

"This book teaches you how to become stronger, how to bend but not break, and how to make the best out of a bad situation..."

Earvin "Magic" Johnson

Resilience

The Science of Mastering Life's
Greatest Challenges

Ten key ways to weather and bounce back from stress and trauma



Steven M. Southwick, M.D.
& Dennis S. Charney, M.D.

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SMS and DSC

What is resilience?

Most of us at some point will be struck by one or more major traumas: violent crime, domestic violence, rape, child abuse, a serious automobile accident, the sudden death of a loved one, a debilitating disease, a natural disaster or war. If you are very lucky, then you have never encountered any of these misfortunes; but most likely you will someday. It is estimated that up to 90% of us will experience at least one serious traumatic event during our lives (Norris & Sloane, 2007).

Traumatic events throw our lives into turmoil in unpredictable ways; no two people will respond to them in exactly the same manner. For some, the stress of the event will become chronic, lasting for years. They may undergo a dramatic change in outlook, becoming sullen, demoralized, withdrawn, cynical, and angry. Some will become depressed or develop post-traumatic stress disorder (PTSD). Horrific, intrusive memories and nightmares will haunt them for days, months or even years, and they will feel unsafe in the world – hypervigilant – as if another serious danger lurks just around the corner. Some will take up drinking or drugs to numb their pain and dull their memories.

Nevertheless, many people will find ways to meet the challenge and continue with purposeful lives. For a period after their ordeal, they may become distressed, but in time they will bounce back and carry on. For some, it will be almost as if the trauma had never occurred. For others, the distress will persist, but they will find healthy ways to cope. Some survivors will even grow stronger and wiser because of their trauma. These survivors may report that their tragedy has helped them to appreciate life more, to become closer to family and friends, to find greater meaning, and sometimes to embark on a new mission in life. In the words of Elisabeth S. Lukas, a protégé of the neurologist, psychiatrist and Holocaust survivor Viktor Frankl, “*The forces of fate that bear down on man and threaten to break him also have the capacity to ennoble him*” (1984).

Resilience after 9/11

On the clear, balmy morning of September 11, 2001, 45-year-old Jimmy Dunne was playing golf in New York’s suburban Westchester County, looking forward to qualifying for the US Mid-Amateur Championship tournament. Along with the other golfers, he was stunned to learn that planes had crashed into the World Trade Center. Dunne’s shock was intensified by the fact that his own company, the financial services firm Sandler O’Neill, was located at Two World Trade Center (the “South Tower”). As details of the damage became available, his fears were confirmed: the plane that struck the South Tower burst into flames on the 78th through 84th floors, trapping hundreds on the floors above (Dwyer *et al.*, 2002). Sandler O’Neill was on the 104th floor.

While Dunne watched television in disbelief, thousands of employees, visitors, police, firefighters, emergency medical personnel, and concerned bystanders were fighting to save lives while they struggled to understand what was happening. One Sandler O'Neill survivor, Karen Fishman, had arrived at her office in the South Tower about 8:45 that morning – moments before the first plane struck the North Tower and sent a massive, blinding ball of flame shooting through the air outside her office window. Shaking, she got up from her desk, stepped out into the hallway, and quickly found herself headed for the stairs with two colleagues who had announced, “We’re getting the hell out of here” (Brooker, 2002, p. 56).

“I don’t know why I left,” Fishman said later. “I don’t know that it was a conscious decision. It was instinct. So much depended on who you saw right at that moment.” Several other Sandler O'Neill employees left, but others stayed in the office and made phone calls assuring family members and business associates that they were all right. Still, the horrors in the neighboring building had everyone so upset that CEO Herman Sandler told his workforce, “Whoever wants to leave can leave.”

Fishman had reached the 64th floor when she heard an announcement that only the North Tower was affected and there was no need to evacuate the South Tower. But by then the stairwell was crowded, and turning back would have meant going against the tide of people headed down, so she continued.

Fishman was on the 62nd floor at 9:03, when United Airlines Flight 175 crashed into the South Tower. Forty-two stories above her, a Sandler O'Neill assistant was on the phone with her husband – “Oh, my God” were the last words he heard her say. A trader called his wife: “There is smoke everywhere. People are dying all around me” (Brooker, 2002, p. 57).

