Human Agency in Social Cognitive Theory

Bandura, Albert

The recent years have witnessed a resurgence of interest in the self-referent phenomena. One can point to several reasons why self processes have come to pervade many domains of psychology. Self-generated activities lie at the very heart of causal processes. They not only contribute to the meaning and valence of most external influences, but they also function as important proximal determinants of motivation and action. The capacity to exercise control over one's own thought processes, motivation, and action is a distinctively human characteristic. Because judgments and actions are partly self-determined, people can effect change in themselves and their situations through their own efforts. In this article, I will examine the mechanisms of human agency through which such changes are realized.

The Nature and Locus of Human Agency

The manner in which human agency operates has been conceptualized in at least three different ways—as either autonomous agency, mechanical agency, or emergent interactive agency. The notion that humans serve as entirely independent agents of their own actions has few, any, serious advocates. However, environmental determinists sometimes invoke the view of autonomous agency in arguments designed to repudiate any role of self-influence in causal processes.

A second approach to the self system is to treat it in terms of mechanical agency. It is an internal instrumentality through which external influences operate mechanistically on action, but it does not itself have any motivative, self-reflective, self-reactive, creative, or self-directive properties. In this view, internal events are mainly products of external ones devoid of any causal efficacy. Because the agency resides in environmental forces, the self system is merely a repository and conduit for them. In this conception of agency, self-referent processes are epiphenomenal by-products of conditioned responses that do not enter into the determination of action. For the material eliminativist, self-influences do not exist. People are not intentional cognizers with a capacity to influence their own motivation and action; rather, they are neurophysiological computational machines. Such views fail to explain the demonstrable explanatory and predictive power of self-referent factors that supposedly are devoid of causal efficacy or do not even exist.

Social cognitive theory subscribes to a model of emergent interactive agency (Bandura, 1986). Persons are neither autonomous agents nor simply mechanical conveyers of animating environmental influences. Rather, they make causal contribution to their own motivation and action within a system of triadic reciprocal causation. In this model of reciprocal causation, action, cognitive, affective, and other personal factors, and environmental events all operate as interacting determinants. Any account of the
determinants of human action must, therefore, include self-generated influences as a contributing factor. Empirical tests of the model of triadic reciprocal causation are presented elsewhere and will not be reviewed here (Wood & Bandura, in press). The focus of this article is on the mechanisms through which personal agency operates within the interactional causal structure.

Exercise of Agency Through Self-Belief of Efficacy

Among the mechanisms of personal agency, none is more central or pervasive than people's beliefs about their capabilities to exercise control over events that affect their lives. Self-efficacy beliefs function as an important set of proximal determinants of human motivation, affect, and action. They operate on action through motivational, cognitive, and affective intervening processes. Some of these processes, such as affective arousal and thinking patterns, are of considerable interest in their own right and not just as intervening influencers of action.

Cognitive Processes

Self-efficacy beliefs affect thought patterns that may be self-aiding or self-hindering. These cognitive effects take various forms. Much human behavior is regulated by forethought embodying cognized goals, and personal goal setting is influenced by self-appraisal of capabilities. The stronger their perceived self-efficacy, the higher the goals people set for themselves and the firmer their commitment to them (Locke, Frederick, Lee, & Bobko, 1984; Taylor, Locke, Lee, & Gist, 1984; Wood & Bandura, in press). As I will show later, challenging goals raise the level of motivation and performance attainments (Locke, Shaw, Saari, & Latham, 1981; Mento, Steel, & Karren, 1987).

A major function of thought is to enable people to predict the occurrence of events and to create the means for exercising control over those that affect their daily lives. Many activities involve inferential judgments about conditional relations between events in probabilistic environments. Discernment of predictive rules requires cognitive processing of multidimensional information that contains many ambiguities and uncertainties. In ferreting out predictive rules, people must draw on their state of knowledge to generate hypotheses about predictive factors, to weight and integrate them into composite rules, to test their judgments against outcome information, and to remember which notions they had tested and how well they had worked. It requires a strong sense of efficacy to remain task oriented in the face of judgmental failures. Indeed, people who believe strongly in their problem solving capabilities remain highly efficient in their analytic thinking in complex decision-making situations, whereas those who are plagued by self-doubts are erratic in their analytic thinking (Bandura & Wood, 1989; Wood & Bandura, 1989). Quality of analytic thinking, in turn, affects performance accomplishments.

