

SOCIAL COGNITIVE THEORY OF PERSONALITY

Albert Bandura
Stanford University

Bandura, A. (1999). A social cognitive theory of personality. In L. Pervin & O. John (Ed.), *Handbook of personality* (2nd ed., pp. 154-196). New York: Guilford Publications. (Reprinted in D. Cervone & Y. Shoda [Eds.], *The coherence of personality*. New York: Guilford Press.)

Many psychological theories have been proposed over the years to explain human behavior. The view of human nature embodied in such theories and the causal processes they postulate have considerable import. What theorists believe people to be determines which aspects of human functioning they explore most thoroughly and which they leave unexamined. The conceptions of human nature in which psychological theories are rooted is more than a theoretical issue. As knowledge gained through inquiry is applied, the conceptions guiding the social practices have even vaster implications. They affect which human potentialities are cultivated, which are underdeveloped, and whether efforts at change are directed mainly at psychosocial, biological or sociostructural factors. This chapter addresses the personal determinants and mechanisms of human functioning from the perspective of social cognitive theory (Bandura, 1986).

The recent years have witnessed a resurgence of interest in self-referent phenomena. Self-processes have come to pervade diverse domains of psychology because most external influences affect human functioning through intermediary self processes rather than directly. The self system thus lies at the very heart of causal processes. To cite but a few examples, personal factors are very much involved in regulating attentional processes, schematic processing of experiences, memory representation and reconstruction, cognitively-based motivation, emotion activation, psychobiologic functioning and the efficacy with which cognitive and behavioral competencies are executed in the transactions of everyday life.

AN AGENTIC VIEW OF PERSONALITY

In the agentic sociocognitive view, people are self-organizing, proactive, self-reflecting, and self-regulating, not just reactive organisms shaped and shepherded by external events. People have the power to influence their own actions to produce certain results. The capacity to exercise control over one's thought processes, motivation, affect, and action operates through mechanisms of personal agency. Human agency has been conceptualized in at least three different ways—as either autonomous agency, mechanically reactive agency or emergent interactive agency. The notion that humans operate as entirely independent agents has few serious advocates, although it is sometimes invoked in caricatures of cognitive theories of human behavior (Skinner, 1971).

The tools for the exercise of agency are derived, in large part, from experiences but what is created by their generative use is not reducible to those experiences. Human action, being socially situated, is the product of a dynamic interplay of personal and situational influences.

A second approach to the self system is to construe it as mechanically reactive agency. It is an internal system through which external influences operate mechanistically on action, but individuals exert no motivative, self-reflective, self-reactive, creative or directive influence on the process. The self system is merely a repository for implanted structures and a conduit for external influences. The more dynamic models operating holistically include multilevel neural networks. However, a diverse mix of parallel distributed neural activity cannot remain fragmented. It requires an integrative system. Given the proactive nature of human functioning, such a system must have agentic capabilities as well as integrative reactive ones. Agentic functions get lodged in a hidden network operating without any consciousness. Consciousness is the very substance of phenomenal and functional mental life. It provides the information base for thinking about events, planning, constructing courses of action and reflecting on the adequacy of one's thinking and actions. There is an important difference between being conscious of the experiences one is undergoing, and consciously producing given experiences. For example, consciousness of one's heart rate and consciously and intentionally doing things known to elevate one's heart rate illustrate the difference between passive undergoing and agentic doing. The purposive accessing and deliberative processing of information to fashion efficacious courses of action represent the functional consciousness. Consciousness cannot be reduced to an epiphenomenon of the output of a mental process realized mechanically at nonconscious lower levels. In the connectionist line of theorizing, sensory organs deliver up information through their diverse pathways to the hidden network acting as the cognitive agent that does the construing, planning, motivating and regulating. However, stripped of consciousness and agentic capability of decision and action, people are mere automatons undergoing actions devoid of any subjectivity, conscious regulation, phenomenological life, or personal identity.

As Green and Vervaeke (1996) note, originally connectionists regarded their conceptual models as approximations of cognitive activities. But more recently, many connectionists have become eliminative materialists, likening cognitive factors to the phlogiston of yesteryear. In their view, people do not act on beliefs, goals, aspirations and expectations. Rather, activation of their network structure makes them do things. The phlogiston argument is sophistry. The

phlogiston notion neither provided any evidential grounds for its existence, nor had any explanatory or predictive value. In a critique of eliminativism, Greenwood (1992) notes that cognitions are contentful psychological factors that are logically independent of the explanatory propositions in which they figure. Cognitive factors do quite well in accounting for variance in human behavior and guiding successful interventions. To make their way successfully through a complex world, people have to make sound judgments about their capabilities, anticipate the probable effects of different events and actions, ascertain sociostructural opportunities and constraints and regulate their behavior accordingly. These belief systems represent a working model of the world that enables people to achieve desired results and avoid untoward ones. Reflective and forethoughtful capabilities are, therefore, vital for survival and progress. Agentic factors that are explanatory, predictive, and of demonstrated functional value may be translatable, refinable and modeled in another theoretical language but not eliminatable (Rottschaefer, 1985; 1991).

In social cognitive theory, people are agentic operators in their life course not just onlooking hosts of internal mechanisms orchestrated by environmental events. They are sentient agents of experiences rather than simply undergoers of experiences. The sensory, motor and cerebral systems are tools people use to accomplish the tasks and goals that give meaning and direction to their lives (Harré & Gillet, 1994). Agentic action shapes brain development and functioning throughout the life course (Kolb & Whishaw, 1998). It is not just exposure to stimulation, but agentic action in exploring, manipulating and influencing the environment that counts. By regulating their own motivation and the activities they pursue, people produce the experiences that form the neurobiological substrate of symbolic, social, psychomotor and other skills.

Social cognitive theory subscribes to a model of emergent interactive agency (Bandura, 1986; 1997a). Persons are neither autonomous agents nor simply mechanical conveyers of animating environmental influences. Mental events are brain activities not immaterial entities existing apart from neural systems. However, materialism does not imply reductionism of psychology to biology. Knowing how the biological machinery works, tells one little on how to orchestrate that machinery psychosocially for diverse purposes. For example, knowledge of the brain circuitry involved in learning says little about how best to devise conditions of learning in terms of levels of abstractness, novelty, and challenge; how to provide incentives to get people to

attend to, process, and organize relevant information; in what modes to present information; and whether learning is better achieved independently, cooperatively, or competitively. The optimal conditions must be specified by psychological principles and are not derivable from neurophysiological theory because it does not contain the relevant psychosocial factors in its subject matter. To use an analogy, the agentic software is not reducible to the biological hardware. Each is governed by its own set of principles requiring explication in its own right.

