8

SEEING OUR FUTURES THROUGH SELF-EFFICACY, OPTIMISM, AND HOPE

FASCINATION WITH THE FUTURE

In the privacy of their personal thoughts, people can imagine wonderful visions of their tomorrows. Indeed, the future is often fascinating precisely because it holds seductive and positive possibilities. Unlike the past and present, therefore, the future offers the chance to change things—to make them different and better or to strive to preserve what has been gained.

People want to feel as if they can "make things happen" to their satisfaction. This starts from the earliest baby and toddler days. As the weeks and years roll by, however, individuals are left with more and more past events that cannot be changed, and their present lives unfold so quickly that it seems as if they have little chance to make any real changes. On the other hand, the future remains a place where people's fantasies and desires can produce the proverbial happy endings.

Within the United States, parents and caregivers teach that the "real action" in life lies ahead. For those who grow up in difficult circumstances, the "American Dream" is that their children will have better lives. Therefore, the children in such environments are often taught to look ahead and to focus on what they can accomplish in the "land of opportunity." In the process of looking ahead, people run the risk of making their lives extremely busy. As a caveat to the general benefits of the **future orientations** we describe in this chapter, we encourage the reader to consider the thoughts of columnist Ellen Goodman in her essay "Being Busy Not an End in Itself." Goodman makes a good case for occasionally taking time out from our busy, future-oriented thinking. Many cultures emphasize this mindfulness and taking time to smell the flowers on a more regular basis; perhaps those of us in the United States might take a lesson from these other cultural groups.

In the present chapter, we first examine three major, future-oriented temporal perspectives in positive psychology—**self-efficacy**, **optimism**, and **hope**. We explore the theories that guide these concepts, along with the scales that measure each and the

BEING BUSY NOT AN END IN ITSELF

ELLEN GOODMAN

BOSTON—A friend of mine once worked for a Hollywood executive as chief assistant in charge of the calendar. That wasn't the actual title, of course, but it was the job description.

This executive had a penchant for filling up her Palm Pilot weeks and months in advance. When the day would come, a day invariably brimming over with "unexpected emergencies," she would order another round of cancellations. And begin to fill in the future.

My friend came to think of this as a binge and purge cycle. Out of earshot, she described her boss as a time-bulimic.

I always remember this, because I wonder how many people suffer from timing disorders. How many make commitments *now* with the absolute and inaccurate certainty that we will have more time *then.* Do we look into the mirror and see an image as distorted as the anorexic who looks into the mirror?

This year, a pair of marketing professors from North Carolina published research about time and timing. The students surveyed said repeatedly they would have more free time on the same day of the next week or the next month than they had today. If you asked these students to add a commitment today, they would answer no. But ask them to do it in the future, and they were more likely to say yes.

These students were not just a bunch of cock-eyed optimists. The same people had a much more realistic view of their budgets. They were less likely to commit to spending more money in the future than in the present.

But in this sense, time was not money. It was more malleable. When thinking about their spare time, they experienced what the researchers called "irrational exuberance." Even those on overload today would take on a fresh load in the future.

Americans talk a great deal about time-crunch. We ask each other, "How are you?" And we answer: "Busy." We export our "productivity," which has become the international gold standard of workaholism. We think of time as something that's been eaten away, not given away.

In just my own adulthood, Americans have lost Sundays to shopping and lost focus to multitasking. We spend lifetimes on hold.

In this world, the hero of the month must surely be Joseph Williams, the Baltimore lawyer who sued Sears, Roebuck when a no-show repairman left him waiting for four hours. He won a single dollar and a shiny principle: You can't waste my time.

But how many of us are also victims of our own timing disorder, keepers of irrational exuberance? Do we also fill in the future out of an irrational anxiety about "free" time?

"It's difficult to learn that time will not be more abundant in the future," wrote the researchers. Well, it is one thing for students to be fooled repeatedly. But it is quite another for those of us who are older. Time is, to put it quietly, *less* abundant. The refusal to learn a lesson comes with a higher price tag.

I wonder if other cultures suffer from our timing disorder, our "irrational exuberance." Busyness, we believe, is part of our creed. It was that founding father, Thomas Jefferson, who admonished us, "Determine never to be idle. No person will have occasion to complain of the want of time who never loses any. It is wonderful how much can be done if we are always doing."

But these days, I smile more at the words of that cranky radical, Henry David Thoreau, who replied, "It is not enough to be busy, so are the ants. The question is what are we busy about."

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Note: Ellen Goodman (ellengoodman@globe.com) is a columnist for the Washington Post Writers Group.

associated research findings. Next, we discuss the potential balance among temporal orientations aimed at past, present, and future. Finally, we provide cautionary comments about how these future-oriented concepts may not apply to samples other than the Caucasian Americans who were the participants in much of the reported research.

Albert Bandura

SELF-EFFICACY

I Think I Can, I Think I Can . . .

After Stanford University psychologist Albert Bandura published his 1977 *Psychological Review* article titled "Self-Efficacy: Toward a Unifying Theory of Behavior Change," the self-efficacy concept spread in popularity to the point that it now may have produced more empirical research than any other topic in positive psychology (Bandura, 1977, 1982, 1997). What exactly is this concept that has proven so influential? To understand self-efficacy, some people have used the sentiments of the little train engine (from Watty Piper's [1930/1989] children's story, *The Little Engine That Could*) to epitomize self-efficacy. Recall that the tiny engine, thinking about how the little boys and girls on the other side of the mountain would not have their toys unless she helped, uttered the now-famous motivational words, "I think I can. I think I can. I think I can"—and then proceeded to chug successfully up the mountainside to deliver her payload. This belief that you can accomplish what you want is at the core of the self-efficacy idea.

The self-efficacy construct rests upon a long line of historical thinking related to the sense of personal control. Famous thinkers such as John Locke, David Hume, William James, and Gilbert Ryle have focused on willfulness, or volition, in human thinking (Vessey, 1967). Similar ideas have appeared in theories on achievement motivation (McClelland, Atkinson, Clark, & Lowell, 1953), effectance motivation (White, 1959), and social learning (Rotter, 1966). (For a review of personal competence, coping, and satisfaction, see Skinner, 1995.) It was this classic line of control-related scholarship upon which Bandura drew in defining the self-efficacy concept.

A Definition

Bandura (1997) defined self-efficacy as "people's beliefs in their capabilities to produce desired effects by their own actions" (p. vii). Similarly, Maddux (2009a) has described self-efficacy as "what I believe I can do with my skills under certain conditions" (p. 336). Based on an examination of what needs to be done to reach a desired goal (these are called *outcome expectancies*), the person supposedly then analyzes their capability to complete the necessary actions (these are called *efficacy expectancies*). For Bandura, outcome expectancies are viewed as far less important than efficacy expectancies; consistent with his perspective, studies have shown that outcome expectancies do not add much to efficacy expectancies when predicting various human actions (Maddux, 1991). Thus, situation-specific self-efficacy thoughts are proposed to be the last and most crucial cognitive step before people launch goal-directed actions.

Childhood Antecedents: Where Does Self-Efficacy Come From?

Self-efficacy is a learned human pattern of thinking rather than a genetically endowed one. It begins in infancy and continues throughout the life span. Self-efficacy is based on the premises of **social cognitive theory**, which holds that humans actively shape their lives rather than passively reacting to environmental forces (Bandura, 1986; Barone, Maddux, & Snyder, 1997a).

Social cognitive theory, in turn, is built on three ideas. First, humans have powerful symbolizing capacities for cognitively creating models of their experiences. Second, by observing themselves in relation to these cognitive models, people then become skilled at self-regulating their actions as they navigate ongoing environmental events. Thus, cognitive reactions influence the surrounding environmental forces that, in turn, shape subsequent thoughts and actions (i.e., there is a back-and-forth interchange of environmental and thinking forces). Third, people (i.e., their selves) and their personalities are a result of these situation-specific, reciprocal interactions of thoughts → environment → thoughts. Given these social cognitive ideas, therefore, a developing child uses symbolic thinking, with specific reference to the understanding of cause-and-effect relationships, and learns self-efficacious, self-referential thinking by observing how she or he can influence the surrounding circumstances (Maddux, 2009a).

Bandura (1977, 1989a, 1989b, 1997) proposed that the developmental antecedents of self-efficacy include the following:

1. Previous successes in similar situations (calling on the wellspring of positive thoughts about how well one has done in earlier circumstances)

2. Modeling on others in the same situations (watching other people who have succeeded in a given arena and copying their actions)

3. Imagining oneself behaving effectively (visualizing acting effectively to secure a wanted goal)

4. Arousal and emotion (when physiologically aroused and experiencing negative emotions, our self-efficacy may be undermined, whereas such arousal paired with positive emotions heightens the sense of self-efficacy)

5. Undergoing verbal persuasion by powerful, trustworthy, expert, and attractive other people (being influenced by a helper's words to behave in a given manner)

We want to take a moment to highlight this last area of study: the important roles that powerful figures may have in the development of self-efficacy. For children and adolescents, parents and teachers may hold the most power and expert quality in their young lives. There is much evidence to show that the self-efficacy shown by these figures can affect the development of the same trait in children. Teachers who are high in self-efficacy have better relationships with their students (de Jong et al., 2014) and are more inclusive in a number of situations, including with students who have disabilities or exhibit other differences (Vaz et al., 2015). Parents may also provide modeling of self-efficacy, and this may influence children in ways that are difficult to predict. In a study by Byrne, Accurso, Arnow, Lock, and Le Grange (2015) looking at adolescents diagnosed with anorexia nervosa (AN) and their parents, findings showed

that self-efficacy played a role in weight gain for these adolescents who were in family therapy with their parents. Interestingly, it was not the self-efficacy of the individuals diagnosed with AN that appeared to predict the weight gain but the self-efficacy of their parents, which showed predictive quality for weight gain in these teens! It appears that these parents' belief that things could be remedied with regard to weight gain did not necessarily make the adolescents believe in their own ability, but perhaps they "borrowed" some of their parents' self-efficacy on the road to wellness. This is an important lesson for any of us who have children or who work with children or adolescents.

Cultural Context and Self-Efficacy

Some differences may exist in the experience of self-efficacy and its development. In specific domains, gender differences have been found in U.S. populations, for example. In a recent meta-analysis, women were found to exhibit higher self-efficacy in language arts than their male counterparts, whereas men had higher self-efficacy than women in areas of study such as math, social sciences, and computer sciences (Huang, 2013). Cultural norms, expectations, and stereotype threat (defined by Claude Steele as the threat one feels at being judged on performance in relation to negative stereotypes that exist about one's group) may be at work in the development (or lack thereof) of self-efficacy in these instances. Interestingly, other research has found that biological sex may not be the determining factor in the development of self-efficacy in the domains of math, science, and/or language arts. Instead, it appears that gender roles may be the main influence. Huffman, Whetten, and Huffman (2013) found in their study that masculinity (i.e., a more masculine gender expression and role assumption) predicted self-efficacy for technological pursuits regardless of biological sex. This means that both men and women who had more masculine gender role traits had higher self-efficacy in technology, whereas those of both genders with less masculinity had lower self-efficacy in this same area. This type of research is important in helping us to understand the role cultural context (and perhaps its tolerance or lack thereof for more fluid gender roles) may have in determining personal beliefs about one's abilities. Finally, the source of self-efficacy may differ between different genders in various pursuits. Self-efficacy for science appeared to stem from vicarious learning for female students but from mastery experiences for male students. More research in this area might help us to provide more culturally specific experiences for different genders in order to fully develop self-efficacy in both (D'Lima, Winsler, & Kitsantas, 2014; Sawtelle, Brewe, & Kramer, 2012).

Others have noted that differences may exist in levels of self-efficacy between individuals from individualist countries such as the United States and members of more collectivist groups. Kim and Park (2006) found that, within the United States, participants in their study rated their abilities as high even when they performed poorly in subjects such as math and science. The opposite was found in Japanese and Korean students, in whom low self-efficacy was found even in the face of high levels of performance on a difficult math test (Lee, 2009). This finding was replicated more recently with Asian American students showing lower levels of self-efficacy in comparison to their African American and White American counterparts (D'Lima et al., 2014). Thus, culture may play a role in the type of persuasion one receives and the modeling available (e.g., women succeeding in fields where few role models are to be found), and this may have an effect on some of the developmental antecedents to self-efficacy mentioned by Bandura above.

One other point in this area seems worth making as our world grows more diverse: Certain groups have been limited in some ways with regard to their being "allowed" to engage in certain types of roles and activities throughout history because of disenfranchisement or actual laws that have prevented their participation. In "Thinking She Could Be the Next President," Rios, Stewart, and Winter (2010) discuss how presenting a diverse curriculum showing girls and women as leaders in addition to those of the male gender might influence girls' perspectives on what they can be in life. Self-efficacy, as described above, can be engendered by role models and by the very virtue of being able to imagine oneself in a particular situation. Presenting diverse examples across all curricula may allow a broader group of children to develop self-efficacy with regard to a broad range of activities and roles in the future. As gender roles are changing and as more women are moving into roles that have power, and as change may be on the horizon in the form of more equality in safety, pay, and workplace conditions for people of any gender, perhaps real-life examples will soon be more apparent and accessible to children in general.

The Neurobiology of Self-Efficacy

It is likely that the frontal and prefrontal lobes of the human brain evolved to facilitate the prioritization of goals and the planful thinking that are crucial for self-efficacy (as well as hope, discussed later in this chapter; see Newberg, d'Aquili, Newberg, & deMarici, 2000; Stuss & Benson, 1984). When faced with goal-directed tasks, especially the problem solving that is inherent in much of self-efficacy thinking, the right hemisphere of the brain reacts to the dilemmas as relayed by the linguistic and abstract left hemisphere processes (Newberg et al., 2000).

Experiments, most of which have been conducted on animals, also reveal that self-efficacy or perceived control can be traced to underlying biological variables that facilitate coping (Bandura, 1997). Self-efficacy yields a sense of control that leads to the production of neuroendocrines and catecholamines (neurotransmitters that govern automatic activities related to stress) (Bandura, 1991; Maier, Laudenslager, & Ryan, 1985). These later catecholamines have been found to mirror the level of felt self-efficacy (Bandura, Taylor, Williams, Mefford, & Barchas, 1985). So, too, does a sense of realistic self-efficacy lessen cardiac reactivity and lower blood pressure, thereby facilitating coping.

In one study involving human participants, individuals who were attempting to stop smoking were exposed to one of three different treatment conditions, one of which involved increasing self-efficacy to avoid cravings to smoke (Ono et al., 2017). In this self-efficacy condition, cravings were significantly reduced and neuroimaging showed "increased activation in the rostral medial prefrontal cortex and the pregenual anterior cingulate cortex in smokers compared with ex-smokers" (p. 1), as well as increased connections between the hippocampus with the pregenual anterior cingulate cortex and parahippocampus gyrus when participants were using the self-efficacy strategies to avoid cravings. These areas are related to craving and the ability to regulate it and as such may provide some interesting starting places for studying the neural impacts of self-efficacy.

