

Personal and collective efficacy in human adaptation and change

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Perceived self-efficacy operates as a central self-regulatory mechanism of human agency. People's beliefs that they can produce desired effects by their actions influence the choices they make, their aspirations, level of effort and perseverance, resilience to adversity, and vulnerability to stress and depression. This chapter addresses the origins of efficacy beliefs, the processes through which they operate, their diverse effects, and the modes by which they can be modified. Human adaptation and change are rooted in social systems. Personal agency through efficacy belief operates within a broad network of sociostructural influences. In these agentic transactions, people are producers as well as products of social systems. People often have to work together to shape their social future. Self-efficacy theory, therefore, extends the conception of agent causality to people's beliefs in their collective efficacy to produce desired outcomes. With growing transnational interdependencies, life in the societies of today is now shaped by events in distant places. The globalization of human interconnectedness presents new challenges for people to exercise some control over their personal destinies and national life.

La perception qu'un individu a de sa propre efficacité agit comme un mécanisme autorégulateur de l'action humaine. La croyance qu'ont les gens de pouvoir produire des effets désirés par l'entremise de leurs actions exerce une influence sur les choix qu'ils font, sur leurs aspirations, sur leur niveau d'effort et de persévérance, sur leur résistance dans l'adversité et sur leur vulnérabilité face au stress et à la dépression. Ce chapitre traite des origines des croyances dans l'efficacité personnelle, du processus de leur action, de leurs effets variés et des façons dont elles peuvent être modifiées. L'adaptation et le changement de l'être humain sont ancrés dans les systèmes sociaux. Par l'intermédiaire de la croyance en l'efficacité, l'action personnelle agit à l'intérieur d'un vaste réseau d'influences socio-structurelles. Dans ces transactions, les individus sont des producteurs ainsi que des produits des systèmes sociaux. Les gens doivent souvent travailler ensemble pour forger leur avenir social. Par conséquent, la théorie de l'efficacité personnelle étend la conception d'un lien causal entre agents, aux croyances des individus dans leur

efficacité collective pour la production des résultats désirés. Avec l'accroissement d'interdépendances entre nations, la vie dans les sociétés d'aujourd'hui est maintenant moulée par des événements dans des endroits lointains. La globalisation des liens entre humains présente aux gens de nouveaux défis les obligeant à exercer un certain contrôle sur leur destin personnel et leur vie nationale.

People have always striven to control events that affect their lives. Control is sought because it provides countless personal and social benefits. By influencing events over which they have some control, people are better able to realize desired futures and to forestall undesired ones. Growth of knowledge has greatly increased people's ability to predict events and to control them. By applying this knowledge, people built physical technologies that transformed how they live their lives. They developed biological technologies to alter the genetic makeup of plants and animals. They created medical and psychosocial technologies to improve the quality of their physical and psychosocial lives. They devised social systems with entitlements and institutional protections against tyrannical control that expanded freedom of belief and action.

The enhanced human power to transform the environment is not an unmixed blessing. Control wielded for short-run benefits can have pervasive harmful consequences on current life and on how future generations live their lives. There is growing public concern over where some of the technologies we are creating are leading us.

The accelerated pace of informational, social and technological evolution has placed a premium on people's capabilities to exert a strong hand in their own development throughout the life course. Under rapidly changing environments, skills that were functional are quickly outmoded requiring continual self-renewal.

SELF-EFFICACY IN THE EXERCISE OF HUMAN AGENCY

Because of the centrality of control in people's lives many theories about it have been proposed. Much of this research is tied to general measures of perceived control and search for their correlates. In social cognitive theory, perceived efficacy is embedded in a theory of human agency. People make causal contribution to their lives through mechanisms of personal agency. Among the mechanisms of agency, none is more central or pervasive than people's judgments of their efficacy. Unless people believe they can produce desired effects by their actions they have little incentive to act. Efficacy belief is, therefore, the foundation of action.

Theorizing and research address each of the various facets of this self-regulative mechanism. These include: the nature and structure of efficacy beliefs; their origins; the diverse ways in which they affect psychosocial functioning; the intervening processes through which they exert their effects; and the modes by which they can be instilled and strengthened to enhance human functioning. The vast literature and wide-ranging applications of self-efficacy theory to different

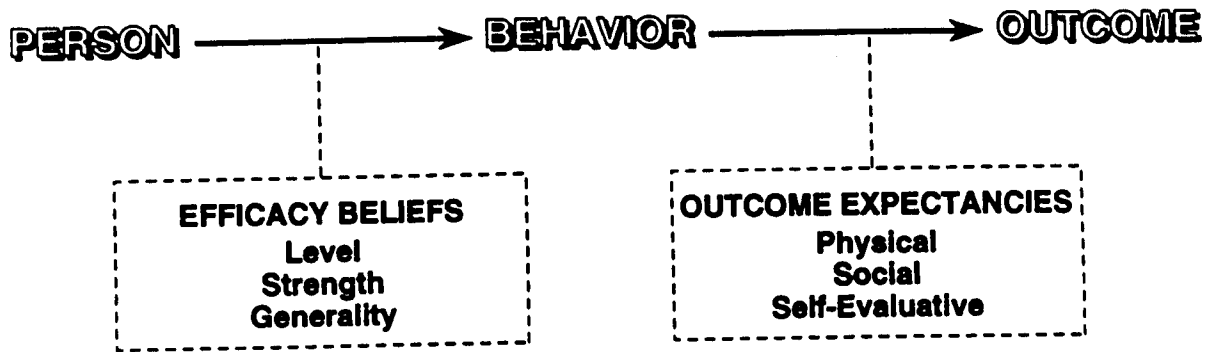


FIG. 3.1 Diagrammatic representation of the conditional relations between efficacy beliefs and outcome expectancies. In given domains of functioning, efficacy beliefs vary in level, strength and generality. The outcomes that flow from a given course of action can take the form of positive or negative physical, social, and self-evaluative effects.

spheres of life are reviewed in *Self-Efficacy: The Exercise of Control* (Bandura, 1997).

