

CHAPTER 31

Self-Efficacy: The Power of Believing You Can

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Abstract

The basic premise of self-efficacy theory is that “people’s beliefs in their capabilities to produce desired effects by their own actions” (Bandura, 1997, p. vii) are the most important determinants of the behaviors people choose to engage in and how much they persevere in their efforts in the face of obstacles and challenges. Self-efficacy theory also maintains that these efficacy beliefs play a crucial role in psychological adjustment, psychological problems, physical health, as well as professionally guided and self-guided behavioral change strategies. This chapter provides an overview of self-efficacy theory and research by addressing three basic questions: (a) What is self-efficacy? (b) Where do self-efficacy beliefs come from? (c) Why is self-efficacy important? The chapter also discusses “collective efficacy”—group members’ beliefs in their ability to collectively accomplish shared goals.

Keywords: collective efficacy, outcome expectancies, self-efficacy, self-regulation, social cognitive theory

The very little engine looked up and saw the tears in the dolls’ eyes. And she thought of the good little boys and girls on the other side of the mountain who would not have any toys or good food unless she helped. Then she said, “I think I can. I think I can. I think I can.”

—*The little engine that could* (Piper, 1930/1989)

Some of the most powerful truths also are the simplest—so simple that a child can understand them. The concept of “self-efficacy” deals with one of these truths—one so simple it can be captured in a children’s book of 37 pages (with illustrations), yet so powerful that fully describing its implications has filled thousands of pages in scientific journals and books over the past three decades. This truth is that believing that you can accomplish what you want to accomplish is one of the most important ingredients—perhaps *the* most important ingredient—in the recipe for success. Any child who has read *The little engine that could* knows this is so. For 30 years, hundreds of researchers have been trying to tell us *why* this is so.

The basic premise of self-efficacy theory is that “people’s beliefs in their capabilities to produce desired effects by their own actions” (Bandura, 1997, p. vii) are the most important determinants of the behaviors people choose to engage in and how much they persevere in their efforts in the face of obstacles and challenges. Self-efficacy theory also maintains that these efficacy beliefs play a crucial role in psychological adjustment, psychological problems, physical health, as well as professionally guided and self-guided behavioral change strategies.

Since the publication of Albert Bandura’s 1977 *Psychological Review* article titled “Self-Efficacy: Toward a Unifying Theory of Behavior Change,” the term “self-efficacy” has become ubiquitous in psychology and related fields. Hundreds of articles on every imaginable aspect of self-efficacy have appeared in journals devoted to psychology, sociology, kinesiology, public health, medicine, nursing, and other fields. In this chapter, I attempt to summarize what we have learned from over three decades of research on self-efficacy. I will address three basic questions: What is self-efficacy? Where does it come from? Why is it important?

What Is Self-Efficacy?

A Very Brief History

Although the term “self-efficacy” is of recent origin, interest in beliefs about personal control has a long history in philosophy and psychology. Spinoza, David Hume, John Locke, William James, and (more recently) Gilbert Ryle have all struggled with understanding the role of “volition” and “the will” in human behavior (Russell, 1945; Vessey, 1967). The theories of effectance motivation (White, 1959), achievement motivation (McClelland, Atkinson, Clark, & Lowell, 1953), social learning (Rotter, 1966), and helplessness (Abramson, Seligman, & Teasdale, 1978) are just a few of the many theories that have sought to explore relationships between perceptions of personal competence and human behavior and psychological well-being (see also Skinner, 1995; Molden & Dweck, 2006). Bandura’s 1977 article, however, formalized the notion of perceived competence as “self-efficacy,” defined it clearly, and embedded it in a theory of how it develops and influences human behavior.

Defining Self-Efficacy

One of the best ways to get a clear sense of how self-efficacy is defined and measured is to distinguish it from related concepts. Self-efficacy is not perceived skill; it is what I believe I can do with my skills under certain conditions. It is not concerned with my beliefs about my ability to perform specific and trivial motor acts, but with my beliefs about my ability to coordinate and orchestrate skills and abilities in changing and challenging situations.

Self-efficacy beliefs are not simply predictions about behavior. Self-efficacy is concerned not with that I believe I *will* do but with what I believe I *can* do.

Self-efficacy beliefs are not casual attributions. Casual attributions are explanations for events, including my own behavior and its consequences. Self-efficacy beliefs are my beliefs about what I am capable of doing.