People's perceptions of their efficacy influence the types of anticipatory scenarios they construct and reiterate. Those who have a high sense of efficacy visualize success scenarios that provide positive guides for performance. Those who judge themselves as
inefficacious are more inclined to visualize failure scenarios that undermine performance by dwelling on how things will go wrong. Cognitive simulations in which individuals visualize themselves executing activities skillfully enhance subsequent performance (Bandura, 1986; Corbin, 1972; Feltz & Landers, 1983; Kazdin, 1978; Markus, Cross, & Wurf, in press). Perceived self-efficacy and cognitive simulation affect each other bidirectionally. A high sense of efficacy fosters cognitive constructions of effective actions, and cognitive reiteration of efficacious courses of action strengthens self-perceptions of efficacy (Bandura & Adams, 1977; Kazdin, 1979).

Self-efficacy beliefs usually affect cognitive functioning through the joint influence of motivational and information processing operations. This dual influence is illustrated in studies of different sources of variation in memory performance. The stronger people's beliefs in their memory capacities, the more effort they devote to cognitive processing of memory tasks, which, in turn, enhances their memory performances (Berry, 1987).

Motivational Processes

People's self-efficacy beliefs determine their level of motivation, as reflected in how much effort they will exert in an endeavor and how long they will persevere in the face of obstacles. The stronger the belief in their capabilities, the greater and more persistent are their efforts (Bandura, 1988a). When faced with difficulties, people who are beset by self-doubts about their capabilities slacken their efforts or abort their attempts prematurely and quickly settle for mediocre solutions, whereas those who have a strong belief in their capabilities exert greater effort to master the challenge (Bandura & Cervone, 1983, 1986; Cervone & Peake, 1986; Jacobs, Prentice-Dunn, & Rogers, 1984; Wennberg, Gould, & Jackson, 1979). Strong perseverance usually pays off in performance accomplishments.

There is a growing body of evidence that human attainments and positive well-being require an optimistic sense of personal efficacy (Bandura, 1986). This is because ordinary social realities are strewn with difficulties. They are full of impediments, failures, adversities, setbacks, frustrations, and inequities. People must have a robust sense of personal efficacy to sustain the perseverant effort needed to succeed. Self-doubts can set in quickly after some failures or reverses. The important matter is not that difficulties arouse self-doubt, which is a natural immediate reaction, but the speed of recovery of perceived self-efficacy from difficulties. Some people quickly recover their self-assurance; others lose faith in their capabilities. Because the acquisition of knowledge and competencies usually requires sustained effort in the face of difficulties and setbacks, it is resiliency of self-belief that counts.

In his revealing book, titled Rejection, John White (1982) provides vivid testimony that the striking characteristic of people who have achieved eminence in their fields is an inextinguishable sense of efficacy and a firm belief in the worth of what they are doing. This resilient self-belief system enabled them to override repeated early rejections of their work. A robust sense of personal efficacy provides the needed staying power.
Many of our literary classics brought their authors repeated rejections. The novelist, Saroyan, accumulated several thousand rejections before he had his first literary piece published. Gertrude Stein continued to submit poems to editors for about 20 years before one was finally accepted. Now that is invincible self-efficacy. Such extraordinary persistence in the face of massive uninterrupted rejection defies explanation in terms of either reinforcement theory or utility theory. James Joyce's book, the Dubliners, was rejected by 22 publishers. Over a dozen publishers rejected a manuscript by e. e. cummings. When his mother finally published it, the dedication, printed in upper case, read: “With no thanks to …” followed by the long list of publishers who had rejected his offering.

Early rejection is the rule, rather than the exception, in other creative endeavors. The Impressionists had to arrange their own art exhibitions because their works were routinely rejected by the Paris Salon. Van Gogh sold only one painting during his lifetime. Rodin was repeatedly rejected by the Ecole des Beaux-Arts. The musical works of most renowned composers were initially greeted with derision. Stravinsky was run out of Paris by an enraged audience and critics when he first served them the Rite of Spring. Many other composers suffered the same fate, especially in the early phases of their career. The brilliant architect, Frank Lloyd Wright, was one of the more widely rejected architects during much of his career.