In a nondualistic mentalism, thought processes are emergent brain activities that are not ontologically reducible (Sperry, 1993). Emergent properties differ qualitatively from their constituent elements. To use Bunge's (1977) analogy, the unique emergent properties of water, such as fluidity, viscosity, and transparency are not simply the aggregate properties of its microcomponents of oxygen and hydrogen. Through their interactive effects they are transformed into new phenomena.

One must distinguish between the physical basis of thought and its functional properties. Cognitive processes are not only emergent brain activities; they also exert determinative influence. The human mind is generative, creative, proactive, and self-reflective not just reactive. The dignified burial of the dualistic Descartes, brings to the fore the more formidable explanatory challenge for a physicalistic theory of human agency. It must explain how people operate as thinkers of the thoughts that serve determinative functions. They construct thoughts about future courses of action to suit ever changing situations, assess their likely functional value, organize and deploy strategically the selected options and evaluate the adequacy of their thinking based on the effects their actions produce. In the theory enunciated by Sperry (1993), cognitive agents regulate their actions by cognitive downward causation as well as undergo upward activation by sensory stimulation. In the exercise of personal agency people actuate the brain processes for realizing selected intentions. Theorists seeking explanations of human behavior at the neurophysiological level must address such agentic activities as forethought, intention, aspiration, proaction, creativity, self-appraisal and self-reflection and their functional neural circuitry.

Triadic Reciprocal Causation

Human behavior has often been explained in terms of one-sided determinism. In such modes of unidirectional causation, behavior is depicted as being shaped and controlled by environmental influences or driven by internal dispositions. Social cognitive theory explains psychosocial functioning in terms of triadic reciprocal causation (Bandura, 1986). The term causation is used to mean functional dependence between events. In this model of reciprocal causality, internal personal factors in the form of cognitive, affective and biological events; behavioral patterns; and environmental events all operate as interacting determinants that influence one another bidirectionally.

In triadic causation there is no fixed pattern for reciprocal interaction. Rather, the relative contribution of each of the constituent classes of influences depends on the activities, situational circumstances, and sociostructural constraints and opportunities. The environment is not a monolithic entity. Social cognitive theory distinguishes between three types of environmental structures (Bandura, 1997a). They include the imposed environment, selected environment, and constructed environment. Gradations of environmental changeability require the exercise of increasing levels of personal agency. The imposed physical and sociostructural environment is thrust upon people whether they like it or not. Although they have little control over its presence, they have leeway in how they construe it and react to it.

There is a major difference between the potential environment and the environment people actually experience. For the most part, the environment is only a potentiality whose rewarding and punishing aspects do not come into being until the environment is selectively activated by appropriate courses of action. Which part of the potential environment becomes the actual experienced environment thus depends on how people behave. The choice of associates, activities and milieus constitutes the selected environment. The environments that are created do not exist as a potentiality waiting to be selected and activated. Rather, people construct social environments and institutional systems through their generative efforts. The construal, selection and construction of environments affect the nature of the reciprocal interplay among personal, behavioral and environmental factors.

Unidirectional causality emphasizing either dispositionalism or situationalism eventually gave way to reciprocal models of causation. Nowadays almost everyone is an interactionist. The major issues in contention center on the type of interactionism espoused. At least three different interactional models have been posed, two of which subscribe to one-way causation in the link to

behavior. These alternative causal structures are represented schematically in Figure 1. In the unidirectional model, persons and situations are treated as independent influences that combine in unspecified ways to produce behavior. The major weakness with this causal model is that personal and environmental influences do not function as independent determinants. They affect each other. People create, alter and destroy environments. The changes they produce in environmental conditions, in turn, affect them personally. The unidirectional causality with regard to behavior is another serious deficiency of this model of interactionism.

Insert Figure 1 about here

The partially bidirectional conception of interaction, which is now widely adopted in personality theory, acknowledges that persons and situations affect each other. But, this model treats influences relating to behavior as flowing in only one direction. The person-situation interchange unidirectionally produces behavior, but the behavior itself does not affect the ongoing transaction between the person and the situation. A major limitation of this interactional causal model is that behavior is not procreated by an intimate interchange between a behaviorless person and the environment. Such a feat would be analogous to immaculate conception. Except through their social stimulus value, people cannot affect their environment other than through their actions. Their behavior plays a dominant role in how they influence situations which, in turn, affect their thoughts, emotional reactions and behavior. In short, behavior is an interacting determinant rather than a detached by-product of a behaviorless person-situation interchange.

As noted earlier, social cognitive theory conceptualizes the interactional causal structure as triadic reciprocal causation. It involves a dynamic interplay among personal determinants, behavior and environmental influences. Efforts to verify every possible interactant simultaneously would produce experimental paralysis. However, because of the time lags in the operation of the triadic factors one can gain understanding of how different segments of reciprocal causation function.

Different subspecialties of psychology center their inquiry on selected segments of triadic reciprocity. Cognitive psychologists examine the interactive relation between thought and action as their major sector of interest. This effort centers on the P®B segment of triadic causation. The programs of research clarify how conceptions, beliefs, self-percepts, aspirations

and intentions shape and direct behavior. What people think, believe and feel affects how they behave. The natural and extrinsic effects of their actions (B®P), in turn, partly influence their thought patterns and affective reactions.

Social psychologists examine mainly the segment of reciprocity between the person and the environment in the triadic system (E®P). This line of inquiry adds to our understanding of how environmental influences in the form of social persuasion, modeling, and tuition alter cognitions and affective proclivities. The reciprocal element in the person-environment segment of causation (P®E) is of central interest to the subspecialty of person perception. People evoke different reactions from their social environment by their physical characteristics, such as their age, size, race, sex and physical attractiveness even before they say or do anything. They similarly activate different reactions depending on their socially conferred roles and status. The social reactions so elicited, in turn, affect the recipients' conceptions of themselves and others in ways that either strengthen or weaken the environmental bias.

Of all the different segments in the triadic causal structure, historically the reciprocal interplay between behavior and environmental events has received the greatest attention. Indeed, ethological, transactional and behavioristic theories focus almost exclusively on this portion of reciprocity in the explanation of behavior. In the transactions of everyday life, behavior alters environmental conditions (B®E), and behavior is, in turn, altered by the very conditions it creates (E®B). The bidirectional relation between behavior and environment is not disembodied from thought, however. Consider coercive parent-child interactions. In discordant families, coercive actions by one member tend to elicit coercive counteractions from the partner in mutually escalating aggression (Patterson, 1976). But about half the time coercion does not produce coercive counteractions. To understand fully the interactive relation between behavior and social environment, the analysis must be extended temporally and broadened to include cognitive determinants operating in the triadic interlocking system. This requires tapping into what people are thinking as they perform actions and experience their effects. Counterresponses to antecedent acts are influenced not only by their immediate effects but also by people's judgments of eventual outcomes should they stick to that course of action. Thus, aggressive children will continue or even escalate their coercive behavior, although immediately punished, when they expect persistence eventually to gain them what they seek (Bandura & Walters, 1959). But the same momentary punishment will serve as an inhibitor, rather than as an escalator, of coercion

when they expect that the continuance of the aversive conduct will be ineffective. Thus, in acting on their environment, people think about where their actions are likely to lead and what they eventually produce. Forethought partly governs the form the reciprocal interplay between behavior and environment takes.