Survivors described how the building shook and twisted when the plane struck, causing paneling, duct work, and electrical wires to fall out of the walls and ceilings. The lights went out, and the building’s sprinkler system activated in some areas, sending cascades of water down the pitch-dark stairwells as people groped their way down. Of course, neither Karen Fishman nor anyone else knew that the building was about to collapse. In a sense this was fortunate, for the evacuation was generally orderly and unhurried – some even commented later that they had paced themselves, aiming to lessen the risk of having to walk down dozens of flights with a sprained ankle (Clark, 2006).

Karen Fishman and another Sandler O'Neill employee, Mark Fitzgibbon, had reached street level and were making their way uptown at 9:59, when the South Tower collapsed. They were far enough away from the burning towers that the surrounding skyscrapers partially obscured their view. Like many who witnessed the event, they had no idea that the entire building was gone; they thought that they were seeing smoke from an explosion or a collapse affecting only the floors above the fire line. Fitzgibbon called to Karen, “Look. The top of our building is gone.” But she didn’t look back (Brooker, 2002, p. 57).

A huge wave of ash and dust burst from the ruins and covered the area like a snowfall. Stunned survivors fled by themselves or in groups, some running, some walking purposefully, others wandering as if in a fog. By 10:28, when One World Trade Center and the adjoining Marriott Hotel collapsed, news organizations had begun to report a possible terrorist connection, and other landmark buildings such as the United Nations were evacuated. Not knowing whether further attacks were imminent, New York Mayor Rudy Giuliani ordered the evacuation of lower Manhattan. This released a swelling tide of pedestrians into the streets as people attempted to get home. Transportation was severely crippled: the subway service was suspended, as were the PATH trains connecting Manhattan with New Jersey. Commuter buses stopped running, as all bridges and tunnels connecting Manhattan with

the outer boroughs and with New Jersey were closed to non-emergency traffic. One survivor described taking a ferry homeward to New Jersey:

... as we got parallel [to the World Trade Center site] we could look over and see that both towers were gone. It was just a surreal feeling. Disbelief. How could this happen? Of course, at the time we knew nothing about the planes being hijacked, nothing about the Pentagon, nothing about the plane going down in Pennsylvania, or the FAA getting all planes out of the air. We were completely in the dark. But we could look off to the Trade Center on our right and see that this building I had worked in for 27 years was gone. It was a staggering thought. There was silence. People just couldn't believe it. (Clark, 2006)

While these events were transpiring, Jimmy Dunne was on the phone, calling first his wife and then a series of friends and associates. He tried repeatedly to reach Chris Quackenbush, his business partner and closest companion; the two had been friends since childhood. And he kept trying to call his boss and mentor Herman Sandler, but could not reach him either. Had Chris and Herman made it out of the South Tower alive? After four or five hours without word on the whereabouts of Chris or Herman, Jimmy began to fear the worst. As painful as it was to imagine, perhaps his best friends and colleagues had been murdered by the terrorists. Perhaps he would never see them again.

Still, like so many others on that chaotic day, Jimmy held out hope and maintained what he referred to as a “we are going to find them” state of mind. As he recalls, “There was a hope that there were people who had gotten out, gotten to a hospital, gotten somewhere and maybe they just couldn't make a phone call.”

His hopes received a massive boost when he was told that a junior trader in the firm had been found.

There was an intern who worked with us. He was terrific. His name was Kevin Williams. After I left the golf course I spoke to his father, who told me they found Kevin. And I was euphoric. I remember physical euphoria when I learned that Kevin was alive. It also meant that if they found Kevin, maybe they would find Chris and Herman and the others. I was euphoric. Absolute joy.

By mid-afternoon, Jimmy learned that surviving employees of his firm were gathering in a small office that Sandler O'Neill maintained in midtown. He decided to take the train into Manhattan and meet with them.

I left for the train station with great hope. But on the way I received a call that I will never forget as long as I live. It was Kevin's father. He said, “Jimmy, Jimmy, they found Kevin Williams – but not our Kevin Williams.” And I remember physically slouching down, almost collapsing. Fortunately there was a chair right there. I've never had anything like that happen before.

By the time the train arrived in Manhattan, however, Jimmy was surging with energy. He ran from Grand Central Station, headed toward the midtown office.

