Self-Efficacy

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Glossary

Affective Processes: Processes regulating emotional states and elicitation of emotional reactions.
Cognitive Processes: Thinking processes involved in the acquisition, organization and use of information.
Motivation: Activation to action. Level of motivation is reflected in choice of courses of action, and in the intensity and persistence of effort.
Perceived Self-Efficacy: People's beliefs about their capabilities to produce effects.
Self-Regulation: Exercise of influence over one's own motivation, thought processes, emotional states and patterns of behavior.

Perceived self-efficacy is defined as people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives. Self-efficacy beliefs determine how people feel, think, motivate themselves and behave. Such beliefs produce these diverse effects through four major processes. They include cognitive, motivational, affective and selection processes.

A strong sense of efficacy enhances human accomplishment and personal well-being in many ways. People with high assurance in their capabilities approach difficult tasks as challenges to be mastered rather than as threats to be avoided. Such an efficacious outlook fosters intrinsic interest and deep engrossment in activities. They set themselves challenging goals and maintain strong commitment to them. They heighten and sustain their efforts in the face of failure. They quickly recover their sense of efficacy after failures or setbacks. They attribute failure to insufficient effort or deficient knowledge and skills which are acquirable. They approach threatening situations with assurance that they can exercise control over them. Such an efficacious outlook produces personal accomplishments, reduces stress and lowers vulnerability to depression.

In contrast, people who doubt their capabilities shy away from difficult tasks which they view as personal threats. They have low aspirations and weak commitment to the goals they choose to pursue. When faced with difficult tasks, they dwell on their personal deficiencies, on the obstacles they will encounter, and all kinds of adverse outcomes rather than concentrate on how to perform successfully. They slacken their efforts and give up quickly in the face of difficulties. They are slow to recover their sense of efficacy following failure or setbacks. Because they view insufficient performance as deficient aptitude it does not require much failure for them to lose faith in their capabilities. They fall easy victim to stress and depression.

I. Sources of Self-Efficacy

People's beliefs about their efficacy can be developed by four main sources of influence. The most effective way of creating a strong sense of efficacy is through mastery experiences. Successes build a robust belief in one's personal 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. 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 stronger from adversity.

The second way of creating and strengthening self-beliefs of efficacy is through the vicarious experiences provided by social models. Seeing people similar to oneself succeed by sustained effort raises observers' beliefs that they too possess the capabilities to master comparable activities required to succeed. By the same token, observing others' fail despite high effort lowers observers' judgments of their own efficacy and undermines their efforts. The impact of modeling on perceived self-efficacy is strongly influenced by perceived similarity to the models. The greater the assumed similarity the more persuasive are the models' successes and failures. If people see the models as very different from themselves their perceived self-efficacy is not much influenced by the models' behavior and the results its produces.

Modeling influences do more than provide a social standard against which to judge one's own capabilities. People seek proficient models who possess the competencies to which they aspire. Through their behavior and expressed ways of thinking, competent models transmit knowledge and teach observers effective skills and strategies for managing environmental demands. Acquisition of better means raises perceived self-efficacy.

Social persuasion is a third way of strengthening people's beliefs that they have what it takes to succeed. People who are persuaded verbally that they possess the capabilities to master given activities are likely to mobilize greater effort and sustain it than if they harbor self-doubts and dwell on personal deficiencies when problems arise. To the extent that persuasive boosts in perceived self-efficacy lead people to try hard enough to succeed, they promote development of skills and a sense of personal efficacy.

It is more difficult to instill high beliefs of personal efficacy by social persuasion alone than to undermine it. Unrealistic boosts in efficacy are quickly disconfirmed by disappointing results of one's efforts. But people who have been persuaded that they lack capabilities tend to avoid challenging activities that cultivate potentialities and give up quickly in the face of difficulties.

By constricting activities and undermining motivation, disbelief in one's capabilities creates its own behavioral validation.

Successful efficacy builders do more than convey positive appraisals. In addition to raising people's beliefs in their capabilities, they structure situations for them in ways that bring success and avoid placing people in situations prematurely where they are likely to fail often. They measure success in terms of self-improvement rather than by triumphs over others.

People also rely partly on their somatic and emotional states in judging their capabilities. They interpret their stress reactions and tension as signs of vulnerability to poor performance. In activities involving strength and stamina, people judge their fatigue, aches and pains as signs of physical debility. Mood also affects people's judgments of their personal efficacy. Positive mood enhances perceived self-efficacy, despondent mood diminishes it. The fourth way of modifying self-beliefs of efficacy is to reduce people's stress reactions and alter their negative emotional proclivities and isinterpretations of their physical states.