Self-efficacy beliefs are not intentions to behave or intentions to attain a particular goal. An intention is what I say I will probably do; and research has shown that intentions are influenced by a number of factors, including, but not limited to, self-efficacy beliefs (Maddux, 1999a).

Self-efficacy is not self-esteem. Self-esteem is what I believe about myself, and how I feel about what I believe about myself. Efficacy beliefs in a given domain will contribute to my self-esteem only in direct proportion to the importance I place on that domain.

Self-efficacy is not a motive, drive, or need for control. I can have a strong need for control in a particular domain and still hold weak beliefs about my efficacy for that domain.

Self-efficacy beliefs are not outcome expectancies (Bandura, 1997) or behavior–outcome expectancies (Maddux, 1999a). A behavior–outcome expectancy is my belief that a specific behavior may lead to a specific outcome in a specific situation. A self-efficacy belief is the belief that I can perform the behavior or behaviors that produce the outcome.

Self-efficacy is not a personality trait. It is a set of beliefs about the ability to coordinate skills and abilities to attain desired goals in particular domains and circumstances. Measures of “general” self-efficacy have been developed (e.g., Chen,

Gully, & Eden, 2001; Sherer et al., 1982; Tipton & Worthington, 1984) and are used frequently in research, but they have not been as useful as more specific self-efficacy measures in predicting what people will do under more specific circumstances (Bandura, 1997; Maddux, 1995).

Where Do Self-Efficacy Beliefs Come From?

Understanding how self-efficacy beliefs develop requires understanding a broader theoretical background. Self-efficacy is best understood in the context of social cognitive theory—an approach to understanding human cognition, action, motivation, and emotion that assumes that we are active shapers of rather than simply passive reactors to our environments (Bandura, 2001, 2006; Barone, Maddux, & Snyder, 1997; Molden & Dweck, 2006). Social cognitive theory's four basic premises, shortened and simplified, are

1. We have powerful cognitive capabilities that allow for the creation of internal models of experience, the development of innovative courses of action, the hypothetical testing of such courses of action through the prediction of outcomes, and the communication of complex ideas and experiences to others. We also can engage in self-observation and can analyze and evaluate our own behavior, thoughts, and emotions. These self-reflective activities set the stage for self-regulation.
2. Environmental events, inner personal factors (cognition, emotion, and biological events), and behaviors are interactive influences. We respond cognitively, effectively, and behaviorally to environmental events. Also, through cognition we exercise control over our own behavior, which then

influences not only the environment but also our cognitive, affective, and biological states.

3. “Self” and “personality” are socially embedded. They are perceptions (accurate or not) of our own and others’ patterns of social cognition, emotion, and action as they occur in patterns of situations. Thus, self and personality are not simply what we bring to our interactions with others; they are created in these interactions, and they change through these interactions.
4. We are capable of self-regulation. We choose goals and regulate our behavior in the pursuit of these goals. At the heart of self-regulation is our ability to anticipate or develop expectancies—to use past knowledge and experience to form beliefs about future events and states and beliefs about our abilities and behavior.

These assumptions suggest that the early development of self-efficacy beliefs is influenced primarily by two interacting factors. First, it is influenced by the development of the capacity for symbolic thought, particularly the capacity for understanding cause–effect relationships and the capacity for self-observation and self-reflection. The development of a sense of personal agency begins in infancy and moves from the perception of the causal relationship between events, to an understanding that actions produce results, to the recognition that they can be the origin of actions that effect their environments. As children’s understanding of language increases, so do their capacity for symbolic thought and, therefore, their capacity for self-awareness and a sense of personal agency (Bandura, 1997).

Second, the development of efficacy beliefs is influenced by the responsiveness of environments to the infant’s or child’s attempts at manipulation and

control. Environments that are responsive to the child's actions facilitate the development of efficacy beliefs, whereas nonresponsive environments retard this development. The development of efficacy beliefs encourages exploration, which in turn enhances the infant's sense of agency. The child's social environment (especially parents) is usually the most important part of his or her environment. Thus, children usually develop a sense of efficacy from engaging in actions that influence the behavior of other people, which then generalizes to the nonsocial environment (Bandura, 1997). Parents can facilitate or hinder the development of this sense of agency not only by their responses to the infant's or child's actions, but also by encouraging and enabling the child to explore and master his or her environment.

Efficacy beliefs and a sense of agency continue to develop throughout the life span as we continually integrate information from five primary sources: performance experiences, vicarious experiences, imagined experiences, verbal persuasion, and physiological/emotional states.