Scales: Can Self-Efficacy Be Measured?

Bandura (1977, 1982, 1997) has held staunchly to the **situational perspective** that self-efficacy should reflect beliefs about using abilities and skills to reach given goals *in specific circumstances or domains.* In his words, "Efficacy beliefs should be measured

in terms of particularized judgments of capacity that may vary across realms of activity, under different levels of task demands within a given domain, and under different situational circumstances" (Bandura, 1997, p. 42). Consistent with Bandura's emphasis upon situations, Betz and colleagues have developed and validated a 25-item measure that taps confidence in making career decisions (Betz, Klein, & Taylor, 1996; Betz & Taylor, 2000). Scores on this scale predict confidence in examining various careers (Blustein, 1989) and actual career indecision (Betz & Klein Voyten, 1997). Other career self-efficacy indices are available, including the Occupational Questionnaire (Teresa, 1991), which taps students' mastery of various vocations, and the Career Counseling Self-Efficacy Scale (O'Brien, Heppner, Flores, & Bikos, 1997), which measures counselors' confidence in deriving interventions for persons who are having difficulties with their career decisions. (See also Schwarzer and Renner [2000] for situation-specific "coping self-efficacy.") Likewise, numerous scales exist for measuring feelings of efficacy for various types of skills. These include the Alcohol Abstinence Self-Efficacy Scale (McKiernan, Cloud, Patterson, Golder, & Besel, 2011) and the Internet Self-Efficacy Scale (Kim & Glassman, 2013). Efficacy is measured in other types of situations in studies such as Hyre and colleagues' (2008) Hurricane Coping Self-Efficacy questionnaire, developed following Hurricane Katrina, and the Cultural Self-Efficacy Scale, which was designed specifically for adolescents (Briones, Tabernero, Tramontano, Caprara, & Arenas, 2009). Scales assessing self-efficacy during specific life transitions also exist, including Lowe's (1993) Childbirth Self-Efficacy Scale and the Memory Self-Efficacy Scale for older adults (Berry, West, & Dennehey, 1989). And, finally, scales exist to measure certain types of social and emotional development, including the Emotional Self-Efficacy Scale (Pool & Qualter, 2012), the Regulatory Emotional Self-Efficacy (RESE) scale (Alessandri, Vecchione, & Caprara, 2015), and the Social Self-Efficacy Scale (Zullig, Teoli, & Valois, 2011).

Although Bandura consistently has argued against the **trait perspective** (in which psychological phenomena are viewed as enduring over time and circumstances), other researchers have developed such dispositional measures of self-efficacy (e.g., Sherer et al., 1982; see also Tipton & Worthington, 1984). Citing evidence that self-efficacy experiences involving personal mastery can generalize to actions that transcend any given target behavior (e.g., Bandura, Adams, & Beyer, 1977) and that some people are especially likely to have high self-efficacy expectations across several situations, Sherer et al. (1982) developed and validated a trait-like index called the Self-Efficacy Scale.

The Self-Efficacy Scale consists of 23 items to which respondents rate their agreement on a 14-point Likert scale (1 = *strongly disagree* to 14 = *strongly agree*). Examples of some items include the following: "When I make plans, I am certain I can make them work," "If I can't do a job the first time, I keep trying till I can," and "When I have something unpleasant to do, I stick to it until I finish it."

Factor analyses have revealed one factor reflecting *general self-efficacy* and a second one tapping *social self-efficacy*. The internal consistency of the scale (i.e., the degree to which individual items aggregate together) has ranged from alphas of .71 to .86. Last, the concurrent validity of the Self-Efficacy Scale has been supported by its positive correlations with scores on measures of personal control, ego strength, interpersonal competency, and self-esteem (Chen, Gully, & Eden, 2001; Sherer et al., 1982).

Chen et al. (2001) have developed an eight-item New General Self-Efficacy Scale, and its scores appear to relate positively to those on the Self-Efficacy Scale of Sherer et al. (1982) (although there are exceptions). This New General Self-Efficacy Scale may provide yet another valid self-report index for tapping cross-situational self-efficacy.

Contrary to the cross-situational perspective of the Self-Efficacy Scale, Bandura suggests that any measurement of the individual's sense of personal efficacy should be carefully tied to a given performance situation (see Bandura, 1995, 1997, for expositions of how to do this). Although the cross-situational efficacy scales produce significant correlations with other measures, it is when using such situation-specific measures that higher self-efficacy robustly and consistently has predicted (1) lower anxiety, (2) higher pain tolerance, (3) better academic performance, (4) more political participation, (5) effective dental practices, (6) continuation in smoking cessation treatment, and (7) adoption of exercise and diet regimes (Bandura, 1997).

Measuring self-efficacy has become a more common cross-cultural endeavor in recent years as well. A quick search of PsycINFO reveals a number of validation studies post-2006 that involve measuring this construct in a variety of populations. For example, Israelashvili and Socher (2007) focused on self-efficacy in counselors in an Israeli sample, and self-efficacy scales for children in Brazil (De Cássia Marinelli, Bartholomeu, Caliatto, & de Greggi Sassi, 2009) and Poland (Gambin & Świeçicka, 2012) also exist. Other researchers have endeavored to examine self-efficacy across a variety of countries (e.g., Klassen et al., 2009; Wu, 2009). These and other similar studies point to the global relevance of strength-based research and applications of this construct and may lead us to a better understanding of how self-efficacy is developed and maintained in various cultural contexts.

Self-Efficacy's Influence in Life Arenas

Self-efficacy has produced huge bodies of research both inside and outside of psychology. In this section, we explore some of this research. For the reader interested in deeper explorations of self-efficacy research findings, we recommend Albert Bandura's *Self-Efficacy: The Exercise of Control* (1997) and the James Maddux–edited volume, *Self-Efficacy, Adaptation, and Adjustment* (1995).

Psychological Adjustment

Self-efficacy has been implicated in successful coping with a variety of psychological problems (Maddux, 1995). Lower self-efficacies have been linked with depression (Bandura, 1977; Locke et al., 2017; O'Shea, Dotson, & Fieo, 2017; Pickett, Yardley, & Kendrick, 2012) and avoidance and anxiety (Bertrams, Baumeister, & Englert, 2016; Williams, 1995). Higher self-efficacy is helpful in overcoming eating disorders and abuse (Byrne et al., 2015; DiClemente, Fairhurst, & Piotrowski, 1995), and it also has been linked with life satisfaction in a variety of populations (see Charrow, 2006; Dahlbeck & Lightsey, 2008; Danielson, Samdal, Hetland, & Wold, 2009). Recent research suggests that self-efficacy may play a role in success of treatment aimed at interpersonal behavior of outpatients dealing with schizophrenia (Morimoto, Matsuyama, Ichihara-Takeda, Murakami, & Ikeda, 2012; Vaskinn, Ventura, Andreassen, Melle, & Sundet, 2015). Bandura was one of the first to take a positive, strengths-based approach when he posed that self-efficacy can play a protective role in dealing with psychological problems and, further, emphasized *enablement factors* that help people "to select and structure their environments in ways that set a successful course" (Bandura, 1997, p. 177). This latter view regarding enablement factors taps the positive psychology emphasis on enhancing strengths instead of lessening weaknesses.

Physical Health

Maddux (2009a) has suggested that self-efficacy can influence positive physical health in two ways. First, elevated self-efficacy increases health-related behaviors and decreases unhealthy ones; moreover, self-efficacy helps to maintain these changes (Lee, Kuo, Fanaw, Perng, & Juang, 2012; Maddux, Brawley, & Boykin, 1995). In this regard, theories pertaining to health behaviors all showcase self-efficacy. Examples of these theories include the protection motivation theory (Rogers & Prentice-Dunn, 1997), the reasoned action behavior theory (Ajzen, 1988), and the health belief model (Strecher, Champion, & Rosenstock, 1997).

Second, self-efficacy has an impact on various biological processes that relate to better physical health. Included in such adaptive biological processes are immune functioning (O'Leary & Brown, 1995), susceptibility to infections, the neurotransmitters that are implicated in stress management (i.e., catecholamines), and the endorphins for muting pain (Bandura, 1997).

Finally, self-efficacy may be particularly useful in dealing with individuals coping with disease or disorders. In a study with patients dealing with multiple sclerosis, researchers found that those who developed a certain level of self-efficacy for dealing with their disease and having control over it (as opposed to becoming overwhelmed by it) were more likely to engage in physical endeavors and had higher quality of life with regard to physical pursuits (Motl, McAuley, Wynn, Sandroff, & Suh, 2013). This is only one example of how self-efficacy interventions might influence daily life with a particular disorder. In addition, self-efficacy may affect health practitioners from their ability to diagnose correctly and spot problematic cues (Lee, Osteen, & Frey, 2016).

Psychotherapy

Just as Jerome Frank (see Frank & Frank, 1991) made the case that hope is a common factor in successful psychotherapy, so, too, has it been reasoned that self-efficacy is a common factor across various psychological interventions (Bandura, 1986; Maddux & Lewis, 1995). As such, self-efficacy enhancement in the context of psychotherapy not only bolsters efficacious thinking for specific circumstances but also shows how to apply such thinking across situations that the client may encounter (Maddux, 2009a).

Psychotherapy may use one or more of the following five strategies discussed previously for enhancing self-efficacy:

1. Building successes, often through the use of goal setting and the incremental meeting of those goals (Hollon & Beck, 1994)

2. Using models to teach the person to overcome difficulties (e.g., Bandura, 1986)

3. Allowing the person to imagine himself or herself behaving effectively (Kazdin, 1979)

4. Using verbal persuasion by a trustworthy psychotherapist (Ingram, Kendall, & Chen, 1991)

5. Teaching techniques for lowering arousal (e.g., meditation, mindfulness, biofeedback, hypnosis, relaxation) to increase the likelihood of more adaptive, self-efficacious thinking

Development of Cultural Competence and Acculturation

Self-efficacy has also been studied with regard to belief in one's ability to succeed in a culture that differs somewhat from one's own home culture. **Bicultural self-efficacy**, for example, is described as a sense of assurance in one's own ability to participate and interact in a culture of origin and a second culture (Miller, Yang, Farrell, & Lin, 2011). Miller and colleagues discuss three ways that this might occur: (1) via language (e.g., translation), (2) through social relations (e.g., understanding norms and subtle nuances), and (3) via an ability to value things from both cultural frameworks (e.g., seeing benefits in individualist and collectivist worldviews). This type of self-efficacy has important implications for individuals who are not part of majority culture (namely White American culture) within the United States, as levels of this may affect an individual's willingness to engage within both cultures when obstacles occur. For example, Jordan, a second-generation Vietnamese American, may choose to retain aspects of his traditional Vietnamese culture (perhaps thereby preserving relationships with his more traditional parents) while at the same time learning and adopting some aspects of U.S. culture (perhaps allowing him to have better social relationships with majority group peers). This type of bicultural skill provides many benefits for the individual, including a decrease in acculturative stress (Miller et al., 2011). Bicultural self-efficacy could also have potential benefits for members of a majority group attempting to learn more about a minority cultural group. Here an example might be Sadie, who is heterosexual, feeling confident about interacting with same-sex–oriented peers as well as those who are heterosexual like herself. Bicultural self-efficacy in this direction may have benefits such as promoting ally behavior in groups with higher social power.

Related to the concept of bicultural self-efficacy is the more general **cultural self-efficacy** defined by Briones and colleagues (2009) as "the perception of one's own capability to mobilize motivation, cognitive resources and courses of action necessary in situations characterized by diversity" (p. 303). This concept is somewhat different from bicultural self-efficacy as it talks about one's comfort in navigating a situation in which various groups, some of which may differ from one's own, are present. Within a country such as the United States, this type of confidence might encourage more interaction between different cultural groups and subsequently increase empathy and understanding between these groups. As diversity has been shown to be profitable both socially and with regard to productivity, development of this type of self-efficacy seems beneficial on many levels. Some research shows that developing a certain level of multicultural self-efficacy with regard to counseling might make clinicians-in-training more successful in implementing therapy as well (Barden & Greene, 2015).

(The reader can refer to the discussion of self-efficacy–based interventions in Chapter 14, which details various positive psychology change techniques.)

The Latest Frontier: Collective Self-Efficacy

Although the great majority of work on the self-efficacy concept has centered on individuals reacting to given circumstances, self-efficacy also can operate at the collective level and involve large numbers of people who are pursuing shared objectives (Bandura, 1997). **Collective self-efficacy** has been defined as "the extent to which we believe that we can work together effectively to accomplish our shared goals" (Maddux, 2009a, p. 340). Although there is no agreement about how to measure this collective efficacy, the relevant evidence does show that it plays a helpful role in classroom performances

CHANGING BEHAVIOR THROUGH TV HEROES

MELISSA DITTMANN

Monitor Staff

Albert Bandura highlighted how serial dramas grounded in his social learning theory can lead people to make lifestyle changes and alter detrimental social practices.

Long-running TV and radio programs founded on social psychology are helping people around the world make positive changes in their lives, from encouraging literacy to raising the status of women in societies where they are marginalized, said renowned social cognitive psychologist Albert Bandura, PhD, at a presidential invited address at APA's 2004 Annual Convention in Honolulu. Bandura also received APA's Lifetime Achievement Award at the convention. . . .

Bandura's social learning theory—which emphasizes how modeling and enhancing people's sense of efficacy can help them improve their lives—is at the heart of numerous serial dramas now airing in Africa, Asia, and Latin America. And research is finding the dramas' gripping storylines and realistic characters are proving influential by encouraging people to adopt family planning methods, seek literacy programs, improve women's status, and protect against AIDS infection.

"These dramatic productions are not fanciful stories," said Bandura, APA president in 1973 and the David Starr Jordan Professor of Psychology at Stanford University. "They portray people's everyday lives, help them see a better future, and provide them with strategies and incentives that enable them to take the steps to realize it."

These dramas, incorporating Bandura's theory, involve a global effort, partnering television producers, writers, demographers and communication researchers in creating programs that change personal lifestyles and society.

The messages appear to inspire action: In Mexico, for example, nearly one million people enrolled in a study program to learn to read after watching a drama that promoted national literacy by showing people of different ages struggling to read and then becoming literate and managing their lives more effectively.

According to Bandura, the television programs spark such behavioral and social changes using four guiding principles:

- Contrasting role models with positive and negative models exhibiting beneficial or detrimental lifestyles and transitional models changing from detrimental to beneficial styles of behavior.

