

# The Sociology of Stress

*Americans are the most entertained and least informed people on the planet.*

—Robert F. Kennedy, Jr.

Today's world is a very different place from the one that existed when Walter Cannon coined the term “fight-or-flight response” and Hans Selye first uttered the words “general adaptation syndrome.” Little did they know just how much stress would become a part of the social fabric of everyday life in the twenty-first century. Some experts argue that our collective stress is a result of our inability to keep up with all the changes that influence the many aspects of our lives. Simply stated, our physiology has not evolved at a comparable rate to the social changes of the last half-century. Perhaps it never will.

Futurist Alvin Toffler warned of these changes decades ago in his best-selling book *Future Shock*. In a 2010 National Public Radio (NPR) interview celebrating the fortieth anniversary of his book, Toffler stated that the “future shock” he described then is here now. *Future Shock* describes the stress that accompanies a proliferation of technology, urban sprawl, and a glut of information on the Internet.

Douglas Rushkoff is a social media theorist and author of the book *Present Shock*, a timely sequel to Toffler's *Future Shock*. Whereas Toffler described that rapid change was coming, Rushkoff states the whirlwind of change is here. Our society, he states, has become reoriented to the present moment with the likes of Twitter, Facebook, Tumblr, and Instagram. In Rushkoff's words, “Everything is live, real time, and always-on.” Citizens with cell phones now post

current events on YouTube quicker than CNN can get a camera crew to report the headline news (as was evident in the Boston Marathon bombing event in 2013). Emails have lost favor to instant messaging, blogs have given way to Twitter feeds, and the search engine Google includes the Google Now option. Linear time has become compressed into a collection of single moments, each forgotten as we become immersed in the next now moment. As someone with his finger on the pulse of social media, Rushkoff sees a new series of stressors and problems with the syndrome he calls present shock. They include the following:

1. *Narrative collapse*: Because so much attention is on the present moment, people cannot get a clear perspective on their lives (e.g., addressing problems of global warming or saving for retirement). Life events are reduced to myopic 140-character tweets or quick Facebook status updates, losing the bigger context of one's life.
2. *Digiphrenia*: The tacit permission to be in more than one place at a time with a variety of social media.
3. *Overwinding*: The ability to reduce big-time scales into small ones (as a result, getting less done).
4. *Fractalnoia*: The anxiety associated with rapid media grazing and jumping to conclusions with incomplete information in the absence of cause and effect perspective.

Moreover, the need for instant gratification mixed with voyeurism and ego grooming becomes a recipe for stress. People's eyes may have adapted to viewing multiple screens and fingers may adapt to smaller keypads finding multiple search engines, but the human nervous system interprets the bombardment of sensory stimulation as overload and adapts through the general adaptation system (GAS).

Author and physician Roberta Lee has a new name for this intense state of stress: "superstress." As a practitioner on the front lines of health care, she sees the result of superstress in patients who live a hectic and demanding lifestyle, in whom chronic stress ultimately translates into chronic disease. She predicts that this association will only increase if people don't take time to integrate effective stress-management skills—specifically meditation, exercise, and healthy eating habits—into their daily lives.

Holmes and Rahe, the creators of the Social Readjustment Rating Scale, were dead-on regarding various social aspects of life that can destabilize one's personal equilibrium, even with the best coping skills employed. Yet no matter what corner of the global village you live in, the stresses of moving to a new city or losing a job are now compounded by significant twenty-first-century issues. We are a product of our society, and societal stress is dramatically on the rise. A quick look at current headlines provides a window on the impact of societal stress on the individual:

- Pedestrians Killed by Texting Driver
- Florida Family Gets Micro-Chipped: Are You Next?
- Bedbug Epidemic Spreads to University Campuses
- Consumers Addicted to Smartphones
- Impact of the Great Recession to Last for Years to Come
- Obesity Epidemic Related to Artificial Sweeteners?

Experts who keep a finger on the pulse of humanity suggest that as rapid as these changes are now, the rate and number of changes are only going to increase.

It's not just the changes we encounter that affect our stress levels, but also how we engage with these new changes. Increasingly, this engagement is online. Unfortunately, the stress that is provoked is real, not virtual. The majority of interactive Web sites are littered with negative comments, frustrations, expletives, and rants, all of which suggest a

**Sociology:** The study of human social behavior within families, organizations, and institutions; the study of the individual in relationship to society as a whole.

malaise in the general public combined with an unparalleled freedom to honestly express oneself anonymously. While it's true that Facebook, Twitter, and YouTube played a significant role in the social changes of Arab countries, from Tunisia and Egypt to Libya, Yemen, Syria, and even Turkey, many people found themselves persecuted for expressing these freedoms publicly.

Being overwhelmed with choices in communication technology for staying in touch with friends, colleagues, and employees leads to a whole new meaning of "burn-out." Being tied to smartphones and tablets after work hours is bringing about a rash of lawsuits regarding unpaid overtime (Simon, 2010). And then there is the stress associated with the creative freedom gained or lost in cyberspace. True, freedom and creativity have been elevated to new heights by the Internet; however, in today's narcissistic and exhibitionist society, anybody can publish a book, release a single, be a critic, star in their own YouTube video, comment on any blog, and claim their full 15 minutes of fame. The rest of the world looks on in what is often described as "e-voyeurism."

The world is rapidly changing, and with it, the culture in which we live—all of which holds the potential to add layers upon layers of stress weighing on each individual. Simply stated, one cannot examine personal stress levels without looking at intertwining social mores and cultural trends, because whether we know it or not, we are greatly influenced by them all. As the expression goes, "Each of us is a product of our culture." As much as we might like, we cannot renounce the world and move to the nearest monastery or Amish community. En masse, we would only take all our cultural tendencies with us. In the words of John Donne, "No man is an island." The social fabric connects us all. There are, however, those who make a serious effort to change the fabric of the social culture, living examples of how to reduce the collective stress level. These, too, make the headlines, but mostly as curiosities:

- Organic Food Purchases on the Sharp Increase
- Man Escapes the Black Hole of his Smartphone
- Biking to Work Increases 60% in Past Decade
- Drop in Teen Suicide Linked to Legalization of Same-sex Marriage
- Pursuit of Happiness Still a Strong American Pastime

Physiology, psychology, anthropology, theology—the topic of stress is so colossal that it is studied by researchers in a great many disciplines, not the least of which is sociology. **Sociology** is often described as the study

of human social behavior within families, organizations, and institutions: The study of the individual in relationship to society as a whole. Because everybody is born into a family and most people work for a living, no one is exempt from the sociology of stress. Revising John Donne's observation for the modern era, "No man or woman is an island." Whether we like it or not, we are all connected to each other.