Perceived efficacy refers to beliefs in one's capabilities to organize and execute the courses of action required to produce given levels of attainments. The events over which influence is exercised vary widely, however. They may entail regulating of one's own motivation, thought processes, affective states and actions or changing environmental conditions, depending on what one seeks to manage.

People's judgments of how well they will be able to perform largely determine what outcomes they expect their actions to produce. The causal relation between efficacy beliefs and outcome expectations is shown in Fig. 3.1. Perceived self-efficacy is a judgment of one's capabilities. An outcome expectation is what people expect their actions to produce. The outcomes may be physical, social or self-evaluative.

NATURE AND STRUCTURE OF EFFICACY BELIEFS

Human competencies are developed and expressed in many different forms. Thus, the efficacy belief system is not an omnibus trait. It is a differentiated set of self-beliefs linked to distinct realms of functioning. Comparative studies show that domain-linked measures of perceived efficacy are good predictors of motivation and action (Bandura, 1997). General measures of perceived control are weak predictors or are nonpredictive. Global all-purpose tests are measures of convenience rather than of explanatory and predictive power.

SOURCES OF PERCEIVED SELF-EFFICACY

People's beliefs in their efficacy can be enhanced in four principal ways. The most effective way of instilling a strong sense of efficacy is through *mastery experiences*. Successes build a robust sense of efficacy. Failures undermine it, especially if failures occur before a sense of efficacy is firmly established. If people experience only easy successes, they come to expect quick results and

are easily discouraged by failure. A resilient sense of efficacy requires experience in overcoming obstacles through perseverant effort. By sticking it out through tough times people emerge more able and stronger from adversity.

The second way of creating, and strengthening self-efficacy is by *social modeling*. Models are a source of aspiration, competencies, and motivation. Seeing people similar to oneself succeed by perseverant effort raises observers' beliefs in their own abilities. The failures of others instill self-doubts about one's own ability to master similar activities.

Social persuasion is the third mode of influence. Realistic boosts in efficacy can lead people to exert greater effort. This increases their chances of success. But effective efficacy builders do more than convey positive appraisals. They structure situations for others in ways that bring success and avoid placing them, prematurely, in situations where they are likely to fail. They measure success by self-improvement rather than by triumphs over others.

People also rely partly on their *physical and emotional states* in judging their capabilities. They read their emotional arousal and tension as signs of vulnerability to poor performance. In activities involving strength and stamina, people interpret their fatigue, aches and pains as indicators of low physical efficacy. Mood also affects how people judge their efficacy. Positive mood enhances a sense of efficacy; depressed mood diminishes it. The fourth way of modifying efficacy beliefs is to reduce people's stress and depression, build their physical strength and change misinterpretations of their physical states. Mastery experiences produce stronger and more generalized efficacy beliefs than the other modes of influence.

COGNITIVE PROCESSING OF EFFICACY INFORMATION

Information for judging self-efficacy, whether conveyed enactively, vicariously, persuasively or somatically is not inherently informative. It is only raw data. Experiences become instructive through cognitive processing of efficacy information and reflective thought. One must distinguish between information conveyed by events and information as selected and integrated into self-efficacy judgments.

The cognitive processing of efficacy information involves two separate functions. The first is the types of information people attend to and use as indicators of personal efficacy. The theory specifies the set of efficacy indicators that are distinctive for each of the four major modes of influence. These are summarized in Table 3.1. For example, judgments of efficacy based on performance attainments may vary depending on people's interpretive biases, the difficulty of the task, how hard they worked at it, how much help they received, the conditions under which they performed, their emotional and physical state at the time, their rate of improvement over time, and biases in how they monitor and recall their attainments.

TABLE 3.1

The distinctive sets of factors within each of the four modes of influence that can affect the construction of efficacy beliefs

<i>Enactive efficacy information</i>	<i>Vicarious efficacy information</i>
Interpretive biases	Model attribute similarity
Perceived task difficulty and diagnosticity	Model performance similarity
Effort expenditure	Model historical similarity
Amount of external aid received	Multiplicity and diversity of modeling
Situational circumstances of performance	Mastery or coping modeling
Transient affective and physical states	Exemplification of coping strategies
Temporal pattern of successes and failures	Portrayal of task demands
Selective bias in self-monitoring of performance	
Selective bias in memory for performance attainments	
<i>Persuasory efficacy information</i>	<i>Somatic and affective efficacy information</i>
Credibility	Degree of attentional focus on somatic states
Expertness	Interpretive biases regarding somatic states
Consensus	Perceived source of affective arousal
Degree of appraisal disparity	Level of arousal
Familiarity with task demands	Situational circumstances of arousal

The indicators people single out provide the information base on which the self-appraisal process operates. The second function in efficacy judgment involves the combination rules or heuristics people use to integrate efficacy information from different sources. There is much work to be done in the integrative aspect of the efficacy judgment process.

VERIFICATION OF CAUSATION

A central question in any theory of cognitive regulation of motivation and action concerns the issue of causality. Do efficacy beliefs operate as causal factors in human functioning? This issue has been examined by a variety of experimental strategies. In some studies perceived self-efficacy is raised to differential levels through vicarious modes of influence (Bandura, Reese, & Adams, 1982). In others, perceived efficacy is altered by comparison of personal attainments with those presented in bogus peer norms (Bouffard-Bouchard, 1990; Jacobs, Prentice-Dunn, & Rogers, 1984; Litt, 1988). Some studies bias self-efficacy judgment with anchoring influences using arbitrary reference points (Cervone & Peake, 1986; Peake & Cervone, 1989). Still other approaches to the verification of causality employ a contravening design in which a procedure that can impair functioning is applied but in ways that raise beliefs of personal efficacy (Holroyd et al., 1984). In each case, perceived self-efficacy is systematically varied by non-performance influences and the effects of efficacy on performance are measured.

These divergent experimental procedures provide convergent evidence that perceived self-efficacy contributes independently to motivation and performance accomplishments regardless of the activity in both children and adults alike (Bandura, 1997).