- Vicarious motivators that serve as incentives to change by showing the benefits of the positive lifestyles and the costs of the detrimental ones.

- Attentional and emotional involvement within the programs to sustain viewers' attention.

- Environmental supports with each program that contain an epilogue providing contact information for relevant community services and support groups.

For example, using these principles, a series of dramas targeted the high fertility rate in Tanzania, which is expected to nearly double its 36 million population in 25 years and has a fertility rate of 5.6 children per woman. After the dramas aired, researchers found that the greater exposure marital partners had to the dramas, the more they discussed the need to control family size and adopted family planning methods.

To help guide such productions, the drama producers study a region's culture and values to identify major social problems and obstacles to overcoming them. Writers and producers use this information to develop realistic characters

(*Continued*)

and plots grounded in respect for human dignity and equity, which are codified in United Nations covenants.

"Global problems produce a sense of paralysis in people that they cannot do anything about them," Bandura said. "Our global applications illustrate how a collective effort combining the expertise of different players can have a world-wide impact on seemingly insurmountable problems."

(Bandura, 1993) and work teams (Little & Madigan, 1997), to name but two examples. Our prediction is that collective efficacy will become even more influential with the growing focus of positive psychology on cooperative group efforts. For a real-life application of social learning theory and self-efficacy principles as embodied by television heroes, read the article "Changing Behavior Through TV Heroes."

OPTIMISM

In this section, we discuss two theories that have received the overwhelming majority of the attention in regard to the construct of optimism. The first is **learned optimism** as studied by Martin Seligman and colleagues, and the second is the view of **dispositional optimism** as advanced by Michael Scheier and Charles Carver.

Learned Optimism—Seligman and Colleagues

The Historical Basis of Learned Optimism

Abramson, Seligman, and Teasdale (1978) reformulated their model of helplessness (see also Peterson, Maier, & Seligman, 1993) to incorporate the attributions (explanations) that people make for the bad and good things that happen to them. University of Pennsylvania psychologist Martin Seligman (Seligman, 1991, 1998b; see also Seligman, Reivich, Jaycox, & Gillham, 1995) later used this attributional or explanatory process as the basis for his theory of learned optimism.

A Definition of Learned Optimism

In the Seligman theory of learned optimism, the optimist uses adaptive causal attributions to explain negative experiences or events. Thus, the person answers the question, "Why did that bad thing happen to me?" In technical terms, the optimist makes external, variable, and specific attributions for failure-like events rather than the internal, stable, and global attributions of the pessimist. Stated more simply, the optimist explains bad things in such a manner as (1) to account for the role of other people and environments in producing bad outcomes (i.e., an external attribution), (2) to interpret the bad event as not likely to happen again (i.e., a variable attribution), and (3) to constrain the bad outcome to just one performance area and not others (i.e., a specific attribution).

FIGURE 8.1 ■ Learned Optimism Theory Viewed in Terms of Its Past Temporally Oriented Excusing Qualities as Compared to Future Temporally Oriented Optimism Qualities
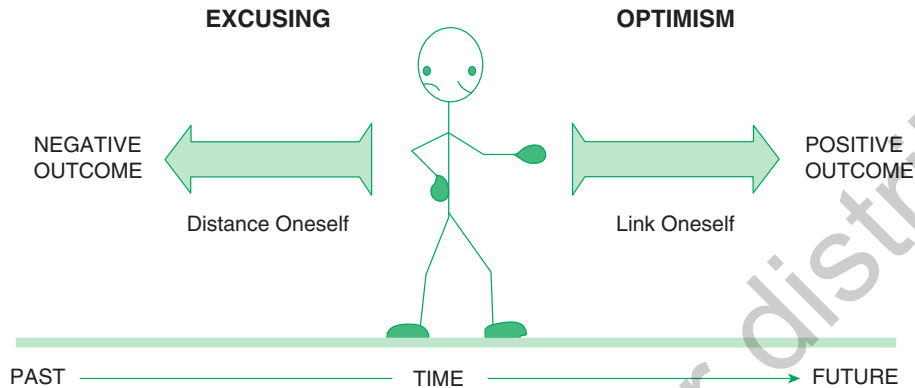
Thus, the optimistic student who has received a poor grade in a high school class would say, (1) "It was a poorly worded exam" (external attribution), (2) "I have done better on previous exams" (variable attribution), and (3) "I am doing better in other areas of my life such as my relationships and sports achievements" (specific attribution). Conversely, the pessimistic student who has received a poor grade would say, (1) "I screwed up" (internal attribution), (2) "I have done lousy on previous exams" (stable attribution), and (3) "I also am not doing well in other areas of my life" (global attribution).

Seligman's theory implicitly places great emphasis upon negative outcomes in determining one's attributional explanations. Therefore, as shown in Figure 8.1, Seligman's theory uses an excuse-like process of "distancing" from bad things that have happened in the past, rather than the more usual notion of optimism involving the connection to positive outcomes desired in the future (as reflected in the typical dictionary definition, as well as in Scheier and Carver's definition, which we explore shortly in this chapter). Within the learned optimism perspective, therefore, the optimistic goal-directed cognitions are aimed at distancing the person from negative outcomes of high importance.

Childhood Antecedents of Learned Optimism

Seligman and colleagues (Abramson et al., 2000; Gillham, 2000; Seligman, 1991, 1995, 1998b) carefully described the developmental roots of the optimistic explanatory style. To begin, there appears to be some genetic component of explanatory style, with learned optimism scores more highly correlated for monozygotic than dizygotic twins (correlations = .48 vs.0; Schulman, Keith, & Seligman, 1993).

Additionally, learned optimism appears to have roots in the environment (or learning). For example, parents who provide safe, coherent environments are likely to promote the learned optimism style in their offspring (Franz, McClelland, Weinberger, & Peterson, 1994). Likewise, the parents of optimists are portrayed as

modeling optimism for their children (Bamford & Lagattuta, 2012), often by making explanations for negative events that enable the offspring to continue to feel good about themselves (i.e., external, variable, and specific attributions) and by providing explanations for positive events that help the offspring feel extra-good about themselves (i.e., internal, stable, and global attributions; Forgeard & Seligman, 2012). Moreover, children who grow up with learned optimism are characterized as having had parents who understood their failures and generally attributed those failures to external rather than internal factors (i.e., they taught their children adaptive excusing; see Snyder, Higgins, & Stucky, 1983/2005). On the other hand, pessimistic people had parents who also were pessimistic. Furthermore, experiencing childhood traumas (e.g., parental death, abuse, incest) can yield pessimism (Bunce, Larsen, & Peterson, 1995; Cerezo & Frias, 1994), and parental divorce also may undermine learned optimism (Seligman, 1991). (Not all studies have found the aforementioned negative parental contributions to the explanatory styles of the offspring of those parents, and thus these conclusions must be viewed with caution. For a balanced overview of parental contributions, see Peterson & Steen, 2002.) As a final thought, researchers note that there can sometimes be "too much of a good thing" with regard to use of optimistic explanatory style. Optimists tend to keep gambling even when losing over and over (Gibson & Sanbonmatsu, 2004). They may also be more likely to make mistakes when looking at risky situations in some cases (Sharot, Korn, & Dolan, 2011). Therefore, sometimes "temporary (realistic) pessimism may be more beneficial" (Forgeard & Seligman, 2012, p. 115). When we become optimistic to the point of disregarding potential problems and consequences, we may need to adjust our tendency.

Television watching is yet another potential source of pessimism. Within the United States, children ages 2 to 17 watch an average of almost 25 hours of television per week (3.5 hours per day; Gentile & Walsh, 2002). As but one recent example of pessimism-related behaviors that stem from children's television watching, Zimmerman, Glew, Christakis, and Katon (2005) found that greater amounts of television watched at age 4 were related significantly to higher subsequent likelihoods of those children becoming bullies. Likewise, a steady diet of television violence can predispose and reinforce a helpless explanatory style that is associated with low learned optimism in children (Nolen-Hoeksema, 1987). Certain types of television programs may have a greater effect on children in this way. For example, shows aimed at "tweens" (i.e., 8- to 12-year-olds), particularly shows that depict social conflict in middle and high school settings, seem to create anxiety in their viewers (Mares, Braun, & Hernandez, 2012). This leads to more pessimism experienced by these tweens when thinking about the high school context. These results were found even when this type of episode was watched only once! Discussions of how parents might deactivate some of these effects with simple conversations are important (Mares et al., 2012). This underlines the importance of parental involvement in the development of a more optimistic explanatory style.

Scales: Can Learned Optimism Be Measured?

The instrument used to measure attributional style in adults is called the Attributional Style Questionnaire (ASQ; Peterson et al., 1982; Seligman, Abramson, Semmel, & von Baeyer, 1979); the instrument for children is the Children's Attributional Style Questionnaire (CASQ; Kaslow, Tanenbaum, & Seligman, 1978; Seligman, 1995;

Seligman et al., 1984). The ASQ poses negative or positive life events, and respondents are asked to indicate what they believe to be the causal explanation of those events on the dimensions of internal/external, stable/transient, and global/specific. Since the development of the ASQ, however, researchers have begun using expanded versions with more items (E-ASQ; see Metalsky, Halberstadt, & Abramson, 1987; Peterson & Villanova, 1988).

Beyond the explanatory style scales for adults and children, University of Michigan psychologist Chris Peterson and his colleagues (Peterson, Bettes, & Seligman, 1985) developed the Content Analysis of Verbal Explanation (CAVE) approach for deriving ratings of optimism and pessimism from written or spoken words (Peterson, Schulman, Castellon, & Seligman, 1992). The advantage of the CAVE technique is that it allows an unobtrusive means of rating a person's explanatory style based on language usage. In this latter regard, one can go back and explore the optimism/pessimism of famous historical figures in their speeches, diaries, or newspaper interviews from earlier decades (e.g., Satterfield, 2000). To demonstrate the predictive power of the CAVE, we describe an intriguing application of the technique to predict the performances of Major League Baseball teams (see "The CAVE and Predicting Baseball Outcomes").

What Learned Optimism Predicts

The various indices of learned optimism have spawned a large amount of research (see Carr, 2004), with the learned optimistic rather than pessimistic explanatory style associated with the following:

1. Better academic performances (Beard, Hoy, & Hoy, 2010; Feldman & Kubota, 2015; Seligman, 1998b; Tetzner & Becker, 2017)

2. Superior athletic performances (Ortin-Montero, Martinez-Rodriguez, Reche-Garcia, de Los Fayos-Ruiz, & González-Hernández, 2018; Seligman, Nolen-Hoeksema, Thornton, & Thornton, 1990)

3. More productive work records (Rabenu & Yaniv, 2017; Seligman & Schulman, 1986)

4. Greater satisfaction in interpersonal relationships (Crocker, Canevello, & Lewis, 2017; Fincham, 2000; Fitzpatrick, 2017)

5. More effective coping with life stressors (Nolen-Hoeksema, 2000; Reed, 2016)

6. Less vulnerability to depression (Abramson et al., 2000; Ji, Holmes, & Blackwell, 2017) and suicidal ideation (Huffman et al., 2016; Yu & Chang, 2016)

7. Superior physical health (Peterson, 2000; Puig-Perez, Hackett, Salvador, & Steptoe, 2017)

8. Greater life satisfaction (Heo, Chun, Lee, & Kim, 2016; Moreno & Marrero, 2015; Szcześniak & Soares, 2011)

In terms of other learned optimism-based interventions, the reader is referred to Chapter 14, where details are given about the change techniques for both children

and adults (see also Seligman, Steen, Park, & Peterson, 2005). Additionally, a good overview of learned optimism interventions can be found in Jane Gillham's (2000) edited volume, titled *The Science of Optimism and Hope.* Easily understood analyses of learned optimism adult interventions can be found in Seligman's *Learned Optimism: How to Change Your Mind and Your Life* (1998b) and his *Authentic Happiness* (2002). Child interventions are described in Seligman et al.'s (1995) *The Optimistic Child.*

THE CAVE AND PREDICTING BASEBALL OUTCOMES

Martin Seligman, an avid Philadelphia Phillies baseball fan, decided to see whether his CAVE approach could be used to predict the outcomes of baseball teams. To accomplish this, his research group used the CAVE technique to analyze the optimistic explanatory styles inherent in the comments of National League baseball players reported in the *Sporting News* and the hometown newspaper sports sections from April through October 1985. This was a huge task in that 12 National League team newspapers had to be read across the season—this involved 15,000 pages of reading! The group then used the tabulated learned optimism scores for 1985 to predict various performance outcomes in the next 1986 season.

Of particular focus were the comments of the players on the New York Mets and the St. Louis Cardinals. When they lost, the Mets players' remarks conveyed an optimistic explanatory style. For example, star Mets pitcher Dwight Gooden explained a batter's home run with a simple, "He hit well tonight," and of his wild pitch, Gooden opined, "Some moisture must have gotten on the ball." Mets right fielder Darryl Strawberry said of a loss, "Sometimes you go through these kind of days." Compare these optimistic comments to the more pessimistic comments of St. Louis Cardinals' manager Whitey Herzog and team slugger Jack Clark. When asked why his team lost, Herzog replied, "We can't hit. What the hell, let's face it." And Clark commented on a fly ball he dropped by saying, "It was a real catchable ball."

When the explanatory styles of the Mets and Cardinals were used to predict performance in the next 1986 season, the optimistic comments of the Mets suggested success, and the pessimistic comments of the Cardinals predicted failure. This is precisely what happened. The Mets won the division, the playoffs, and the World Series in 1986, whereas the Cardinals lost more games than they won. The Mets' batting average for 1986 was .263 overall and .277 in pressure situations; the Cardinals, in comparison, had a batting average of .236 overall and .231 in pressure situations. Although we have described the results for only 2 of the 12 National League teams, the CAVE ratings of 1985 optimism were equally robust in predicting the outcomes of the other 10 teams. Because Seligman was skeptical about these findings, he replicated them, this time using 1986 comments to predict 1987 performance. He found the same results.

Seligman and his coworkers have performed similar studies on other sports to show the power of players' comments as measured by the CAVE approach to deriving explanatory style scores. More specifically, he has predicted the outcomes of NBA professional basketball teams and 1988 Olympic swimmer Matt Biondi. In yet another form of "sports," American politics (humor intended), Seligman also has found that optimistic explanatory-style scores are strong predictors of success.

Source: From Seligman, M. E. P., *Learned Optimism,* copyright © 1990 by Martin E. P. Seligman.