What if it is not we who are stressed per se, but the society and culture we live in (or have created)? Poorly designed urban sprawl with no consideration of sidewalks or nature paths for exercise. Food deserts in our nation's cities. Poorly drafted legislation regarding working mothers. Perpetual issues of gender and race inequality that are so woven into the fabric of society that they are often hidden to those fortunate enough to even know what stress management is. This is the argument made by Dana Becker in her book *One Nation Under Stress*, which discusses what she calls stress and the biopolitics of American life. In an overview of the past several decades, Becker, a professor of social work at Bryn Mawr College in Pennsylvania, cites many examples of societal stress that contribute to personal strife, particularly affecting women, minorities, and the poor. She contends that for stress to be addressed fully, it must be reconciled from a societal perspective or what she calls the "wear and tear of society."

Perhaps the sociology of stress can best be acknowledged through the buzzword "social networking," which describes the likes of Facebook, Twitter, Facetime/Skype, YouTube, Snapchat, Instagram, and new social media and networking outlets looming on the horizon. Technology has even changed how people converse at a dinner party (e.g., one person asks a question and five people pull out their cell phones and Google the answer). Technology, the economy, and the environment have become significant threads of the social fabric. This chapter examines some of the most current issues and trends in the global society and their potential to increase stress for each of us personally.

## ■ Technostress

The tsunami of cyber information has been building for years, yet the first devastating wave seems to have hit the shores of the human mind in earnest at about the same time Facebook reached over half a billion users in 2010 (FIG. 2.1), which was the same year that the Swiss army knife included a USB drive as a necessary tool for "survival." The deluge of tweets, Facebook updates,



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**FIGURE 2.1** In 2013, the popular social networking site Facebook reached over 1 billion users. What was originally created as a means for college-aged students to meet each other is now cited by some as promoting loneliness and increasing social alienation.

Skype messages, text messages, and emails has led to annoyance and addiction for a great many people who are fed up with giving their lives over to technology. The growing dependence on technology has even inspired a term: "screen addiction." If it's not computer screens and smartphones, it's iPads, google glasses, and Bluetooth technology, none of which is bad, but all of which can become problematic if your life is completely centered around being plugged in all the time.

Technology is meant to serve us, yet many people have turned the roles upside down and have become slaves to technology, hence the technostress phenomenon.

The perfect storm of stress related to the information age comes from the overwhelming amount of information available, the distractive nature of being plugged in 24/7, a sense of alienation, and the poor boundaries people maintain to regulate the information available. Examples of poor boundaries include college students who text during classroom lectures (Rubinkam, 2010) and the scores of people who bring all their technology with them on vacation, thus never separating work from leisure and possibly compromising both (FIG. 2.2). For example, it is not uncommon to find people plugged in to Wi-Fi technology at or near National Park campgrounds, a place people once went to get away from the trappings of modern civilization (Seigler, 2010). Similarly, fewer than half of all employees nationwide leave their desk or workstation during lunch hour, according to a Manpower survey, leading to higher stress levels and fatigue (Marquardt, 2010).



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**FIGURE 2.2** Copper Mountain Ski Resort in Colorado has some of the best slopes in the world to ski, but these days many people ski or snowboard one run and then check their emails and text messages. Vacations were once a way to escape from work, but now people bring their work with them via smartphones and laptops. People now say they cannot live without these accessories.

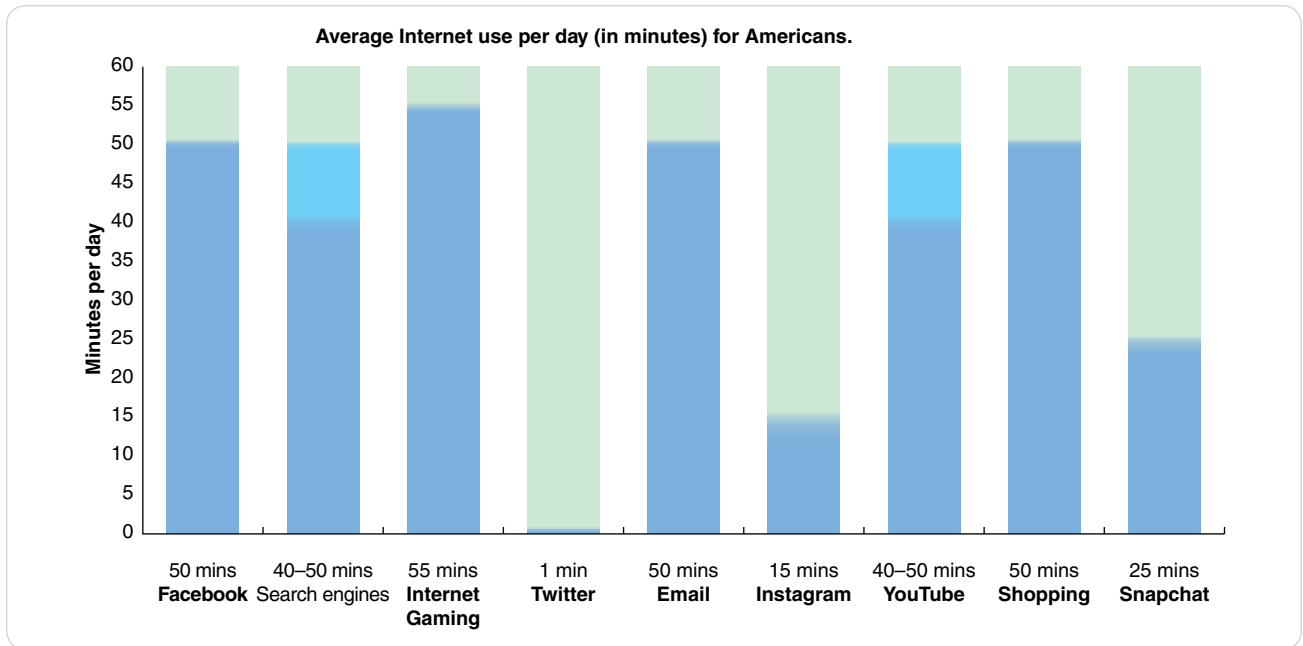
Many terms have been created for all the problems associated with this tsunami of information and the convenience of accessing it, but the one term that sums it all up is **technostress**, which is the feeling of being overwhelmed by technology. Factors contributing to techno-stress include, but are not limited to, privacy issues, identity theft, cell phone radiation, sensory bombardment, Internet scams, addiction to Internet gambling and pornography, and the problem of children having access to adult content. The Kaiser Family Foundation data suggest that 8–18-year-olds spend over 7 hours per day with entertainment media (video games, TV, apps, etc.).

**Technostress:** A term used to define the result of a fast-paced life dependent on various means of technology, including computers, cell phones and smartphones, personal digital assistants, texting, and email—all of which were supposed to give people more leisure time. Instead, people have become slaves, addicted to the constant use of these devices and technologies.