And then I remember thinking, as soon as I get there everybody's gonna be looking at me, everybody's gonna be looking for direction from me. I want to set a very different tone, one of total calm. I remember I stopped running and I walked about four blocks before I got to the office.

Under normal circumstances, Jimmy saw himself as somewhat pessimistic. “I'm like the French Foreign Legion: I prepare for the worst and hope for the best.” But on September 11, coming to terms with the news that the World Trade Center attack had been perpetrated by

terrorists whose goal was to kill as many Americans as possible and create a sense of mass hysteria among the living, he remembered something his father had told him decades earlier. Jimmy and his father had been sitting together watching an Army–Notre Dame football game, and Notre Dame was crushing Army 40–7.

That’s when Jimmy’s father turned to him and said, “Now is the time that I would like to be a lineman on the Army squad.”

Jimmy didn’t understand.

Why would anyone want to be on Army? They’re being beaten 40–7! And we liked Notre Dame better than Army. Plus, being a lineman for Army, you’d be outweighed by something like 80 pounds. I can’t think of a less desirable position to be in. So I asked my father, “why?” And I remember what he said like it was yesterday: “Because the guy on the other side of the line is gonna find out what I’m made of. I would wreak holy hell on that guy.”

In his own way, after the destruction of September 11, that’s what Jimmy did.

The moment I heard what the terrorists wanted, I decided to do exactly the opposite. Osama Bin Laden wanted us to be afraid. I would show no fear. He wanted us to be pessimistic. I would be incredibly optimistic. He wanted anguish. I would have none of it.

The determination to “show them what I’m made of” served him well in the hours and days after the attacks, as the scope of the catastrophe became clear. As hard as he may have tried to prepare himself to face severe losses, the damage was unimaginable. Of 171 Sandler employees, 66 died (Kroft, 2001). Among them were Jimmy’s close friends and fellow managing partners, Chris Quackenbush and Herman Sandler. In all, the deaths of the firm’s workers left 46 widows and widowers, and 71 children under age 18 who had lost a father or mother. Furthermore, Sandler O’Neill was a small enough firm that its operations had been concentrated in the Two World Trade Center office. All of the company’s paperwork and computer systems were destroyed. As *Fortune* magazine reported, “Every phone number of every person Sandler’s traders had done business with over the years was vaporized” (Brooker, 2002, p. 60). Even more devastating was the loss of corporate memory.

Suddenly Dunne, who previously had shared responsibilities with Quackenbush and Sandler, was thrust into the role of chief executive and decision maker. The firm was so terribly crippled – should he simply dissolve it? If not, how could he possibly guide it to survival? Would an attempt to stay in business merely prolong the agony? How could so many traumatized employees manage to function and conduct business when they were grieving for their lost colleagues?

One of the first crucial decisions Dunne made was to “do right by the families” of those who had died (Nocera, 2006). He personally attended dozens of funerals and delivered eulogies for many. Despite the financial burden, comprising a third of the firm’s working capital, Sandler O’Neill paid the salaries of the deceased employees through December 31, 2001 (McKay, 2002). The company paid bonuses and extended family health-care benefits for five years. In addition, the firm set up a fund for the education of the children who had lost a parent, and it provided five years of psychological counseling for all family members and for surviving employees.

Another of Dunne’s crucial decisions was that he would find a way to carry on with business. If the firm failed, it could no longer support his colleagues and their families. Failure would also mean success for the terrorists. Although there were rumors – including a CNBC report – that the firm was closing, Sandler’s operations never came to a halt. As much as Dunne felt the profound pain of his colleagues, he knew that the firm’s only chance for survival was to rebuild immediately.

Early on we got everyone together and they were in various levels of their pain. I said, “Look, everybody is re-evaluating their lives after 9–11.” And I said, “That’s fine. You can go ahead and re-evaluate your life. That’s OK. And some of you may decide that coming to the city every day and chasing the dollar is not worth it, and that you should work in the post office and teach lacrosse. That’s great. Some of you may want to go take a trip around the world. That’s fine too. But I can tell you what I am gonna do. I’m gonna put on my Brooks Brothers suit every day and I am gonna come to work, and I am gonna rebuild this firm, and I am gonna pay for these benefits, and I am not gonna give in. That is what I have decided to do. Now for those of you who want to be doing the same thing, we have to be doing it *now*. And those of you who want to re-evaluate things and think differently, I wish you well. Go do it.”