Note: All these applied studies are described in delightful detail in Seligman's 1990 book, *Learned Optimism.*

Optimism—Scheier and Carver

Defining Optimism as Expectancies of Reaching a Desired Goal

In their seminal article published in *Health Psychology,* psychologists Michael Scheier and Charles Carver (1985) presented their new definition of optimism, which they described as the stable tendency "[to] believe that good rather than bad things will happen" (p. 219). Scheier and Carver assumed that, when a goal was of sufficient value, then the individual would produce an expectancy about attaining that goal.

In their definition of optimism, Scheier and Carver (1985) purposefully do not emphasize the role of personal efficacy. They wrote,

> Our own theoretical approach emphasizes a person's expectancies of good or bad outcomes. It is our position that outcome expectancies per se are the best predictors of behavior rather than the bases from which those expectancies were derived. A person may hold favorable expectancies for a number of reasons—personal ability, because the person is lucky, or because others favor him. The result should be an optimistic outlook—expectations that good things will happen. (p. 223)

Thus, these generalized outcome expectancies may involve perceptions about being able to move toward desirable goals or to move away from undesirable goals (Carver & Scheier, 1999). The consensus is that there is a genetic basis to optimism as defined by Scheier and Carver (see also Plomin et al., 1992). Likewise, borrowing from Erikson's (1963, 1982) theory of development, Carver and Scheier (1999) suggest that their form of optimism stems from early childhood experiences that foster trust and secure attachments to parental figures (Bowlby, 1988). Parents have a role in the development of optimism on the "nurture side" of things. Various types of childhood experiences may lead a child to develop less optimism for the future. Some researchers have noted that children born to parents who live in a lower socioeconomic status may be exposed to more stress and a greater amount of negative emotional states due to this; exposure to socioeconomic difficulties in childhood predicts lower adult optimism as well (Heinonen et al., 2006). Sadly, children in these cases may expect the worst throughout life because they've often been right; this lower level of optimism appears to be somewhat stable throughout life, even if socioeconomic status becomes higher in adulthood (Heinonen et al., 2006; Pedrotti, 2013a).

In a study asking college students why they scored high on a scale of dispositional optimism, participants credited factors such as belief in a higher power, feelings that the world was just, personal privileges and benefits in life, and feelings of hope as major reasons with regard to *why* they were optimistic overall (Sohl, Moyer, Lukin, & Knapp-Oliver, 2011). Many of these types of factors might find their origin in positive childhood experiences and beneficial parenting practices, thus giving a bit more evidence for a positive childhood leading to the development of optimism.

Scales: Can Optimism Be Measured?

Scheier and Carver (1985) introduced their index of optimism, the Life Orientation Test (LOT), as including positive ("I'm always optimistic about my future") and negative ("I rarely count on good things happening to me") expectancies. The LOT has

displayed acceptable internal consistency (alpha of .76 in original sample) and a test–retest correlation of .79 over 1 month. In support of its concurrent validity, the LOT correlated positively with expectancy for success and negatively with hopelessness and depression.

After years of extensive research using the LOT, a criticism arose about its overlap with neuroticism (see Smith, Pope, Rhodewalt, & Poulton, 1989). In response to this concern, Scheier, Carver, and Bridges (1994) validated a shorter, revised version of the LOT known as the LOT-Revised (LOT-R). The LOT-R eliminated items that caused the neuroticism overlap concerns. Furthermore, relative to neuroticism, trait anxiety, self-mastery, and self-esteem, optimism as measured by the LOT-R has shown superior capabilities in predicting various outcome markers related to superior coping. For example, higher scores on the LOT-R have related to better recovery in coronary bypass surgery, dealing more effectively with AIDS, enduring cancer biopsies more easily, having better adjustment to pregnancy, and continuing in treatment for alcohol abuse (Carver & Scheier, 2002; for a good review of the many beneficial correlates of optimism, see Scheier, Carver, & Bridges, 2001). Additionally, internal consistency of the LOT-R equals or exceeds the original LOT (alpha of .78); its test–retest correlations are .68 to .79 for intervals of 4 to 28 months. Further, recent confirmatory factor analyses have substantiated the two-factor structure of the LOT-R and showed similarities of structure across participants of different ages and genders (Hinz et al., 2017). This study verified that use in a number of different populations, in research and in clinical practice, could be recommended based on these results.

In addition, some discussion has been generated regarding whether optimism should be considered a *unidimensional* characteristic (i.e., with optimism at one end of the continuum and pessimism at the other) versus a *bidimensional* construct (i.e., two different factors on two different continua). Studies have found varying results on the factor structure of the LOT-R, with Scheier et al. (1994) finding one factor (optimism) and Affleck and Tennen (1996) finding the two independent factors of optimism and pessimism. This may be a function of cultural context, as differing results have been found when looking cross-culturally. Findings show that the LOT-R seems to measure two factors (optimism and pessimism) in its Spanish translation and with Brazilian Portuguese individuals as well (Ribeiro, Pedro, & Marques, 2012). In Hong Kong, German, and French-Canadian populations, the one-factor model (i.e., high or low optimism) has been found. Differing reliability coefficients have been found in different samples; specifically, English-language versions of the LOT have been found to have reliability estimates that are higher than non-English-language versions (Vassar & Bradley, 2010). Given this finding, it is important to acknowledge that measurement does not appear to be consistent across varying groups at this time (Li, 2012; Ribeiro et al., 2012). The categorizing of optimism as unidimensional in some groups and bidimensional in others might provide us with more information; more research is needed in this area.

New scales have been developed as well, including a measure of personal and social optimism called the Questionnaire for the Assessment of Personal Optimism and Social Optimism–Extended (POSO-E; Schweizer & Koch, 2001). A new scale created in Italy in 2017 by Ginevra, Sgaramella, Ferrari, Nota, and Santilli, called the Visions About Future (VAF) scale, has shown some potential in use with adolescents. This 22-item scale was developed to assess hope and pessimism, in addition to optimism, and shows promise in its findings that the VAF-combined score correlated with career

adaptability and life satisfaction. No differences were found in different genders in this study as well (Ginevra et al., 2017). In addition, versions of the LOT for children have been developed, including the Youth Life Orientation Test (YLOT; Ey et al., 2004) and the Parent-Rated Life Orientation Test (PLOT; Lemola et al., 2010). In this second scale, parents rate the optimism of their young children.

What Optimism Predicts

The LOT-R, like the LOT, has generated a large amount of research. When coping with stressors, optimists (in Caucasian samples) appear to take a problem-solving approach[1] (Scheier, Weintraub, & Carver, 1986) and are more planful than pessimists (Fontaine, Manstead, & Wagner, 1993). Furthermore, optimists tend to use the approach-oriented coping strategies of positive reframing and seeing the best in situations, whereas pessimists are more avoidant and use denial tactics (Carver & Scheier, 2002). Optimists appraise daily stresses in terms of potential growth and tension reduction more than their pessimistic counterparts do. Also, when faced with truly uncontrollable circumstances, optimists tend to accept their plights, whereas pessimists actively deny their problems and thereby tend to make them worse (Carver & Scheier, 1998; Carver, Scheier, & Segerstrom, 2010; Scheier & Carver, 2001). In other words, an optimist knows when to give up and when to keep plugging on, whereas the pessimist still pursues a goal when it is not a smart thing to do.

On the whole, the LOT-R has produced robust predictive relationships with a variety of outcome markers (for reviews, see Carver & Scheier, 1999, 2002; Carver, Scheier, Miller, & Fulford, 2009). For example, optimists as compared to pessimists fare better in the following situations:

1. Starting college (Aspinwall & Taylor, 1992)

2. Performing in work situations (Long, 1993; Rabenu & Yaniv, 2017) and vocational identity (Shin & Kelly, 2013)

3. Enduring a missile attack (Zeidner & Hammer, 1992) or other traumatic event in war (Thomas, Britt, Odle-Dusseau, & Bliese, 2011)

4. Caring for patients with Alzheimer's disease (Hooker, Monahan, Shifren, & Hutchinson, 1992) and patients with cancer (Given et al., 1993)

5. Undergoing coronary bypass surgeries (Fitzgerald, Tennen, Affleck, & Pransky, 1993) and bone marrow transplants (Curbow, Somerfield, Baker, Wingard, & Legro, 1993)

6. Coping with cancer (Carver et al., 1993; Colby & Shifren, 2013), AIDS (Taylor et al., 1992), and chronic pain (Ramírez-Maestre, Esteve, & López, 2012)

7. Coping in general (Carver et al., 2010; Reed, 2016)

8. Dealing with health issues in later life (Ruthig, Hanson, Pedersen, Weber, & Chipperfield, 2011)

A recent meta-analysis looked at a variety of studies that aimed to increase optimism because of its clear links to both psychological and physical health. Malouff and

Schutte (2017) found that across 29 studies, optimism can be increased in interventions aimed at this goal. Some moderators of the increase were found including use of the Best Possible Selves intervention, using an expectancy measure of positive and negative outcomes (as opposed to a quantitative measure such as the LOT-R), and providing the intervention in person as opposed to other methods of administration. While a number of different facets may impact effect size found in these interventions, an overall meta-analytic effect size of .41 was found looking at the studies together. This was a significant effect size and points to the attainability of increasing optimism via intervention.

Interestingly, some studies have found that optimism may be related to the suppression of the immune system in some cases (Segerstrom, 2006; Segerstrom & Sephton, 2010). Segerstrom found in a study with law students that while those with higher optimism had higher cellular immunity in times of low conflict, these same individuals had *lower* cellular immunity than those with lower optimism scores during times of high stress or extreme conflict. At present, it is not clear if this is due to high expectations being unfulfilled, the fact that optimists set their sights on more difficult goals (with more difficult stressors), or some other explanation. Segerstrom suggests that regardless of the reason for this, "If optimists are more successful in fulfilling difficult but important goals, the short-term physiological costs may even be to their long-term benefit" (p. 657). In a follow-up to this study, Segerstrom and Sephton (2010) looked more carefully at cellular immune function to determine differences between "little optimism" (optimism about a specific situation) versus "big optimism" (general dispositional optimism) and found that differences exist in terms of what other constructs appear to mediate these experiences. Positive affect may be one such construct in circumstances involving little optimism, although it does not appear to have this mediating effect when looking at big optimism. In this follow-up study, it was found that when law students became more optimistic about law school (little optimism), their cellular immune function also increased; the results here are thought to be partly a result of the increase in positive affect that accompanied thinking more positively about their law school future (Segerstrom & Sephton, 2010). More research must be done in this area to further elucidate the complex interactions between optimism and immunity. Implications also exist for interventions to be created for specific circumstances. Perhaps thinking more positively about other experiences (e.g., childbirth, academic testing, going through a medical procedure) might help us to be healthier in these situations as well.

Edward C. Chang

Culture, Optimism, and Pessimism

Varied findings in studies using the LOT and the LOT-R point to potential cultural nuances in looking at these constructs (e.g., Vassar & Bradley, 2010). Along these lines, both differences and similarities have been found with regard to research on optimism, pessimism, and

their correlations to one another across different countries, different racial groups, and different genders. Additional uses for optimism and pessimism are also found in different cultural groups.

In African American samples, optimism seems to mirror Caucasian samples' usual associations with other constructs, including positive correlations to resilience (Baldwin, Jackson, Okoh, & Cannon, 2011) and effective parenting practices (Taylor, Larsen-Rife, Conger, Widaman, & Cutrona, 2010), as well as spirituality and faith (Mattis et al., 2017), and negative relationships to depressive symptoms (Odom & Vernon-Feagans, 2010; Taylor, Budescu, & McGill, 2011) and stress/distress (Baldwin et al., 2011; Taylor et al., 2011). Optimism may be a buffer (along with other factors such as church-related support) against racism and discrimination experienced because of being African American (Odom & Vernon-Feagans, 2010). Furthermore, the way the women in this study perceived racism, as well as the effects racism had upon them, were moderated by their levels of optimism. This may be another example of a cultivated strength in a population that must deal with adversity and might be maximized by emulation in other groups who suffer similar indignities.

Some research has been conducted with the optimism construct in comparing Western and Eastern cultural backgrounds. Using the learned optimism construct as measured by the ASQ, for example, Lee and Seligman (1997) found that Asian Americans and Caucasian Americans had similar levels of optimism, but the mainland Chinese students were less optimistic. Using the Scheier and Carver approach to operationalizing optimism (along with a version of the LOT), Edward Chang of the University of Michigan (1996a) found that Asian American and Caucasian American students did not differ on optimism, but the Asian Americans were higher in pessimism than their Caucasian American counterparts. In this same study, Chang found that, for the Caucasian Americans, their higher pessimism was associated with less problem solving—as one would expect. For the Asian Americans, on the other hand, *their higher pessimism was associated with greater problem solving.* In the words of Chang (2001a), "Thus, what 'works' for Asians relative to Caucasian Americans simply might be different, *not necessarily more effective*" (p. 226, emphasis added). (See Chapter 4 for a related discussion of Chang's work.) Thus, in Asian American samples, optimism and pessimism seem to interact differently than they do in Caucasian and African American samples.

Chang's recent research suggests that Asian Americans may also have more of a pessimistic bias toward some future events (Chang, Sanna, Kim, & Srivastava, 2010). Asian Americans were more likely to have a pessimistic outlook about positive physical health outcomes such as having "wrinkle-free skin." They did not show differences from Caucasian Americans on predictions of positive psychological (e.g., "I will be resilient"), negative physical (e.g., "I will suffer from gum disease"), or negative psychological (e.g., "I will suffer from depression") outcomes. Both groups had a more optimistic bias (Chang et al., 2010). Other researchers have found that social support may have a different function with regard to optimism in the lives of Asian Americans (Ayres & Mahat, 2012). These researchers found that having social support may increase the impact of optimism on the lives of individuals in this group. Thus, we cannot assume that this coping approach is manifested in the same degree among Asian Americans and Caucasian Americans, nor can we assume that having more optimism (and less pessimism) even produces the same coping repercussions for these two distinct groups.

More recent research from Chang and colleagues (Yu & Chang, 2016) shows that these findings are supported in that suicidal ideation might be differently related to optimism and pessimism in Asian American samples in comparison to other cultural groups. Yu and Chang measured optimism and pessimism in Asian American, Latino American, and African American college students and found that pessimism and lack of ability to orient oneself toward the future were related to suicidal thoughts in both African American and Latino groups. This finding was not present in the Asian American college student participants, however, furthering the evidence that optimism and pessimism may not have the same links with depression as they do in other cultural groups (Yu & Chang, 2016).