Numerous multivariate investigations have been conducted using panel designs in which efficacy beliefs, along with other possible determinants and performance attainments, are measured on two or more occasions. In some of these studies, efficacy beliefs are altered by naturally occurring influences during the intervening period. More often, efficacy beliefs are modified experimentally. The temporal ordering and systematic variation of efficacy beliefs antecedently to the predicted behavior helps to remove ambiguities about the source and direction of causality. In addition to controlled induction and temporal priority of efficacy change, multiple controls are applied for other potentially influential factors. The results of such studies reveal that efficacy beliefs make substantial independent contribution to variations in motivation and performance attainments (Bandura & Jourden, 1991; Dzewaltowski, 1989; Locke, Frederick, Lee, & Bobko, 1984; Ozer & Bandura, 1990; Wood & Bandura, 1989). The causal contribution of efficacy beliefs to human functioning is further documented in comparative tests of the predictive power of social cognitive theory and alternative conceptual models (Dzewaltowski, Noble, & Shaw, 1990; Lent, Brown, & Larkin, 1987; McCaul, O'Neill, & Glasgow, 1988; Siegel, Galassi, & Ware, 1985; Wheeler, 1983).

BENEFITS OF OPTIMISTIC SELF-EFFICACY BELIEF

It is widely believed that misjudgment breeds dysfunction. Certainly, gross misjudgments can get one into trouble, but optimistic appraisals of efficacy can be advantageous. Veridical judgments can be self-limiting. When people err in their self-appraisal they tend to overestimate their abilities.

The realities of everyday life are strewn with difficulties. They are full of disappointments, impediments, adversities, failures, setbacks, frustrations and inequities. Optimistic self-efficacy is, therefore, an adaptive judgmental bias not a cognitive failing to be eliminated. Evidence shows that human accomplishments and positive well-being require an optimistic sense of personal efficacy to override the numerous impediments to success. Indeed, the striking characteristic of people who have achieved success in their fields is an inextinguishable sense of efficacy and a firm belief in the worth of what they are doing (Shepherd, 1995; White, 1982).

Early rejection is the rule, rather than the exception, in virtually all innovative and creative endeavors. A resilient self-belief enables people to override repeated early rejections of their work. People who are successful, innovative, sociable, nonanxious, nondepressed, and effective social reformers take an

optimistic view of their efficacy to influence events that affect their lives. If not unrealistically exaggerated, such self-beliefs raise aspirations, and enhance and sustain the level of motivation needed for personal and social accomplishments.

There is a controversy in the literature over whether people are better served by veridical or by optimistic self-belief. These debates fail to make important distinctions that specify when optimistic judgment of capabilities is beneficial. Tenacious strivers should be differentiated from wistful dreamers. Wistful optimists lack the efficacy strength to put up with the uncertainties, disappointments and drudgery that are required for high accomplishments. Tenacious strivers believe so strongly in themselves, that they are willing to exert extraordinary effort and suffer countless reversals in pursuit of their vision. They abide by objective realism about the normative reality but subjective optimism about their chances of success. They do not delude themselves about the tough odds of high attainments but they believe they have what it takes to beat those odds.

The functional value of veridical self-appraisal also depends on the nature of the activity. In activities where the margins of error are narrow and missteps can produce costly or injurious consequences, people had better be accurate in judging their efficacy. It is a different matter where difficult accomplishments can produce substantial personal or social benefits. The personal costs involve time, effort and resources. Individuals have to decide for themselves which abilities to cultivate, whether to invest their efforts in ventures that are difficult to fulfill, and how much hardship they are willing to endure in pursuits strewn with obstacles and uncertainties. Societies enjoy the considerable benefits of the accomplishments in the arts, sciences and technologies of its persisters and risk takers. To paraphrase the astute observation of George Bernard Shaw: since reasonable people adapt to the world and unreasonable ones try to alter it, human progress depends on the unreasonable ones.

We study extensively the costs of mistaken actions that are taken, but we ignore the costs of promising actions not taken because of underconfidence. Yet, people have greater regrets about the career opportunities not pursued, personal relationships not cultivated and risks not taken than regrets about the actions they have taken. Preoccupation with the risks of optimistic efficacy reflects a pervasive conservative bias in psychology.

EFFICACY-ACTIVATED PROCESSES

Efficacy beliefs regulate human functioning through four major processes. They include cognitive, motivational, emotional and selection processes.

Cognitive processes

Efficacy beliefs affect thought patterns that can enhance or undermine performance. These cognitive effects take various forms. People who have a high sense of efficacy take a future time perspective in structuring their lives. Much human

behavior is regulated by forethought in the form of goals. The stronger the perceived efficacy, the higher the goals people set for themselves and the firmer their commitment to them (Bandura, 1991). Challenging goals raise motivation and performance attainments (Locke & Latham, 1990).

People's beliefs in their efficacy also influence the anticipatory scenarios and visualized futures they construct and rehearse. Those of high efficacy visualize success scenarios that provide positive guides for performance. Those who doubt their efficacy visualize failure scenarios that undermine performance by dwelling on how things will go wrong.

A major function of thought is to enable people to predict events and to exercise control over those that are important to them. People of high efficacy show greater cognitive resourcefulness and strategic flexibility. Rapid discovery of predictive and operative rules enables them to manage their environment more effectively and productively (Wood & Bandura, 1989).

Motivational processes

Efficacy beliefs play a central role in the self-regulation of motivation. Most human motivation is cognitively generated. One can distinguish three forms of cognitive motivators around which different theories have been built. These include *causal attributions*, *outcome expectancies* and *cognized goals*. The corresponding theories are attribution theory, expectancy-value theory and goal theory. Figure 3.2 summarizes these theories of cognitive motivation.

Much human motivation and behavior is regulated anticipatorily by the outcomes expected for given actions. The capacity to exercise self-influence by personal challenge through goal setting and evaluative reaction to one's own performances provides another major cognitive mechanism of motivation and self-directedness. Once people commit themselves to valued goals, they seek self-satisfaction from fulfilling them and intensify their efforts by discontent with substandard performances. The causal attributions people make for their performances also affect their motivation.