Combining knowledge of the various subsystems of causality increases understanding of the superordinate causal system. Some progress has been made in clarifying how the triadic determinants operate together and how their patterning and relative strength change in the causal structure over time. These studies involve microanalyses of triadic reciprocal causation in which people manage a dynamic computerized environment (Bandura & Jourden, 1991; Bandura & Wood, 1989; Wood & Bandura, 1989). Each of the major interactants in the triadic causal structure -- personal, behavioral, and environmental -- functions as an important constituent in the transactional system. The personal determinant is indexed by self-beliefs of efficacy, cognized goals, quality of analytic thinking, and affective self-reactions. The options that are actually executed in the management of the organizational environment constitute the behavioral determinant. The properties of the organizational environment, the level of challenge it prescribes, and its responsiveness to behavioral interventions represent the environmental determinant. The constituent factors in the ongoing transactional system are measured repeatedly to verify the dynamics of the triadic causal system over time. The findings clarify the way in which the interlocked set of determinants operate as a whole and change in their relative contribution with experience.

Fortuitous Determinants in Causal Structures

There is an element of fortuity in people's lives. The role of fortuitous determinants in causal structures remains ever dormant in psychological theorizing even though it is often a critical factor in the paths lives take (Bandura, 1982b; 1998a). People are often brought together through a fortuitous constellation of events that set in motion reciprocal interplays of influences that shape the course of their lives. Indeed, some of the most important determinants of life paths often arise through the most trivial of circumstances. In these instances, seemingly minor events have important and enduring impact on the courses that lives take. Consider an example that illustrates prospectively the branching power of fortuitous events in the formation of a marital

partnership. Some years ago I delivered a presidential address to the Western Psychological Association on the psychology of chance encounters and life paths (Bandura, 1982b). At the convention the following year an editor of one of the publishing houses explained that he had entered the lecture hall as it was rapidly filling up and seized an empty chair near the entrance. In the coming week he will be marrying the woman who happened to be seated next to him. With only a momentary change in time of entry, seating constellations would have altered and this intersect would not have occurred. A marital partnership was thus fortuitously formed at a talk devoted to fortuitous determinants of life paths! A flight delayed by an unexpected storm creates a fortuitous intersect by two people who found themselves seated next to each other at the airport that eventuates in a marriage, geographic relocation and a shift in career trajectory, none of which would have occurred if the original flight had departed on time (Krantz, 1998).

A fortuitous event in socially mediated happenstances is defined as an unintended meeting of persons unfamiliar with each other. Although the separate chains of events in a chance encounter have their own causal determinants, their intersection occurs fortuitously rather than by design (Nagel, 1961). It is not that a fortuitous event is uncaused but, rather, there is a lot of randomness to the determining conditions of its intersections. The profusion of separate chains of events in everyday life provides numerous opportunities for such fortuitous intersects. People are often inaugurated into marital partnerships, occupational careers, or untoward life paths through circumstances. A happenstance meeting launches a new life trajectory. Had the chance encounter not occurred, the participants lives would have taken quite different courses. The power of most fortuitous influences lies not in the properties of the events themselves but in the interactive processes they initiate. These branching processes are in accord with chaos theory in which minor events set in motion cyclic processes that eventuate in major changes.

Of the myriad fortuitous elements encountered in daily life, many of them touch people only lightly, others leave more lasting effects, and still others thrust people into new life trajectories. Psychological science cannot foretell the occurrence of fortuitous intersects, except in a very general way. Personal proclivities, the social circles in which one moves, and the kinds of people who populate those settings make some types of intersects more probable than others. However, social cognitive theory provides a conceptual scheme for predicting the nature, scope, and strength of the impact that chance encounters will have on human lives based on the

reciprocal interplay of personal attributes and the characteristics of the social milieu into which one is inaugurated (Bandura, 1982b).

The personal determinants of the impact of fortuitous encounters operate by converting chance meetings into ongoing relationships. People's attributes, interests, and skills will affect whether they can gain sufficient social acceptance and satisfaction to sustain involvement with those they happened to encounter. Emotional ties also play an influential role. Interpersonal attraction seals chance encounters into lasting bonds. Values and personal standards similarly come into play. Fortuitous meetings are more apt to last if the persons involved have similar value commitments and evaluative standards than if they clash.

The social determinants of the impact of fortuitous encounters concern the holding and shaping power of the milieu into which people are fortuitously inaugurated. Individuals become attached to groups that provide valued benefits and rewards but forsake those that have little to offer. Fortuitous induction into a group also provides a new symbolic environment designed to foster affinity, solidarity, and shape ideological perspectives on life. The belief system of milieu and their reach and degree of closedness operate as other formative environmental factors. Chance encounters have the greatest potential for abruptly branching people into new trajectories of life when they induct them into a relatively closed milieu (Bromley & Shupe, 1979; Winfrey, 1979). A totalistic environment supplies a pervading new reality—new kinships, strongly held group beliefs and values, all-encompassing codes of conduct, and substantial rewarding and coercive power to alter the entire course of personal lives.

People can make chance happen by pursuing an active life that increases the number of fortuitous encounters they are likely to experience. Indeed, Austin (1978) highlights the role of action in chance occurrences. In the proactive sociocognitive view, chance favors the inquisitive, venturesome and persistent. By selecting advantageous activities and milieu people can make chance occurrences work for them.

Social scientists underplay fortuitous determinants in their theoretical schemes, but such factors figure significantly in their prescriptions for personal development (Bandura, 1995, 1997a; Hamburg, 1992; Masten, Best, & Garmezy, 1990; Rutter, 1990). On the utilization side, the proactive efforts center on cultivating personal attributes that enable people to make the most of opportunities that arise unexpectedly from time to time. Pasteur put it well when he noted that "*Chance favors only the prepared mind.*" On the nullifying side, people are equipped with self-

protective capabilities that enable them to resist social traps leading down detrimental paths, and to extricate themselves from such predicaments should they become enmeshed in them. At the societal level, they create social systems that provide opportunity structures for beneficial fortuities and institute safeguards that set limits on coercive control in detrimental fortuities. Mastering the tools of personal agency does not necessarily assure a desired future. But these types of personal and institutional measures give people a greater hand in shaping their own destinies.