Research on gender differences suggests that the cultural facet of gender affects optimism and pessimism. One interesting study examined differences in *comparative optimism* (i.e., one's belief that the chance that good things will happen for him or her is greater than for others) and *personal optimism* (i.e., one's belief that good things will happen for him or her in general) and found that men scored higher than women on both of these constructs, even after controlling for personal experience with parental divorce (Helweg-Larsen, Harding, & Klein, 2011). This same difference, with men scoring higher on optimism and lower on pessimism, has also been found in other studies using samples in the United States and in Taiwan (Black & Reynolds, 2013; Chang, Tsai, & Lee, 2010; Jacobsen, Lee, Marquering, & Zhang, 2014). Even at the high school level, the same conclusion was reached: Boys were more optimistic than girls overall (Pusker et al., 2010). Helweg-Larsen and colleagues (2011) considered why this might be the case and found, for example, that the men in their study also scored significantly higher on measures of personal control. It may be that as men feel they have more control over their futures, they also feel more positive about them. Historically, women across the globe have had less control over their lives and less social power and privilege. It may be that even today, this affects the beliefs of many women on what the future holds. Interestingly, a recent study by Arrosa and Gandelman (2016) shows that women overall appear to be happier than men, despite objective characteristics that would seem to suggest they should not be happier. The authors say that this happiness in the face of what should produce more unhappiness can be defined as an "optimism" of sorts. Although this study does not use a formal measure of optimism, it is an interesting idea that gender may influence one's ability to deal with lack of power or with less control in general. Thus, more study is needed in gender and optimism as results appear inconclusive. Although there may be cultural variations in terms of desire or expectation for personal control, we may want to investigate ways that women may use optimism to cope and as a way to look forward to the future, even if their situations are less fortunate than those of men.

Turning to the interventions to enhance optimism, we again suggest that the reader examine our Chapter 14 discussion of implementing positive psychological change. Presently, there appears to be one major therapy approach that expressly seeks to enhance the positive expectancies as conceptualized in the Scheier and Carver model of optimism. John Riskind and his colleagues (Riskind, Sarampote, & Mercier, 1996) have modified standard cognitive therapy to influence optimism and pessimism. Riskind has acknowledged that most cognitive therapy techniques aim to lessen negative thinking (pessimism) but do little to enhance positive thinking (optimism). On this point, it should be noted that a simple decrease in negative

thinking does not change positive thinking, owing perhaps to the fact that negative and positive cognitions are not correlated (Ingram & Wisnicki, 1988). In the Riskind approach, cognitive techniques are used to challenge optimism-suppressing schemas as well as to enhance positive and optimistic thinking. Another technique suggested by Riskind et al. (1996) is positive visualization, wherein the client rehearses seeing positive outcomes for problematic circumstances (for overview, see Pretzer & Walsh, 2001). Because of the robust findings relating optimism to various health outcomes, we believe that the Scheier and Carver model will continue to expand in influence, especially in the area of interventions to help medical patients who are facing physical health challenges.

The Neurobiology of Optimism and Pessimism

Individuals higher and lower in optimism may differ in terms of the type of allele pair found on a receptor gene in the oxytocin system (Saphire-Bernstein, Way, Kim, Sherman, & Taylor, 2013). This points to the idea that brain structure may indeed influence one's ability to be optimistic. Individuals high in dispositional optimism also appear to have a weaker cortisol response upon waking up in the morning, compared to those lower in dispositional optimism; this result was found after holding other influencing factors constant (e.g., waking time, depressive symptoms, gender; Endrighi, Hamer, & Steptoe, 2011). In addition, some research suggests that optimism bias (or the tendency to think that things that happen to oneself will usually be better than what might happen to others) appears to be linked to attention bias (the individualized tendency to pay attention to some types of things more than others) in terms of the neural networks shown to be activated (Kress & Aue, 2017). This points to the fact that some of us may have brains that are in some respect "wired" to be optimistic. These findings are supported by other research that shows that working memory appears to mediate the relationship between depression and dispositional optimism (Alloway & Horton, 2016). In this study, researchers tested the strength of working memory in a number of participants by showing them various grids with objects and then taking them away and asking subsequent questions about where the object was located on the grid. Levels of optimism and pessimism were also measured via the LOT-R. Findings showed that working memory was able to predict an optimistic or pessimistic outlook such that those with weaker working memory appeared also to be more pessimistic. As you may recall from Chapter 6, it is much easier to focus on negative stimuli (in this case, a pessimistic mindset) than those that are positive (an optimistic mindset). In this study, those with a weaker working memory had difficulty in remembering the location of the object that was viewed as an obstacle. These participants then potentially began to attend to the negative situation ("I can't remember!"), which is evolutionarily easier than looking at a situation in a positive light. Those with a stronger working memory did not encounter the obstacle and thus did not have to work to force their attention to an optimistic outlook (Alloway & Horton, 2016). Thus, lower levels of working memory may prevent access to an optimistic mindset in difficult situations. Finally, other studies have shown that healthy individuals, when experiencing optimism, have distinctly different neural reactions with regard to the medial prefrontal cortex and caudate, from individuals diagnosed with Generalized Anxiety Disorder (Blair et al., 2017).

Researchers are currently investigating the reasons for *unrealistic optimism* (i.e., optimism for a rosy outcome in the face of a nonrosy reality; Ruthig, Gamblin, Jones, Vanderzanden, & Kehn, 2017). Scientists have investigated the neurological mechanisms that appear to keep some of us optimistic even when we really shouldn't be. For example, Sharot et al. (2011) asked participants to rate their risk of developing various medical problems in the future (e.g., kidney stones, Alzheimer's disease) and then presented these same participants with the actual calculated risk of someone similar to them in terms of physicality and lifestyle developing these problems. The participants were then asked at a second interview to again estimate their likelihood of risk for these various diseases and medical conditions. When participants were allowed to become more optimistic as a result of the actual prediction offered to them (i.e., they had *over*-estimated their likelihood of developing these problems), they were much more likely to move to a more accurate position in terms of assessing their risk in the second interview. When participants should logically have revised their view in a more pessimistic direction (i.e., they had *under*estimated their likelihood of developing these problems in the face of the actual probability), they did not change as much in their predictions from the first interview to the second (Sharot et al., 2011). Neurologically, less activity was noted in many brain regions in the unrealistically optimistic individuals. This provides interesting evidence for the *optimism bias* discussed by many researchers in this area of the field (see Sharot's [2011] book *The Optimism Bias: A Tour of the Irrationally Positive Brain*). Many researchers have pondered the evolutionary benefits of optimism (e.g., its positive correlations to coping, resiliency); findings such as these ask us to delve further into this very interesting area of study (Izuma & Adophs, 2011; Shah, 2012; Whelan & Garavan, 2013).

HOPE

In all of human history, there has been a need to believe that bad could be transformed into good, that ugly could become beautiful, and that problems could be solved. But civilizations have differed in the degree to which they have viewed such changes as possible. For example, consider the classic Greek myth of Pandora's box, a story about the origin of hope. There are two versions of this tale.

In one version, Zeus created Pandora, the first woman, to exact revenge against Prometheus (and against humans in general) because he had stolen fire from the gods. Pandora was endowed with amazing beauty and grace but also with the tendency to lie and deceive. Zeus sent Pandora with her dowry chest to Epimetheus (brother of Prometheus), who married her. In using what may be one of the earliest examples of reverse psychology, Zeus instructed Pandora not to open her dowry chest upon arriving on Earth. Of course, she ignored Zeus's order and opened the chest. Out spewed all manner of troubles into the world. Hope, however, remained in the chest—not to help humankind but

Pandora's box

to taunt it with the message that hope does not really exist. In this version, therefore, hope was but a cruel hoax.

A second version of this tale holds that all earthly misfortunes were caused by Pandora's curiosity rather than by any inherent evil nature. The gods tested her with instructions not to open the dowry chest. She was sent to Epimetheus, who accepted her despite the warning of Prometheus about gifts from Zeus. When Pandora opened the dowry chest, hope was not a hoax but a blessing and a source of comfort for misfortunes (Hamilton, 1969). And in this positive version of the story, hope served as an antidote to the evils (e.g., gout, rheumatism, and colic for the body and envy, spite, and revenge for the mind) that escaped when the chest was opened. Whether hope was a hoax or an antidote, these two versions of this story reveal the tremendous ambivalence of the Greeks toward hope.

A Definition

Given the considerable attention that C. R. Snyder's theory of hope (Snyder, 1994; Snyder et al., 1991) has received since the early 1990s, when it was proposed, we explore this approach

C. R. Snyder

to explaining hopeful thinking in some detail. (Snyder, before his death in 2006, was professor of psychology at the University of Kansas.) An overview of the various theories of hope are set forth in Appendix A. Additionally, the books *Making Hope Happen* by Shane J. Lopez (2013) and *Hope and Hopelessness: Critical Clinical Constructs* by Farran, Herth, and Popovich (1995) provide a good overview of various approaches for defining and measuring hope.

Both the Snyder hope theory and the definition of hope emphasize cognitions that are built on goal-directed thought. We define hope as goal-directed thinking in which the person uses **pathways thinking** (the perceived capacity to find routes to desired goals) and **agency thinking** (the requisite motivations to use those routes).

Only those goals with considerable value to the individual are considered applicable to hope. Also, the goals can vary temporally—from those that will be reached in the next few minutes (short-term goals) to those that will take months or even years to reach (long-term goals). Likewise, the goals entailed in hoping may be approach oriented (aimed at reaching a desired goal) or preventative (aimed at stopping an undesired event) (Hellman, Pittman, & Munoz, 2013; Snyder, Feldman, Taylor, Schroeder, & Adams, 2000). Last, goals can vary in relation to the difficulty of attainment, with some quite easy and others extremely difficult. Even with purportedly impossible goals, however, people may join together and succeed through supreme planning and persistent efforts. On this latter issue, coordinated and successful group efforts illustrate why we should refrain from characterizing extremely difficult goals as being based on "false hopes" (Snyder, Rand, King, Feldman, & Taylor, 2002).

Pathways thinking has been shown to relate to the production of alternate routes when original ones are blocked (Snyder et al., 1991), as has positive self-talk about finding routes to desired goals (e.g., "I'll find a way to solve this"; Lopez, 2013; Snyder, LaPointe, Crowson, & Early, 1998). Those who see themselves as having greater capacity for agency thinking also endorse energetic personal agency-focused self-talk
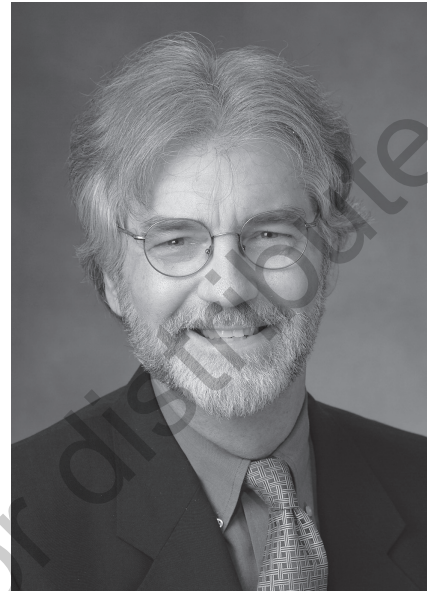
statements (e.g., "I will keep going"; Snyder et al., 1998), and they are especially likely to produce and use such motivational talk when encountering impediments.

High hopers have positive emotional sets and a sense of zest that stems from their histories of success in goal pursuits, whereas low hopers have negative emotional sets and a sense of emotional flatness that stems from their histories of having failed in goal pursuits. High- or low-hope people bring these overriding emotional sets with them as they undertake specific goal-related activities.

The various components of hope theory can be viewed in Figure 8.2, with the iterative relationship of pathways and agency thoughts on the far left. Moving left to right from the developmental agency–pathways thoughts, we can see the emotional sets that are taken to follow specific goal pursuit activities. Next in Figure 8.2 are the values associated with specific goal pursuits. As noted previously, sufficient value must be attached to a goal pursuit before the individual will continue the hoping process. At this point, the pathways and agency thoughts are applied to the desired goal. Here, the feedback loop entails positive emotions that positively reinforce the goal pursuit process or negative emotions that curtail this process.

Figure 8.2 shows how the person may encounter a stressor along the route to the goal that potentially blocks the actual goal pursuit. Hope theory proposes that the successful pursuit of desired goals, especially when circumventing stressful impediments, results in positive emotions and continued goal pursuit efforts (i.e., positive reinforcement). On the other hand, if a person's goal pursuit is not successful (often because that person cannot navigate around blockages), then negative emotions should result (Ruehlman & Wolchik, 1988), and the goal pursuit process should be undermined (i.e., punishment). (For more information on hope, consult Shane Lopez's [2013] *Making Hope Happen*.)

Such a stressor is interpreted differently depending on the person's overall level of hope. That is to say, high hopers construe such barriers as challenges and will explore alternate routes and apply their motivations to those routes. Typically, having experienced successes

FIGURE 8.2 ■ The Feedforward and Feedback Functions in Hope Theory
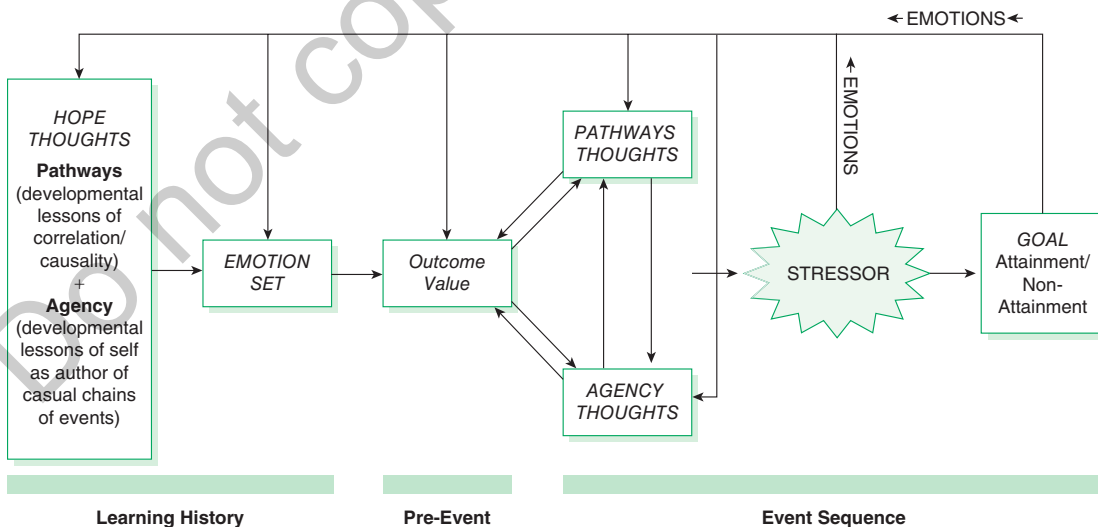
in working around such blockages, the high hopers are propelled onward by their positive emotions. The low hopers, however, become stuck because they cannot find alternate routes; in turn, their negative emotions and ruminations stymie their goal pursuits.