The effects of goals, outcome expectations and causal attributions on motivation are partly governed by beliefs of personal efficacy. There are many activities

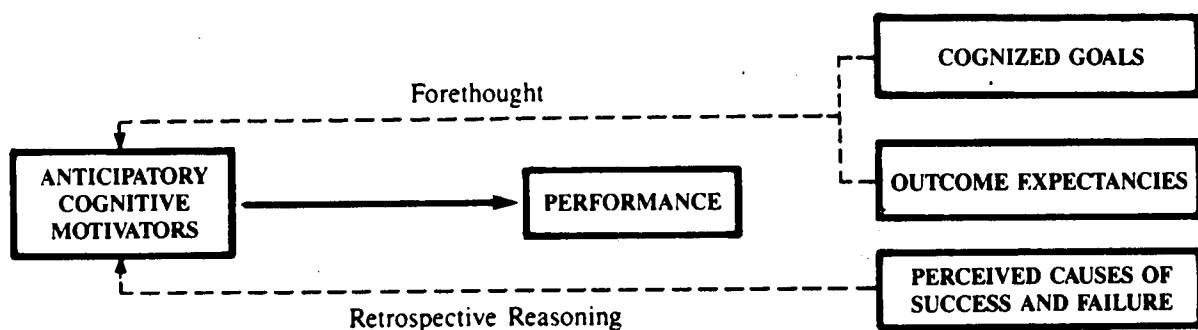


FIG. 3.2 Schematic representation of conceptions of cognitive motivation based on cognized goals, outcome expectancies and causal attributions.

which, if done well, produce valued outcomes, but they are not pursued by people who doubt they can do what it takes to succeed. They do not regard options in domains of low perceived efficacy worth considering whatever benefits they may hold. Such exclusions of large classes of options are made rapidly on efficacy grounds with little thought of costs and benefits. Rational models of decision making that exclude efficacy judgment sacrifice explanatory and predictive power.

It is partly on the basis of efficacy beliefs that people choose what goal challenges to undertake, how much effort to invest and how long to persevere in the face of difficulties (Bandura, 1997; Locke & Latham, 1990). When faced with obstacles, setbacks and failures, those who doubt their abilities slacken their efforts, give up or settle for mediocre solutions. Those who have strong belief in their abilities exert greater effort to master the challenges.

Efficacy beliefs also influence causal attributions. The influence of efficacy beliefs on causal attributions is highly reproducible across cognitive attainments (Matsui et al., 1988; Silver, Mitchell, & Gist, 1995), interpersonal transactions (Alden, 1986), physical performances (Courneya & McAuley, 1993; McAuley, Duncan, & McElnoy, 1989), and management of health habits (Grove, 1993). People who regard themselves as highly efficacious ascribe their failures to insufficient effort, inadequate strategies or unfavorable circumstances. Those of low efficacy attribute their failures to low ability. The effects of causal attributions on achievement strivings are mediated almost entirely through efficacy beliefs (Relich, Debus, & Walker, 1986; Schunk & Gunn, 1986; Schunk & Rice, 1986).

Affective processes

People's beliefs in their coping capabilities also affect how much stress and depression they experience in threatening or difficult situations. There are four major ways in which efficacy beliefs regulate emotional states (Bandura, 1997). They do so through cognitive processing of threats, transformational actions, exercise of thought control, and regulation of affective states.

Efficacy beliefs influence how threats are perceived and cognitively processed. If people believe they can manage threats they are not distressed by them; but if they believe they cannot control them they experience high anxiety, dwell on their coping deficiencies, view many aspects of their environment as fraught with danger, magnify possible risks and worry about perils that rarely happen. By such thinking they distress themselves and impair their functioning.

People who have a high sense of coping efficacy adopt strategies that change threatening environments into safe ones. In this mode of emotion regulation, efficacy beliefs reduce stress and anxiety through their impact on coping behavior. The stronger the sense of efficacy the bolder people are in tackling the problems that breed stress and anxiety, and the greater is their success in shaping the environment to their liking (Bandura, 1988).

People have to live with a psychic environment that is largely of their own making. Many human distresses result from failures to control disturbing thoughts. Control of one's thought processes is, therefore, a key factor in self-regulation of emotional states. The process of efficacious thought control 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 hair.* Research shows that it is not the sheer frequency of disturbing thoughts but the perceived helplessness to turn them off that is the major source of distress (Kent, 1987; Kent & Gibbons, 1987). Hence, the frequency of aversive cognitions is unrelated to anxiety level when the influence of perceived thought control efficacy is removed, whereas perceived thought control efficacy is strongly related to anxiety level when extent of aversive cognitions is removed.

In addition, people can exercise control over their affective states in palliative ways without altering the causes of their emotional arousal. Self-relaxation, engrossment in diversionary reactional activities, calming self-talk and seeking the solace of social support are examples of palliative ways for reducing stress and anxiety. Belief that one can relieve unpleasant emotional states when they arise makes them less aversive (Arch, 1992a; 1992b). These alternative paths of affect regulation must be considered in analyzing the role of perceived coping efficacy in human stress and anxiety.

Efficacy and depression Perceived inefficacy to control things one values also produces depression. A theory must specify when perceived inefficacy will generate anxiety or depression. The nature of the outcomes over which personal control is sought is an important differentiating factor. Attenuation or control of injurious events is central to anxiety. Irreparable loss and perceived inefficacy to gain highly valued outcomes figures prominently in despondency. Human distress does not come packaged in neatly separable forms, however. When losses of what one values highly produce aversive outcomes, as when loss of a job jeopardizes one's livelihood, a sense of powerlessness to control vital aspects of one's life is both distressing and depressing.

As in the case of anxiety arousal, perceived inefficacy contributes to depression in varied ways. One route is through unfulfilled aspirations. People who impose on themselves standards of self-worth which they judge they cannot attain drive themselves to depression (Bandura, 1991; Kanfer & Zeiss, 1983). Depression, in turn, weakens people's beliefs in their efficacy, creating a downward cycle (Kavanagh & Bower, 1985).