To turn to more contemporary examples, Hollywood initially rejected the incomparable Fred Astaire for being only “a balding, skinny actor who can dance a little.” Decca Records turned down a recording contract with the Beatles with the nonprophetic evaluation, “We don't like their sound. Groups of guitars are on their way out.” Whoever issued that rejective pronouncement must cringe at each sight of a guitar.

It is not uncommon for authors of scientific classics to experience repeated initial rejection of their work, often with hostile embellishments if it is too discrepant from the theories in vogue at the time. For example, John Garcia, who eventually won well-deserved recognition for his fundamental psychological discoveries, was once told by a reviewer of his oft-rejected manuscripts that one is no more likely to find the phenomenon he discovered than bird droppings in a cuckoo clock. Verbal droppings of this type demand tenacious self-belief to continue the tortuous search for new Muses. Scientists often reject theories and technologies that are ahead of their time. Because of the cold reception given to most innovations, the time between discovery and technical realization typically spans several decades.

It is widely believed that misjudgment produces dysfunction. Certainly, gross miscalculation can create problems. However, optimistic self-appraisals of capability that are not unduly disparate from what is possible can be advantageous, whereas veridical judgments can be self-limiting. When people err in their self-appraisals, they tend to overestimate their capabilities. This is a benefit rather than a cognitive failing to be eradicated. If self-efficacy beliefs always reflected only what people could do routinely, they would rarely fail but they would not mount the extra effort needed to surpass their ordinary performances.
Evidence suggests that it is often the so-called normals who are distorters of reality, but they exhibit self-enhancing biases that distort appraisals in the positive direction. The successful, the innovative, the sociable, the nonanxious, the nondespondent, and the social reformers take an optimistic view of their personal efficacy to exercise influence over events that affect their lives (Bandura, 1986; Taylor & Brown, 1988). If not unrealistically exaggerated, such self-beliefs foster the perseverant effort needed for personal and social accomplishments. The findings of laboratory studies are in accord with the records of human triumphs regarding the centrality of the motivational effects of self-beliefs of efficacy in human attainments. It takes a resilient sense of efficacy to override the numerous dissuading impediments to significant accomplishments.

Affective Processes

People's beliefs in their capabilities affect how much stress and depression they experience in threatening or taxing situations, as well as their level of motivation. Such emotional reactions can affect action both directly and indirectly by altering the nature and course of thinking. Threat is not a fixed property of situational events, nor does appraisal of the likelihood of aversive happenings rely solely on reading external signs of danger or safety. Rather, threat is a relational property concerning the match between perceived coping capabilities and potentially aversive aspects of the environment.

People who believe they can exercise control over potential threats do not conjure up apprehensive cognitions and, therefore, are not perturbed by them. But those who believe they cannot manage potential threats experience high levels of stress and anxiety arousal. They tend to dwell on their coping deficiencies and view many aspects of their environment as fraught with danger. Through such ineffectual thought they distress themselves and constrain and impair their level of functioning (Bandura, 1988b, 1988c; Lazarus & Folkman, 1984; Meichenbaum, 1977; Sarason, 1975).

That perceived coping efficacy operates as a cognitive mediator of anxiety has been tested by creating different levels of perceived coping efficacy and relating them at a microlevel to different manifestations of anxiety. Perceived coping inefficacy is accompanied by high levels of subjective distress, autonomic arousal, and plasma catecholamine secretion (Bandura, Reese, & Adams, 1982; Bandura, Taylor, Williams, Mefford, & Barchas, 1985). The combined results from the different psychobiological manifestations of emotional arousal are consistent in showing that anxiety and stress reactions are low when people cope with tasks in their perceived self-efficacy range. Self-doubts in coping efficacy produce substantial increases in subjective distress and physiological arousal. After perceived coping efficacy is strengthened to the maximal level, coping with the previously intimidating tasks no longer elicits differential psychobiological reactions.