Performance Experiences

Our own attempts to control our environments are the most powerful source of self-efficacy information (Bandura, 1997). Successful attempts at control that I attribute to my own efforts will strengthen self-efficacy for that behavior or domain. For example, if I get strong ratings of teaching effectiveness from my students, and if I attribute those ratings to my abilities as a teacher (vs. luck or easily pleased students), then my self-efficacy beliefs for teaching will probably be strengthened. Likewise, perceptions of failure that I attribute to lack of ability usually weaken self-efficacy beliefs.

Vicarious Experiences

Self-efficacy beliefs are influenced by our observations of the behavior of others and the consequences of those behaviors. We use this information to form expectancies about our own behavior and its consequences, depending on the extent to which we believe that we are similar to the person we are observing. Vicarious experiences generally have weaker effects on self-efficacy expectancy than do performance experiences (Bandura, 1997).

Imagined Experiences

We can influence self-efficacy beliefs by imagining ourselves or others behaving effectively or ineffectively in hypothetical situations. Such images may be derived from actual or vicarious experiences with situations similar to the one anticipated, or they may be induced by verbal persuasion, as when a psychotherapist guides a client through interventions, such as systematic desensitization and covert modeling (Williams, 1995). Simply imagining myself doing something well, however, is not likely to have as strong an influence on my self-efficacy as will an actual experience (Williams, 1995).

Verbal Persuasion

Efficacy beliefs are influenced by what others say to us about what they believe we can or cannot do. The potency of verbal persuasion as a source of self-efficacy expectancies will be influenced by such factors as the expertness, trustworthiness, and attractiveness of the source, as suggested by decades of research on verbal persuasion and attitude change (e.g., Eagly & Chaiken, 1993). Verbal

persuasion is a less potent source of enduring change in self-efficacy expectancy than performance experiences and vicarious experiences.

Physiological and Emotional States

Physiological and emotional states influence self-efficacy when we learn to associate poor performance or perceived failure with aversive physiological arousal and success with pleasant feeling states. When I become aware of unpleasant physiological arousal, I am more likely to doubt my competence than if my physiological state were pleasant or neutral. Likewise, comfortable physiological sensations are likely to lead me to feel confident in my ability in the situation at hand. Physiological indicants of self-efficacy expectancy, however, extend beyond autonomic arousal. For example, in activities involving strength and stamina, such as exercise and athletic performances, perceived efficacy is influenced by such experiences as fatigue and pain (e.g., Bandura, 1997.)

Why Is Self-Efficacy Important?

Fully describing the many ways that self-efficacy beliefs are important would take hundreds of pages. I will focus on five areas: self-efficacy and psychological adjustment; self-efficacy and physical health; self-efficacy and self-regulation; self-efficacy and psychotherapy; and collective efficacy.

Self-Efficacy and Psychological Well-Being

Most philosophers and psychological theorists agree that a sense of control over our behavior, our environment, and our own thoughts and feelings is essential for

happiness and a sense of psychological well-being. Feelings of loss of control are common among people who seek the help of psychotherapists and counselors.

Self-efficacy beliefs play a major role in a number of common psychological problems. Low self-efficacy expectancies are an important feature of depression (Bandura, 1997; Maddux & Meier, 1995). Depressed people usually believe they are less capable than other people of behaving effectively in many important areas of life. Dysfunctional anxiety and avoidant behavior are the direct result of low-self-efficacy beliefs for managing threatening situations (Bandura, 1997; Williams, 1995). Self-efficacy beliefs also play a powerful role in substance abuse problems and eating disorders (Bandura, 1997; DiClemente, Fairhurst, & Piotrowski, 1995). For each of these problems, enhancing self-efficacy for overcoming the problem and for implementing self-control strategies in specific challenging situations is essential to the success of therapeutic interventions (Bandura, 1997; Maddux, 1995).

Self-Efficacy and Physical Health

Most strategies for preventing health problems, enhancing health, and hastening recovery from illness and injury involve changing behavior. Research on self-efficacy has greatly enhanced our understanding of how and why people adopt healthy and unhealthy behaviors and of how to change behaviors that affect health (Bandura, 1997; Maddux, Brawley, & Boykin, 1995; O'Leary & Brown, 1995). Beliefs about self-efficacy influence health in two ways.