Personal Determinants Versus Individual Differences

The field of personality has traditionally relied heavily on all-purpose measures of personal attributes in efforts to explain how personal factors contribute to psychosocial functioning. In this “one fits all approach,” the items are decontextualized by deleting information about the situations with which people are dealing. For example, they are asked to judge their aggressiveness in an environmental void without reference to the form of aggression, who the protagonists are, their power status, the type and level of provocation, the social setting, and other conditional circumstances that can strongly influence behavioral outcomes that affect one’s proneness to act aggressively. The more general the items, the more respondents have to try to guess what the unspecified situational particulars might be. The predictiveness of indefinite global measures will depend on the extent to which the visualized activities and contextual factors on which the mental averaging is performed happen to overlap with those being studied.

The everyday realities that people must manage are structured and operate conditionally. Thus, for example, behaving assertively with indifferent store clerks will bring more attentive service, whereas confrontive assertiveness toward police officers will get one roughed up or arrested. As a consequence, people will behave assertively with clerks but compliantly with police. A shapeless overall rating is ill-equipped to explain and predict the variation in assertiveness under these different circumstances. Given the highly conditional nature of human functioning, it is unrealistic to expect personality measures cast in unconditional generalities to shed much light on the contribution of personal factors to psychosocial functioning in different task domains under diverse circumstances across all situations. Indeed, personality measures that capture the contextualized and multifaceted nature of personal causation within an agentic model

have greater explanatory and predictive power and provide more effective guides for personal change than do global trait measures (Bandura, 1997). The convenience of all-purpose global tests of personal determinants is gained at the cost of explanatory and predictive power.

A major movement in psychology is away from global structures to more domain-linked knowledge structures, self-conceptions, and competencies. Even in the field of cognitive development, the bulwark of global structuralism (Piaget, 1950) is being abandoned for more specialized cognitive competencies (Feldman, 1980; Flavell, 1978a). It is ironic that, at a time when other subfields of psychology are becoming contextualized and discarding global personal structures for more particularized ones, much of the field of personality is seeking the personal causes of human behavior in omnibus conglomerate traits severed from the social realities of everyday life.

The multifaceted dynamic nature of personal causation raises the broader issue of how personal determinants are conceptualized and measured. The influence of personal factors on human functioning is often insufficiently recognized because the issue tends to be construed in static terms of individual differences rather than personal determination of action. The issue of major interest for the science of personality is not how differences between individuals on a behavioral continuum correlate with behavior, but rather how personal factors operate in causal structures in producing and regulating behavior under the highly contingent conditions of everyday life. Consider a situation in which a personal factor is essential for certain types of performances but is developed to the same high level in different individuals. The difference among individuals is negligible and would, therefore, not correlate with performance because of constricted variability. However, the personal competence is, in fact, vital for successful performance. For example, all librarians know how to read well and do not differ in this respect, but possessing the ability to read is indispensable for performing the librarianship role.

Low correlations between “individual differences” in a personal determinant and performance resulting from curtailed variability are often misinterpreted as evidence that personal factors exert little causal impact. Personal determinants operate as multifaceted dynamic factors in causal structures rather than as static entities that people possess in differing amounts. These alternative perspectives on personal causation reflect more than differences in semantic labeling. The individual differences approach is rooted in trait theory, whereas the personal

determinants approach is founded on an agentic model of functional relations between dynamic personal factors that govern the quality of human adaptation and change.

Social cognitive theory does not cede the construct of “disposition” to trait theory. Dynamic dispositions must be distinguished from static trait dispositions. For example, individuals who have a resilient sense of efficacy in a given domain are disposed to behave differently in that realm of activity from those who are beset by self-doubt. Efficacy beliefs are patterned differently across individuals and spheres of activity. The issue in contention is not whether people have personal dispositions but how they are conceptualized and operationalized. In social cognitive theory, an efficacious personality disposition is a dynamic, multifaceted belief system that varies across different activity domains and under different situational demands rather than being a decontextualized conglomerate. The patterned individuality of efficacy beliefs represents the unique dispositional makeup of efficaciousness for any given person. In social cognitive theory, dispositions are personal factors such as self-beliefs, aspirations, and outcome expectations that regulate behavior rather than descriptors of habitual behavior.

DISCARDING DUALISTIC CONCEPTIONS OF PERSONALITY

Theorizing in personality often contains a variety of dualities that social cognitive theory rejects. It will be recalled from the earlier discussion that the theory casts off mind-body dualism. Mental events are brain activities rather than immaterial entities that exist apart from brain processes. There are other forms, the dualistic conceptions of which are discussed briefly in the sections that follow.

Duality of Self as Agent and Object

One common dichotomy separates self into agent and object. People are said to be agents when they act on the environment but objects when they reflect and act on themselves. Social cognitive theory questions such a dualistic view of self. Proaction does not operate isolatedly from self-reaction. The dual functions of the self typically operate interactively. In their daily transactions, people formulate courses of action, anticipate their likely effects, and act on their judgments. While acting on their environment, they are also evaluating and reacting to

themselves. They monitor and analyze how well their thinking and corresponding actions have served them and change their strategies accordingly. One is just as much an agent monitoring and reflecting on one's experiences and exerting self-influence as in acting on the environment. It is simply a shift in perspective of the same agent between self and environment. Even when individuals are the object of external influence, they are not just passive recipients of stimulus inputs. They act agentially on that influence in cognitive, affective, and behavioral ways that enhance, neutralize or subvert it. Rather than splitting the self into object and agent, social cognitive theory treats this static dichotomy as a dynamic system of interlocking functions.

Social cognitive theory also rejects the fractionation of human agency into multiple selves. A theory of personality cast in terms of multiple selves plunges one into deep philosophical waters. It requires a regress of selves to a presiding overseer self that selects and manages the collection of selves to suit given purposes. Actually, there is only one self that can visualize different futures and select courses of action designed to attain desired futures and avoid aversive ones. Actions are regulated by a person not by a cluster of selves doing the choosing and guiding.

The fractionation of agency into different types of selves poses additional conceptual problems. Once one starts fractionating the self, where does one stop? For example, an athletic self can be split into an envisioned tennis self and a golfing self. These separable selves would, in turn, have their subselves. Thus, a golfing self can be subdivided into different facets of the athletic ability to include a driving self, a fairway self, a sand-trapped self, and a putting self. How does one decide where to stop fractionating selves? Here, too, there is only one self that can strive to perfect different sets of competencies required for an envisioned pursuit. Diversity of action arises not from a collection of agentive selves but from the different options considered by the one and the same agentive self. It is the person who is doing the thinking, regulating, and reflecting not a homunculus-overseeing self.