By September 17, the day the New York Stock Exchange reopened, the firm was set up in temporary office space donated by Bank of America and prepared to resume trading. Dunne and the other managers saw rebuilding the firm as a moral imperative. They were determined to honor their lost colleagues and make the trades that their colleagues no longer could. Several weeks later, after his first visit to Ground Zero, accompanying a colleague’s widow who wished to view the site, Dunne commented to a co-worker, “... if I was determined before, I’m on fire now” (Brooker, 2002, p. 53). As founding partner Tom O’Neill told CBS’s *60 Minutes*, “I don’t think we appreciated the depth of [the terrorists’] hatred, but I think for every percentage that we might have underestimated them, I think they very much underestimated us” (Kroft, 2001). By the first anniversary of the attack, Sandler had hired 81 new employees and closed 59 deals, including 15 mergers worth \$2.7 billion.

Although immersing himself in work was a healing influence for Dunne in many ways, the emotional toll was still vast. A year after the attacks, Dunne told National Public Radio’s Scott Simon, “I’m better when I’m busy, but the very first thing I think about when I wake up in the morning and the very last thing I think about at night are those planes” (Simon, 2002). Then-Chief Operating Officer Fred D. Price, who had been away at a conference in Seattle on September 11, agreed:

When you are busy and active you don’t think about it, but when it’s quiet, when you are driving alone, or on weekends when you get up in the morning, that is when I vividly miss [my colleagues]. ... Some days, I feel bad and some days I feel good and I never know why ... Weekends are tougher, and Sunday is my ugliest day. It’s when I’ve got time on my hands. (Wayne, 2002)

The grief that Jimmy felt was unlike anything that he had experienced. Reflecting on the loss of his lifelong friend Chris Quackenbush and his mentor Herman Sandler, he likened it to the utter despondency that history tells us Thomas Jefferson experienced upon the death of his beloved wife Martha in 1782:

It was absolute grief, the kind of grief that Thomas Jefferson talks about, grief without a point. I felt that kind of grief at Chris’s funeral after I spoke, and when I went to see [Herman’s widow] Suki Sandler. When other people talk about their grief, sometimes you don’t even know what they’re talking about. You don’t really know what real grief is. Now I think I know. I think I have a sense about absolute grief. Those are the times I just broke down.

Five years later, *New York Times* reporter Joe Nocera interviewed Dunne and noted that “his eyes would well up while his voice would start to crack” when he talked about his partners (Nocera, 2006). Yet, far from being a sign of weakness, Dunne’s heartfelt emotion was the

driving force in his rescue of the firm. Jimmy Dunne personifies resilience in his unwavering determination to bounce back from the brink of despair, and to grow in the process, becoming a more compassionate, dedicated leader than he had been in the past.

How we became interested in resilience

Our interest in resilience evolved during nearly 20 years treating and studying trauma survivors who came to us for help with conditions such as depression and posttraumatic stress disorder. In our research, we examined the psychological, neurobiological, social and spiritual impact of having lived through overwhelming traumas such as combat, child abuse, physical and sexual assault, and natural disasters including the WTC disaster and Hurricane Ike (Charney *et al.*, 1993, 1996; Bremner *et al.*, 1993, 1999; Southwick *et al.*, 2006, 2007; Stellman *et al.*, 2008). We, and many other researchers, discovered alterations in psychological view of self and others, in the brain circuits that respond to frightening situations, and in feelings about one's purpose, meaning and place in the world. These alterations often had profound negative effects on the lives of our patients.

As we worked with traumatized individuals, we often wondered about survivors who seemed to somehow cope effectively with the negative effects of stress, those who did not develop stress-related symptoms, or who, if they developed symptoms, carried on successfully nevertheless. The term “resilient” (meaning having the capacity to bend without breaking, to return to an original shape or condition) described these survivors well. They had been “bent” by their traumatic experiences, but not broken.