Childhood Antecedents of Hope

More details on the developmental antecedents of the hope process can be found in Snyder (1994, pp. 75–114) and Snyder, McDermott, Cook, and Rapoff (2002, pp. 1–32). In brief, Snyder (1994) proposes that hope has no hereditary contributions but rather is entirely a learned cognitive set about goal-directed thinking. The teaching of pathways and agency goal-directed thinking is an inherent part of parenting, and the components of hopeful thought are in place in a child by age 2. Pathways thinking reflects basic cause-and-effect learning that the child acquires from caregivers and others. Such pathways thought is acquired before agency thinking, with the latter being posited to begin around age 1. Agency thought reflects the baby's increasing insights as to the fact that they are the causal force in many of the cause-and-effect sequences in their surrounding environment.

Snyder (1994, 2000a) has proposed that strong attachment to caregivers is crucial for imparting hope, and available research is consistent with this speculation (Shorey, Snyder, Yang, & Lewin, 2003). Parents who are securely attached themselves also have children who are higher in hope (Blake & Norton, 2014; Goldner, Edelstein, & Habshush, 2015; Otis, Huebner, & Hills, 2016). Traumatic events across the course of childhood also have been linked to the lessening of hope (Rodriguez-Hanley & Snyder, 2000; Weinberg, Besser, Zeigler-Hill, & Neria, 2016), and there is research support for the negative impacts of some of these traumas (e.g., the loss of parents; Westburg, 2001). That said, research has found that even in cases of trauma, high-hope individuals are less susceptible to depression and other negative psychological consequences as compared to those lower in hope (Chang, Yu, Chang, & Hirsch, 2016). In a recent study, Chang and colleagues found that the level of impact a traumatic event had on the development of depressive symptoms in high hopers was closer to the rate of depression in participants in a no-trauma condition. Others have found that hope interventions might be successfully used to help deal with trauma. Camp HOPE America is an example of one intervention that attempts to treat exposure to trauma in school-aged children who have been exposed to violence in their homes (Hellman & Gwinn, 2017). Best of all, hope is contagious, meaning that when children are around adults who exude hope, they benefit from learning how to be hopeful as well (Best & de Alwis, 2017).

The Neurobiology of Hope

Although Snyder and colleagues have held that hope is a learned mental set, this does not preclude the idea that the operations of hopeful thinking have neurobiological underpinnings, especially as related to goal-directed behaviors. Norman Cousins, in his 1991 best-selling book *Head First: The Biology of Hope and the Healing Power of the Human Spirit,* wrote the following apt description of the brain and hope-related thinking:

> Brain researchers now believe that what happens in the body can affect the brain, and what happens in the brain can affect the body. Hope, purpose, and determination are not merely mental states. They have electrochemical connections

that play a large part in the workings of the immune system and, indeed, in the entire economy of the total human organism. In short, I learned that it is not unscientific to talk about a biology of hope. (p. 73)

One exciting idea here is that goal-directed actions are guided by opposing control processes in the central nervous system. According to Pickering and Gray (1999), these processes are regulated by the *behavioral inhibition system* (*BIS*) and the *behavioral activation system* (*BAS*). The BIS is thought to be responsive to punishment, and it signals the organism to stop, whereas the BAS is governed by rewards, and it sends the message to go forward. A related body of research suggests a *behavioral facilitation system (BFS)* that drives incentive-seeking actions of organisms (see Depue, 1996). The BFS is thought to include the dopamine pathways of the midbrain that connect to the limbic system and the amygdala.

Another idea recently discussed by Lopez (2013) is the idea of the "prospection pipeline" (p. 41). Lopez discusses the process of hope as it may occur neurologically in the brain. Neuroscientists can track in the brain the process of a good idea or a future plan by watching the parts of the brain that light up as the idea forms and becomes realized. Lopez talks about creating hopes from memories, and thus the prospection pipeline begins in the hippocampus, where memories are examined and often used as the basis for new imaginings. Hope, a form of imagining in some ways, may start here as we begin to take stock of what has happened before and what that might mean we could do in the future. Once the ideas have been examined, the next stop along the pipeline might be the rostral anterior cingulate cortex (rACC), which works with the amygdala to determine how important our various mental images and plans are and to attach emotional meaning to them. As Lopez says, "It pushes you to make smart choices" (p. 43). The last stop on the pipeline is the prefrontal cortex. Thoughts and ideas that are deemed meaningful and emotionally provocative change into action in the prefrontal cortex. It is here that the hopeful pathway begins to emerge in a way that looks like Snyder and colleagues' (1991) operationalization of hope. Ideas about pathways, obstacles, and ways around obstacles begin to emerge in our minds, and we can then begin our journey along these pathways, motivated by that prospection pipeline that got us started on the process. Using neuroscience to understand processes such as this is invaluable in helping us to understand how to shape our future as we would like.

Very recent research is exploring the medial orbitofrontal cortex and its potential role in buffering against anxiety. In this research, scientists found that hope as a trait construct appeared to mediate the relationship between anxiety and spontaneous activity in this area of the brain (Wang et al., 2017). As the authors state, this study may "provide the first evidence for functional brain substrates underlying trait hope" (p. 439).

Scales: Can Hope Be Measured?

Using hope theory, Snyder and his colleagues developed several self-report scales. First, Snyder et al. (1991) developed a 12-item trait measure for adults ages 16 and older in which 4 items reflect pathways, 4 items reflect agency, and 4 items are distracters. An example pathways item is "I can think of many ways to get out of a jam," and an example agency item is "I energetically pursue my goals." Respondents respond to each item on an 8-point Likert continuum (1 = *definitely false* to 8 = *definitely true*).

The internal consistency (alpha level) typically has been in the .80 range, and test–retest reliabilities have been .80 or above over time periods of 8 to 10 weeks (Snyder et al., 1991). Internal consistency is typically found to be higher for the eight-item test (alpha = .82) as compared to a shorter four-item version (alpha = .77) of the Hope Scale, although both are at adequate levels (Hellman et al., 2013). Furthermore, there are extensive data on the concurrent validity of the Hope Scale in regard to its predicted positive correlations with scales tapping such similar concepts as optimism, expectancy for attaining goals, expected control, and self-esteem, and there have been negative correlations with scales reflecting such opposite constructs as hopelessness, depression, and pathologies. Finally, several factor-analytic studies provide support for the pathways and agency components of the Hope Scale (Babyak, Snyder, & Yoshinobu, 1993; Feldman & Dreher, 2012; Hellman et al., 2013).

The Children's Hope Scale (CHS; Snyder et al., 1997) is a six-item self-report trait measure appropriate for children age 8 to 15. Three of the six items reflect agency thinking (e.g., "I think I am doing pretty well"), and three reflect pathways thinking (e.g., "When I have a problem, I can come up with lots of ways to solve it"). Children respond to the items on a 6-point Likert continuum (1 = *none of the time* to 6 = *all of the time*). The alphas have been close to .80 across several samples, and the test–retest reliabilities for 1-month intervals have been .70 to .80. The CHS has shown convergent validity in terms of its positive relationships with other indices of strengths (e.g., self-worth) and negative relationships with indices of problems (e.g., depression). Last, factor analyses have corroborated the two-factor structure of the CHS (Snyder et al., 1997). Both Portuguese (Marques, Pais-Ribeiro, & Lopez, 2009) and Spanish (L. M. Edwards, personal communication, November 14, 2013) language versions of the CHS have recently been developed and determined psychometrically valid as well. The CHS has also been found to be valid cross-culturally with children in Burundi, Indonesia, and Nepal (Haroz et al., 2017) and with Native American children as well (Shadlow, Boles, Roberts, & Winston, 2015).

Snyder and colleagues (Snyder et al., 1996) also developed the State Hope Scale (SHS), a six-item self-report scale that taps here-and-now goal-directed thinking. Three items reflect pathways thinking (e.g., "There are lots of ways around any problem that I am facing now"), and three items reflect agency thinking ("At the present time, I am energetically pursuing my goals"). The response range is 1 = *definitely false* to 8 = *definitely true.* Internal reliabilities are quite high (alphas often in the .90 range). Strong concurrent validity results also show that SHS scores correlate positively with state indices of self-esteem and positive affect and negatively with state indices of negative affect. Likewise, manipulation-based studies reveal that SHS scores increase or decrease according to situational successes or failures in goal-directed activities. Finally, factor analysis has supported the two-factor structure of the SHS (Snyder et al., 1996). Finally, hope scales have also been created involving specific domains of life (e.g., the Academic Hope Scale and the Math Hope Scale), and many of these measures have also been found to be psychometrically valid (Robinson & Rose, 2010).

What Hope Predicts

For a detailed review of the predictions flowing from Hope Scale scores, see Snyder (2002a) or Heller and colleagues (2013) for an updated list. What is noteworthy about the results related to these predictions is that the statistically significant findings

typically remain, even after mathematical correction for the influences of a variety of other self-report psychological measures, such as optimism, self-efficacy, personal growth initiative, and self-esteem. In general, Hope Scale scores have predicted outcomes in academics, sports, physical health, adjustment, and psychotherapy. For example, in the area of academics, higher Hope Scale scores obtained at the beginning of college have predicted better cumulative grade point averages and whether students remain in school (Feldman & Kubota, 2015; Snyder, Shorey, et al., 2002). More recent research has found that although other positive constructs are also related to academic achievement (e.g., self-efficacy, engagement), hope is "the only factor that had unique effects when examining predictors simultaneously and controlling for academic history" (Gallagher, Marques, & Lopez, 2017, p. 341). In addition, hope has been linked with other academically beneficial constructs such as grit (Anderson, Turner, Heath, & Payne, 2016). Unsurprisingly, those highest in overall hope and in agency have had the best academic outcomes, and no significant differences were found with socioeconomic status or gender (Dixson, Worrell, & Mello, 2017). Some differences have been found in the links between hope and a number of variables, including academic achievement, when looking at different racial and ethnic groups (Pedrotti, 2018). In some populations, hope in combination with ethnic identity provides the best predictor of academic achievement such that those high in ethnic identity are often also high in hope (Adelabu, 2008). In the area of sports achievement, higher Hope Scale scores obtained at the beginning of college track season have predicted the superior performances of male athletes and have done so beyond the coach's rating of natural athletic abilities (Curry, Snyder, Cook, Ruby, & Rehm, 1997). Some studies show that hope appears to be active in decision making about potential wins or losses in sports and distinct from just being optimistic about winning (Bury, Wenzel, & Woodyatt, 2016). This shows that hope is more than just a positive expectation or belief and may be present and particularly useful in situations where it is hard to have optimism (low possibility of winning; Bury et al., 2016).

With regard to adjustment, higher Hope Scale scores have related to various indices of elevated happiness, satisfaction, positive emotions, persistence and engagement, self-worth, dealing with change, and getting along with others, to name a few (Marques, Lopez, & Mitchell, 2013; McDavid, McDonough, & Smith, 2015; McDermott, Donlan, Zaff, & Prescott, 2016; Snyder et al., 1991; Strauss, Niven, McClelland, & Cheung, 2015; Yeung, Ho, & Mak, 2015). Additionally, hope has been advanced as the common factor underlying the positive changes that happen in psychological treatments (Howell, Jacobson, & Larsen, 2015; Owens, Magyar-Moe, & Lopez, 2015; Snyder, Ilardi, Cheavens, et al., 2000), even in an online counseling program (Dowling & Rickwood, 2016). Recently, the basic premise that Snyder's scale predicts goal attainment was tested by Feldman, Rand, and Kahle-Wrobleski (2009). In this research, the agency portion of the Hope Scale was found to most successfully predict goal attainment in college students. The seemingly greater strength of agency (as compared to pathways and, at times, overall hope) in predicting other positive outcomes is something that has been found in other samples as well (e.g., Tong, Fredrickson, Chang, & Lim, 2010). Physical health is also linked to hope, and recent studies have found that it may help individuals cope with a variety of illnesses and health difficulties in general, including physical effects of stress, chronic illnesses, chronic pain, breast cancer, and other diseases (Eaves, Nichter, & Ritenbaugh, 2016; Hirsch & Sirois, 2016; Larsen, King, Stege, & Egeli, 2015; Yadav & Jhamb, 2015). In addition, hope may be linked

to well-being in older adults who are struggling with a dwindling amount of time left (Ferguson, Taylor, & McMahon, 2016) and may help promote a future orientation in older adults as well (Barnett, 2014).

Hope, too, has been investigated in different cultures, and the results begin to elucidate our understanding of the contextual influences on this construct (Vela Lu, Lenz, Savage, & Guardiola, 2016). Chang and Banks (2007) investigated the applicability of Snyder's (1994, 2002) hope model in a diverse population and found that predictors of hope and its factors of pathways and agency might vary between racial or ethnic groups. For example, in European Americans in this study, life satisfaction was the strongest predictor of agentic thinking, but it had no significant predictive power toward agentic thinking in the Asian American portion of the sample (Chang & Banks, 2007). In Latinos in Chang and Banks's sample, rational problem solving (i.e., a deliberate and rational approach to solving problems) was the strongest significant predictor of agentic thinking; this construct was not significantly predictive of this trait in European Americans. Positive affect was the strongest predictor of agentic thinking in Asian Americans, but it was not a significant predictor for Latinos or European Americans.

Differences between racial and ethnic groups in terms of the mean overall hope, agency, and pathways scores were also found in this comprehensive study (Chang & Banks, 2007). Some racial and ethnic minority groups appear to have higher mean scores in agentic and pathways thinking when compared to majority groups. Chang and Banks hypothesized that the types of obstacles faced by these different cultural groups (e.g., racism, discrimination) may differ substantially, and these experiences may lead some individuals to have more practice at dealing with obstacles in life, which may in turn lead to higher scores.

Recently, other researchers have looked at hope in a racially diverse sample within the context of the relationship between depression and suicidal behavior (Hirsch, Visser, Chang, & Jeglic, 2012). These researchers measured trait hope (via Snyder and colleagues' [1991] model), hopelessness, depression, and suicidal thoughts/behavior (including ideation, attempts, etc., over the lifetime). Findings showed different patterns of data when comparing different racial groups. In Latino and White samples, higher-hope individuals were less likely to have many suicidal behaviors as a result of their depression, but this was not found in the African American or Asian American participants. In these cases, hope (either high or low) was a better predictor of suicidal behavior than hopelessness (Hirsch et al., 2012). In addition, lack of hope (measured by the Beck Hopelessness Scale) was a better predictor of suicidal behavior (as opposed to depression) for both African American and White participants, although this was not found in the Latino or Asian samples. (Note: Some of Hirsch and colleagues' [2012] conclusions about Asian Americans must be tempered, as the sample size was small compared to the other racial groups.) Thus, this study provides more evidence for the fact that hope may interact with other constructs differently in different racial groups (see Hirsch et al. [2012] for a more thorough description of hypotheses for why results occurred in this way).