Perhaps the most widespread stress from technology that most people experience is the perpetual distraction of email and the replacement of face-to-face conversation with digital communications (**FIG. 2.3**). In one of a series of articles in 2010 for the *New York Times*, technology investigative reporter Matt Richtel noted that people check email up to 37 times an hour on average. Furthermore, some people feel an urge to respond to emails immediately and feel guilty if they don't. How many emails can push one over the edge, past the threshold of exhaustion? According to a Harris Interactive poll, respondents said that more than 50 emails per day caused stress, many using the phrase “email stress” to explain their frustrations. According to Pingdom, a Web-monitoring firm, over 90 trillion emails were sent over the Internet in 2009, with an average of 247 billion emails per day (Swartz, 2010).

In the age of digital anxiety, what impact does repeated interfacing with Wi-Fi technology have on our brains? Given the recent discovery that our brain tissue has the ability to adapt to a host of cognitive challenges and stimuli (a phenomenon known as *neuroplasticity*), the implications are significant. Susan Greenfield (2008, 2009), a professor of synaptic pharmacology at Oxford University, is concerned regarding how six to eight hours a day of computer interfacing will affect neuronal connectivity. Research from the University of California at Irvine reveals that the constant interruption of emails triggers the stress response, with the subsequent release of stress hormones affecting short-term memory (Richtel, 2010). And if you ever wondered why people, perhaps even yourself, seem addicted to checking emails, voice mails, or tweets, consider this fact: Research shows that the receipt of emails and tweets is accompanied by a release of dopamine. Dopamine, a “feel-good” neurotransmitter, is associated with chemical addictions. In the absence of dopamine release, boredom ensues, until the next fix (Richtel, 2010).

Whereas Greenfield and others are alarmed regarding sensory input and brain physiology, others are concerned with people's emotional maturity, intuition, psychological reasoning, memory processing, and moral compass (Dossey, 2009). Clay Shirky, author of the best-selling book *Cognitive Surplus*, cites a dramatic shift in society's relationship to technology, from primarily watching television to using online media. With this shift lies both promise and peril. The promise is the collective effort (sometimes called “digital consciousness” or “wiki efforts”) to solve world problems. The peril is becoming self-absorbed in cyberspace with screen-addiction or being drowned out by the sheer amount of cyber noise (Alter, 2017).



**FIGURE 2.3** According to data collected by various organizations including Social Media Today, Amazon, Google, and the Entertainment Software Association for 2016, on average, people spend 8 hours per day on their screen devices, from gaming, shopping, and search engines to all kinds of social media posting. Teens (ages 12–18) spend as much as 9 hours per day. One billion hours of YouTube is watched every day. The impact of screen use and Internet interaction on society cannot be understated.

Every abrupt shift in the history of societies has had its associated stressors; for example, the shift from agrarian to industrial society was correlated with a dramatic increase in alcoholism, regarded as the “social disease” of its time. In today’s abrupt shift to online technology and social media, the online technology is itself the addiction. This addiction is easy to observe: Check people’s behavior inside an airplane cabin the moment the plane touches down, or in a movie theater once the credits appear on the screen—everybody reaches for their cell phone to check messages. Young people today who never knew life without a cell phone or iPad don’t understand why older adults seem so concerned about their addictive tech habits, whereas adults notice that children and teens raised with screen technology may be well versed in cyber communications skills but are socially immature regarding face-to-face communication skills, including eye contact. Harvard psychologist Sherry Turkle notes these and other growing stressors in her book *Alone Together*, stating that people’s social skills diminish with technology and artificial intelligence.

Another problem associated with constantly being “on” with technology is what experts describe as the **shallow effect**. According to Nicholas Carr, author of the book

*The Shallows: What the Internet Is Doing to Our Brains*, information grazing is not the same thing as cultivating a synthesis of wisdom, yet superficial information grazing has become the norm, resulting in a shallow understanding of complicated issues. Not long ago, there was a clear line between information and entertainment. That line is quite blurry, if not non-existent, now—so much so that many people view these two aspects as one and the same, as illustrated by Jon Stewart’s *Daily Show*, Huffingtonpost.com, and DailyBeast.com. Moreover, jumping from site to site and cherry-picking information seems to “rewire” the brain to deleterious effect; specifically, it compromises one’s ability to concentrate or focus on something long enough to fully understand all its implications. Carr states that this rewiring of the brain not only weakens one’s ability to cultivate one’s memory (by always being reliant on an outside source of

**Shallow effect:** A shallow understanding of complicated issues that is caused by information grazing. Jumping from site to site and cherry-picking information compromises one’s ability to concentrate or focus on something long enough to fully understand all its implications.

information), but also makes it more difficult for people to calm the mind and relax. Many social media experts disagree with Carr's findings, but they do agree with the obvious dilemma: The Internet may make you smarter, but beware of the multitude of distractions. Experts interviewed by *USA Today* reporter Marco della Cava for a story on this topic all offered the same advice to people aged 30 and younger: Learn to restrain yourself when it comes to Wi-Fi technology.

### Digital Toxicity, FOMO (Fear of Missing Out), and Digital Dementia

As more research comes to light with regard to smartphone use and screen technology, we are learning more about how various behaviors with technology affect cognitive skills, including memory, as well as social skills (or the lack thereof). Sociologists, including MIT Professor Sherry Turkle, identify two of the biggest concerns with screen devices as being isolation and alienation, both of which lead to or perpetuate stress.

What effect does digital overload have on memory? Research conducted by Bill Thornton at the University of Southern Maine and published in the journal *Social Psychology* revealed that people who had their cell phones within easy reach were less efficient with a given task than those who did the same task without the presence of their cell phone (Freidman, 2014). Smartphones not only distract one's attention, but the constant anticipation of social media messages derails memory processing and perhaps other cognitive functions, keeping the brain in an alert state, one that is hard to turn off when preparing for sleep.

With the world of information at our fingertips, can having access to so much information be a hindrance to memory rather than an asset? The answer appears to be a definitive YES! In an article titled "A Smart Thing That Makes You Stupid," investigative reporter Ron Friedman cites a series of studies that reveals the problem with being online with a smartphone all the time. In the first study, two groups of people were given a task: one group was allowed to have their cell phones within arm's reach (on the table where they were working) and the second group had no access to their smartphones. When the results were tabulated, the group of people with access to their smartphones did 20 percent worse on the task than the control group. In a similar study, people were asked to participate in a face-to-face conversation. Those who had a smartphone within reach found the person they were in conversation with boring, whereas those without a smartphone did not.