Defining resilience

What is resilience? In the physical sciences, materials and objects are termed resilient if they resume their original shape upon being bent or stretched. In people, resilience refers to the ability to “bounce back” after encountering difficulty. The American Psychological Association defines it as “the process of adapting well in the face of adversity, trauma, tragedy, threats and even significant sources of stress – such as family and relationship problems, serious health problems, or workplace and financial stresses.”¹ In his book *Aging Well*, Harvard University psychologist George Vaillant (2002) describes resilient individuals as resembling “a twig with a fresh, green living core. When twisted out of shape, such a twig bends, but it does not break; instead, it springs back and continues growing” (p. 285).

Resilience is complex, multidimensional and dynamic in nature (Bonanno, 2004, 2005; Carver, 1998; Layne *et al.*, 2007; Luthar *et al.*, 2000; Rutter, 1985). When faced with adversity, people tend to be more competent in some domains of their lives than in others, and during some, but not all, phases of their lives. For example, an individual may be remarkably sturdy in responding to adversity at work, but not so much in handling family or other interpersonal stresses. Or a person may demonstrate resilience to stress at a young age, but not as he or she

¹ American Psychological Association Help Center. Accessed 12/4/09 at <http://www.apahelpcenter.org/featuredtopics/feature.php?id=6&ch=2>. It is worth noting that researchers have identified a coping style called hardiness which involves a constellation of personality characteristics associated with high performance under stressful conditions. These characteristics include commitment (the tendency to engage fully in life activities), perceived control (belief in one's ability to exercise control over life circumstances), and challenge (the tendency to view adversity as a challenge). See, for example: Kobasa (1979), Kobasa *et al.* (1982), Bartone (1999), Maddi (2005), and <http://www.hardiness-resilience.com/>.

grows older. It is important to note that healthy adaptation to stress depends not only on the individual, but also on available resources through family, friends, and a variety of organizations, and on the characteristics of specific cultures and religions, communities, societies, and governments – all of which, in themselves, may be more or less resilient (Southwick *et al.*, 2011).

Researchers have developed various tests to measure resilience; among them are the Connor–Davidson Resilience Scale and the Response to Stressful Experiences Scale. These tests are self-report instruments with a 5-point Likert scale (strongly agree, agree somewhat, etc.) and include statements such as the following:

- During and after life's most stressful events, I tend to find opportunity for growth.
- I have at least one close and secure relationship that helps me when I am stressed.
- When there are no clear solutions to my problems, sometimes fate or God can help (Connor & Davidson, 2003).
- During and after life's most stressful events, I tend to calm and comfort myself (Johnson *et al.*, 2008).

Additional tests of resilience include the Dispositional Resilience Scale-15, which focuses on three dimensions – being fully engaged, having a sense of control over events, and being able to view adversity as a challenge – and the Resiliency Scale for Children and Adolescents, which assesses an array of attributes related to mastery, relatedness, and emotional reactivity (Bartone, 2007; Prince-Embury, 2008).

What makes some people resilient?

When we began our research we had many questions. Why do some survivors appear relatively unscathed by their trauma, while others develop debilitating disorders such as PTSD, depression and alcohol dependence? (For more information about PTSD, please see the Appendix.) And why do some survivors who develop trauma-related psychological symptoms continue to function well in spite of their symptoms? Do they differ genetically? Is there something unique about their nervous system? Have they been raised in a special manner? What about their personalities? Do they use specific coping mechanisms to deal with stress? And if we learn more about how they dealt with stress and trauma, will these lessons be helpful to PTSD patients and to the general public? Can the average person learn to become more resilient?

These were the questions that we asked ourselves as we began to investigate social, biological, psychological and spiritual factors associated with resilience to stress. And, of course, we also wondered whether these lessons would be helpful to us. Could we, ourselves, learn to become more resilient? We had many unanswered questions.

So we made a decision to search actively for answers to our questions about resilience. We knew that our task would be daunting, because anyone who has spent time studying human behavior, or investigating the nervous system and brain, understands that thoughts, feelings and behaviors are the complex products of genetic, biological, psychological, social, and spiritual forces. Resilience is far more than a simple psychological trait or biological phenomenon. In order to truly understand it, researchers must approach it from multiple perspectives and examine it through a number of different scientific lenses. We did this by reviewing the available scientific research and popular literature on resilience, by initiating our own psychological and neurobiological research on the topic, and by conducting in-depth interviews with a large number of highly resilient individuals (Southwick *et al.*, 2005).