People striving to realize an envisioned future guide and motivate their efforts through a set of self-regulatory mechanisms. These are governed by appraisal of personal capabilities for different pursuits, long-range aspiration merged with working proximal subgoals that lead to its fulfillment, positive and negative outcome expectations for different life courses, the value placed on those envisioned outcomes, and the perceived environmental constraints and opportunity structures. These represent some of the influential sociocognitive determinants of the

courses that lives take. One and the same person exercises these self-influences differentially for different purposes, in different activity domains, and in different social contexts.

Duality of Structure and Process of the Self System

The affinity to global dispositional constructs has also fostered a disjointed duality of process and structure that pervades the field of personality. This dualistic view is also reflected in the dichotomization of personality theories as embodying structuralism or functionalism. Theories that specify how human agency is exercised are often mistakenly depicted as solely process theories. Trait approaches are said to be structural theories. Social cognitive theory rejects this false separateness of structural and process theories. Regulatory processes operate through guiding self structures rather than disembodied from them. Self structures do not emerge autonomously and give rise to behavior divorced from any operational processes. Developed self structures are translated into actions through regulatory functions. The experiences produced by regulatory processes operating on the environment, in turn, shape self structures. In short, both the structure of a self system and the regulatory processes must work together in human functioning.

To illustrate the interdependence of structure and process consider the self-regulation of moral conduct. Social cognitive theory provides a detailed account of how moral standards are constructed through cognitive processing of diverse sources of information conveyed by modeled moral commitments, direct instruction in moral precepts, and the evaluative reactions of others to conduct that has ethical and moral significance (Bandura, 1991a). The nature and pattern of the acquired moral standards represent an enduring cognitive structure for judging the moral status of conduct in situations containing many morally relevant decisional ingredients. One does not have a full set of moral standards on Monday, none on Tuesday, and a new set on Wednesday. The standards of conduct are enduring unless they happen to be altered by powerful experiences. Moral structure is translated into action via self-regulatory mechanisms operating through a set of agentive subfunctions. These include self-monitoring of conduct; judging the conduct in relation to one's moral standards and the circumstances under which it occurs; and applying evaluative self-sanctions depending on whether the conduct measures up to the internal standards or violates them. In short, processes do not operate in a vacuum without structural properties that provide

the substance and direction for those processes. People do not run around mindlessly engaging in structure-free processing of experiences.

A social cognitive theory combining moral rule structures and self-regulative processes operating through them is no less a structural theory of personality than, for example, the psychoanalytic approach in which a superego is posited as a structural feature of personality that controls conduct. The major differences between these two theories are in globality of constructs, explicitness of acquisitional and regulative mechanisms, and explanatory and predictive power, not in whether one theory postulates a structure and the other does not (Bandura, 1973, 1991a).

Moral rule structures do not operate as invariant internal regulators of conduct. Self-regulatory mechanisms do not operate unless they are activated, and there are many processes by which self-sanctions can be disengaged from internal standards to perpetrate inhumane conduct (Bandura, 1986, 1991a). Selective activation and disengagement of internal control thus permits different types of conduct with the same moral standards. Many inhumanities are perpetrated by people who, in other aspects of their lives and other circumstances, behave in considerate, compassionate ways (Bandura, 1991a; Kelman & Hamilton, 1989; Reich, 1990; Sanford & Comstock, 1971). Consideration of the conjoint operation of moral rule structures, self-regulatory mechanisms and contextual influences helps to explain this seeming paradox where more global structures alone do not (Gillespie, 1971). We shall return to the issue of selective self-regulation later.

The nature and regulative function of self-conceptions provides a further illustration in which relinquishment of global measures is sometimes misconstrued as abandonment of structure. Self-appraisal has traditionally been conceptualized in personality theory in terms of the self-concept (Rogers, 1959; Wylie, 1974). Such self theories are concerned, for the most part, with global self-images. A global self-conception does not do justice to the multifaceted structure of self-belief systems. They can vary substantially across different life domains and operate dynamically in concert with other psychosocial determinants. Thus, people's self-conceptions as parents may differ from their occupational self-conception and, even in the occupational realm, their self-conceptions are likely to differ for different facets of occupational competency. Composite self-images are not equal to the task of predicting with any degree of accuracy such intraindividual variability. Social cognitive theory approaches the structure of self-belief systems

in more refined, domain-linked ways that have greater explanatory and predictive power (Bandura, 1986; 1997; Pajares & Kranzler, 1995; Pajares & Miller, 1994, 1995).

A multifaceted approach does not mean that there is no structure or generality to human functioning. Given that no two situations are ever identical, life would be unbearably burdensome if one had to figure out anew how to behave in every situation one encounters. Conversely, life would be exceedingly costly and perilous if people remained blissfully inattentive to situational factors signifying appropriate courses of action and indifferent to the personal and social effects of what they do. In short, neither isolated specificity nor obtuse indiscriminateness is adaptive (Bandura, 1986, 1997a).

Trait theorists framed the issue of human adaptiveness in terms of “consistency” with misleading connotations that perpetuated the search for behavioral fixedness. Consistency not only implies virtues of steadfastness and principled conduct, but it sets up the contrast as “inconsistency” implying instability or expediency. In fact, action devoid of discriminative forethought would produce disastrous results. Nevertheless, the inverted value implications diverted attention from analyses of the dynamic nature of human adaptation to an elusive search on how to extract consistency from variability and efforts to explain how the same global disposition can spawn highly variable conduct (Bandura, 1986).

Much ink has been spilt in fruitless debates about whether behavior is characterized by uniformity or specificity. In fact, as already noted, adaptive functioning requires both generalization and differentiation of action. Therefore, social cognitive theory addresses the determinants and mechanisms governing both generality and specificity of action rather than championing only variability. Whether people behave uniformly or variably depends heavily upon the functional equivalence of the environments. Thus, if acting intelligently in diverse settings has functional value, people will be consistently intelligent in situations that otherwise differ markedly. By contrast, if directives to subordinates improve performance but giving commands to bosses brings rebukes, people will behave authoritatively with subordinates but diplomatically with bosses. Nor is consistency across expressive modalities a blessing. If people acted on every thought that entered their minds, or if their affect ruled every action, they would get themselves into very serious trouble. Here, too, they have to regulate their actions and affective expressions discriminatively. In their conditional conception of dispositions, Mischel and Shoda (1995) document that individuals exhibit stable but discriminative patterns of social

behavior. These behavioral signatures of personality are functionally related to conditional influences that facilitate or deter certain styles of behavior. The particular organization of conditional relations characterizes the uniqueness and coherence of personality for any given individual.