Anxiety arousal in situations involving some risks is affected not only by perceived coping efficacy but also by perceived self-efficacy to control intrusive perturbing cognitions. The exercise of control over one's own consciousness is summed up well in
the proverb: “You cannot prevent the birds of worry and care from flying over your head. But you can stop them from building a nest in your head.” Perceived self-efficacy in thought control is a key factor in the regulation of cognitively generated arousal. It is not the sheer frequency of aversive cognitions but the perceived inefficiency to turn them off that is the major source of distress (Kent, 1987; Salkovskis & Harrison, 1984). Thus, the incidence of aversive cognitions is unrelated to anxiety level when variations in perceived thought control efficacy are controlled for, whereas perceived thought control efficacy is strongly related to anxiety level when the extent of aversive cognitions is controlled (Kent & Gibbons, 1987).

The role of perceived self-efficacy and anxiety arousal in the causal structure of avoiding behavior has also been examined extensively. The results show that people base their actions on self-perceptions of coping efficacy in situations they regard as risky. The stronger the perceived coping efficacy, the more venturesome the behavior, regardless of whether self-perceptions of efficacy are enhanced through mastery experiences, modeling influences, or cognitive simulations (Bandura, 1988b). Perceived self-efficacy accounts for a substantial amount of variance in phobic behavior when anticipated anxiety is partialed out, whereas the relationship between anticipated anxiety and phobic behavior essentially disappears when perceived self-efficacy is partialed out (Williams, Dooseman, & Kleifield, 1984; Williams, Kinney, & Falbo, in press; Williams, Turner, & Peer, 1985). In short, people avoid potentially threatening situations and activities, not because they are beset with anxiety, but because they believe they will be unable to cope with situations they regard as risky. They take self-protective action regardless of whether they happen to be anxious at the moment. The dual control of anxiety arousal and avoidant behavior by perceived coping efficacy and thought control efficacy is revealed in analyses of the mechanisms governing personal empowerment over pervasive social threats (Ozer & Bandura, 1989). One path of influence is mediated through the effects of perceived coping self-efficacy on perceived vulnerability and risk discernment, and the other through the impact of perceived cognitive control self-efficacy on intrusive aversive thoughts.

Perceived self-inefficacy to fulfill desired goals that affect evaluation of one's self-worth and to secure things that bring satisfaction to one's life can give rise to bouts of depression (Bandura, 1988a; Cutrona & Troutman, 1986; Holahan Holahan, 1987a, 1987b; Kanfer & Zeiss, 1983) When the perceived self-inefficacy involves social-relationships, it can induce depression both directly and indirectly by curtailing the cultivation of interpersonal relationships that can provide satisfactions and buffer the effects of chronic daily stressors (Holahan & Holahan, 1987a). Depressive rumination not only impairs ability to initiate and sustain adaptive activities, but it further diminishes perceptions of personal efficacy (Kavanagh & Bower, 1985). Much human depression is also cognitively generated by dejecting ruminative thoughts (Nolen-Hoeksema, 1987). Therefore, perceived self-inefficacy to exercise control over ruminative thought figures prominently in the occurrence, duration, and recurrence of depressive episodes (Kavanagh & Wilson, 1988).
Other efficacy-activated processes in the affective domain concern the impact of perceived coping efficacy on basic biological systems that mediate health functioning (Bandura, in press-a). Stress has been implicated as an important contributing factor to many physical dysfunctions. Controllability appears to be a key organizing principle regarding the nature of these stress effects. Exposure to physical stressors with a concomitant ability to control them has no adverse physiological effects, whereas exposure to the same stressors without the ability to control them impairs cellular components of the immune system (Coe & Levine, in press; Maier, Laudenslager, & Ryan, 1985). Biological systems are highly interdependent. The types of biochemical reactions that have been shown to accompany perceived coping inefficacy are involved in the regulation of immune systems. For example, perceived self-inefficacy in exercising control over cognitive stressors activates endogenous opioid systems (Bandura, Cioffi, Taylor, & Brouillard, 1988). There is evidence that some of the immunosuppressive effects of inefficacy in controlling stressors are mediated by release of endogenous opioids. When opioid mechanisms are blocked by opiate antagonists, the stress of coping inefficacy loses its immunosuppressive power (Shavit & Martin, 1987).