It is not the sheer intensity of emotional and physical reactions that is important but rather how they are perceived and interpreted. People who have a high sense of efficacy are likely to view their state of affective arousal as an energizing facilitator of performance, whereas those who are beset by self- doubts regard their arousal as a debilitator. Physiological indicators of efficacy play an especially influential role in health functioning and in athletic and other physical activities.

II. Efficacy-Activated Processes

Much research has been conducted on the four major psychological processes through which self-beliefs of efficacy affect human functioning.

A. Cognitive Processes

The effects of self-efficacy beliefs on cognitive processes take a variety of forms. Much human behavior, being purposive, is regulated by forethought embodying valued goals. Personal goal setting is influenced by self-appraisal of capabilities. The stronger the perceived self-efficacy, the higher the goal challenges people set for themselves and the firmer is their commitment to them.

Most courses of action are initially organized in thought. People's beliefs in their efficacy shape the types of anticipatory scenarios they construct and rehearse. Those who have a high sense of efficacy, visualize success scenarios that provide positive guides and supports for performance. Those who doubt their efficacy, visualize failure scenarios and dwell on the many things that can go wrong. It is difficult to achieve much while fighting self-doubt. A major function of thought is to enable people to predict events and to develop ways to control those that affect their lives. Such skills require effective cognitive processing of information that contains many ambiguities and uncertainties. In learning predictive and regulative rules people must draw on their knowledge to construct options, to weight and integrate predictive factors, to test and revise their judgments against the immediate and distal results of their actions, and to remember which factors they had tested and how well they had worked.

It requires a strong sense of efficacy to remain task oriented in the face of pressing situational demands, failures and setbacks that have significant repercussions. Indeed, when people are faced with the tasks of managing difficult environmental demands under taxing circumstances,

those who are beset by self-doubts about their efficacy become more and more erratic in their analytic thinking, lower their aspirations and the quality of their performance deteriorates. In contrast, those who maintain a resilient sense of efficacy set themselves challenging goals and use good analytic thinking which pays off in performance accomplishments.

B. Motivational Processes

Self-beliefs of efficacy play a key role in the self-regulation of motivation. Most human motivation is cognitively generated. People motivate themselves and guide their actions anticipatorily by the exercise of forethought. They form beliefs about what they can do. They anticipate likely outcomes of prospective actions. They set goals for themselves and plan courses of action designed to realize valued futures.

There are three different forms of cognitive motivators around which different theories have been built. They include causal attributions, outcome expectancies, and cognized goals. The corresponding theories are attribution theory, expectancy-value theory and goal theory, respectively. Self-efficacy beliefs operate in each of these types of cognitive motivation. Self-efficacy beliefs influence causal attributions. People who regard themselves as highly efficacious attribute their failures to insufficient effort, those who regard themselves as inefficacious attribute their failures to low ability. Causal attributions affect motivation, performance and affective reactions mainly through beliefs of self-efficacy.

In expectancy-value theory, motivation is regulated by the expectation that a given course of behavior will produce certain outcomes and the value of those outcomes. But people act on their beliefs about what they can do, as well as on their beliefs about the likely outcomes of performance. The motivating influence of outcome expectancies is thus partly governed by self-beliefs of efficacy. There are countless attractive options people do not pursue because they judge they lack the capabilities for them. The predictiveness of expectancy-value theory is enhanced by including the influence of perceived self- efficacy.

The capacity to exercise self-influence by goal challenges and evaluative reaction to one's own attainments provides a major cognitive mechanism of motivation. A large body of evidence shows that explicit, challenging goals enhance and sustain motivation. Goals operate largely through self-influence processes rather than regulate motivation and action directly. Motivation based on goal setting involves a cognitive comparison process. By making self-satisfaction conditional on matching adopted goals, people give direction to their behavior and create incentives to persist in their efforts until they fulfill their goals. They seek self-satisfaction from fulfilling valued goals and are prompted to intensify their efforts by discontent with substandard performances.

Motivation based on goals or personal standards is governed by three types of self influences. They include self-satisfying and self-dissatisfying reactions to one's performance, perceived self-efficacy for goal attainment, and readjustment of personal goals based on one's progress. Self-efficacy beliefs contribute to motivation in several ways: They determine the goals people set for themselves; how much effort they expend; how long they persevere in the face of difficulties; and their resilience to failures. When faced with obstacles and failures people who harbor self-doubts about their capabilities slacken their efforts or give up quickly. Those who have a strong belief in their capabilities exert greater effort when they fail to master the challenge. Strong perseverance contributes to performance accomplishments.