Behavior patterns are not necessarily locked in temporally either. Otherwise, people would not alter their behavior over the course of their development to suit their age and the changing demands of life. Changes over the life course take diverse forms across spheres of functioning rather than follow a consistent, unidirectional course (Baltes, Lindenberger, & Staudinger, in press; Bandura, 1982b). Whether social behavior is invariant or changes over time depends partly on the degree of continuity of environmental conditions over the time span that affect the functional value of different forms of behavior. However, environments are diverse rather than monolithic. In the agentic constructivist perspective of social cognitive theory, people have a hand in promoting continuities in their life. They do so by selecting environments compatible with their values, attributes, and aspirations and by constructing social environments through their actions (Bandura, 1986, 1997; Snyder, 1981). For example, we are all acquainted with problem-prone individuals who, by their aversive conduct, breed negative social milieus wherever they go. In contrast those skilled in bringing out the best in others create beneficial social milieus. Through selection and construction of environments, personality patterns can become self-perpetuating.

Protracted disputes continue to be fought under the banners of the idiographic view that people behave idiosyncratically as though they have no processes in common, or the nomothetic view that people's behavior follows general principles that allegedly grant no individuality. These disputes often fail to distinguish between what one thinks, feels, values and can do from the basic mechanisms by which these personal proclivities are developed and regulated. People obviously differ in their make-up because they come with different biological endowments and experience different admixtures of influences. But cultures provide numerous common direct and modeling influences that create many similar proclivities. An ideographic psychology solely of uniqueness would be a feeble scientific enterprise devoid of generalizability and operative utility. With regard to mechanisms, all people learn through modeling and the effects of their actions. Indeed, in many cultures the word for "teach" is the same as the word for "show" (Reichard, 1938). People regulate their motivation and actions anticipatorily by judgments of their

capabilities, goal aspirations, outcome expectations, and perceived environmental opportunity structures and impediments (Bandura, 1986, 1997). Thus, there is diversity in sociostructural arrangements and the forms that lives take in different social milieus but universality in the basic acquisitional and regulative mechanisms.

Continuity has meaning when applied to distinct styles of behavior. But it takes on considerable indefiniteness when judged in terms of broad categories of adaptation. One can always find linkages between early and later endeavors as, for example, between pursuit of scholarship in childhood and professional careers in adulthood. However, at this level of generality, continuity can be achieved through a variety of life paths. Personal lives, whether marked by continuities or discontinuities have their particular characters. The rapid pace of social and technological changes increasingly requires new forms of adaptation throughout the life course (Bandura, 1997). Broad adaptational categories mask personal changes over time. As in the explanation of both generality and specificity of behavior across contextual variations, a comprehensive theory must also explain both temporal continuities and change.

The dualistic thinking is also reflected in suggestions that the processes of sociocognitive theories be combined with trait theory, such as the five-factor taxonomy, to form the comprehensive theory of personality. According to trait structuralists, factor analyses of everyday descriptors of behavior culled from dictionaries and personality questionnaires will yield the supertraits that constitute the basic structure of personality. Some of the trait theorists rallied with missionary zeal around the “Big Five” global supertraits of extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience as the universal features of personality structure. McCrae and Costa (1996), the leading proponents of this approach, relied on the computer to find the supertraits in the mixture of common descriptors, and bootstrapping to fill them out with additional variants of the descriptors. They dismiss conceptually-guided approaches to personality as “armchair theories,” as though theoretical propositions are never subjected to empirical verification or translated into social applications. The epistemological issue in that metaphoric armchair, which incidentally has served other scientific disciplines remarkably well, centers on whether personologists or machines do the conceptualizing. The essentially atheoretical strategy of research, the shrinking of personal characteristics to a few global traits, the empirical status of the extracted traits, and the exaggerated claims of consensuality regarding the fivefold taxonomy drew sharp critiques (Block, 1995; Carlson, 1992;

Endler & Parker, 1992; Eysenck, 1991; Kroger & Wood, 1993; McAdams, 1992). Although the fivefold clustering is presented as a “model,” a descriptive classification of habitual behavior is not a conceptual model, which must specify a system of postulates governing the phenomenon of interest.

Seeking the structure of personality by factor analyzing a limited collection of behavioral descriptors essentially reduces to a psychometric method in search of a theory. In an earlier expedition in the unabridged dictionary, Gordon Allport came up with thousands of trait descriptors. This vast collection required severe pruning to reduce them to a small manageable lot. The products of factor analysis are predetermined by what one puts into it. The prepruning and the methods of factor extraction used largely preordain the clusters that will be found. Adding a few more classes of trait descriptors yields more supertraits (Almagor, Tellegen & Waller, 1995). An even more inclusive collection of descriptors with built-in assemblages of redundancies would probably yield still more clusters. Moreover, sets of descriptors of sociocognitive belief systems and other self-regulatory factors that constitute the personality structures governing human behavior would produce quite different factors than descriptors of habitual behaviors.

Not surprisingly, there are disputes among trait theorists about how many supertraits there are. Proponents of the fivefold taxonomy assert that there are five supertraits (McCrae & Costa, 1997), but others contend that there are only two (Digman, 1997), or three (Eysenck, 1991), or six (Jackson, Ashton, & Tomes, 1996), or seven (Tellegen & Waller, 1987), and still others find even more basic traits (Barrett & Klein, 1982). Variations in the claimed size of the trait collection have fueled semantic debates about what constitutes a trait, how broad it should be, and whether traits should be analyzed as untiered groupings or as tiered groupings with cardinal traits subsuming secondary ones (Guastello, 1993). This controversy is reminiscent of the debates of yesteryear about the correct number of instincts or cardinal motives.

Trait theorists disagree not only over how many supertraits there are but what factors belong in them and what they should be called (Block, 1995). To add further to classificatory fuzziness, some of the trait descriptors show up in more than one trait cluster creating significant intertrait correlations. The traits are measured by either single word descriptors or brief phrases stripped of any contextual conditions. This is a socially disembodied reclusive personality. We know that the same behavior can mean different things in different contexts. For example, the

item “*prefer to do things alone*” is a rejective behavior in a marital relationship but self-sufficiency in a physical fitness routine. Killing is a heroic act deserving commendation on the battlefield but a homicidal act demanding imprisonment in civilian life. The behavioral descriptors that form the trait terms may, therefore, shift from one cluster to another depending on the contexts in which the behavior is performed and the purposes it is designed to serve.