Additionally, although there may be differences in the way hope is defined and used in different cultural groups, it has also been found to be effective in many groups. Shogren and colleagues (2015) found that hope assists in cultivation of self-determination and well-being in those who are disabled. Additionally, hope may moderate the relationship between suicidal thoughts and belongingness, as well as feelings

of being a burden to others in African American populations (Hollingsworth, Wingate, Tucker, O'Keefe, & Cole, 2016).

Although more research needs to be conducted on various groups, this information, coupled with the findings regarding optimism in Chang's earlier (2001a) study, provides evidence that the links between hope, life satisfaction, optimism, and other psychological constructs related to adjustment seem to differ across racial and/or ethnic groups (Pedrotti, 2018; Pedrotti & Edwards, 2017). Thus, these differences must be taken into account when attempting to develop interventions and explanations for these constructs.

In regard to interventions to enhance hope, see our discussion of the various approaches in Chapter 14. For the reader with considerable background in psychotherapy, a thorough overview of hope theory interventions can be found in Snyder's (2000b) original edited volume, *Handbook of Hope,* or its newest edition edited by Gallagher and Lopez (2018), *The Oxford Handbook of Hope.* For the reader with less experience in psychotherapy, "how-to" descriptions for enhancing adults' hopes can be found in Lopez's (2013) *Making Hope Happen* and in Snyder's (1994/2004) *The Psychology of Hope: You Can Get There From Here.* "How-to" descriptions for raising children's hopes are described in McDermott and Snyder's (2000) *The Great Big Book of Hope* and in Snyder, McDermott, et al.'s (2002) *Hope for the Journey: Helping Children Through the Good Times and the Bad.*

The Latest Frontier—Collective Hope

As with the concept of self-efficacy, hope researchers also have expanded their construct to explore what is called **collective hope** (see Snyder & Feldman, 2000). Simply put, collective hope reflects the level of goal-directed thinking of a large group of people. Often, such collective hope is operative when several people join together to tackle a goal that would be impossible for any one person. Snyder and Feldman (2000) and others (e.g., Aubin, Amiot, & Fontaine-Boyte, 2016) have applied the notion of collective hope more generally to the topics of disarmament, preservation of environmental resources, health insurance, and government.

Hope in Our Current Times

Hope was a term frequently used when President Barack Obama was elected the first time; many in the United States commented that an era of new hope was being ushered in for all individuals living in the United States. With the election of our first non-White president, people in this country of all ages and races reported feelings of hope that opportunities long prevented by racism and discrimination were now opening to a larger group. President Obama himself titled his book *The Audacity of Hope.* In addressing the National Democratic Convention in Boston in 2004, well before his own election campaign, he stated,

> In the end, that's what this election is about. Do we participate in a politics of cynicism or a politics of hope? . . . I'm not talking about blind optimism here—the almost willful ignorance that thinks unemployment will go away if we just don't talk about it, or the health care crisis will solve itself if we just ignore it. No, I'm talking about something more substantial. It's the hope of slaves sitting around a fire singing freedom songs; the hope of immigrants setting

out for distant shores; the hope of a young naval lieutenant bravely patrolling the Mekong Delta; the hope of a millworker's son who dares to defy the odds; the hope of a skinny kid with a funny name who believes that America has a place for him, too. Hope in the face of difficulty. Hope in the face of uncertainty. The audacity of hope!

As hope has often been touted as false or foolish, it is an interesting change to be called upon by a leader to use hope as a tool to move forward and to work to solve problems within the United States. This points to an expansion of the understanding of positive characteristics such as hope, optimism, and self-efficacy and their use in our current era as traits that should be cultivated and used regularly, and it may represent a paradigm shift in our current world. So too can hope promote positive change. Some have said that positive psychology as a field can be a "force for social change" (Biswas-Diener, Linley, Govindji, & Woolston, 2011). Likewise, social equity can be a goal for our field since we as positive psychologists are "uniquely positioned to understand that balance and equity are important in describing any human experience"

LIFE ENHANCEMENT STRATEGIES

Self-efficacy, optimism, and hope provide the momentum needed to pursue a good life. Therefore, we encourage you to use the self-efficacy, optimism, and hope you already possess to improve functioning in important domains of your life.

Love

- Build new confidence in your relationships by observing someone who is quite skilled in managing friendships and romantic relationships. Emulate their behavior as appropriate.

- Approach your next visit with extended family with a flexible explanatory style. When positive events occur, be sure to identify your role in the family success.

- Set goals for important relationships that will help you grow closer to others. Be sure to identify multiple pathways and sources of agency for pursuing these aims.

Work

- Develop new skills for work or school by attending training or study sessions that will

help you approach your assignments with increased confidence.

- When a new project is assigned to you, expect that the best will happen. Nurture those optimistic thoughts daily as you work toward successful completion of the project.

- Break down a big task into small goals and direct your energy toward pursuing small goal after small goal.

Play

- Watch an hour of educational television for children. Attempt to identify the many messages designed to enhance self-efficacy.

- Play a board game or a sport with a friend and attempt to respond to a poor outcome with a flexible explanatory approach.

- Identify a personal goal associated with your favorite leisure activity that you hope to attain in the next month. Identify and procure all the resources you need to make progress toward that goal.

(Pedrotti & Edwards, 2017, p. 278). Hope in particular, however, may be particularly suited to this goal. Hope has been found to empower individuals who are high in this trait in the sense that it may help them to have more adaptability than those who are low in hope (Strauss et al., 2015). Moving the social needle is a difficult and often stressful task, but having the wherewithal and inside strength to work in this area may be easier for those high in hope (Chang, Yu, et al., 2016). In addition, hope has been shown to help disenfranchised youth who are in socially stigmatized groups (Bryant & Ellard, 2015), and those high in hope have also been found to deal better with every-day discrimination while protecting individual well-being (Datu & Jose Mateo, 2017; Romero, Edwards, Fryberg, & Orduña, 2014).

PUTTING TEMPORAL FUTURES IN PERSPECTIVE

We now juxtapose the orientations that focus on the future (i.e., the ones we have explored in this chapter) with those that focus on either the past or the present. We do this because comparing these three orientations toward time may foster a better understanding of the possible role of a balanced temporal orientation in producing a productive and satisfying life (see Boniwell & Zimbardo, 2004).

There are advantages and disadvantages to each of the three temporal orientations—the past, the present, and the future. Let us begin, for example, with the **past orientation**, which often is characterized by an emphasis on pleasurable views of previous interpersonal relationships with friends and family. This somewhat sentimental perspective focuses on the happiness to be derived in warm personal interactions. However, there is no guarantee that the view of the past is positive; those who hold negative views about their pasts are filled with ruminations, anxieties, and depressive thoughts and feelings. Additionally, assessment of the use of this orientation must be viewed using a cultural lens. For example, from a Western perspective, the past orientation can produce a very conservative, overly cautious approach to one's life and a desire to preserve the status quo, making the person unwilling to experience new things. From an Eastern perspective, however, paying attention to the past might ensure safe passage of traditions and ritual from generation to generation.

Let us next explore the person who lives in the here and now. The person who lives for the present can be described in hedonistic terms that have both good and bad consequences. The individual who lives in the moment derives great pleasure in highly intense activities, relishes the thrills and excitements found in the here and now, and remains open to the ongoing adventures of the moment. The person focused on the present also may place a premium on excitement. Some cultural groups tend to live more in the moment, sometimes resulting in less attention to *time* as it relates to a clock or one's phone, but instead view time as related to what is going on in the moment. Dinner time isn't at "6:00 p.m.," for example, but "when one is hungry." This orientation can at times feel counter to the way in which daily life occurs in the United States, but perhaps these cultural groups (e.g., American Indian cultures) are more mindful and can in this way enjoy the present more often.

One aspect of enjoying the ongoing experience can be savoring (Bryant, 2004; Bryant & Veroff, 2006). Although savoring can be applied to the past or the future,

one of the most robust types of savoring pertains to the enjoyment of the moment, perhaps even acting to stretch out an ongoing positive event. As balloonist Bertrand Piccard observed in his 1999 trip around the world, "During the last night, I savor once more the intimate relationship we have established with our planet. I feel so privileged that I want to enjoy every second of this air world" (Piccard, 1999, p. 44). Recently, I (JTP) have been trying to teach my children about the art of savoring. When something good happens to one of our family members, we try to mark it with a moment of savoring. When my daughter was selected for student council, I heard her older brother ask, "How did it feel when they read the vote? Did you know it was going to be you that won?" I could see the excitement on her face as she recounted the experience, made richer by an older sibling showing interest in how it all had occurred. Savoring is something that those of us who are older siblings, mentors, teachers, or parents can help our younger counterparts to enjoy. This may develop more positive emotions within the relationship as a whole. In short, savoring helps us to hold on to a good moment and to revisit it later to enjoy it all the more.

When considered from a Western perspective, the concerns that arise from this **present orientation** all reflect the fact that such a person may not think ahead about the potential liabilities of such excitement seeking. Although most of us probably do not remember our toddler years, it is likely that we then lived a here-and-now existence as we pursued our momentary whims and desires to the fullest. When adults are committed solely to this present orientation, however, some may suffer the negative consequences of hedonistic adventures. For example, addictions, injuries from accidents, and various temptations can destroy the career aspirations of the person who lives only with such a hedonistic present orientation. Such people take risks in a variety of arenas, including the driving of automobiles, sexual encounters, and drug use (Keough, Zimbardo, & Boyd, 1999). Much of our current description of the present orientation has a distinctly Western flavor; an Eastern perspective or an American Indian perspective would include a meditative appreciation of the calmness that flows from a here-and-now orientation (see Chapter 10 for discussions of optimal experiences of the present). If one considers these other cultural perspectives, many of these more negative possibilities are less likely to appear (if they appear at all).

Last, there is the future temporal perspective, which has formed the core theme of this chapter. The person with a future orientation thinks ahead to the possible consequences of their actions. As we have learned, future-oriented people form clear goals and conjure the requisite paths to reach those goals. They are likely to engage in preventive behaviors to lessen the likelihood of bad things happening in the future. Furthermore, as we have learned in the literature on self-efficacy, optimism, and hope reviewed in this chapter, such people are typically successful in life's endeavors—in academics, jobs, sports, health, and so on. Some future-oriented people may not do very well, however, at experiencing the enormous pleasure that can be derived from just being with others or recalling previous interpersonal activities. Additionally, future orientation may not be viewed in a positive light by all cultures.

In reading about the past, present, and future orientations, you may be intrigued about which orientation characterizes your own life. Stanford psychologist Philip Zimbardo (Zimbardo & Boyd, 1999) has developed and validated a trait-like measure of temporal orientation, the Zimbardo Time Perspective Inventory (see Appendix B). Although people have accentuated the past, present, or future at given moments, they also are disposed across situations to one of these temporal orientations. Thus, temporal orientations can have a trait-like quality.

PERSONAL MINI-EXPERIMENTS
BALANCING YOUR PERSPECTIVE ON TIME

In this chapter, we discuss the benefits of future orientation and balancing time perspectives. Our review suggests that our orientation to time affects positive and negative outcomes alike. Here are a few ideas for experimenting with increasing your awareness of how you view time.

What's Ahead. Although you may have a rough idea about how much time you spend thinking about the future, we have found it useful for people actually to reflect on their days to produce an estimate of the time spent "in the past," "in the present," and "in the future." Mark a piece of lined paper with columns and rows (see the example following). From the top down in each column, write the hours of your day (1:00 a.m., 2:00 a.m., 3:00 a.m., etc.), and across the top in a row, write the words *Past, Present,* and *Future.* Now you have a chart on which you can note how many minutes in each hour were spent in thoughts of the past, present, or future. It helps to print this chart on a small piece of card stock that you can place in your pocket or purse along with a small pencil for the hourly recording of your time spent in each perspective.

Time	Past	Present	Future
7:00 a.m.			
8:00 a.m.			
9:00 a.m.			
10:00 a.m.			
11:00 a.m.			
12:00 p.m.			
1:00 p.m.			
And so on			
Totals			

If you can, in the last minute of each hour from 7:00 a.m. to midnight (or whatever your waking hours may be), estimate the number of minutes you spent in that previous hour thinking about the past, present, or future. If you found yourself in a flow-like experience, totally engrossed in whatever you were doing, and the time just seemed to fly, count that under *Present.* Last, sum the number of past, present, or future minutes across the hours that you were awake. The next day, figure out how you spent most of your time. For most people, even during busy hours, considerable time was spent thinking ahead about goals and plans to reach those goals. We do this virtually from the moment we awaken and think about what we will be doing that day. Remember, there are no right or wrong ways to spend your time. Instead, the purpose is to sensitize you to the temporal foci of your thinking. Realize also that the results of this experiment

may depend on the day of the week, your health, your age, whether you are on vacation, the time of year, where you live, your job, and so on. Most people who complete this exercise, however, are somewhat surprised by how much time they spend thinking about the future.

Toward a Balanced Time Perspective. After completing and scoring the Zimbardo Time Perspective Inventory (see Appendix B), identify the most meaningful event you will experience in the upcoming week (i.e., the event you are most looking forward to or the one you are most dreading). Once you have identified that event, daydream about how you will approach it with the temporal orientation you typically hold across situations (past-negative, past-positive, present-fatalistic, present-hedonistic, future). Jot down notes about how your orientation to time might affect the outcome of the event. Then, consider how you might approach the event if you held one of the other orientations. Are there benefits to this alternative orientation to time? Most people realize that perceptions of time can affect present and future experiences.

In the Personal Mini-Experiments are two approaches to help you answer the question of how you use your time. First, we encourage you to try the "What's Ahead" exercise. In this exercise, you will monitor your thoughts for one day to see to what degree you are focused on the past, present, and future. Students who have tried this exercise report that they find the results surprising and worthwhile.

As part of the Personal Mini-Experiments, you can take the Zimbardo Time Perspective Inventory (Zimbardo & Boyd, 1999) presented in Appendix B. With this scale, you can ascertain the degree to which each of the following five temporal orientations best characterizes you across situations: (1) past-negative, (2) past-positive, (3) present-fatalistic, (4) present-hedonistic, or (5) future. By completing the "What's Ahead" Personal Mini-Experiment and the "Balance Exercise" associated with the Zimbardo Time Perspective Inventory, you should be able to see the past, present, and future temporal orientations in your life.