The results showed that when one's focus is split (distracted) between a task and the anticipation of a text message, email, phone call, or social media post (the opposite of "undivided attention") memory function is compromised. For information to be transferred from short- to long-term memory, the brain requires periods of rest. When people are glued to their screen devices, there is no time for the brain to rest, and hence shift necessary information from short-term to long-term memory.

Likewise, in a study to determine if the process of taking handwritten lecture notes was superior or inferior to memory formation, when compared to taking notes on a computer, results showed that old fashioned note-taking is far superior. As people listened and wrote by hand, they were forced to synthesize the information rather than merely transcribe it digitally, and hence were better able to demonstrate memory recall. Freidman has these suggestions to avoid digital dementia: (1) keep smartphones off desks, (2) banish email and text alerts, and (3) schedule distraction-free periods each day.

The boom in the telecommunications industry and computer industry, pillars of the information age, has led to an overnight conversion of lifestyle in both American and global society. In their book *Technostress*, authors Weil and Rosen suggest that the rapid pace of technology will only continue with greater speed in the coming years, giving a whole new meaning to the expression "24/7." They predict, as do others, that the majority of people will not deal well with this change. The result will be more stress, more illness and disease, more addictions, more dysfunction, and a greater imbalance in people's lives (Alter, 2017). There is general consensus that the rate of change of technology has far outpaced the level of responsibility and moral codes that typically accompany the creative process. The following are some aspects of technostress as they currently affect our lives:

- *Information overload:* Given the flood of Facebook updates, text messages, emails, pop-up ads, smartphone apps, Web sites, and Pinterest posts, it is easy to become inundated by information. Reviewing and responding to a slew of text messages, emails, tweets, and voice mails, not to mention deleting spam and closing pop-up ads, can eat up several hours of one's time each day. Research reveals that too much information, coupled with all the means of accessing it, results in what is now called "brain freeze," "information paralysis," and "infostress," leading to indecisiveness, inability to focus, and poor memory recall (Begley, 2011).

- *Cyber bullying:* Bullying may be a perpetual pastime, but taking this behavior online to a global audience with online harassments, accusations, slurs, and rumors can destroy one's personal integrity. (Several people have committed suicide over cyber-bullying.)
- *Identify theft:* Well beyond bank account numbers and credit card access codes, identify theft now includes imposter Facebook and Twitter accounts. One's identity can be stolen in seconds, yet it may take months to recover.
- *Cyber hacking:* It's one thing to have someone hack into your online accounts (and this is stressful), but the stakes have been raised with international hacking, most notably overseas nationals infiltrating everything from online banking systems and news outlets to power companies that connect to the power grids that service the Internet.
- *Bandwidth and cloud issues:* If you have ever tried to download and watch a movie only to find out that there are issues with bandwidth, you know the meaning of technostress. And as more and more apps and software become available only through the cloud, stress looms when there are issues with cloud accessibility.
- *Boundaries:* Less than twenty years ago, there were clear-cut boundaries between one's personal and professional lives. Today the boundaries have dissolved to a point where it's hard to tell where one ends and the next begins. With smartphones, and tablets, a person can be accessed every minute of the day. People feel compelled to take these devices to movie theaters, plays, restaurants, vacations, and even to bed. Although the expression "24/7" was first coined to refer to retail shopping, it now conveys nonstop accessibility.
- *Privacy:* With constant accessibility, one forfeits privacy. Furthermore, with many purchases made on the Internet, each person develops a consumer profile, which then is sold to a host of other vendors. From cookies to bookmarks to cyber-bullying to identity theft, privacy has become a serious if not stressful issue in the information age. With advances in reducing the microchip to the size of a molecule, information storage is predicted to go from the smart card to biotech implants.
- *Ethics:* With the completion of the Human Genome Project, scientists may be able to identify persons likely to inherit genetic-based diseases. Although this information may provide insight into cures, fear arises at the prospect of this information falling into the hands of insurance companies that revoke policies based on genetic profiling. Scientific breakthroughs in genetic research raise other moral and ethical concerns, too, such as those surrounding genetic cloning and genetically modified foods.
- *Less family time:* Unlike television watching, which can be done as a family, surfing the Internet is a solitary activity. Thus, people are spending more virtual time on their computers and cell phones and less real time with each other.
- *Online dating:* As people spend more and more time plugged into their computers, they find less time for social activities. Many people are enlisting the help of Facebook, Match.com, and eHarmony for finding relationships. Although many are happy to have this new way to meet people and have great luck with it, some find their expectations unfulfilled by people who falsely represent themselves online.
- *Wi-Fi stress:* If you were to eavesdrop on conversations or scroll through social tweets, you would be quick to notice that issues such as net neutrality, cloud distortion, and bandwidth access are producing a great deal of stress for nearly everyone tied to the Internet. As more content becomes accessible online, these issues will result in higher service fees, stretching tight budgets even tighter.
- *Technology and the generational divide:* Are you constantly being asked by your parents to assist them with all things digital, such as helping to program their iPod and digital cameras, download music files, install software packages, upgrade operating systems, download apps, or set up Wi-Fi in the house? It's not an uncommon hassle among the younger generation, who feel as if they are constantly on call for "parental tech support."

## ■ A Decline in Civility

Have you noticed that people today seem quick-tempered, impatient, cynical, self-centered, and perhaps even rude at times? If you have, you are not alone. Once again, a review of some disturbing national headlines suggests a high level of restlessness in the American culture:

- Why We're Losing the Internet to the Culture of Hate
- Responsible Gun Owner Shoots, Kills Brother in Fight over Cheeseburger

- Churchgoer Killed in Fight over Seat at Sunday Service
- Internet Harassment Is Now the Norm
- Man Shoots Woman After He Runs Red Light
- Majority of College Students Text During Classroom Lectures

**Civility**, as expressed through social etiquette, refers to the practice of good manners and appropriate behavior. Many consider the basic rules of civility to be sorely lacking in today's culture. Nitsa Lallas, who authored the book *Renewing Values in America*, attributes the lack of civility to an alchemy of narcissism and a national lack of values, contributing not only to social unease, but also to the economic mess that created the Great Recession of 2008–2009.

Moreover, a revolution in the way people communicate with each other over the past few years has dramatically changed the social fabric of our culture, particularly how we relate, or fail to relate, to each other in face-to-face situations, as discussed earlier. Instant accessibility has sown the seeds for impatience. Politeness has given way to rudeness. The type of behavior used in Internet rants and talk radio phone calls carries over into face-to-face shouting matches at sporting events and political rallies. Social manners (e.g., appropriate behavior and thinking of others first) have become minimal, if not obsolete, for many people, particularly when bursts of anger perpetuate feelings of victimization.