A second route to depression is through a low sense of social efficacy to develop social relationships that bring satisfaction to one's lives and cushion the adverse effects of chronic stressors. A low sense of social efficacy contributes to depression both directly and by curtailing development of social support. Perceived efficacy and social support operate bidirectionally in human adaptation and change. Social support is not a self-forming entity waiting around to

buffer harried people against stressors. Rather, people have to go out and find or create supportive relationships for themselves. Individuals of high perceived social efficacy create more supportive environments for themselves than those who have a low opinion of their social capabilities (Holahan & Holahan, 1987a; 1987b). Supportive relationships, in turn, can enhance personal efficacy (Cutrona & Troutman, 1986; Major, Mueller, & Hildebrandt, 1985). Supporters can raise efficacy in others in several ways. They can model effective coping attitudes and strategies for managing problem situations, demonstrate the value of perseverance, and provide positive incentives and resources for efficacious coping. Mediation analyses reveal that social support has beneficial effects to the extent that it raises perceived coping efficacy.

The third route to depression is through thought control efficacy. Much human depression is cognitively generated by dejecting ruminative thought (Nolen-Hoeksema, 1991). A low sense of efficacy to control ruminative thought contributes to the occurrence, duration, and recurrence of depressive episodes (Kavanagh & Wilson, 1989).

Selection processes

The preceding discussion documents how efficacy beliefs enable people to create beneficial environments and to control them. People are partly the product of their environment. By choosing their environments they can have a hand in what they become. Efficacy beliefs can, therefore, play a key role in shaping the courses lives take by influencing the types of activities and environments people choose to get into. In self-development through choice processes, destinies are shaped by selection of environments known to cultivate valued potentialities and lifestyles.

The power of efficacy beliefs to affect life paths through selection processes is most clearly revealed in studies of career choice and development (Lent, Brown, & Hackett, 1994). The stronger people believe in their efficacy, the more career options they consider possible, the greater the interest they show in them, the better they prepare themselves educationally for different occupational careers, and the greater their staying power in the chosen pursuits.

The diverse effects of perceived self-efficacy on human well-being and functioning can be summarized as follows:

People who have a low sense of efficacy in a given domain of life: shy away from difficult tasks which they perceive as personal threats; have low aspirations and weak commitment to the goals they choose; maintain a self-diagnostic focus rather than concentrate on how to perform successfully; dwell on personal deficiencies, obstacles and adverse outcomes; attribute failures to deficient capability; slacken their efforts or give up quickly in the face of difficulties; are slow to recover their sense of efficacy after failures or setbacks; and are prone to stress and depression.

People who have a strong sense of efficacy: approach difficult tasks as challenges rather than as threats; set challenging goals and sustain strong commitment to their goals; maintain a task-diagnostic focus that guides effective performance; attribute failures to insufficient effort; heighten effort in the face of difficulties; display low vulnerability to stress and depression; and quickly recover their sense of efficacy after failures or setbacks. Success usually comes through renewed effort after failed attempts. It is resiliency of personal efficacy that counts.

INTERDEPENDENCE OF PERSONAL AGENCY AND SOCIAL STRUCTURE

In social cognitive theory (Bandura, 1986), human agency operates in an interdependent causal structure involving triadic reciprocal causation (see Fig. 3.3). In this transactional view of self and society, personal factors in the form of cognitive, affective and biological events, behavior, and environmental influences all operate as interacting determinants that influence each other bidirectionally.

Human adaptation and change are rooted in social systems. Personal agency, therefore, exerts its effects within a broad network of sociostructural influences. In these agentic transactions, people are producers as well as products of social systems. Social structures are created by human activity to organize, guide and regulate human affairs in given domains by authorized rules and sanctions. The structural practices, in turn, impose constraints and provide resources and opportunity structures for personal development and functioning. Given this bidirectionality of influence, social cognitive theory rejects a dualism between social structure and personal agency.

Sociostructural theories and psychological theories are often regarded as rival conceptions of human behavior or as representing different levels of causation. Human behavior cannot be fully understood solely in terms of sociostructural factors or psychological factors. A full understanding requires an integrated

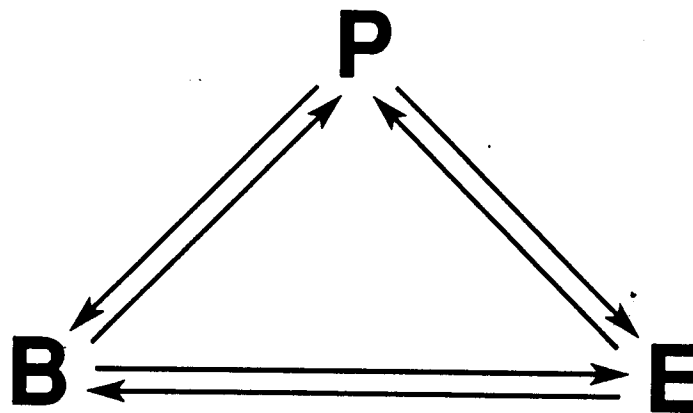


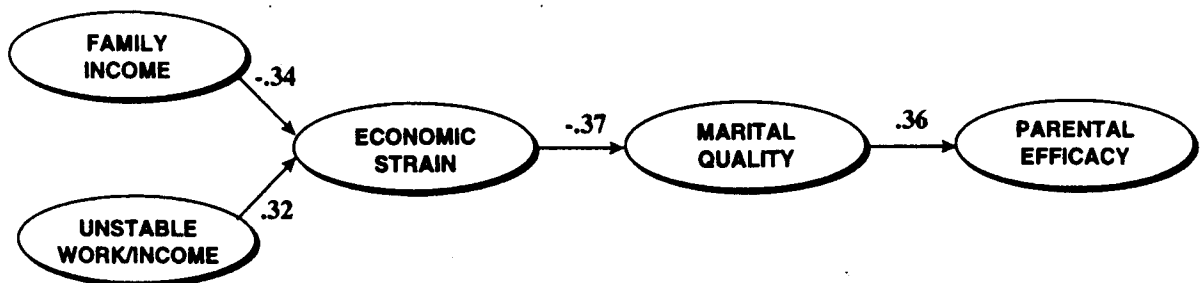
FIG. 3.3 Schematization of the relations between the three major classes of determinants in triadic reciprocal causation. *B* represents behavior; *P* the internal personal factors in the form of cognitive, affective and biological events; and *E* the external environment (Bandura, 1986).

perspective in which social influences operate through psychological mechanisms to produce behavioral effects. However, the self-system is not merely a conduit for external influences. The self is socially constituted; but by exercising self-influence human agency operates generatively and proactively rather than just reactively. Thus, in the theory of triadic reciprocal causation, sociostructural and personal determinants are treated as cofactors within a unified causal structure.