The big-five adherents spend much time comparing lists of descriptors used by different trait theorists, seeking analogues of the competitors’ supertraits to the fivefold clusters, and explaining misfitting ones and how they might be subsumed under the five clusters. Formal goodness-of-fit tests, however, reveal a poor fit of the empirical data to five distinct personality features (Parker, Bagby, & Summerfeldt, 1993). The substantial intercorrelations among some of the supertraits refute their distinctiveness. McCrae and his colleagues argue that the fivefold taxonomy is correct, but the statistical methods are at fault (McCrae, Zonderman, Costa, Bond, & Paunonen, 1996). The view that the supertraits are distinct yet have overlapping defining traits does not provide an adequately specified conceptual model required for definitive tests of goodness of fit. The discounting and refitting of discordant findings convey the impression that the fivefold taxonomy has become the procrustean bed of trait theorizing. Some personologists suggest that trait theorists should seek better representation of the diversity of personal characteristics by adding clusters of theoretically distinct items rather than reiterating a fivefold clustering within a stripped-down assemblage of items (Jackson, Paunonen, Fraboni, & Goffin, 1996).

Development of a comprehensive theory of personality requires an integrated conceptual scheme that classifies not only behaviors but specifies their determinants and key mechanisms through which they operate and the modes by which desired ones can be fostered and undesired ones altered. Theory guides the development of appropriate measures, specifies the conditions for empirical verification of its core propositions, and informs effective psychosocial programs of change.

The so-called supertraits are essentially clusters of habitual behaviors. People are asked to rate whether they are courteous, methodical, curious, fearful, get into arguments, and the like. It comes as no surprise, for example, that a collection of behaviors that resemble one another, such as being organized, dutiful, disciplined, and effortful form a behavioral cluster dubbed “conscientiousness.” Some of the clusters cohere better than others depending on the degree of

redundancy of behavioral descriptors representing them. However, descriptive behavioral clusters tell us little about the determinants and regulative structures governing the behaviors that make up a particular cluster.

In trait analyses, the behavioral descriptors tend to get reified as causes of behavior. Consider conscientiousness as an example. In measuring this factor, individuals rate such things as whether they are a “productive person who always get the job done,” “work hard to accomplish my goals,” and “perform the tasks assigned to me conscientiously.” Conscientious behavior is said to affect how well people perform on a job. One can, of course, use past conscientious performance as a predictor of future conscientious job performance. But conscientious behavior is neither a personality structure nor is such behavior a cause of itself.

The proponents of taxonomies founded on behavioral descriptors locate the personality structure in the wrong place. As shown in Figure 1, the determinative personality structures are in the self system not in the behavioral expressions. To continue with the above example, the personal determinants of job performance include, among other things, people’s knowledge structures, their skills, self-beliefs of efficacy to manage given activities and environmental demands, and self-regulatory capabilities operating through goals and outcome expectancies rooted in a value structure (Bandura, 1986, 1997a; Feather, 1982; Locke & Latham, 1990). These are the personality structures and processes operating within the self system that regulate level of motivation, performance attainments, and affective states. If behavior is the personality structure, then even the lowest organisms have at least a twofold personality characterized by approach and avoidance proclivities.

The paucity of guiding theory in seeking the structure of personality through factor analyses of behavioral descriptors is further revealed in the ambiguity about the sources of the supertraits. They are said to be “set like plaster” by innate endowment and unspecified experiences into terminal entities by early adulthood and remain essentially unchangeable thereafter (Costa & McCrae, 1994). The apparent fixedness of personal attributes throughout adulthood most likely has more to do with the insensitivity of nonconditional global measures than with unchangeableness of personal factors over the life course. Global measures of personal attributes mask significant patterns of changes with age that domain-linked measures reveal (Brandstädter, Krampen, & Heil, 1996; Lachman, 1986; McAvay, Seeman, & Rodin, 1996). Adding conditional factors to personality assessments further increases their sensitivity to

variability in the way individuals behave in different social contexts (Matsumoto, Kudoh, & Takeuchi, 1996).

Each of the supertraits is a conglomerate of facets. For example, the supertrait openness to experience includes such diverse activities as endorsement of daydreaming, rejection of religious authority, excitement over art and poetry, support of controversial speakers, and trying foreign foods. An individual may display high intellectual curiosity and openness to technical and commercial ideas but not care much about exotic foods or what the glitterotti decree is modern art. By contrast, another individual may support diverse artistic endeavors but act like a Luddite toward technological innovations. Efforts to understand the nature, origin, and predictiveness of scientific curiosity, for example, should not clutter the personal determinant with preferences for exotic foods. It is not that a general disposition predicts behavior, but that a few of the behavioral descriptors in the conglomerate mixture may provide some overlap with the particular behavior being predicted to yield a correlate. Global conglomerates do not lend themselves to causal analyses because human experiences do not occur at the level of averaged behavioral conglomerates or life circumstances reduced to a nondescript average.

Nor are conglomerate measures equipped to explain the wide variations in behavior by the same individual in a given domain of activity under different situational circumstances. Trait theorists sought to remedy the weak predictiveness of trait indices by averaging ratings of behavior across situations and occasions, which presumably provides a truer measure of the trait (Epstein, 1983). However, aggregation does not produce much predictive gain when actual behavior in different situations rather than self-reports of behavior is measured (Rushton, Brainerd, & Pressley, 1983). No amount of aggregation will elevate correlations between a given form of behavior under different circumstances that social sanctions have disjoined. Aggressive acts by delinquents toward parish priests and toward rival gang members will correlate poorly, however much averaging one does. In a world characterized by contingency, one can lose rather than gain predictive power by trying to predict behavior from an average value that typifies neither situation. The situational averaging solution reminds one of the nonswimmer who drowned while crossing a river that averaged only three feet in depth.

Other efforts to boost correlates included aggregating differing forms of conduct, such as physical aggression, verbal aggression, and antagonistic conduct into a conglomerate index. Mixing behaviors obscures the understanding of psychological functioning as does the mixing of

situations. To be able to predict through aggregation that individuals will sometime, somewhere, do something within a wide assortment of acts is of no great interest. For example, people want to know whether adolescent offenders are likely to commit physical assaults, not whether sometime, somewhere, they may speak offensively or behave antagonistically, or do something else untoward.

There is little evidence that the repackaging of traits in a fivefold format has produced any better prediction of human behavior than do the traditional trait measures (Pervin, 1994), which are not much to rave about. The inflated self-congratulatory claims of breakthrough stand in stark contrast to the paucity of empirical reality tests of predictiveness. It is the replication of fivefold clustering rather than evidence of predictive power that seems to be racing the pulse of adherents to this taxonomic view of personality. It should be noted in passing that the standard correlate of omnibus trait measures is not .30, as commonly assumed. When it comes to predicting particular forms of behavior, global measures are weaker or nonsignificant predictors. Gains in social consensus among trait theorists about the number of supertraits without gains in predictive power hardly constitutes an advance in the field of personality.