The key to having a balance in these three temporal perspectives is your ability to operate in the temporal orientation that best fits the situation in which you find yourself. This balance, according to Boniwell and Zimbardo (2004), entails the following: "Working hard when it's time to work. Playing intensively when it's time to play. Enjoying listening to grandma's old stories while she is still alive. Viewing children through the eyes of wonder with which they see the world. Laughing at jokes and life's absurdities. Indulging in desire and passion" (p. 176).

Being flexible and capable of switching to an appropriate temporal orientation yields the most productive approach to how we spend our time. Having said this, however, it is clear that cultural context plays a large role in what type of temporal orientation feels right and is validated by the societies and communities of which we are a part. We touch on this important point in the next and final section of this chapter.
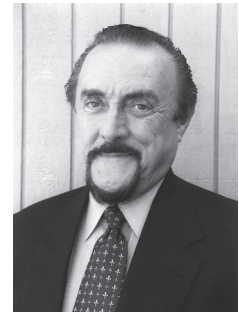
Philip Zimbardo

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CULTURAL CAVEATS ABOUT TEMPORAL PERSPECTIVE

Much of the research presented in this chapter deals with a perspective on temporal orientations that reflects that of Caucasian Americans, who overwhelmingly have been the research participants in the various reported studies. Be clear, therefore, that some in the United States and members of other, non-Western cultures may *not* share the perspectives on self-efficacy, optimism, and hope that we have presented. (See Chapter 4 for a detailed discussion of culture and positive psychology; see Chapter 2 for more details on both Western and Eastern philosophies.) Not only may these non-Western perspectives differ in their implementation of self-efficacy, optimism, and hope, but they also may not value these to the same degree that we have in writing about them in this chapter.

Additionally, in many cases, the instruments we have described may not be sensitive to the nuances of non-Western people. Clearly, Caucasian cultural groups in the United States and other Western cultures place a priority on the mastery of their futures and emphasize action- or goal-oriented activities and the individual rather than the collective perspective (Carter, 1991). Moreover, the Caucasian Americans about whom we have reported in this chapter are judged by what they do more so than by what they are. So, too, are these research participants, in a manner similar to Western cultural bias (Stewart, 1972), probably focused on controlling their surrounding environments and, in so doing, view time in a linear manner (and consider planning for the future crucial).

Contrast the former perspective, for example, with the American Indian accentuation of the here and now (Trimble, 1976). For American Indians, time is seen as a kind of flowing and relative resource that is to be focused upon; instead of "going by the clock," things are done as needed (Soldier, 1992). Similarly, Cuban Americans, Mexican Americans, and Puerto Rican Americans all appear to prefer a present orientation to a future one (Chandler, 1979; Inclan, 1985; Szapocznik, Scopetta, & King, 1978). Generally, American Indians, Latinos/Latinas, African Americans, and Asian Americans perceive time in a *polychronic* manner—many things are conceptualized as happening at once with people. Moreover, time is viewed as a plentiful resource, and human relationships take priority over it (Schauber, 2001). Contrast this with the European American culture, in which time is linear, sequential, and *monochronic* (also consider the value placed on time in the phrase "time is money"; Schauber, 2001).

There is considerable variation, however, even within the multicultural context of the United States as a whole, as has been noted at other points in this chapter. Furthermore, as we begin to flesh out the types of differences that exist within the U.S. culture regarding perspectives that relate to self-efficacy, optimism, and hope, it is probably accurate to infer that the differences are even larger when comparisons are made to cultures outside the United States.

In Eastern cultures (as exemplified by Asian countries), the traditional view is to see the self and other people as interrelated (Kim, Triandis, Kagitcibasi, Choi, & Yoon, 1994; Markus & Kitayama, 1991). Thus, contrary to the Western values, the Eastern view is to accentuate harmonious interdependence among interacting persons (see Chapter 2; Weisz, Rothbaum, & Blackburn, 1984). Furthermore, in the Eastern perspective, the experience of suffering is seen as a necessary part of human existence (Chang, 2001b). This emphasis on people serves to make temporal concerns far less important in Eastern cultures.

In closing this chapter by comparing persons from different cultural backgrounds, we seek to point out how important it is to consider the cultural context of the theories, research hypotheses, and conclusions, as well as of the participants involved in the study of any construct or process. It is important that future positive psychology thinkers *not* assume that Western-based theories and scales can and will translate in obvious ways to Eastern cultures (see Chapter 3 for a more thorough discussion of *conceptual equivalence*). We strongly believe that positive psychology should be a worldwide initiative, and thus we must take care to test any theories and measures across cultures before drawing inferences about "universally" applicable findings. As such, we are reminded of the wisdom inherent in the old proverb, "To be uncertain is to be uncomfortable, but to be certain sometimes can be ridiculous."

APPENDIX A: A SUMMARY OF HOPE THEORIES

Averill

Averill, Catlin, and Chon (1990) define hope in cognitive terms as appropriate when goals are (1) reasonably attainable (i.e., have an intermediate level of difficulty), (2) under control, (3) viewed as important, and (4) acceptable at social and moral levels.

Breznitz

Breznitz (1986) proposed five metaphors to capture the operations of hope in response to stressors, with hope as (1) a protected area, (2) a bridge, (3) an intention, (4) a performance, and (5) an end in itself. He also cautioned that hope may be an illusion akin to denial.

Erikson

Erikson (1964) defined hope as "the enduring belief in the attainability of fervent wishes" (p. 118) and posed dialectics between hope and other motives, one of the strongest and most important being trust/hope versus mistrust, which is the infant's first task. Another broad dialectic, according to Erikson (1982), pertains to the generativity of hope versus stagnation.

Gottschalk

For Gottschalk (1974), hope involves positive expectancies about specific favorable outcomes, and it impels a person to move through psychological problems. He developed a hope scale to analyze the content of 5-minute segments of spoken words. This hope measurement has concurrent validity in terms of its positive correlations with positive human relations and achievement and its negative relationships to higher anxiety, hostility, and social alienation.

Marcel

Basing his definition on the coping of prisoners of war, Marcel (see Godfrey, 1987) concluded that hope gives people the power to cope with helpless circumstances.

Mowrer

Mowrer (1960) proposed that hope was an emotion that occurred when rats observed a stimulus that was linked with something pleasurable. Mowrer also described the antithesis of hope, or fear, which he said entailed a type of dread in which the animal lessened its activity level and that, as such, fear impedes their goal pursuits.

Staats

Staats (1989) defined hope as "the interaction between wishes and expectations" (p. 367). Staats and colleagues developed instruments for tapping the affective and cognitive aspects of hope. To measure affective hope, the Expected Balance Scale (EBS; Staats, 1989) entails 18 items for which respondents use a 5-point Likert continuum. To measure cognitive hope, the Hope Index (Staats & Stassen, as cited in Staats, 1989) focuses on particular events and their outcomes and contains the subscales of Hope-Self, Hope-Other, Wish, and Expect. The Hope Index contains 16 items, and respondents use a 6-point Likert continuum (0 = *not at all* to 5 = *very much*) to rate both the degree to which they "wish this to occur" and "expect this to occur."

Stotland

Stotland (1969) explored the role of expectancies and cognitive schemas and described hope as involving important goals for which there is a reasonably high perceived probability of attainment. Using Stotland's (1969) model, Erickson, Post, and Paige (1975) designed a hope scale that consists of 20 general and common (i.e., not situation-specific) goals. This hope scale yields scores of average importance and average probability across these goals. There is little reported research, however, using this scale.

APPENDIX B: ZIMBARDO TIME PERSPECTIVE INVENTORY ITEMS

Directions: Read each item carefully. Using the 5-point scale shown below, please select the number to indicate how characteristic each statement is of you in the blank provided.

1	2	3	4	5
Very Uncharacteristic	*Uncharacteristic*	*Neutral*	*Characteristic*	*Very Characteristic*

_____ 1. I believe that getting together with one's friends to party is one of life's important pleasures.

_____ 2. Familiar childhood sights, sounds, smells often bring back a flood of wonderful memories.

_____ 3. Fate determines much in my life.

_____ 4. I often think of what I should have done differently in my life.

_____ 5. My decisions are mostly influenced by people and things around me.

_____ 6. I believe that a person's day should be planned ahead each morning.

_____ 7. It gives me pleasure to think about my past.

_____ 8. I do things impulsively.

_____ 9. If things don't get done on time, I don't worry about it.

_____ 10. When I want to achieve something, I set goals and consider specific means for reaching those goals.

_____ 11. On balance, there is much more good to recall than bad in the past.

_____ 12. When listening to my favorite music, I often lose track of time.

_____ 13. Meeting tomorrow's deadlines and doing other necessary work comes before tonight's play.

_____ 14. Since whatever will be will be, it doesn't really matter what I do.

_____ 15. I enjoy stories about how things used to be in the "good old times."

_____ 16. Painful past experiences keep being replayed in my mind.

_____ 17. I try to live my life as fully as possible, one day at a time.

_____ 18. It upsets me to be late for appointments.

_____ 19. Ideally, I would live each day as if it were my last.

_____ 20. Happy memories of good times spring readily to mind.

_____ 21. I meet my obligations to friends and authorities on time.

_____ 22. I've taken my share of abuse and rejection in the past.

_____ 23. I make decisions on the spur of the moment.

_____ 24. I take each day as it is rather than try to plan it out.

_____ 25. The past has too many unpleasant memories that I prefer not to think about.

_____ 26. It is important to put excitement in my life.

_____ 27. I've made mistakes in the past that I wish I could undo.

_____ 28. I feel that it's more important to enjoy what you're doing than to get work done on time.

_____ 29. I get nostalgic about my childhood.

_____ 30. Before making a decision, I weigh the costs against the benefits.

_____ 31. Taking risks keeps my life from becoming boring.

_____ 32. It's more important for me to enjoy life's journey than to focus only on the destination.

_____ 33. Things rarely work out as I expected.

_____ 34. It's hard for me to forget unpleasant images of my youth.

_____ 35. It takes joy out of the process and flow of my activities if I have to think about goals, outcomes, and products.

(_Continued_)

(Continued)

_____36. Even when I am enjoying the present, I am drawn back to comparisons with similar past experiences.

_____37. You can't really plan for the future because things change so much.

_____38. My life path is controlled by forces I cannot influence.

_____39. It doesn't make sense to worry about the future, since there is nothing I can do about it anyway.

_____40. I complete projects on time by making steady progress.

_____41. I find myself tuning out when family members talk about the way things used to be.

_____42. I take risks to put excitement in my life.

_____43. I make lists of things to do.

_____44. I often follow my heart more than my head.

_____45. I am able to resist temptations when I know that there is work to be done.

_____46. I find myself getting swept up in the excitement of the moment.

_____47. Life today is too complicated; I would prefer the simpler life of the past.

_____48. I prefer friends who are spontaneous rather than predictable.

_____49. I like family rituals and traditions that are regularly repeated.

_____50. I think about the bad things that have happened to me in the past.

_____51. I keep working at difficult, uninteresting tasks if they will help me get ahead.

_____52. Spending what I earn on pleasures today is better than saving for tomorrow's security.

_____53. Often luck pays off better than hard work.

_____54. I think about the good things that I have missed out on in my life.

_____55. I like my close relationships to be passionate.

_____56. There will always be time to catch up on my work.

To obtain the scores for each of the five subfactors, (1) reverse code all the relevant items, (2) add the scores for each item that contributes to the specific subfactor, and (3) divide the subfactor total by the number of questions that constitute the subfactor.

Past-Negative = Items 4, 5, 16, 22, 27, 33, 34, 36, 50, and 54

Past-Positive = Items 2, 7, 11, 15, 20, 25, 29, 41, and 49

Present-Fatalistic = Items 3, 14, 35, 37, 38, 39, 47, 52, and 53

Present-Hedonistic = Items 1, 8, 12, 17, 19, 23, 26, 28, 31, 32, 42, 44, 46, 48, and 55

Future = Items 6, 9, 10, 13, 18, 21, 24, 30, 40, 43, 45, 51, and 56

NOTE

1. As noted later in this chapter and in Chapter 4, Asian Americans who are higher in pessimism are also higher in problem solving (Chang, 2001).

Key Terms

Agency thinking: The requisite motivations to use routes to desired goals. (Compare with *pathways thinking*.)

Bicultural self-efficacy: Confidence in one's ability to navigate both one's culture of origin and a second culture. May include a comfort with language in both cultures (e.g., translation), appropriate social interaction (understanding cultural norms), and an ability to understand both worldviews.

Collective hope: Goal-directed thinking in which a group of people have the perceived capacity to find routes to desired goals and the requisite motivations to use those routes.

Collective self-efficacy: The degree to which a group of people believe they can work together to accomplish shared goals.

Cultural self-efficacy: The perception of one's own capability to mobilize motivation, cognitive resources, and courses of action necessary in situations characterized by diversity.

Dispositional optimism: The tendency of some to expect good things about the future in a general sense.

Future orientations: Perspectives in which one emphasizes future events and the consequences of one's actions. Future-oriented people focus on planning for things to come.

Hope: Goal-directed thinking in which the person uses *pathways thinking* (the perceived capacity to find routes to desired goals) and *agency thinking* (the requisite motivations to use those routes).

Learned optimism: Characteristic use of a flexible explanatory style in which one has learned to make external (outside oneself), variable (not consistent), and specific (limited to a specific situation) attributions for one's failures. In contrast, pessimists have learned to view failures as due to internal (characteristics of the self), stable (consistent), and global (not limited to a specific situation) attributions.

Optimism: One's expectancy that good things rather than bad will happen. It is a stable trait in some people and is independent of self-efficacy (Scheier & Carver, 1985).

Past orientation: A perspective in which one emphasizes past occurrences, pleasurable experiences, or previous relationships when thinking about time.

Pathways thinking: The perceived capacity to find routes to desired goals. (Compare with *agency thinking*.)

Present orientation: A perspective in which one emphasizes the here and now, looking to the present to experience pleasure and satisfy needs.

Self-efficacy: Belief that one's skills and capabilities are enough to accomplish one's desired goals in a specific situation.

Situational perspective: A view of psychological concepts (such as self-efficacy) as situationally or context specific—that is, that the specific setting influences how a psychological phenomenon is

manifested. As the situation varies, the concept varies in turn. (Compare with *trait perspective*.)

Social cognitive theory: A theory suggesting that people's self-efficacy (confidence in their abilities) influences their actions and thoughts in such a way that it shapes their environment. For example, a young girl who thinks she might be good at basketball tries out for the team. Trying out for the basketball team, in turn, gives the child opportunities to develop her skills and gain confidence in her abilities. Then the child thinks more positively about her ability to do a variety of sports. Therefore, the child's beliefs influenced the type of environment in which she pursued goals.

Trait perspective: An approach to understanding a psychological concept (such as self-efficacy) as part of the enduring characteristics of a person—a part of their disposition that is evident across situations. (Compare with *situational perspective*.)