C. Affective Processes

People's beliefs in their coping capabilities affect how much stress and depression they experience in threatening or difficult situations, as well as their level of motivation. Perceived self-efficacy to exercise control over stressors plays a central role in anxiety arousal. People who believe they can exercise control over threats do not conjure up disturbing thought patterns. But those who believe they cannot manage threats experience high anxiety arousal. They dwell on their coping deficiencies. They view many aspects of their environment as fraught with danger. They magnify the severity of possible threats and worry about things that rarely happen. Through such inefficacious thinking they distress themselves and impair their level of functioning. Perceived coping self-efficacy regulates avoidance behavior as well as anxiety arousal. The stronger the sense of self-efficacy the bolder people are in taking on taxing and threatening activities.

Anxiety arousal is affected not only by perceived coping efficacy but by perceived efficacy to control disturbing thoughts. 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 to control thought processes is a key factor in regulating thought produced stress and depression. It is not the sheer frequency of disturbing thoughts but the perceived inability to turn them off that is the major source of distress. Both perceived coping self-efficacy and thought control efficacy operate jointly to reduce anxiety and avoidant behavior.

Social cognitive theory prescribes mastery experiences as the principal means of personality change. Guided mastery is a powerful vehicle for instilling a robust sense of coping efficacy in people whose functioning is seriously impaired by intense apprehension and phobic self-protective reactions. Mastery experiences are structured in ways to build coping skills and instill beliefs that one can exercise control over potential threats. Intractable phobics, of course, are not about to do what they dread. One must, therefore, create an environment so that incapacitated phobics can perform successfully despite themselves. This is achieved by enlisting a variety of performance mastery aids. Feared activities are first modeled to show people how to cope with threats and to disconfirm their worst fears. Coping tasks are broken down into subtasks of easily mastered steps. Performing feared activities together with the therapist further enables phobics to do things they would resist doing by themselves. Another way of overcoming resistance is to use graduated time. Phobics will refuse threatening tasks if they will have to endure stress for a long time. But they will risk them for a short period. As their coping efficacy increases the time they perform the activity is extended. Protective aids and dosing the severity of threats also help to restore and develop a sense of coping efficacy.

After functioning is fully restored, the mastery aids are withdrawn to verify that coping successes stem from personal efficacy rather than from mastery aids. Self-directed mastery experiences, designed to provide varied confirmatory tests of coping capabilities, are then arranged to strengthen and generalize the sense of coping efficacy. Once people develop a resilient sense of efficacy they can withstand difficulties and adversities without adverse effects.

Guided mastery treatment achieves widespread psychological changes in a relatively short time. It eliminates phobic behavior and anxiety and biological stress reactions, creates positive attitudes and eradicates phobic ruminations and nightmares. Evidence that achievement of coping efficacy profoundly affects dream activity is a particularly striking generalized impact.

A low sense of efficacy to exercise control produces depression as well as anxiety. It does so in several different ways. One route to depression is through unfulfilled aspiration. People who impose on themselves standards of self-worth they judge they cannot attain drive themselves to bouts of depression. A second efficacy route to depression is through a low sense of social efficacy. People who judge themselves to be socially efficacious seek out and cultivate social

relationships that provide models on how to manage difficult situations, cushion the adverse effects of chronic stressors and bring satisfaction to people's lives. Perceived social inefficacy to develop satisfying and supportive relationships increases vulnerability to depression through social isolation. Much human depression is cognitively generated by dejecting ruminative thought. A low sense of efficacy to exercise control over ruminative thought also contributes to the occurrence, duration and recurrence of depressive episodes.

Other efficacy-activated processes in the affective domain concern the impact of perceived coping self-efficacy on biological systems that affect health functioning. 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. It is not stressful life conditions per se, but the perceived inability to manage them that is debilitating. Thus, exposure to stressors with ability to control them has no adverse biological effects. But exposure to the same stressors without the ability to control them impairs the immune system. The impairment of immune function increases susceptibility to infection, contributes to the development of physical disorders and accelerates the progression of disease.