Different lines of research lend support to this interdependent multicausality. Consider some examples. Elder and Ardel (1992) have shown that economic hardship by itself has no direct influence on parental efficacy. Rather, financial hardship creates subjective strain (see Fig. 3.4). In intact households, subjective strain impairs parental efficacy by creating marital discord. A supportive marital relationship enables parents to withstand poverty without its undermining belief in their ability to guide their children's development. For single parents, financial strain weakens parents' efficacy both directly and by instilling depression. Regardless of family structure, parents who have a high sense of efficacy are active in promoting their children's competencies.

The study of children's academic development provides further evidence that psychosocial processes mediate the influence of sociostructural conditions. Our discipline went through a period of austere, insulated cognitivism in which the

INTACT FAMILY



SINGLE-PARENT FAMILY

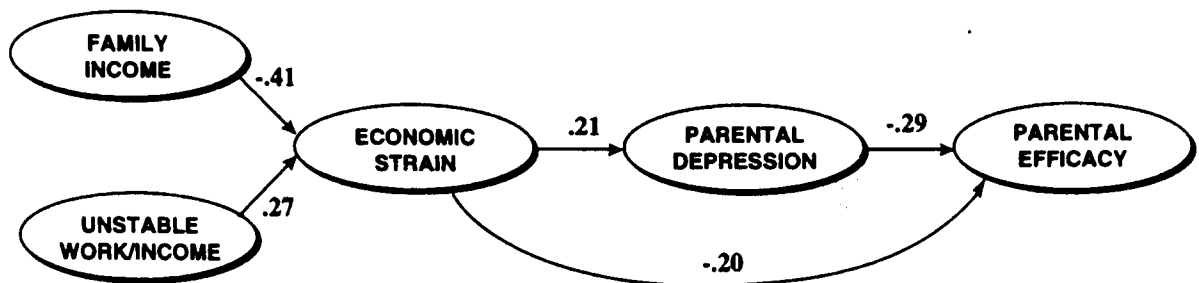


FIG. 3.4 Path analysis showing that the effect of objective economic hardship on parents' sense of efficacy to guide their children's development operates through psychosocial processes rather than directly. Marital discord is the mediator in intact households, and depression is the mediator in single parent households (Elder & Ardel, 1992).

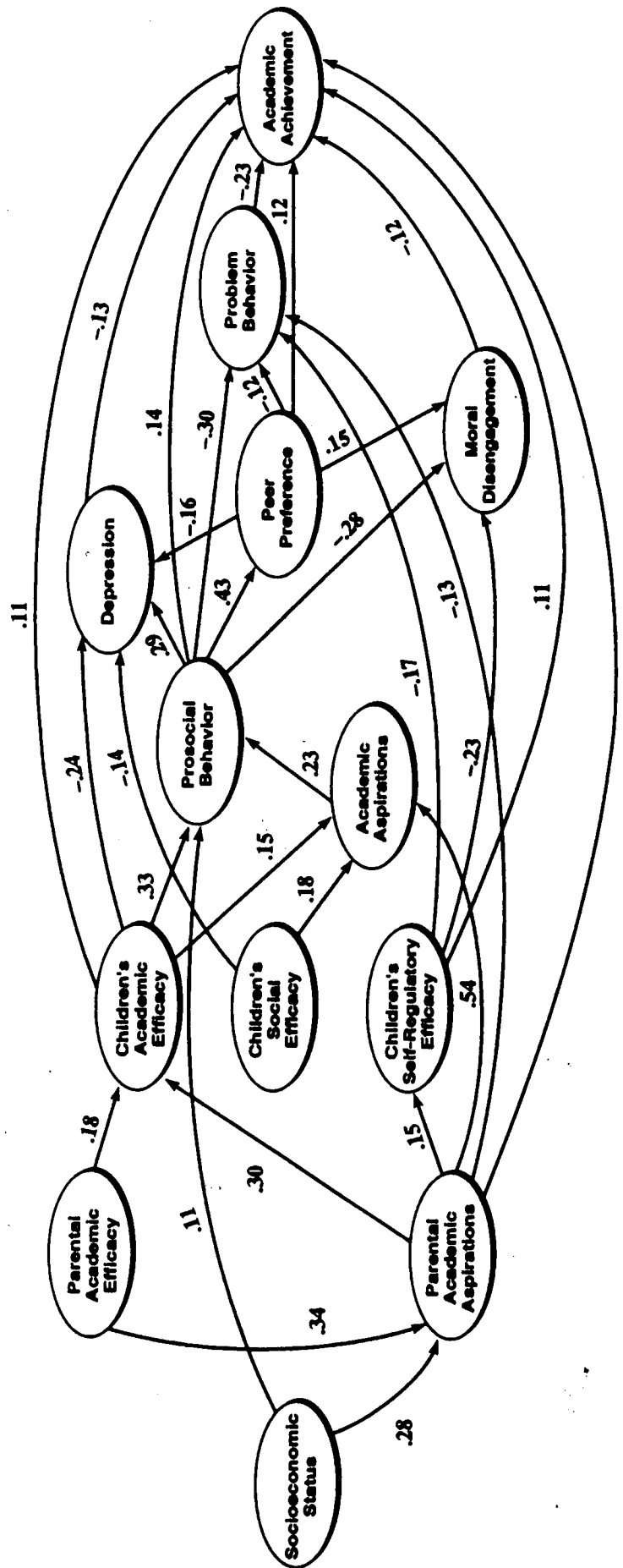


FIG. 3.5 Path analysis of the pattern of influence through which parental and children's efficacy beliefs and academic aspirations promote children's academic achievement. All of the path coefficients are significant beyond the $p < .05$ level (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996).

