (Walsh, 1998). To remain relatively resilient, a viable family needs to carry out a number of functions, including the provision of economic resources, protection or safety, and care. In addition, families may provide access to health, education, welfare, and recreation (see chapter 4).

How families carry out these and other functions after adversity is a matter of assessment. The practitioner considers the many events that can disrupt a family’s effective functioning. You can use the schema of Carter and McGoldrick (1999) to visualize the flow of stress through a family to assess its potential risks or stressors. Horizontal stressors on the schema include

- *developmental events*, such as life course transitions;
- *unpredictable events*, such as the untimely death of a friend or family member, chronic illness, or accident; and
- *historical events*, such as war and economic depression.

Vertical stressors illustrated include

- racism, sexism, classism, and ageism;
- the disappearance of community, the inflexibility of the workplace, and less leisure time;
- family emotional patterns, myths, secrets, and losses;
- violence, addictions, and lack of spiritual expression or dreams; and
- genetic makeup, abilities, and challenges. (Carter & McGoldrick, 1999)

Family Resilience

According to Walsh (1998), if a family has effective organization, open communication, and an active belief system, it is better able to reintegrate and achieve resilience during and after adverse events. Use the following case study to examine the flow of stress through Sally's family. Can you list the horizontal and vertical stressors they faced?

CASE STUDY: SALLY

Just before the storm hit, Sally, an African American grandmother (in her late fifties) with diabetes, her son and his wife, and two grandchildren drove around New Orleans trying to find a shelter that wasn't full. None was available. They returned to sleep at Sally's home in the Ninth Ward, a low-income neighborhood of New Orleans. By two or three in the morning, the floodwaters had risen precipitously and were flooding the house. The family went across the street and found an empty apartment on higher ground. From there, they tried signaling several helicopters circling them. The helicopter lights were flashing and the family kept trying to get the pilots' attention, but they were never airlifted.

By the next morning, they determined that the floodwaters were too high for them to remain in the fifth-floor apartment. "We had to hurry to get out of that house. We knew people were going to the Superdome." The family worked with others in the apartment building. "We took a neighbor's camper top from his truck and created a little boat for the children." Sally and another older woman were put on an air mattress so they could float to the Superdome. Being the tallest in the group, Sally's daughter and son-in-law pushed the boat and mattress to the bridge near the Superdome. "It was an act of God that got us there."

Sally and her daughter and family slept on the ramp to the Superdome, sharing their food with others on that "bridge." They waded through miles of water (passing dead bodies along the way) to arrive at the Superdome at the same time as the military who were trying to keep order. "There was screaming and yelling with poor little children just terrified. You know the children were frightened because a bullet do not have a name." The family finally "fought" its way into the Superdome. "Some guys with guns stole my purse with my money and medicine." At that point, Sally's daughter tried to find a paramedic because she felt like "her sugar was 485." She was taken to a site reserved for emergencies.

Sally and her family were finally bused to a temporary shelter in a Texas city, where caseworkers found her an apartment. “When I got here on September 16th, that Thursday, I will never forget it. I went into the office to sign a lease. Volunteers took me to the hospital to get more medicine. I also received Medicaid. I joined a local church.” “We all stuck together ‘til we got on those buses. . . . I thanks God every day for my life and my children.” (Greene, 2007, p. 59)

Community Resilience

Community resilience involves a set of adaptive capacities that can be assessed, such as the external and internal pattern of activities differentiated in the community. Do institutions such as schools and banks function effectively after disasters? For example, during Hurricane Katrina pharmacies could not provide prescriptions. The largest black-owned bank in New Orleans was flooded, and its mainframe computer was destroyed during the storm. Major legal documents were ruined, such as deeds to homes and titles to cars (Rivlin, 2015).

Just as with the family, communities have functions they must carry out to maintain effective resilient functioning. As quoted in Greene and Schriver (2016), Warren (1978) defined *community* as “that combination of social units and systems that perform the major social functions having locality relevance” (p. 9). Warren viewed community as a set locality of relevant functions that provides the necessary services and systems for members to satisfy most of their daily living needs. Therefore, the social worker who is responding to an adverse event needs to assess how the following functions are carried out:

- Are people still able to participate in production, distribution, and consumption of goods and resources? If not, recovery plans need to address this difficulty.
- Are family members united after a critical event? Are they able to socialize with members?
- Has the critical event caused a disruption in the social order? Are relevant institutions contributing to social control?
- How are community members responding to events? Can social participation by relevant groups assist in recovery?
- Are people banding together to help one another in a form of mutual support (Warren, 1978, pp. 9–11, 170–212)?