First, self-efficacy beliefs influence the adoption of healthy behaviors, the cessation of unhealthy behaviors, and the maintenance of behavioral changes in the face of challenge and difficulty. All of the major theories of health behavior, such as

protection motivation theory (Maddux & Rogers, 1983; Rogers & Prentice-Dunn, 1997), the health belief model (Strecher, Champion, & Rosenstock, 1997), and the theory of reasoned action/ planned behavior (Ajzen, 1988; Fishbein & Ajzen, 1975; Maddux & DuCharme, 1997), include self-efficacy as a key component (see also Maddux, 1993; Weinstein, 1993). In addition, researchers have shown that enhancing self-efficacy beliefs is crucial to successful change and maintenance of virtually every behavior crucial to health, including exercise, diet, stress management, safe sex, smoking cessation, overcoming alcohol abuse, compliance with treatment and prevention regimens, and disease detection behaviors such as breast self-examinations (Bandura, 1997; Maddux et al., 1995).

Second, self-efficacy beliefs influence a number of biological processes, which, in turn, influence health and disease (Bandura, 1997). Self-efficacy beliefs affect the body's physiological responses to stress, including the immune system (Bandura, 1997; O'Leary & Brown, 1995). Lack of perceived control over environmental demands can increase susceptibility to infections and hasten the progression of disease (Bandura, 1997). Self-efficacy beliefs also influence the activation of catecholamines, a family of neurotransmitters important to the management of stress and perceived threat, along with the endogenous painkillers referred to as endorphins (Bandura, 1997; O'Leary & Brown, 1995).

Self-Efficacy and Self-Regulation

Research on self-efficacy has added greatly to our understanding of how we guide our own behavior in the pursuit of desired goals. Self-regulation (simplified)

depends on three interacting components (Barone et al., 1997): goals or standards of performance; self-evaluative reactions to performance; and self-efficacy beliefs.

Goals are essential to self-regulation because we attempt to regulate our actions, thoughts, and emotions to achieve desired outcomes. The ability to envision desired future events and states allows us to create incentives that motivate and guide our actions and standards against which to monitor our progress and evaluate both our progress and our abilities (chap. 30).

Self-evaluative reactions are important in self-regulation because our beliefs about the progress we are making (or not making) toward our goals are major determinants of our emotional reactions during goal-directed activity. These emotional reactions, in turn, can enhance or disrupt self-regulation.

Self-efficacy beliefs influence self-regulation in several ways. First, they influence the goals we set. The higher my self-efficacy in a specific achievement domain, the loftier will be the goals that I set for myself in that domain. Second, they influence our choices of goal-directed activities, expenditure of effort, persistence in the face of challenge and obstacles (Bandura, 1997), and reactions to perceived discrepancies between goals and current performance (Bandura, 1997). If I have strong efficacy beliefs, I will be relatively resistant to the disruptions in self-regulation that can result from difficulties and setbacks, and I will persevere. Perseverance usually produces desired results, and this success then increases my sense of efficacy (see also chap. 12).

Third, self-efficacy beliefs influence the efficiency and effectiveness of problem solving and decision making (see also chap. 32). When faced with complex decisions, people who have confidence in their ability to solve problems use their

cognitive resources more effectively than do those people who doubt their cognitive skills (e.g., Bandura, 1997). Such efficacy usually leads to better solutions and greater achievement. In the face of difficulty, if I have high self-efficacy, I am likely to remain “task-diagnostic” and continue to search for solutions to problems. If my self-efficacy is low, however, I am more likely to become “self-diagnostic” and reflect on my inadequacies, which detracts from my efforts to assess and solve the problem (Bandura, 1997).

Self-Efficacy and Psychotherapy

I use the term “psychotherapy” to refer broadly to professionally guided interventions designed to enhance psychological well-being, while acknowledging that self-regulation plays an important role in all such interventions. Different interventions, or different components of an intervention, may be equally effective because they equally enhance self-efficacy for crucial behavioral and cognitive skills (Bandura, 1997; Maddux & Lewis, 1995).

Self-efficacy theory emphasizes the importance of arranging experiences designed to increase the person’s sense of efficacy for specific behaviors in specific problematic and challenging situations. Self-efficacy theory suggests that formal interventions should not simply resolve specific problems, but should provide people with the skills and sense of efficacy for solving problems themselves. Some basic strategies for enhancing self-efficacy are based on the five sources of self-efficacy previously noted.