Biological systems are highly interdependent. A weak sense of efficacy to exercise control over stressors activates autonomic reactions, catecholamine secretion and release of endogenous opioids. These biological systems are involved in the regulation of the immune system. Stress activated in the process of acquiring coping capabilities may have different effects than stress experienced in aversive situations with no prospect in sight of ever gaining any self-protective efficacy. There are substantial evolutionary benefits to experiencing enhanced immune function during development of coping capabilities vital for effective adaptation. It would not be evolutionarily advantageous if acute stressors invariably impaired immune function, because of their prevalence in everyday life. If this were the case, people would experience high vulnerability to infective agents that would quickly do them in. There is some evidence that providing people with effective means for managing stressors may have a positive effect on immune function. Moreover, stress aroused while gaining coping mastery over stressors can enhance different components of the immune system.

There are other ways in which perceived self-efficacy serves to promote health. Lifestyle habits can enhance or impair health. This enables people to exert behavioral influence over their vitality and quality of health. Perceived self-efficacy affects every phase of personal change--whether people even consider changing their health habits; whether they enlist the motivation and perseverance needed to succeed should they choose to do so; and how well they maintain the habit changes they have achieved. The stronger the perceived self-regulatory efficacy the more successful people are in reducing health-impairing habits and adopting and integrating health-promoting habits into their regular lifestyle. Comprehensive community programs designed to prevent cardiovascular disease by altering risk-related habits reduce the rate of morbidity and mortality.

D. Selection Processes

The discussion so far has centered on efficacy-activated processes that enable people to create beneficial environments and to exercise some control over those they encounter day in and day out. People are partly the product of their environment. Therefore, beliefs of personal efficacy can shape the course lives take by influencing they types of activities and environments people choose. People avoid activities and situations they believe exceed their coping capabilities. But they readily undertake challenging activities and select situations they judge themselves capable of handling. By the choices they make, people cultivate different competencies, interests and social networks that determine life courses. Any factor that influences choice behavior can profoundly affect the direction of personal development. This is because the social

influences operating in selected environments continue to promote certain competencies, values, and interests long after the efficacy decisional determinant has rendered its inaugurating effect.

Career choice and development is but one example of the power of self-efficacy beliefs to affect the course of life paths through choice-related processes. The higher the level of people's perceived self-efficacy the wider the range of career options they seriously consider, the greater their interest in them, and the better they prepare themselves educationally for the occupational pursuits they choose and the greater is their success. Occupations structure a good part of people's lives and provide them with a major source of personal growth.

III. Adaptive Benefits of Optimistic Self-Beliefs of Efficacy

There is a growing body of evidence that human accomplishments and positive well-being require an optimistic sense of personal efficacy. This is because ordinary social realities are strewn with difficulties. They are full of impediments, adversities, setbacks, frustrations, and inequities. People must have a robust sense of personal efficacy to sustain the perseverant effort needed to succeed. In pursuits strewn with obstacles, realists either foresake them, abort their efforts prematurely when difficulties arise or become cynical about the prospects of effecting significant changes.

It is widely believed that misjudgment breeds personal problems. Certainly, gross miscalculation can get one into trouble. However, the functional value of accurate self-appraisal depends on the nature of the activity. Activities in which mistakes can produce costly or injurious consequences call for accurate self- appraisal of capabilities. It is a different matter where difficult accomplishments can produce substantial personal and social benefits and the costs involve one's time, effort, and expendable resources. People with a high sense of efficacy have the staying power to endure the obstacles and setbacks that characterize difficult undertakings.

When people err in their self-appraisal they tend to overestimate their capabilities. This is a benefit rather than a cognitive failing to be eradicated. If efficacy beliefs always reflected only what people can do routinely they would rarely fail but they would not set aspirations beyond their immediate reach nor mount the extra effort needed to surpass their ordinary performances.

People who experience much distress have been compared in their skills and beliefs in their capabilities with those who do not suffer from such problems. The findings show that it is often the normal people who are distorters of reality. But they display self-enhancing biases and distort in the positive direction. People who are socially anxious or prone to depression are often just as socially skilled as those who do not suffer from such problems. But the normal ones believe they are much more adept than they really are. The nondepressed people also have a stronger belief that they exercise some control over situations.

Social reformers strongly believe that they can mobilize the collective effort needed to bring social change. Although their beliefs are rarely fully realized they sustain reform efforts that achieve important gains. Were social reformers to be entirely realistic about the prospects of transforming social systems they would either forego the endeavor or fall easy victim to discouragement. Realists may adapt well to existing realities. But those with a tenacious self-efficacy are likely to change those realities.

Innovative achievements also require a resilient sense of efficacy. Innovations require heavy investment of effort over a long period with uncertain results. Moreover, innovations that clash with existing preferences and practices meet with negative social reactions. It is, therefore, not surprising that one rarely finds realists in the ranks of innovators and great achievers.