Today's self-centered, narcissistic indulgences have hit an all-time high, many of which are directly related to political incivility (BOX 2.1). How did things go so wrong? Some people blame poor parenting skills. Many cite talk radio and various news media outlets that broadcast incivility. Others point their finger at the proliferation of technology and the constant self-promotion that seems to go along with it (Meyer, 2008). Many say the perfect storm of "uncivil Americans" is a combination of all these factors. Noting the serious issue of American incivility, Rutgers University has initiated a one-credit course called Project Civility for students, with topics ranging from cell phone etiquette and cyberbullying to civil sportsmanship and social responsibility

**Civility:** The practice of good manners and appropriate behavior.

### BOX 2.1 Political Incivility

Political incivility reached new heights (or lows) with the 2016 U.S. presidential election, and experts suggest that this is the new normal. It was not uncommon to see fights breaking out at political rallies and candidates name-calling (e.g., "nasty woman") during the presidential debates. The political climate was so polarized that feuds broke out among friends and family members across the country. People seem to have less tolerance for those with differing opinions. Social media rants and bullying have reached an all-time high. Many blame candidates, social media, and the Internet for the rise of political incivility. Political incivility, in turn, can lead to other antisocial behaviors in various aspects of people's lives, adding to already increased stress levels (Richards, 2016).

(BOX 2.2). It is likely that other colleges will follow this trend (Lanman, 2010).

According to a study by the *New York Times*, the average young American now spends every waking minute (with the possible exception of school classes) using a smartphone, computer, television, or other electronic device. Adults appear to be no different. It is not uncommon to see people texting while at movie theaters, talking on cell phones in restaurants (despite signs prohibiting their use), and texting while driving (despite the growing number of state laws banning this behavior). In 2006, researchers at the University of Utah were curious to see whether the distraction of cell phone use while driving was similar to driving while under the influence of alcohol. Using driving simulators, it was revealed that people on cell phones show a driving impairment rate similar to a blood alcohol level of 0.08%, the demarcation of drunk driving in the majority of U.S. states. Although many people may recognize the dangers of talking and driving, few offer to give up this social faux-pas mode of multitasking (Dossey, 2009).

Many people use technology to avoid stressful situations, which adds to a general lack of civility in society. Examples include quitting a job with a tweet, breaking up with a girlfriend or boyfriend via Facebook, or sending a derogatory email and blind-copying everyone in one's address book (FIG. 2.4). The modern lack of civility cannot be blamed entirely on technology, yet the

## BOX 2.2 Civility 101

**(Things Your Parents Should Have Taught You)**

The following is a short list of commonly accepted polite manners that promote civil behavior. The premise of civility, as expressed through etiquette, is respect for your fellow human being (also known as the Golden Rule).

1. Always say “please” and “thank you.”
2. Always look a person in the eye when addressing them.
3. Never interrupt when someone is talking; wait until they finish speaking.
4. Refrain from rude or vulgar language in public.
5. Stand when someone enters a room and greet people politely upon meeting them.
6. Shake hands when you are introduced to someone new.
7. Hold the door open for people upon entering or exiting through it.
8. Cover your mouth when you sneeze, cough, yawn, and/or chew food.
9. Wait for everyone to be served before eating.
10. Don’t take cuts (e.g., airport gates, movie theaters, etc.).
11. Don’t bring your cell phone to the dinner table.
12. Don’t end a relationship with a text message, Facebook post, or email. Do it in person.

dramatic rise in the use of communication devices has played its part. How would you rate your current level of social etiquette?

Americans may be lacking in the social graces, but they are renowned the world over for giving generously to the needy (e.g., the Boston Marathon bombing victims, New York and New Jersey residents affected by Hurricane Sandy, and the victims of countless devastating tornadoes in the midwest). However, texting a donation for earthquake relief while watching the Super Bowl or *The Voice* is far different from face-to-face contact and polite social interactions. It’s the direct social contact skills that are sorely lacking in American culture today.



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**FIGURE 2.4** People spend less face-to-face time with each other and more screen time talking to others, leading many experts to suggest that social skills and face-to-face communication skills are on the decline in America.

## Environmental Disconnect

Even if you don’t listen to the news regularly, it’s hard to ignore the impact humanity is having on the state of the planet. The word “sustainable” has entered the American lexicon, even if the concept is largely ignored in practice by most people. From a sociological perspective, the earth may not be your family, an organization, or institute, but it is your home, and as such your relationship to it and with it is paramount. Modern society can be said to suffer from an **environmental disconnect**, a state in which people have distanced themselves so much from the natural environment that they cannot fathom the magnitude of their impact on it. The term **nature deficit disorder** was coined by award-winning author Richard Louv in his book *Last Child in the Woods* to describe the growing abyss between people and the outdoor world. Kids, as it turns out, would rather play

**Environmental disconnect:** A state in which people have distanced themselves so much from the natural environment that they cannot fathom the magnitude of their impact on it.

**Nature deficit disorder:** A term coined by Richard Louv to describe a now-common behavior (affliction) where people (particularly children) simply don’t get outside enough, hence losing touch with the natural world and all of its wonder.

video games or surf online than play outside—where there are no outlets. A great many experts and luminaries have predicted over the years that as humanity distances itself from nature, people will suffer the consequences, primarily in terms of compromised health status.

Continuing our theme of current news headlines, consider these:

- 2016 Hottest Year on Record
- Children Spend Less Time Outdoors Than Prison Inmates
- Fracking Now Linked to Hundreds of Earthquakes
- Earth Just Passed the 400 PPM Climate Threshold
- Dangerous Depletion of the World's Aquifers
- Climate Change Puts 1.3 Billion People and \$158 Billion at Risk, Says World Bank

An age-old question asks, “How many angels can dance on the head of a pin?” Today that imponderable question has become “How many humans can sustainably live on planet Earth?” It’s interesting to note that some of the earliest studies on stress physiology involved placing an abnormally high number of mice in a cage. As their environment, personal space, food availability, and quality of life decreased with each additional occupant, tension significantly increased. The parallels between the environment and behavior of those mice and humans today are unavoidable, giving credence to the axiom, “As population increases, behavior decreases.”

To support this premise, scientists recently reviewed over 60 studies regarding the relationship between increased global temperatures and increased violence. They concluded that as global temperatures increase, there is a corresponding increase in violence, hostility, and conflict (Kirwood, 2013).

Even if you think your drinking water is safe, you may be mistaken. Residents of Flint, Michigan, have been forced to drink bottled water for several years due to lead contamination. Lead, leaching into the drinking water from old pipes, is a well-known toxin associated with brain dysfunction, and the drinking water of Flint is full of it. Not only is the inconvenient lack of tap water stressful, so is the realization that many children may suffer the long-term effects of brain damage. People in Flint have been forced to drink bottled water for years, currently with no signs of improvement due to political squabbling. Residents of Flint may get the most headlines about toxic drinking water, but they are hardly alone with this concern. Residents from several cities and communities

around the country have similar issues, not the least of whom are the Navajo Indians in Arizona.