mechanics of how the mind works in processing, representing, organizing and retrieving information was intensively studied but the social nature of cognitive development was largely ignored. Children's intellectual development cannot be isolated from the social relations within which it is imbedded and from its interpersonal effects: it must be analyzed from a social perspective. A secure sense of intellectual and self-regulatory efficacy not only promotes academic successes, but supportive social relationships and positive emotional development that are conducive to learning. Social cognitive theory adopts an ecological perspective to the contribution of efficacy beliefs to cognitive and social development. Socio-economic, familial, peer and self-processes operate in concert to shape the course of academic development. Figure 3.5 summarizes the intricate causal structure.

The impact of the socioeconomic status of the families on children's academic achievement is entirely mediated through parental academic aspirations and children's prosocial behavior. The higher the families' socioeconomic status, the higher the academic and occupational aspirations parents have for their children and the greater is their children's prosocialness. In this network of influences, parents' beliefs in their efficacy to promote their children's intellectual development and the educational aspirations they hold for them raise children's beliefs in their efficacy and academic aspirations. Children's perceived efficacy, in turn, affects their academic achievement both directly and by its effects on their social behavior and emotional well-being.

PERCEIVED EFFICACY IN COLLECTIVE AGENCY

Conceptions of human agency have been confined to individual agency. However, people do not live their lives as isolates. They work together to produce the results they desire. Social cognitive theory extends the analysis of mechanisms of human agency to collective agency. People's shared beliefs in their collective power to produce desired outcomes is a crucial ingredient of collective agency. Group performance is the product of interactive and coordinative dynamics of its members. Therefore, perceived collective efficacy is not simply the sum of the efficacy beliefs of individual members. It is an emergent group-level attribute.

Personal and collective efficacy differ in the unit of agency, but in both forms efficacy beliefs serve similar functions and operate through similar processes. People's beliefs in their collective efficacy influence the type of futures they seek to achieve; how well they use their resources; how much effort they put into their group endeavor; their staying power when collective efforts fail to produce quick results or meet forcible opposition; and their vulnerability to discouragement.

Some writers inappropriately equate self-efficacy with individualism and pit it against collectivism (Schooler, 1990). In fact, a high sense of personal efficacy contributes just as importantly to group-directedness as to self-directedness. To

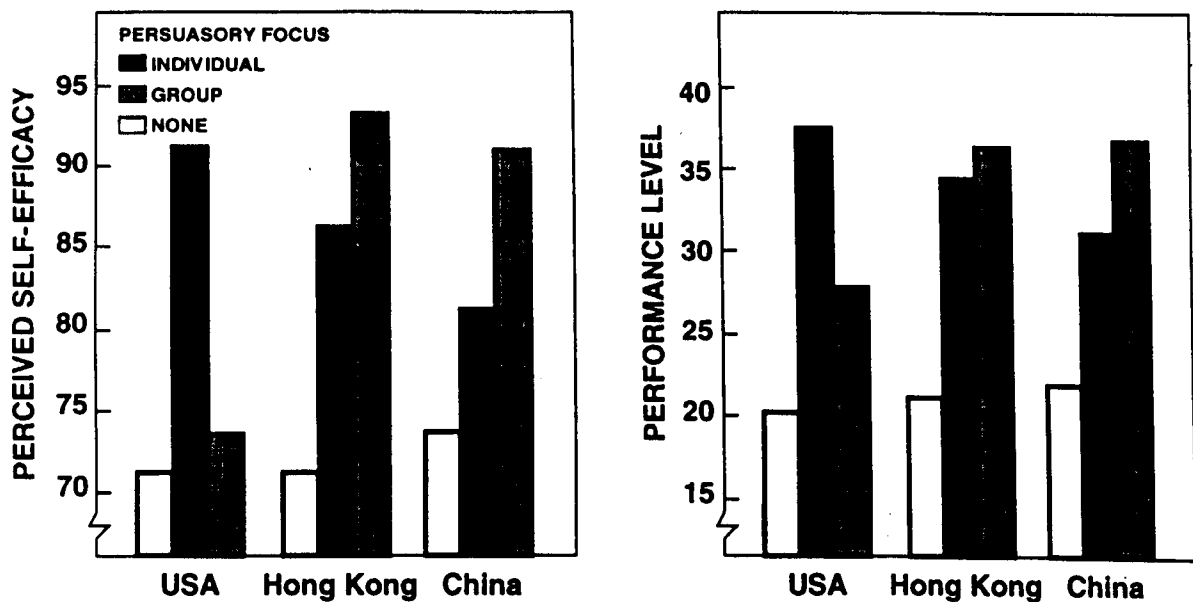


FIG. 3.6 The differential effect of efficacy-boosting influences on the perceived efficacy and productivity of managers in individualistic and collectivistic cultures depending on whether the social influence was individually oriented or group oriented (plotted from data of Earley, 1994).

work together successfully members have to perform their roles with a high sense of efficacy. Chronic self-doubters are not easily formed into a collective efficacious force. Personal efficacy is valued, not because of reverence for individualism, but because a strong sense of efficacy is vital for successful functioning regardless of whether it is achieved individually or by group members working together.