In the laboratory research demonstrating immunosuppression through stress mediation, controllability is studied as a fixed dichotomous property in which animals either exercise complete control over physical stressors, or they have no control whatsoever. In contrast, most human stress is activated in the course of learning how to exercise control over recurring cognitive and social stressors. It would not be evolutionarily advantageous if acute stressors invariably impaired immune function, because of their prevalence in everyday life. Indeed, in a recently completed project, my colleagues and I found (Wiedenfeld et al., 1989) that stress aroused in the process of gaining coping efficacy over stressors enhances immune function. The rate of efficacy acquisition is a good predictor of whether exposure to acute stressors enhances or suppresses immune function.

Selection Processes

People can exert some influence over their life course by their selection of environments and construction of environments. So far, the discussion has centered on efficacy activated processes that enable people to create beneficial environments and to exercise control over them. Judgments of personal efficacy also affect selection of environments. People tend to avoid activities and situations they believe exceed their coping capabilities, but they readily undertake challenging activities and select social environments they judge themselves capable of handling. Any factor that influences choice behavior can profoundly affect the direction of personal development because the social influences operating in the environments that are selected continue to promote certain competencies, values, and interests long after the decisional determinant has rendered its inaugurating effect. Thus, seemingly inconsequential determinants can initiate selective associations that produce major and enduring personal changes (Bandura, 1986; Snyder, 1986).

The power of self-efficacy beliefs to affect the course of life paths through selection processes is clearly revealed in studies of career decision-making and career development.
(Betz & Hackett, 1986; Lent & Hackett, 1987). The more efficacious people judge themselves to be, the wider the range of career options they consider appropriate and the better they prepare themselves educationally for different occupational pursuits. Self-limitation of career development arises more from perceived self-inefficacy than from actual inability. By constricting choice behavior that can cultivate interests and competencies, self-disbeliefs create their own validation.

It should be noted that the sociocognitive benefits of a sense of personal efficacy do not arise simply from the incantation of capability. Saying something should not be confused with believing it to be so. Simply saying that one is capable is not necessarily self-convincing, especially when it contradicts preexisting firm beliefs. No amount of reiteration that I can fly will persuade me that I have the efficacy to get myself airborne and to propel myself through the air. Action tendencies vary with the strength of self-beliefs of efficacy (Bandura, 1977). Efficacy beliefs exhibit a gradient of strength as a function of temporal and physical proximity to the relevant activity. One must consider the height and slope of the efficacy gradient and the threshold strength for acting on one's self-belief. These characteristics of a self-belief system are affected by the authenticity of the efficacy information on which they are based. Self-efficacy beliefs that are firmly established are likely to remain strong regardless of whether one is far removed from the taxing or threatening activities or is about to perform them. Such beliefs are resilient to adversity. In contrast, weakly held self-beliefs are highly vulnerable to change: Self-doubts mount the nearer one gets to the taxing activities (Kent, 1987; Kent & Gibbons, 1987), and negative experiences readily reinstate self-disbelief in one's capabilities.

Efficacy beliefs are the product of a complex process of self-persuasion that relies on cognitive processing of diverse sources of efficacy information. These include performance mastery experiences, vicarious experiences for judging capabilities in comparison with performances of others, verbal persuasion and allied types of social influences indicating that one possesses certain capabilities; and physiological states from which one may partly judge one's capabilities, strength, and vulnerability. Information that is relevant for judging personal capabilities is not inherently enlightening. Rather, in the self-appraisal of efficacy these different sources of efficacy information must be cognitively processed, weighed, and integrated through self-reflective thought. Acting on one's self-efficacy judgment produces confirming or disconfirming experiences that prompt further reappraisals of personal efficacy.

Development of resilient self-efficacy requires some experience in mastering difficulties through perseverant effort. If people experience only easy successes, they come to expect quick results and their sense of efficacy is easily undermined by failure. Some setbacks and difficulties in human pursuits serve a useful purpose in teaching that success usually requires sustained effort. After people become convinced they have what it takes to succeed, they persevere in the face of adversity and quickly rebound from setbacks. By sticking it out through tough times, they emerge from adversity with a stronger sense of efficacy.