To conduct these interviews, we needed to step out of our traditional clinical and research settings, and to go into the community and recruit people who had clearly demonstrated

resilience in the face of extreme stress. We turned to three groups of highly resilient individuals: former Vietnam prisoners of war (POWs), Special Forces instructors, and civilian men and women who had not only survived enormous stress and trauma, but had somehow endured or even thrived.

We interviewed former Vietnam POWs

We began by conducting detailed and lengthy interviews with more than 30 former Vietnam prisoners of war. We chose to study former POWs for several reasons. First, the traumatic experiences they endured were extreme and of long duration; for some, the ordeal lasted for more than eight years. Second, because their captivity took place decades ago, we could examine how their lives had unfolded over many years after the trauma. Third, we believed that the former POWs were good role models and that their methods of coping with stress and trauma would be highly instructive for anyone facing or recovering from their own stressors.

Most of these former POWs were pilots who were captured when their planes were shot down over North Vietnam. After ejecting from disabled burning fighter jets flying at speeds of greater than 400 miles per hour, they parachuted into the jungle. There they were captured by North Vietnamese.

The North Vietnamese treated American prisoners as war criminals, not as prisoners of war protected by the Geneva Conventions. Often captured Americans were paraded through crowds of hostile villagers before being imprisoned, interrogated, beaten, and tortured. The largest and most infamous facility where POWs were held was Hoa Lo Prison in Hanoi, which the Americans sarcastically nicknamed the “Hanoi Hilton.” Here prisoners were subjected to interrogation techniques like the “rope trick,” in which both arms are tied behind the back and then gradually lifted higher and higher until one or both shoulders are pulled out of their sockets. At other times, guards wrapped a rope around the prisoner’s throat, stretched the rope behind his back, and tied it to his ankles, so that if he relaxed his arched back, he would choke.

POWs were also starved. Typically, they were given meager portions of barely edible food: swamp grass or cabbage soup, a chicken head floating in grease, pumpkin soup, a piece of bread covered with mold, the hoof of a cow, an occasional tiny piece of pig fat, or a handful of rice that might be full of rat feces, weevils, or small stones. Even prisoners in solitary confinement rarely dined alone. Colonel Larry Guarino (1990, p. 45) describes his “dinner guests”:

A new civilian guard brought food, and as he set it down on the far bunk, a horde of hungry ants rushed out from the block mounts of the leg irons and swarmed into the tin plates. ... While eating, I was startled by two lightning-fast brown rats who darted around the cell and between my feet looking for food. ... I had more visitors. Arriving under the door were two huge scorpions ... The scorpions came in with raised stingers, but when they sensed my presence, they backed out into the cement channel where the pickings were presumably better. ... Mosquitoes by the hundreds lived under the cement bunks, where it was very damp. I sat swinging my legs and swatting mosquitoes until my hands were swollen. Suddenly, I saw a huge gray-white, web-footed rat poking his head under the door. He was so big he couldn’t get under the door to enter the cell. He sniffed about, showing me inch-long white fangs, then swirled his head under the door, still trying to get in. His tail was over an inch thick! No doubt this rat and his friends were the producers of the huge turds that covered the outside yard. What a disgusting and frightening creature. My heart pounded so, it was difficult for me to breathe, even as I told myself to calm down and take it easy.

In Glory Denied: The Saga of Vietnam Veteran Jim Thompson, America’s Longest-Held Prisoner of War, Captain Thompson describes one of his “accommodations”:

I was put into a horizontal cage maybe two feet wide, two feet high, and five feet long. There I was kept for four months, chained hand and feet. The leg irons were a nasty device, a U-bolt with a rusted rod through the back, much too small for American legs. Every time they put the thing on it took a chunk of flesh. This cage sat in the back room of a house in complete darkness. They had a bamboo wall around it so I saw nothing. I was not let out for exercise. For ten minutes a day I could use the latrine and wash up. Then they would stick me back in and put the leg irons back on. (Philpott, 2002, p. 147)

In this environment, it's not surprising that many POWs developed serious illnesses and were sick during much of their time in prison. They described skin infections, malnutrition, extreme weight loss, open untreated wounds, broken and dislocated bones, dysentery, malaria, depression and symptoms of posttraumatic stress, such as terrifying nightmares. Plagued by dysentery and needing to defecate dozens of times each day, some prisoners became severely dehydrated. Others described boils and skin diseases, where pus and blood attracted jungle flies and mosquitoes, and where maggots thrived.