In other water news, rising waters due to global warming are already having an effect in Miami, where city officials have begun to elevate highways in and around the city in an effort to deal with the loss of land due to flooding from global warming. Rising sea levels have also swallowed up land in Louisiana. In fact, it is estimated that the Bayou State is losing several hundred acres a year to climate change. Once shaped like a shoe, the map of Louisiana is a much smaller land mass now than it was even a decade ago.

By now everyone has not only heard of the issues on global warming, but also has experienced the preliminary effects first hand: violent storms, hotter summers, more intense droughts, and severe weather patterns. The problems of our dependence on oil were highlighted by the massive 2010 oil spill in the Gulf of Mexico. What has yet to become clear to the average person, however, are the looming problems of water shortages, an issue that will greatly affect everyone. Former United Nations Secretary General Ban Ki-Moon has repeatedly stated that wars will most likely be fought over water sources in our lifetime. So significant is this stressor that *National Geographic* dedicated its April 2010 issue entirely to the topic of water and our thirsty world. Environmentalist Lester Brown of the Earth Policy Institute states that when valuable drinking water is used for such things as fracking, and laws make collecting rainwater illegal, tension rises. Moreover, the variables of rapid population growth, increased energy demands, farming irrigation demands, depleted aquifers, and limited water supplies make water a dramatically stressful topic for a great many global citizens, including Americans. Here are some facts concerning water that will affect you now and in the years to come:

- 97.5 percent of the earth’s water is salty, with only 2.5 percent of earth’s water considered fresh.
- Two-thirds of all fresh water is frozen.
- Many Western states (e.g., Texas, Arizona, and California) are draining underground aquifers quicker than they can be naturally restored.
- Many freshwater streams contain hormones and antibiotics from prescription drugs flushed down toilets and petrochemical fertilizers from agricultural run-off.
- Americans use approximately 100 gallons of water at home each day, compared with 5 gallons per day in developing nations.

## Stress with a Human Face



Courtesy of Juliet Simbo.

Society, and the culture it creates, is often described in metaphors. A common one is “the social fabric.” For Juliet, a more apt metaphor might be a carpet, one that was pulled right from underneath her feet as a child. Juliet Mamie Simbo now lives in Denver, Colorado, but at the age of 13 she and her family fled from Sierra Leone, a small country on the west coast of Africa. She begins her story with a Hollywood reference:

“If you have seen the movie *Blood Diamond*, starring Leonardo DiCaprio and Jennifer Connelly, then you have witnessed a realistic portrayal of the horrors of civil war in Sierra Leone. I lived in this world. I witnessed my dad held at gunpoint on our porch on January 10th, 1999, by a rebel who told all of us that he was going to kill my father and suck his blood because of his vocal opposition to the atrocities being committed in my country. The gunman spared my father’s life; however, in a defiant move, he turned and shot and killed our family dog. Because of greed and hatred amongst the people of my country, death came to many in Sierra Leone for seemingly no reason. I was changed forever by these events, knowing that my life was kept alive by the slimmest of margins.”

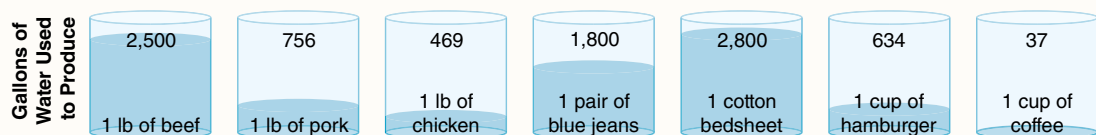
As an immigrant to the United States, she had to adapt quickly to a whole new culture, one with superhighways,

fast food, snowstorms, power shopping, abundant lifestyle opportunities, high technology, and crumbling family structures. “Initially, I felt lost and lonely as I tried to merge into the fast lane that is the American lifestyle,” she explained. But over time, Juliet became less shy and more assertive, adapting successfully to a new way of life in a new culture. With college graduation months away, her eyes are now set on new sights. One day Juliet hopes to return to Africa and use her knowledge, skills, and experience to help make the world a better place, beginning with the severe hunger issues known in this part of the world.

Juliet has used her experience of cultural differences in a positive way and hopes that others will do the same. As she said in her high school graduation speech, “I say to you, open your eyes to the world beyond your country’s borders. Feel the presence of humanity around the world and learn about them, even experience their culture. I hope that one day, you can be as grateful as I am for what you know about a different land and people. I thank you for being a part of my world, and I welcome you to visit mine.”

- It takes 2,500 gallons of water to make 1 pound of beef and 1,800 gallons to grow enough cotton for a pair of blue jeans (TABLE 2.1).
- Clean water is a huge issue in China, so much so that the country tried (and failed) to license and export fresh water from the Great Lakes Region in the United States and Canada.
- The Three Gorges Dam in central China caused the earth’s axis to tilt by nearly an inch.

TABLE 2.1 The Real Cost of Water



NOTE: Fresh water consumption is far more extensive than people realize. A closer look reveals the hidden consumption of water. The term “virtual water” is used to describe the amount of water used to create a product; in essence, a “water footprint.”

Data from National Geographic Society. *Water: Our Thirsty World* [special issue], *National Geographic*, April 2010; and Water Footprint Network ([www.waterfootprint.org](http://www.waterfootprint.org)). Accessed February 16, 2011.



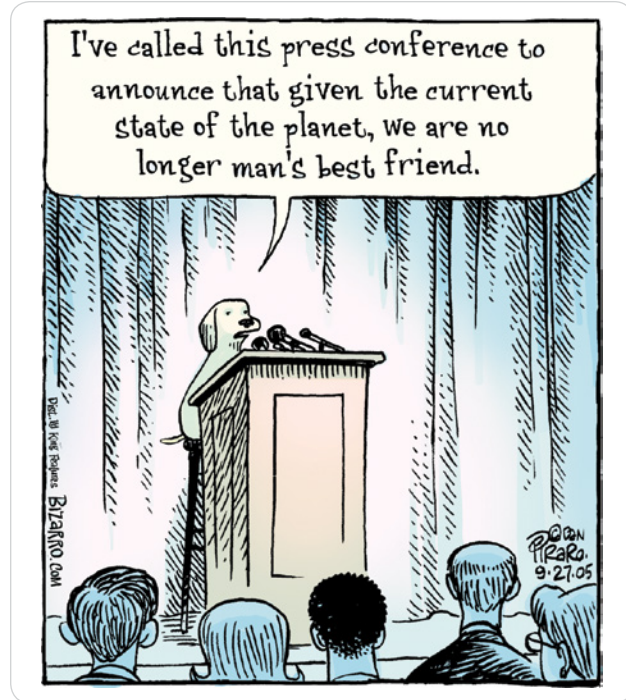
© Geoff/Shutterstock

**FIGURE 2.5** People, including children, are spending less time outside and in nature. Many children prefer to be inside playing video games or surfing the Internet. Being disconnected from nature may be harmful to one's health, including inadequate exposure to natural sunlight for vitamin D absorption.