Group achievements and social change are rooted in self-efficacy. The cross-cultural research conducted by Earley (1993; 1994) on organizational functioning confirms the universal functional value of efficacy beliefs. In these cross-cultural studies, efficacy beliefs contribute to productivity by members of collectivist cultures just as they do by those raised in individualistic cultures. But cultural values shape how efficacy beliefs are developed, the purposes to which they are put, and the social arrangements through which they are best expressed. As shown in Fig. 3.6, people from the United States, an individualistic culture, feel most efficacious and perform best under an individually oriented system, whilst those from collectivistic cultures, namely Hong Kong and China, judge themselves most efficacious and work most productively under a group-oriented system. However, the critical factor is not collectivism *per se*. Collectivists display lower personal and group efficacy and low productivity when they have to perform in a culturally mixed group.

Cultures are not as homogeneous as the stereotypic portrayals would lead one to believe. Collectivistic systems, such as East Asian ones founded on Confucianism or Buddhism, favor a communal ethic. But they differ from each other in the values, meanings and customs they promote (Kim et al., 1994). Nor are so-called individualistic cultures a uniform lot. Americans, Italians, Germans,

and the British differ in their particular brands of individualism. Even within the individualistically oriented culture of the United States, the New England brand of individualism is quite different from the Californian version or that of the Southern region of the nation.

There are collectivists in individualistic cultures and individualists in collectivistic cultures. Regardless of cultural background, people achieve the greatest personal efficacy and productivity when their personal orientation is congruent with the social system. For example, American collectivists do better under a group-oriented system and Chinese individualists do better under an individually-oriented system. The personal orientation rather than the cultural orientation is a major carrier of the effects. Both at the societal and individual level of analysis, strong efficacy fosters high group effort and performance.

UNDERMINERS OF COLLECTIVE EFFICACY IN CHANGING SOCIETIES

The growing interdependence of social and economic life requires effective collective action at both local and transnational levels. As the need for efficacious collective effort grows, so does the sense of collective powerlessness. Many of the contemporary conditions of life undermine the development of collective efficacy. Life in the societies of today is increasingly shaped by transnational interdependencies. What happens economically and politically in one part of the world can affect the welfare of vast populations elsewhere. The transnational forces, which are hard to disentangle let alone control, challenge the efficacy of governmental systems to exert a determining influence on their own economic and national life.

Global market forces are restructuring national economies and shaping the social life of societies. There are no handy social mechanisms or global agencies through which people can shape transnational practices that affect their lives. As nations wrestle with the loss of control, the public expresses disillusionment and cynicism over whether their leaders and institutions can work for them to improve their lives. The crisis of leadership and governmental efficacy affects most nations nowadays. People strive to regain some control over their lives by seeking to shape their local circumstances over which they have some influence. The retreat to localism, fueled by public disillusionment with its national systems, ironically comes at a time calling for strong national leadership to manage powerful influences from abroad to shape their nation's own destiny.

Under the new realities of growing transnational control, nation states increase their controlling leverage by merging into larger regional units such as the European Union. Other regional nation states will be forced to merge into larger blocks, otherwise they will have little bargaining power in transnational relations. These regional marriages do not come without a price. Paradoxically, to gain international control, nations have to negotiate reciprocal pacts that

require some loss of national autonomy and changes in traditional ways of life. Some members of the society gain from the agreements others lose. This creates disputes within nations between the winners and losers. The major challenge to leadership is to build a national sense of efficacy to take advantage of the opportunities of globalization while minimizing the price that the changes extract from local cultures.

Modern life is increasingly regulated by complex technologies that most people neither understand nor believe they can do much to influence. The very technologies that people create to control their life environment can become a constraining force that, in turn, controls how they think and behave. As an example of such paradoxical consequences, the citizens of nations that are heavily dependent on deteriorating atomic plants for their energy feel powerless to remove this catastrophic hazard from their lives even though they acknowledge the grave danger. The devastating consequences of mishaps do not respect national borders.

The social machinery of society is no less challenging. Bureaucracies thwart effective social action. Many of the bureaucratic practices are designed more to benefit the people who run the social systems than to serve the public. Long delays between action and noticeable results discourage efforts at change. Most people relinquish control in the face of bureaucratic obstacles.

Social efforts to change lives for the better require merging diverse self-interests in support of common core values and goals. Disagreements among different constituencies create additional obstacles to successful collective action. The voices for parochial interests are usually much stronger than those for collective responsibility. It requires efficacious, inspiring leadership to create unity within diversity.

The recent years have witnessed growing social fragmentation into separate interest groups, each exercising its own power. Pluralism is taking the form of antagonistic factionalism. In the more extreme forms of social fragmentation, countries are being dismantled with a vengeance along racial, religious, and ethnic lines. While some forces are creating social fragmentation, others are breaking down national identities. Advanced telecommunications technologies are spreading ideas, values and styles of behavior transnationally at an unprecedented rate. The symbolic environment feeding off communication satellites is supplanting national cultures and homogenizing collective consciousness. With further development of the computerized Web world, people will be heavily embedded in global symbolic environments. In addition, mass migration of people fleeing tyranny or seeking a better life is changing cultural landscapes. As migration changes the ethnic composition of populations, societies are becoming less distinctive. Cultures are no longer insular. These new realities will transform the agendas of cross-cultural research.

The magnitude of human problems also undermines perceived efficacy to find effective solutions for them. Profound global changes are destroying the

ecosystems that sustain life. These changes are creating new realities requiring transnational remedies. Worldwide problems of growing magnitude instill a sense of paralysis that there is little people can do to reduce such problems. Global effects are the products of local actions. The strategy of *Think globally, act locally* is an effort to restore in people a sense of efficacy that they can make a difference.

The psychological barriers created by beliefs of collective powerlessness are more demoralizing, and debilitating than are external impediments. The less people bring their influence to bear on conditions that affect their lives the more control they relinquish to others. People who have high collective efficacy will mobilize their efforts and resources to surmount the obstacles to the changes they seek. But those convinced of their collective powerlessness will cease trying, even though changes are attainable through perseverant collective effort. As a society, we enjoy the benefits left by those before us who collectively fought inhumanities and worked for social reforms that permit a better life. Our own collective efficacy will, in turn, shape how future generations will live their lives. The times call for social initiatives that build people's sense of collective efficacy to influence conditions that shape their lives and that of future generations.

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