Performance experience. The phrase “seeing is believing” underscores the importance of providing people with tangible evidence of their success. When people

actually can see themselves coping effectively with difficult situations, their sense of mastery is likely to be heightened. These experiences are likely to be most successful when both goals and strategies are specific. Goals that are concrete, specific, and proximal (short-range) provide greater incentive, motivation, and evidence of efficacy than goals that are abstract, vague, and set in the distant future (chap. 30). Specific goals allow people to identify the specific behaviors needed for successful achievement and to know when they have succeeded (chap. 30). For example, the most effective interventions for phobias and fears involve “guided mastery”—in vivo experience with the feared object or situation during therapy sessions, or between sessions as “homework” assignments (Williams, 1995). Recent technological advances now allow for the use of “virtual reality” experiences in the treatment of phobias and fears (e.g., Rothbaum et al., 2006). In cognitive treatments of depression, clients are provided structured guidance in arranging success experiences that will counteract low-self-efficacy expectancies (Maddux & Lewis, 1995).

Vicarious experience. Vicarious learning and imagination can be used to teach new skills and enhance self-efficacy for those skills. For example, modeling films and videotapes have been used successfully to encourage socially withdrawn children to interact with other children. The child viewing the film sees the model child, someone much like himself or herself, experience success and comes to believe that he or she too can do the same thing (Conger & Keane, 1981). In vivo modeling has been used successfully in the treatment of phobic individuals. This research has shown that changes in self-efficacy beliefs for approach behaviors mediate adaptive behavioral changes (Bandura, 1986; Williams 1995). Common everyday (nonprofessional) examples of the use of vicarious experiences to enhance self-efficacy include

advertisements for weight loss and smoking cessation programs that feature testimonials from successful people. The clear message from these testimonials is that the listener or reader also can accomplish this difficult task. Formal and informal support groups—people sharing their personal experiences in overcoming a common adversity, such as addiction, obesity, or illness—also provide forums for the enhancement of self-efficacy.

Imagined experience. Live or filmed models may be difficult to obtain, but the imagination is an easily harnessed resource. Imagining ourselves engaging in feared behaviors or overcoming difficulties can be used to enhance self-efficacy. For example, cognitive therapy of anxiety and fear problems often involves modifying visual images of danger and anxiety, including images of coping effectively with the feared situation. Imaginal (covert) modeling has been used successfully in interventions to increase assertive behavior and self-efficacy for assertiveness (Kazdin, 1979). Systematic desensitization and implosion are traditional behavioral therapy techniques that rely on the ability to image coping effectively with a difficult situation (Emmelkamp, 1994). Because maladaptive distorted imagery is an important component of anxiety and depression, various techniques have been developed to help clients modify distortions and maladaptive assumptions contained in their visual images of danger and anxiety. A client can gain a sense of control over a feared situation by imagining a future self that can deal effectively with the situation.

Verbal persuasion. Most formal psychological interventions rely strongly on verbal persuasion to enhance a client's self-efficacy and encouraging small risks that may lead to small successes. In cognitive and cognitive-behavioral therapies (Holland, Stewart, & Strunk, 2006), the therapist engages the client in a discussion of

the client's dysfunctional beliefs, attitudes, and expectancies and helps the client see the irrationality and self-defeating nature of such beliefs. The therapist encourages the client to adopt new, more adaptive beliefs and to act on these new beliefs and expectancies. As a result, the client experiences the successes that can lead to more enduring changes in self-efficacy beliefs and adaptive behavior. People also rely daily on verbal persuasion as a self-efficacy facilitator by seeking the support of other people when attempting to lose weight, quit smoking, maintain an exercise program, or summon up the courage to confront a difficult boss or loved one.

Physiological and emotional states. We usually feel more self-efficacious when we are calm than when we are aroused and distressed. Thus, strategies for controlling and reducing emotional arousal (specifically anxiety) while attempting new behaviors should enhance self-efficacy beliefs and increase the likelihood of successful implementation. Hypnosis, biofeedback, relaxation training, meditation, and medication are the most common strategies for reducing the physiological arousal typically associated with low self-efficacy and poor performance.