In his delightful book, titled, *Rejection*, John White provides vivid testimony, that the striking characteristic of people who have achieved eminence in their fields is an inextinguishable sense of personal 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.

Many of our literary classics brought their authors countless rejections. James Joyce's, the Dubliners, was rejected by 22 publishers. Gertrude Stein continued to submit poems to editors for 20 years before one was finally accepted. Over a dozen publishers rejected a manuscript by e. e. cummings. When he finally got it published, by his mother, the dedication read, in upper case: With no thanks to . . . followed by the list of 16 publishers who had rejected his manuscript.

Early rejection is the rule, rather than the exception, in other creative endeavors. The Impressionists had to arrange their own exhibitions because their works were routinely rejected by the Paris Salon. Van Gogh sold only one painting during his lifetime. Rodin was rejected three times for admission to the 'cole des Beaux-Arts.

The musical works of most renowned composers, were initially greeted with derision. Stravinsky was run out of town by enraged Parisiens and critics when he first served them the Rite of Spring. Entertainers in the contemporary pop culture have not fared any better. Decca records rejected a recording contract with the Beatles with the non-prophetic evaluation, "We don't like their sound. Groups of guitars are on the way out." Columbia records was next to turn them down. [And see **this page**]

Theories and technologies that are ahead of their time usually suffer repeated rejections. The rocket pioneer, Robert Goddard, was bitterly rejected by his scientific peers on the grounds that rocket propulsion would not work in the rarefied atmosphere of outer space. Because of the cold reception given to innovations, the time between conception and technical realization is discouragingly long.

The moral of the *Book of Rejections* is that rejections should not be accepted too readily as indicants of personal failings. To do so is self-limiting.

In sum, the successful, the venturesome, the sociable, the nonanxious, the nondepressed, the social reformers, and the innovators take an optimistic view of their personal capabilities to exercise influence over events that affect their lives. If not unrealistically exaggerated, such self-beliefs foster positive well-being and human accomplishments.

Many of the challenges of life are group problems requiring collective effort to produce significant change. The strength of groups, organizations, and even nations lies partly in people's sense of collective efficacy that they can solve the problems they face and improve their lives through unified effort. People's beliefs in their collective efficacy influence what they choose to do as a group, how much effort they put into it, their endurance when collective efforts fail to produce quick results, and their likelihood of success.

IV. Development and Exercise of Self-Efficacy Over the

Lifespan

Different periods of life present certain types of competency demands for successful functioning. These normative changes in required competencies with age do not represent lock-step stages through which everyone must inevitably pass. There are many pathways through life and, at any given period, people vary substantially in how efficaciously they manage their lives. The sections that follow provide a brief analysis of the characteristic developmental changes in the nature and scope of perceived self-efficacy over the course of the lifespan.

A. Origins of a Sense of Personal Agency

The newborn comes without any sense of self. Infants exploratory experiences in which they see themselves produce effects by their actions provide the initial basis for developing a sense of efficacy. Shaking a rattle produces predictable sounds, energetic kicks shake their cribs, and screams bring adults. By repeatedly observing that environmental events occur with action, but not in its absence, infants learn that actions produce effects. Infants who experience success in controlling environmental events become more attentive to their own behavior and more competent in learning new efficacious responses, than are infants for whom the same environmental events occur regardless of how they behave.

Development of a sense of personal efficacy requires more than simply producing effects by actions. Those actions must be perceived as part of oneself. The self becomes differentiated from others through dissimilar experience. If feeding oneself brings comfort, whereas seeing others feed themselves has no similar effect, one's own activity becomes distinct from all other persons. As infants begin to mature those around them refer to them and treat them as distinct persons. Based on growing personal and social experiences they eventually form a symbolic representation of themselves as a distinct self.

B. Familial Sources of Self-Efficacy

Young children must gain self-knowledge of their capabilities in broadening areas of functioning. They have to develop, appraise and test their physical capabilities, their social competencies, their linguistic skills, and their cognitive skills for comprehending and managing the many situations they encounter daily. Development of sensorimotor capabilities greatly expands the infants' exploratory environment and the means for acting upon it. These early exploratory and play activities, which occupy much of children's waking hours, provide opportunities for enlarging their repertoire of basic skills and sense of efficacy.