All of the POWs we interviewed were deeply affected by their prison experience. A substantial number developed trauma-related depression and/or PTSD and experienced difficulty adjusting to civilian life. However, despite their wartime experiences, these former POWs went on to live productive lives after their release. In fact, many of them reported having a greater appreciation of life, closer connections with family, and a newfound sense of meaning and purpose because of their prison experience.

We interviewed Special Forces instructors

The second group of people we interviewed were members of the Special Forces (SF). The Special Forces is an elite command within the US Army. The Army selects these soldiers and trains them to be among the hardest, most resilient men and women on the planet. In the world today, there is perhaps no group that is better conditioned to handle stress than are SF troops. They benefit from the US Military's constant refinement of its combat and training programs. SF soldiers are rigorously trained to deal with hardship and life-and-death situations. They're intelligent, agile, resourceful, and exceptionally well-prepared for covert missions related to reconnaissance, counter-intelligence, unconventional warfare, and foreign internal defense.

All of the SF members we interviewed were instructors. To become an instructor, one must first serve as an SF soldier. After completing tours of duty stationed around the globe, the instructor's job is to assess and train the next generation of elite soldiers. We chose to interview instructors in order to learn about their philosophy of training and about the actual principles and techniques they use to enhance resilience. These men had all served as instructors at the rigorous SERE course (Survival, Evasion, Resistance, Escape), which is designed to teach soldiers survival fieldcraft so that they can maneuver in enemy-controlled areas, escape detection, and return unharmed to friendly forces. They participate in a grueling war game with a well-equipped "enemy" while they have no food, water, or weapons. They learn how to live for several days with nothing but a knife and canteen and to overcome food aversions so they can eat snakes, insects, worms and dead animals. During the last segment of the course, trainees are taken captive and held in a mock POW camp. Here they are stripped of their uniforms and identity, and deprived of food and sleep. As SERE graduates who teach soldiers in this course, the SF instructors are real-life experts in how to cope with high levels of emotional and physical stress; in how to become emotionally and physically stronger.

Retired four-star general Henry Hugh Shelton, former Chairman of the Joint Chiefs of Staff, also talked with us about resilience. Early in his military career, he trained as an Army

Ranger and later served as head of the Special Operations Command for all of the Armed Forces. He told us that his Ranger training gave him the tools that he needed to overcome the personal and professional traumas in his adult life.

Special Forces instructor Bruce Norwood described a mission that particularly stood out in his memory. He and his wife were living in Puerto Rico when his beeper went off one night and he was told to drive to his office immediately. Thirty minutes later, he and four team members were on board a Black Hawk helicopter, flying to Venezuela. As they approached their destination, in heavy rain and violent gusts of wind, the pilot directed the chopper's searchlight to the road below. There they could see scores of people being swept away by the torrential flood waters.

Once the pilot located a cluster of terrified survivors, Norwood and his colleagues slid down a rope while the Black Hawk hovered above. Norwood's left boot struck a firm but spongy object as he stepped onto the slippery terrain. It was an infant girl who had died in the flood.

We worked for forty straight hours and saved hundreds of people, maybe as many as 1500. Most people don't know it, but at least 50 percent of our missions are humanitarian. They call us the Peace Corps with guns. Even when we're on a foreign international defense mission, the SF medics will go out to the front gate and treat whoever shows up. Some poor campesinos bring their dead baby that they carried across the mountains for three days, and they've never seen a doctor before. The SF medics will be out there five, six, seven hours a night on their off-time treating the locals. The engineers will go down to the nearest town and see what they can do for the schools, the churches. They'll put a new roof on. They'll build a new school, a new church.

We interviewed resilient civilians from many walks of life

The third group we interviewed consisted of civilian men and women who have gone on to lead productive and accomplished lives after experiencing severe psychological traumas, such as congenital medical problems, childhood sexual abuse, death of parents at an early age, abduction and rape, loss of a limb, and cancer.