Perhaps the most subtle warning of a disconnect from our environment is the news that for the first time it has been noted that Americans are not getting enough vitamin D, as explained by nutritionist and *New York Times* reporter Jane Brody. Vitamin D deficiency is due to lack of exposure to sunlight and poor dietary habits. Sunlight is often referred to as the “sunshine vitamin” because, as sunlight reaches the skin, it reacts to help form vitamin D. Today, people spend little time outdoors, denying themselves exposure to adequate amounts of sunlight (**FIG. 2.5**).

Vitamin D isn't the only nutritional/environmental problem. People who saw the documentary film *Food, Inc.* (or who read the book by Karl Weber) are acutely aware that the move away from family farms to industrial farms in the last few decades has greatly compromised the quality of food, primarily chicken and beef, and encouraged the proliferation of products that use high-fructose corn syrup. Changes in the food industry, along with inadequate exercise, help explain the recent dramatic increase in national obesity levels.

Sadly, what we lack in the sunshine vitamin, we compensate for plenty with our exposure to plastic, and not just water bottles clogging our landfills. In her acclaimed expose on this ubiquitous substance, Susan Freinkel's book, *Plastic: A Toxic Love Story*, highlights a frightening bio-ecological stressor: many plastics (derived from petroleum and natural gas) once thought to be inert are



Bizarro: © 2005, Dan Piraro. Distributed by King Features Syndicate, Inc.

**FIGURE 2.6** In every generation, there are people who predict humanity's demise. The world is not coming to an end, but our future will certainly depend on how we act now.

now known to leak synthetic estrogens into the fluids and foods they contain to interfere with the hormones of our endocrine system that orchestrate growth, development, and the immune system, with phthalates being one of the biggest concerns to one's health.

Some of the world's leading scientists are not optimistic about the future of humanity, given the stresses we have put on our environment and, in turn, ourselves (**FIG. 2.6**). Physicist Stephen Hawking's outlook for humanity is grim at best, unless we learn to change our ways, and quickly. In a 2010 interview with the Huffington Post blog (Stuart, 2010), he stated, “We are entering an increasingly dangerous period in our history. There have been a number of times in the past when survival has been a question of touch and go. We are rapidly depleting the finite natural resources that Earth provides, and our genetic code carries selfish and aggressive instincts.” Harvard biologist E. O. Wilson and others now refer to the loss of biodiversity in our modern era as the “sixth mass extinction” on Earth, with hunting and fishing, loss of natural habitat, and pollution as the primary causes (Eldredge, 2001). Meanwhile, sociologist Jared Diamond warns that if positive changes are not made with regard to our use of resources and

our relationship to our natural environment, we too will face extinction.

Not all views of the future of humanity are so dire or fatalistic. Several, in fact, are quite optimistic—with the caveat that we must act now. Consider the viewpoint of cell biologist and philosopher Bruce Lipton. In his book *Spontaneous Evolution*, he states: “Society is beginning to realize that our current beliefs are detrimental and that our world is in a very precarious position. The new science (the nexus of quantum physics, psychology, and biology) paves a way into a hopeful story of humanity’s potential future, one that promotes planetary healing.” Lipton uses the model of holism (in which all parts are respected and come together for a greater purpose) as the template for his optimism. Lipton is among a growing group of social luminaries, including Barbara Marx-Hubbard, Jean Houston, Christine Page, Edgar Mitchell, Elizabeth Sartoris, and Gregg Braden, who share this optimistic paradigm of humanity’s shifting consciousness (Schlitz, 2010). In the words of the rock musician Sting, “Yes we are in an appalling environmental crisis, but I think as a species, we evolve through crises. That’s the only glimmer of hope, really” (Richter, 2010).

Another ray of hope shone brightly on November 5, 2016, when the Paris Agreement on Climate Change became official, instituting restrictions on CO<sub>2</sub> emissions, as well as other strategies to halt global warming.

When technostress, incivility (mixed with political instability), and environmental disconnect combine, they form a “perfect storm of stress.” How do these aspects of the sociology of stress affect you directly? Consider this: As climate changes create more droughts, food prices will increase. As chemicals from discarded technology (smartphones, flat screen TVs, etc.) pollute water supplies, environmental stressors increase. As oil reserves decrease, increasing the price of a barrel of oil, all things tied to gasoline (food distribution, travel, consumer products) will increase in price, adding to an ever-growing sense of economic anxiety. The importance of learning and using effective stress management skills becomes even more essential in the twenty-first century.

## Occupational Stress

Sociologists suggest that one’s family is the first and often the most important social structure, providing social support, but also stress. Coming in a close second in both aspects is one’s work environment. While ideally providing professional fulfillment, a creative outlet,



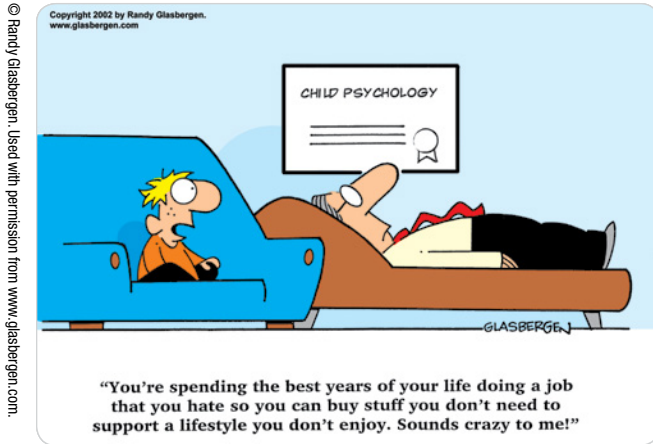
**FIGURE 2.7** Worker burnout has reached epic proportions as people strive to personify the Puritan work ethic that deems that work equals worth.

and a path to wealth, work is also cited as a source of significant stress by a great many employees. Paul Rosch, M.D., director of the American Institute of Stress, notes that in American society today, **occupational stress**, or job stress, is at an all-time high (FIG. 2.7). He defines job stress as coming from “occupational duties in which the individual perceives having a great deal of responsibility, yet little or no authority or decision-making latitude” (Rosch, 1991).