Successful experiences in the exercise of personal control are central to the early development of social and cognitive competence. Parents who are responsive to their infants' behavior, and who create opportunities for efficacious actions by providing an enriched physical environment and permitting freedom of movement for exploration, have infants who are accelerated in their social and cognitive development . Parental responsiveness increases cognitive competence, and infants' expanded capabilities elicit greater parental responsiveness in a two-way influence. Development of language provides children with the symbolic means to reflect on their experiences and what others tell them about their capabilities and, thus, to expand their self-knowledge of what they can and cannot do.

The initial efficacy experiences are centered in the family. But as the growing child's social world rapidly expands, peers become increasingly important in children's developing self-knowledge of their capabilities. It is in the context of peer relations that social comparison

comes strongly into play. At first, the closest comparative age-mates are siblings. Families differ in number of siblings, how far apart in age they are, and in their sex distribution. Different family structures, as reflected in family size, birth order, and sibling constellation patterns, create different social comparisons for judging one's personal efficacy. Younger siblings find themselves in the unfavorable position of judging their capabilities in relation to older siblings who may be several years advanced in their development.

C. Broadening of Self-Efficacy Through Peer Influences

Children's efficacy-testing experiences change substantially as they move increasingly into the larger community. It is in peer relationships that they broaden self-knowledge of their capabilities. Peers serve several important efficacy functions. Those who are most experienced and competent provide models of efficacious styles of thinking and behavior. A vast amount of social learning occurs among peers. In addition, age-mates provide highly informative comparisons for judging and verifying one's self-efficacy. Children are, therefore, especially sensitive to their relative standing among the peers in activities that determine prestige and popularity.

Peers are neither homogeneous nor selected indiscriminately. Children tend to choose peers who share similar interests and values. Selective peer association will promote self-efficacy in directions of mutual interest, leaving other potentialities underdeveloped. Because peers serve as a major influence in the development and validation of self-efficacy, disrupted or impoverished peer relationships can adversely affect the growth of personal efficacy. A low sense of social efficacy can, in turn, create internal obstacles to favorable peer relationships. Thus, children who regard themselves as socially inefficacious withdraw socially, perceive low acceptance by their peers and have a low sense of self-worth. There are some forms of behavior where a high sense of efficacy may be socially alienating rather than socially affiliating. For example, children who readily resort to aggression perceive themselves as highly efficacious in getting things they want by aggressive means.

D. School as an Agency for Cultivating Cognitive Self-Efficacy

During the crucial formative period of children's lives, the school functions as the primary setting for the cultivation and social validation of cognitive competencies. School is the place where children develop the cognitive competencies and acquire the knowledge and problem-solving skills essential for participating effectively in the larger society. Here their knowledge and thinking skills are continually tested, evaluated, and socially compared. As children master cognitive skills, they develop a growing sense of their intellectual efficacy. Many social factors, apart from the formal instruction, such as peer modeling of cognitive skills, social comparison with the performances of other students, motivational enhancement through goals and positive incentives, and teachers interpretations of children's successes and failures in ways that reflect favorably or unfavorably on their ability also affect children's judgments of their intellectual efficacy.

The task of creating learning environments conducive to development of cognitive skills rests heavily on the talents and self-efficacy of teachers. Those who are have a high sense of efficacy about their teaching capabilities can motivate their students and enhance their cognitive development. Teachers who have a low sense of instructional efficacy favor a custodial orientation that relies heavily on negative sanctions to get students to study.

Teachers operate collectively within an interactive social system rather than as isolates. The belief systems of staffs create school cultures that can have vitalizing or demoralizing effects on

how well schools function as a social system. Schools in which the staff collectively judge themselves as powerless to get students to achieve academic success convey a group sense of academic futility that can pervade the entire life of the school. Schools in which staff members collectively judge themselves capable of promoting academic success imbue their schools with a positive atmosphere for development that promotes academic attainments regardless of whether they serve predominantly advantaged or disadvantaged students.

Students' belief in their capabilities to master academic activities affects their aspirations, their level of interest in academic activities, and their academic accomplishments. There are a number of school practices that, for the less talented or ill prepared, tend to convert instructional experiences into education in inefficacy. These include lock-step sequences of instruction, which lose many children along the way; ability groupings which further diminish the perceived self-efficacy of those cast in the lower ranks; and competitive practices where many are doomed to failure for the success of a relative few.