Eleanor Jensen, for example, lost her parents in an automobile accident when she was eight. Eleanor remembers sitting with her sister on the front porch of their house, waiting to find out where and with whom they would live. After temporary placement with relatives, they were adopted by a childless couple who lived in another region of the country.

Soon Eleanor's new stepfather began to show "special" interest in her and started to touch her. One night, when her stepmother was out of the house, Eleanor's stepfather came into her room and asked her to sit with him. "He started feeling me, French kissing me. And I didn't know what was happening ... I was still. Dead. A robot." The situation became chronic.

My stepmother put a lock on my door, a screw and hook, and I could hear him come up the steps and scratch at the door. He would work on the lock with this little ruler until it opened. Then my stepmother tried a slide lock, and he'd work on it until he eventually got in, then a bolt lock, then a twist lock. There were about 4–5 locks on the door. I'd always be afraid to be home alone. One time when the dog got away and ran down the road and I was running after it, he drove in the car after me and told me to get in and I froze. I could not move my muscles. He said, "I'm sorry, I'm sorry, I won't touch you, I promise. Get in the car, I'll take you home." There was always this tension in being alone, and I'd panic.

As a teenager, Eleanor was sent to a boarding school where she was safe. Although the memories of abuse haunted her for years, she was eventually able to forgive her stepfather.

Eleanor went on to become a highly respected nurse practitioner and psychotherapist specializing in treating posttraumatic stress disorder.

Additional examples of ordinary people who found constructive ways to cope with their trauma include, among others:

- Deborah Gruen, who, despite a serious congenital neurological condition, was valedictorian of her high school class, competed as a member of the Yale University Women's Varsity Swim Team, won bronze medals in the 2004 and 2008 Paralympics, graduated summa cum laude from Yale with a major in economics, and went on to pursue a law degree at Georgetown University.
- Elizabeth Ebaugh, who was kidnapped, raped, and thrown over a bridge into a freezing river only to survive and over the ensuing years who built a thriving clinical social work practice that focuses on holistic approaches to helping survivors of trauma and tragedy.
- Jerry White, who lost his leg to a landmine while hiking in Israel as a college student, and then slipped into depression. Years later he co-founded Landmine Survivors Network and played a leading role in the International Campaign to Ban Landmines coalition, which was awarded the Nobel Peace Prize in 1997.

What we found: 10 resilience factors

During our interviews, we kept hearing a number of recurrent themes. Although their circumstances differed greatly, the resilient people we interviewed tended to use the same or similar coping strategies when confronted with high levels of stress. By conducting a detailed analysis of the interviews, we identified 10 coping mechanisms that proved to be effective for dealing with stress and trauma. Throughout the book we refer to these coping mechanisms as “resilience factors”. In response to stress, all of the individuals we interviewed confronted their fears, maintained an optimistic but realistic outlook, sought and accepted social support, and imitated sturdy role models. Most also relied upon their own inner moral compass, turned to religious or spiritual practices, and found a way to accept that which they could not change. Many attended to their health and well-being, and trained intensively to stay physically fit, mentally sharp, and emotionally strong. And most were active problem solvers who looked for meaning and opportunity in the midst of adversity and sometimes even found humor in the darkness. Finally, all of the resilient people we interviewed accepted, to an impressive degree, responsibility for their own emotional well-being, and many used their traumatic experiences as a platform for personal growth.

We recognize that this list of what we call “resilience factors” (i.e. realistic optimism, facing fear, moral compass, religion and spirituality, social support, resilient role models, physical fitness, brain fitness, cognitive and emotional flexibility and meaning and purpose) is by no means definitive or complete and that other factors certainly contribute to stress hardness. We focus on the above-mentioned resilience factors because they were the one most often described as crucial, and sometimes even life-saving, for the individuals we interviewed. In upcoming chapters we will discuss each of these factors in greater detail.

Most of us will never become a prisoner of war or step on a land mine, but we will inevitably face our own stressors, traumas, and tragedies. Today, for example, many people throughout the world face prolonged unemployment, financial distress, poverty, homelessness, separation from loved ones, medical and mental illness, and a host of other challenges. Fortunately, to withstand, overcome, and grow from these experiences, we don't need to have superior genes, take a “tough as nails” approach to life, or train with the Special Forces. But we do need to prepare ourselves, for life has a way of surprising us with adversity when