According to a 2013 Harris survey, 83 percent of American workers claim to be stressed out, a 10 percent rise from 2012. Reasons for the rise in stress are attributed to low pay, unreasonable workloads, annoying co-workers, poor work-life balance, and the fear of being laid off or fired (Perman, 2013). Few of these people take advantage of employee assistance programs offered at the worksite (Scott, 2007). One of the first signs of stress at the workplace is burnout, followed by absenteeism. The term *presenteeism* was coined to describe the related problem of going to work but being unproductive and unmotivated, there in body but not in mind.

The cost of stress is not insignificant in terms of work productivity or the bottom line of corporate profits. Rosch noted that the fiscal consequences of occupational stress cost an average of \$200 billion each year. Moreover, between 60 and 80 percent of all industrial accidents are stress induced,

**Occupational stress:** Job-related stress, which often comes from occupational duties for which people perceive themselves as having a great deal of responsibility, yet little or no authority or decision-making latitude.



**FIGURE 2.8**

as are over 80 percent of all office visits to primary care physicians. Perhaps most striking is that workers' compensation claims associated with stress are skyrocketing, with 90 percent of claims being awarded in settlements.

What are some reasons for job stress? (FIG. 2.8) Although perceptions will vary from person to person, the following is a list compiled by the National Safety Council (2011):

- Lack of job security
- Too much responsibility with little or no authority
- Unrealistic expectations, deadlines, and quotas
- Corporate downsizing, restructuring, or job relocation
- Inadequate training
- Lack of appreciation
- Inadequate time to complete job responsibilities
- Inability to voice concerns
- Lack of creativity and autonomy
- Too much to do with too few resources
- Lack of clear job descriptions
- Commuting and traffic difficulties
- Keeping pace with technology
- Inadequate child care
- Poor working conditions (lighting, ventilation, noise)
- Sexual harassment and racial discrimination
- Workplace violence

Rosch noted that the Public Health Service placed stress-management courses as its top priority in order to improve health standards at the worksite. However, Rosch, who surveyed several hundred existing stress-management programs in cooperation with the Office of Occupational Safety and Health, came to the conclusion that few stress-management programs currently taught in the corporate or industrial setting offer enough substance to make a positive influential change in lifestyle behaviors, because they are either too narrowly focused or too brief, or both. Those programs he did find to be effective showed reduced illness and absenteeism, higher morale, and increased productivity.

Unfortunately, stress in the workplace is not likely to decrease any time soon. In the next decade, more companies will merge, meaning more corporate restructuring. Companies looking to appease stockholders will look for ways to trim budgets, especially by letting go of senior employees and replacing them with a young and eager workforce, or by outsourcing jobs.

## Race and Gender Stress

Several national events between 2014 and 2016 brought the issues of racial and gender stress to the forefront, including the Black Lives Matter movement and the 2016 U.S. presidential campaign.

The United States, a nation of immigrants, has often been described as a melting pot, but recently another metaphor has been used to describe the make-up of her citizens: a tossed salad, where assimilation meets head on with cultural diversity. Race and ethnic issues currently make headline news, such as illegal alien issues nationwide, disenfranchised black voters in Florida, poverty in New Orleans, and Muslim Americans facing episodes of discrimination, to name a few issues. Race and gender tensions, however, are not new. It could be argued that they are as old as humanity itself. Since time began, people have felt threatened by other people of different skin color, ethnicity, gender, religion, or sexual preference. The 2008 election of the first African American president has helped jump-start a national discussion on race, but it hasn't resolved intolerance.

Stress, you will remember, is defined as a perceived threat, a threat generated by the ego. These threats manifest in a variety of ways, including stereotyping, prejudice, discrimination, harassment, and even physical harm. Race and gender stress may begin early in life; many children can attest to being bullied in grade school or

excluded and teased by social cliques because of their race or gender. The emotional stress associated with this type of angst includes low self-esteem, alienation, and anxiety. Everybody wants to be accepted.

How can society help alleviate race and gender stress? Anti-bullying programs are being implemented in many schools nationwide, helping raise awareness among kids and parents of the dangers of bullying and cyber-bullying. On television, many shows have tried to better reflect the demographics of American society with casts of various ethnicities and gender identity issues (e.g., *Glee*, *Transparent*, and *Sense*). The Women's March on Washington in January 2017 also made a strong statement regarding gender inequity issues. Although these are steps in the right direction, school curricula marches on Washington D.C., and television shows alone

cannot change the world overnight. They are a start, however. Remember that when people demonstrate a bias toward your race, gender, ethnic background, or anything related to these concepts, they are projecting their fears onto you. A common reaction is to meet stress with stress, but the best answer is to rise above it and take the high road.

Experts remind us that the cultural fabric of society is in a tremendous transition, one unparalleled in recorded human history. Indeed, we are products of our society, and society is in a state of rapid flux regarding demographics, technology, economics, global warming, and several other factors that lead to an increasingly dynamic landscape. In the end, everyone will be affected. The best strategy for coping with these changes is to adapt to them.

## SUMMARY

- Sociology is described as the study of human social behavior within families, organizations, and institutions. Societal stress is a force to be reckoned with in today's culture. Once called *future shock*, the tsunami of social issues is now referred to as *superstress*—the inability to cope with an overwhelming amount of change.
- No one is exempt from the sociology of stress.
- *Technostress* is a term used to describe the overwhelming frustrations of sensory bombardment and poor boundaries that result from the plethora of technological gadgets. Technostress began with personal computers but has evolved with the advent of and addiction to social networking. The body's physiology wasn't designed to be "on" all the time. The result is burnout and physical health issues.
- Social stress includes a decline in social etiquette. A lack of civility (demonstrated by rude, impatient behavior) is on the rise.
- Experts suggest that one aspect of societal stress is an environmental disconnect: a growing disregard of the environment by humanity, such that dramatic changes, from dwindling supplies of fresh water to declining food quality to environmental pollution, will have a significant impact on each individual's lifestyle and health.
- *Nature deficit disorder* is a term describing people's absence from the natural world. One result is inadequate amounts of sunlight exposure, which produces a vitamin D deficiency.
- Most people garner their self-worth from their jobs or careers, yet many Americans cite their job as being stressful, thus impacting self-worth, self-esteem, family relationships, and many other aspects of their lives in negative ways.
- Race and gender issues have always been part of the social fabric and continue to contribute largely to stress, especially as people express themselves with reckless abandon in the digital age.

## STUDY GUIDE QUESTIONS

1. How would you define the term *sociology*? How would you describe the concept of the sociology of stress?
2. How would you best explain the concept of technostress?
3. What factors are associated with technostress?
4. What explains the attraction of (or addiction to) being plugged in all the time?
5. What effect does information overload and sensory bombardment have on brain function and cognitive abilities?
6. How does stress affect our relationships with others, in terms of social etiquette?
7. What factors are associated with environmental disconnect?
8. Give examples of ways in which society can help alleviate race and gender stress.

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