Community Institutions

As described in this chapter’s three case studies, community institutions have a role in promoting and maintaining resilience. For example, educational resilience can be fostered through interventions “that enhance children’s learning, develop their talents and competencies, and protect or buffer them against environmental adversities” (Wang, Haertel, & Walberg, 1997, p. 1). These actions might include programs that build community assets such as providing a school-based mentor program (chapter 2). Unfortunately, New Orleans schools were often substandard before Katrina, perhaps leaving children less prepared to face life’s difficulties (Gabor, 2015). Failing hospitals were another institution not prepared

to withstand the emergency presented by Hurricane Katrina (see Table 1-3). Sheri Fink (2013) described the breakdown in the establishment of workplace safety planning and precautions in a book titled *Five Days at Memorial*:

At last through the broken windows, the pulse of helicopter rotors and airboat propellers set the summer morning air throbbing with the promise of rescue. Floodwaters unleashed by Hurricane Katrina had marooned hundreds of people at the hospital, where they had now spent four days. Doctors and nurses milled in the foul-smelling second-floor lobby. Since the storm, they had barely slept, surviving on catnaps, bottled water, and rumors. (pp. 17–18)

TABLE 1-3: Theory Toolbox: Apply Assumptions

Practitioner's Assessment			Intervention	Outcome
Assumption to Put into Action	Listen: Comments to Hear	Observe: Behaviors to Detect	Action: Interventions to Make	Client Response: Reaction or Effect
Resilience is a reaction to stress.	"I could not believe the water pouring down and up to my roof."	Stamping a foot, he says, "I decided to not give up. I went up to the roof."	"Do you feel safe now?"	Realizing one is safe
Resilience is a natural phenomenon involving adaptation and dealing with hardships.	"I told the soldiers, 'Who do you think you are, pointing that gun at my kids?'"	She shows how she did it; "I pointed my finger right at them."	"You really stood up for yourself."	Having self-esteem and competence
Resilience requires that basic needs be met.	"How will we care for my baby in the shelter?"	She walks around nervously; "You better get us out of here. The Dome may not be safe. Where can the baby sleep?"	"What is the most important thing you need for the baby? Let's get that right away."	Prioritizing concerns and solutions
Resilience involves biopsychosocial and spiritual processes.	"I know my [blood] sugar was up to 300! I was dizzy."	Crying out loud, "Where is a doctor? I need medicine."	"Do you think we should get you right over to the health desk?"	Offering a choice of solutions
Resilience occurs across the life course.	"I have lived through too much! I am over 75 years old!"	"I am just sitting here patiently until you have them helicopter me out."	"Do you know someone here you can wait with? Can we get a bite to eat meanwhile?"	Giving the client choices at any age

(Continued)

TABLE 1-3: Theory Toolbox: Apply Assumptions (Continued)

Practitioner's Assessment		Intervention		Outcome
Assumption to Put into Action	Listen: Comments to Hear	Observe: Behaviors to Detect	Action: Interventions to Make	Client Response: Reaction or Effect
Resilience varies with culture and diversity.	"They pointed a gun at me."	He shows his posture; "I just lay down and did not move. I had seen this before."	"I bet you did not like being singled out."	Acknowledging discriminatory actions
Resilience is enhanced through relatedness and relationships.	"I can't find my daughter and her children."	She swings her arm around. "I am looking all over the Superdome."	"We have a volunteer trying to reunite families. Should we try that desk?"	Trying to connect the client with significant others
Resilience is an individual and collective phenomenon.	"I can't believe our whole neighborhood is gone! All the houses were flooded. Some people died inside."	She seems to be walking in circles. "Are all my neighbors going to be somewhere else? I am looking around the Superdome."	"I think you will find some and miss some of them too."	Responding to loss
Resilient individuals and communities return to everyday function.	"This is finally over. Where will I live now?"	She raises her voice in demand. "I want to speak to the housing supervisor."	"Let's see where you get an application for housing. It may be a trailer."	Giving the client a heads up and information

SUMMARY AND CONCLUSION

Professionals involved in recovery efforts need to go beyond traditional methods and labeling (DeWolf & Nordboe, 2000). To summarize,

- No one who is involved in a disaster is untouched by it.
- There are two types of disaster trauma: individual and community.
- Most people pull together and function during and after a disaster, but their effectiveness can be diminished.
- Stress is a normal response to an abnormal situation.
- Many of the emotional reactions of disaster survivors stem from problems brought about by the disaster.
- Most people do not see themselves as needing mental health services after a disaster and usually do not seek such services.

- Survivors may reject disaster assistance of all types.
- Disaster mental health assistance is often more practical than psychological in nature.
- Disaster mental health services must be uniquely tailored to the communities they serve.
- Mental health workers need to set aside traditional methods, avoid the use of mental health labels, and use an active outreach approach to intervene successfully in times of disaster.
- Survivors respond to active, genuine interest and concern.
- Interventions must be appropriate to the phase of the disaster.
- Social support systems are crucial to recovery.

Practitioners need to ask what is needed directly and empathically. It is important to understand that survivors may refuse aid. At the same time, no one who is involved in a traumatic event—including providers—is immune to it. Thus, self-care practices are described throughout the book.