Collective Efficacy

This chapter has focused so far on the efficacy beliefs of individuals about themselves as individuals. Positive psychology and social cognitive theory both emphasize the social embeddedness of the individual. For this reason, I cannot leave the concept of efficacy locked inside the person. Accomplishing important goals in groups, organizations, and societies always has depended on the ability of individuals to identify the abilities of other individuals and to harness these abilities to accomplish common goals. Thus, in self-efficacy theory, it is recognized that no man

or woman is an island and that there are limits to what individuals can accomplish alone. This idea is captured in the notion of “collective efficacy”: “a group’s shared belief in its conjoint capabilities to organize and execute the courses of action required for producing given levels of attainments” (Bandura, 1997, p. 477; also Zaccaro, Blair, Peterson, & Zazanis, 1995). Simply stated, collective efficacy is the extent to which we believe that we can work together effectively to accomplish our shared goals.

Despite a lack of consensus on its measurement (Bandura, 1997; Maddux, 1999b), collective efficacy has been found to be important to a number of collectives. The more efficacious spouses feel about their shared ability to accomplish important shared goals, the more satisfied they are with their marriages (Kaplan & Maddux, 2002). The same is true of college-age dating couples (Zapata & Maddux, 2006). The collective efficacy of an athletic team can be raised or lowered by false feedback about ability and can subsequently influence its success in competitions (Hodges & Carron, 1992). The individual and collective efficacy of teachers for effective instruction seems to affect the academic achievement of school children (Bandura, 1993, 1997). The effectiveness of self-managing work teams (Little & Madigan, 1994) and group “brainstorming” (Prussia & Kinicki, 1996) also seems to be related to a collective sense of efficacy. Researchers are also beginning to understand the origins of collective efficacy for social and political change (Fernandez-Ballesteros, Diez-Nicolas, Caprara, Barbaranelli, & Bandura, 2000). Of course, personal efficacy and collective efficacy go hand-in-hand because a “collection of inveterate self-doubters is not easily forged into a collectively efficacious force” (Bandura, 1997, p. 480).

Summary

In the past three decades, we have learned much about the role of self-efficacy beliefs and psychological adjustment and maladjustment, physical health, and self-guided and professionally guided behavior change. There is, of course, much more to be learned. In keeping with the agenda of positive psychology, I suggest two broad avenues of future research.

First, positive psychology emphasizes the development of positive human qualities and the facilitation of psychological health and happiness over the mere prevention of or remediation of negative human qualities and human misery. It also embraces the notion that individuals can be self-initiating agents for change in their own lives and the lives of others. The emphasis of social cognitive theory and self-efficacy theory on the development of “enablement”—providing people with skills for selecting and attaining the life goals they desire—over prevention and risk reduction is consonant with both of these emphases. Self-efficacy research concerned with enhancing our understanding of self-regulation will enhance our understanding of how to provide people with these enablement skills.

Second, positive psychology emphasizes the social embeddedness of the individual and acknowledges that my individual success and happiness depends to a large degree on my ability to cooperate, collaborate, negotiate, and otherwise live in harmony with other people. In addition, the ability of businesses, organizations, communities, and governments (local, state, and national) to achieve their goals will increasingly depend on their ability to coordinate their efforts, particularly because these goals often conflict. For this reason, collective efficacy—including collective efficacy in organizations and schools, and efficacy for social and political change—

provides numerous important questions for future research. In a world in which communication across the globe often is faster than communication across the street, and in which cooperation and collaboration in commerce and government is becoming increasingly common and increasingly crucial, understanding collective efficacy will become increasingly important.

The simple yet powerful truth that children learn from *The little engine that could* has been amply supported by over three decades of self-efficacy research—namely, that when equipped with an unshakable belief in one’s ideas, goals, and capacity for achievement, there are few limits to what one can accomplish. As Bandura (1997) has stated, “People see the extraordinary feats of others but not the unwavering commitment and countless hours of perseverant effort that produced them” (p. 119). They then overestimate the role of “talent” in these accomplishments, while underestimating the role of self-regulation. The timeless message of research on self-efficacy is the simple, powerful truth that confidence, effort, and persistence are more potent than innate ability. In this sense, self-efficacy is concerned with human potential and possibilities, not limitations, thus making it a truly “positive” psychology.

Future Questions

1. It is clear that self-efficacy beliefs are important in the initiation of behavior changes, but additional research is needed on the role that self-efficacy beliefs play in the ongoing process of self-regulation. What is the complex interaction among self-efficacy beliefs and the other major components of self-regulation such as goals, intentions, plans, and so on?

2. Is there any utility in refining scales of “general self-efficacy” and continuing to use them in research?

3. What role do beliefs about collective efficacy play in organizational change and societal-level changes and movements (e.g., political movements)?

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