Classroom structures affect the development of intellectual self-efficacy, in large part, by the relative emphasis they place on social comparison versus self-comparison appraisal. Self-appraisals of less able students suffer most when the whole group studies the same material and teachers make frequent comparative evaluations. Under such a monolithic structure students rank themselves according to capability with high consensus. Once established, reputations are not easily changed. In a personalized classroom structure, individualized instruction tailored to students' knowledge and skills enables all of them to expand their competencies and provides less basis for demoralizing social comparison. As a result, students are more likely to compare their rate of progress to their personal standards than to the performance of others. Self-comparison of improvement in a personalized classroom structure raises perceived capability. Cooperative learning structures, in which students work together and help one another also tend to promote more positive self-evaluations of capability and higher academic attainments than do individualistic or competitive ones.

E. Growth of Self-Efficacy Through Transitional Experiences of Adolescence

Each period of development brings with it new challenges for coping efficacy. As adolescents approach the demands of adulthood, they must learn to assume full responsibility for themselves in almost every dimension of life. This requires mastering many new skills and the ways of adult society. Learning how to deal with pubertal changes, emotionally invested partnerships and sexuality becomes a matter of considerable importance. The task of choosing what lifework to pursue also looms large during this period. These are but a few of the areas in which new competencies and self-beliefs of efficacy have to be developed.

With growing independence during adolescence some experimentation with risky behavior is not all that uncommon. Adolescents expand and strengthen their sense of efficacy by learning how to deal successfully with potentially troublesome matters in which they are unpracticed as well as with advantageous life events. Insulation from problematic situations leaves one ill-prepared to cope with potential difficulties. Whether adolescents foresake risky activities or become chronically enmeshed in them is determined by the interplay of personal competencies, self- management efficacy and the prevailing influences in their lives.

Impoverished hazardous environments present especially harsh realities with minimal resources and social supports for culturally-valued pursuits, but extensive modeling, incentives and social supports for transgressive styles of behavior. Such environments severely tax the coping efficacy of youth enmeshed in them to make it through adolescence in ways that do not irreversibly foreclose many beneficial life paths.

Adolescence has often been characterized as a period of psychosocial turmoil. While no period of life is ever free of problems, contrary to the stereotype of "storm and stress," most adolescents negotiate the important transitions of this period without undue disturbance or discord. However, youngsters who enter adolescence beset by a disabling sense of inefficacy transport their vulnerability to distress and debility to the new environmental demands. The ease with which the transition from childhood to the demands of adulthood is made similarly depends on the strength of personal efficacy built up through prior mastery experiences.

F. Self-Efficacy Concerns of Adulthood

Young adulthood is a period when people have to learn to cope with many new demands arising from lasting partnerships, marital relationships, parenthood, and occupational careers. As in earlier mastery tasks, a firm sense of self-efficacy is an important contributor to the attainment of further competencies and success. Those who enter adulthood poorly equipped with skills and plagued by self-doubts find many aspects of their adult life stressful and depressing.

Beginning a productive vocational career poses a major transitional challenge in early adulthood. There are a number of ways in which self-efficacy beliefs contribute to career development and success in vocational pursuits. In preparatory phases, people's perceived self-efficacy partly determines how well they develop the basic cognitive, self-management and interpersonal skills on which occupational careers are founded. As noted earlier, beliefs concerning one's capabilities are influential determinants of the vocational life paths that are chosen.

It is one thing to get started in an occupational pursuit, it is another thing to do well and advance in it. Psychosocial skills contribute more heavily to career success than do occupational technical skills. Development of coping capabilities and skills in managing one's motivation, emotional states and thought processes increases perceived self-regulatory efficacy. The higher the sense of self-regulatory efficacy the better the occupational functioning. Rapid technological changes in the modern workplace are placing an increasing premium on higher problem-solving skills and resilient self-efficacy to cope effectively with job displacements and restructuring of vocational activities.

The transition to parenthood suddenly thrusts young adults into the expanded role of both parent and spouse. They now not only have to deal with the ever-changing challenges of raising children but to manage interdependent relationships within a family system and social links to many extrafamilial social systems including educational, recreational, medical, and caregiving facilities. Parents who are secure in their parenting efficacy shepherd their children adequately through the various phases of development without serious problems or severe strain on the marital relationship. But it can be a trying period for those who lack a sense of efficacy to manage the expanded familial demands. They are highly vulnerable to stress and depression.

Increasing numbers of mothers are joining the work force either by economic necessity or personal preference. Combining family and career has now become the normative pattern. This requires management of the demands of both familial and occupational roles. Because of the cultural lag between societal practices and the changing status of women, they continue to bear the major share of the homemaking responsibility. Women who have a strong sense of efficacy to manage the multiple demands of family and work and to enlist their husbands' aid with childcare experience a positive sense of well-being. But those who are beset by self-doubts in their ability to combine the dual roles suffer physical and emotional strain.

By the middle years, people settle into established routines that stabilize their sense of personal efficacy in the major areas of functioning. However, the stability is a shaky one because life does not remain static. Rapid technological and social changes constantly require adaptations calling for self-reappraisals of capabilities. In their occupations, the middle-aged find themselves pressured by younger challengers. Situations in which people must compete for promotions, status, and even work itself, force constant self-appraisals of capabilities by means of social comparison with younger competitors.

G. Reappraisals of Self-Efficacy With Advancing Age

The self-efficacy issues of the elderly center on reappraisals and misappraisals of their capabilities. Biological conceptions of aging focus extensively on declining abilities. Many physical capacities do decrease as people grow older, thus, requiring reappraisals of self-efficacy for activities in which the biological functions have been significantly affected. However, gains in knowledge, skills, and expertise compensate some loss in physical reserve capacity. When the elderly are taught to use their intellectual capabilities, their improvement in cognitive functioning more than offsets the average decrement in performance over two decades. Because people rarely exploit their full potential, elderly persons who invest the necessary effort can function at the higher levels of younger adults. By affecting level of involvement in activities, perceived self- efficacy can contribute to the maintenance of social, physical and intellectual functioning over the adult life span.

Older people tend to judge changes in their intellectual capabilities largely in terms of their memory performance. Lapses and difficulties in memory that young adults dismiss are inclined to be interpreted by older adults as indicators of declining cognitive capabilities. Those who regard memory as a biologically shrinking capacity with aging have low faith in their memory capabilities and enlist little effort to remember things. Older adults who have a stronger sense of memory efficacy exert greater cognitive effort to aid their recall and, as a result, achieve better memory.

Much variability exists across behavioral domains and educational and socioeconomic levels, and there is no uniform decline in beliefs in personal efficacy in old age. The persons against whom the elderly compare themselves contribute much to the variability in perceived self-efficacy. Those who measure their capabilities against people their age are less likely to view themselves as declining in capabilities than if younger cohorts are used in comparative self-appraisal. Perceived cognitive inefficacy is accompanied by lowered intellectual performances. A declining sense of self-efficacy, which often may stem more from disuse and negative cultural expectations than from biological aging, can thus set in motion self-perpetuating processes that result in declining cognitive and behavioral functioning. People who are beset with uncertainties about their personal efficacy not only curtail the range of their activities but undermine their efforts in those they undertake. The result is a progressive loss of interest and skill.

Major life changes in later years are brought about by retirement, relocation, and loss of friends or spouses. Such changes place demands on interpersonal skills to cultivate new social relationships that can contribute to positive functioning and personal well-being. Perceived social inefficacy increases older person's vulnerability to stress and depression both directly and indirectly by impeding development of social supports which serve as a buffer against life stressors.

The roles into which older adults are cast impose sociocultural constraints on the cultivation and maintenance of perceived self-efficacy. As people move to older-age phases most suffer losses of resources, productive roles, access to opportunities and challenging activities. Monotonous environments that require little thought or independent judgment diminish the

quality of functioning, intellectually challenging ones enhance it. Some of the declines in functioning with age result from sociocultural dispossession of the environmental support for it. It requires a strong sense of personal efficacy to reshape and maintain a productive life in cultures that cast their elderly in powerless roles devoid of purpose. In societies that emphasize the potential for self-development throughout the lifespan, rather than psychophysical decline with aging, the elderly tend to lead productive and purposeful lives.

Summary

Perceived self-efficacy is concerned with people's beliefs in their capabilities to exercise control over their own functioning and over events that affect their lives. Beliefs in personal efficacy affect life choices, level of motivation, quality of functioning, resilience to adversity and vulnerability to stress and depression. People's beliefs in their efficacy are developed by four main sources of influence. They include mastery experiences, seeing people similar to oneself manage task demands successfully, social persuasion that one has the capabilities to succeed in given activities, and inferences from somatic and emotional states indicative of personal strengths and vulnerabilities. Ordinary realities are strewn with impediments, adversities, setbacks, frustrations and inequities. People must, therefore, have a robust sense of efficacy to sustain the perseverant effort needed to succeed. Succeeding periods of life present new types of competency demands requiring further development of personal efficacy for successful functioning. The nature and scope of perceived self-efficacy undergo changes throughout the course of the lifespan.

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"On ne voit bien qu'avec le cœur. L'essentiel est invisible pour les yeux."