Job productivity is often cited as a domain in which the predictive utility of the fivefold approach has been demonstrated. In commenting on behavioral description versus prediction, Hough (1992) notes that the fivefold supertraits are not only too general and heterogeneous in facets but lack relevant factors to be useful in accounting for job performance. Innumerable studies have shown that personal goals are consistent predictors of job productivity (Locke & Latham, 1990). Barrick, Mount and Strauss (1993) found that conscientiousness was related to actual sales productivity but neither extraversion, which presumably should make good sellers, nor any of the other supertraits had any predictive value. Even the relationship between conscientiousness and sales performance disappears when the influence of the goals employees set for themselves is removed. Given the view that personality is essentially unchangeable after early adulthood, this taxonomic approach offers little hope of self-betterment along the life course for those who happened to have gotten off to a poor start. Once cast into a nonconscientious mold by innate endowment and experience, one remains ever nonconscientious thereafter. To continue with the productivity example, goal theory offers a much more optimistic view of human changeableness with sound conceptual and empirical backing on how to instill goals and how they work. Teaching people how to regulate their motivation and activities

through goal setting enables them to achieve sizeable increases in productivity regardless of their age or sphere of activity (Bandura, 1991b; Locke & Latham; 1990).

A comparative test conducted by Caprara and his associates further illustrates the benefit in predictiveness and social utility of personality factors linked to modifiable determinants and explanatory mechanisms (Caprara, Barbaranelli, & Pastorelli, 1998). They tested the longitudinal predictiveness of the big five factors and three aspects of perceived self-efficacy (social, academic, and self-regulatory) for four different forms of adolescent functioning. In a stepwise regression analysis, perceived academic and self-regulatory efficacy predicted academic achievement, peer preference, and degree of internalization problems and internalization problems. Except for a relationship between openness to experience and academic achievement, the big five factors proved unproductive. Social cognitive theory provides explicit guidelines on how to build a resilient sense of efficacy, which adds to the social utility of the theory. Perceived self-efficacy operates in concert with other sociocognitive factors in a multifaceted causal structure. The addition of goal aspirations, outcome expectations, and perceived opportunities and impediments would further enhance the predictive power of the theory.

The value of a psychological theory is judged not only by its explanatory and predictive power but also by its operative power to guide change in human functioning. A descriptive taxonomy of aggregated behaviors offers no guidance on how to effect personal or social change. Social cognitive theory provides a large body of particularized knowledge on how to develop the cognitive structures and enlist the processes of the self system that govern human adaptation and change (Bandura, 1986, 1997a). It lends itself readily to applications because the factors it posits are empirically anchored in indices of functioning and are amenable to change. The determinants and mechanisms through which they operate are spelled out so the theory provides explicit guidelines on how to structure conditions that foster personal and social change.

One could argue that a taxonomic scheme is not designed to be explanatory or prescriptive for change. However, trait theorists often make conflicting claims. On the one hand, their classification scheme is portrayed as simply a descriptive taxonomy. Once the major classes of behavior are firmly established, their origins and functions could be examined. On the other hand, behavioral characteristics are often reified as dynamic causal factors. This creates a serious problem of circularity: Behavior becomes the cause of behavior. Even as descriptive taxonomies, global traits cannot shed much light on the nature of personal causation because personal

determinants operate conditionally at a particular contextualized level not at a socially detached conglomerate level.

Duality of Social Structure and Personal Agency

Human adaptation and change are rooted in social systems. Therefore, personal agency operates within a broad network of sociostructural influences. In these agentic transactions, people are producers as well as products of social systems. Social structures are devised to organize, guide, and regulate human affairs in given domains by authorized rules and sanctions. For the most part, social structures represent authorized social practices carried out by human beings occupying designated roles (Giddens, 1984). Within the rule structures, there is a lot of personal variation in their interpretation, enforcement, adoption, circumvention, or active opposition (Burns & Dietz, in press). It is not a dichotomy between a disembodied social structure and personal agency but a dynamic interplay between individuals and those who preside over the institutionalized operations of social systems. Social structures are created by human activity. The structural practices, in turn, impose constraints and provide resources and opportunity structures for personal development and functioning. Given this dynamic bidirectionality of influence, social cognitive theory rejects a dualism between personal agency and social structure.

Sociostructural theories and psychological theories are often regarded as rival conceptions of human behavior or as representing different levels and proximity of causation. Human behavior cannot be fully understood solely in terms of sociostructural factors or psychological factors. A full understanding requires an integrated perspective in which sociostructural 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 on social systems not just reactively.

In the theory of triadic reciprocal causation, sociostructural and personal determinants are treated as cofactors within a unified causal structure (Bandura, 1997). Diverse lines of research lend support to this interdependent multicausality. For example, poverty is not a matter of multilayered or distal causation. Lacking the money to provide for the subsistence of one's

family impinges pervasively on everyday life in a very specific, proximal way. Elder and his colleagues show that economic hardship, by itself, has no direct influence on parents' efficacy to promote their children's development (Elder & Ardel, 1992). Families who feel overwhelmed by the hardships experience high subjective strain, whereas those who feel they can make it through tough times experience less emotional strain. In intact households, subjective strain impairs parental efficacy by increasing marital discord. For single parents, subjective strain weakens parents' sense of efficacy both directly and by creating feelings of despondency. Thus the impact of both economic conditions and family structure operate through self processes.

Similarly, socioeconomic status does not directly affect children's academic development. Rather, it does so by influencing parents' educational aspirations for their children (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996a). Parental aspirations and belief in their educational parenting efficacy, in turn, influence their children's scholastic performances by raising their educational aspirations and beliefs in their scholastic capabilities. Different facets of perceived self-efficacy operating in concert with other psychosocial factors contribute to academic achievement through different mediated paths. Multifaceted measures thus provide a refined view of causal structures that global measures of perceived efficacy cannot provide.

A similar integrated causality governs occupational trajectories of youth (Bandura, Barbaranelli, Caprara, & Pastorelli, 1997). Socioeconomic status has no direct effects on either occupational efficacy or career considerations. Rather, it has an indirect impact by influencing parents' beliefs in their efficacy to promote their children's educational development and the aspirations they hold for them. Parental efficacy and aspirations raise children's educational aspirations and their sense of academic, social, and self-regulatory efficacy. The patterning of children's perceived efficacy influences the types of occupational activities they believe they can do, which, in turn, is linked to the kinds of jobs they would choose for their life's work. In other aspects of family functioning, the impact of socioeconomic status on child outcomes is entirely mediated through parents' child management practices (Baldwin, Baldwin, Sameroff, & Seifer, 1989).

Similar paths of multicausality mediated through self processes are evident in the functioning of educational systems as well as familial systems. Schools that have many poor students and those of disadvantaged minority status generally do poorly academically. However, these sociodemographic characteristics exert their impact on schools' level of achievement

largely by shaping teachers' beliefs in their collective efficacy to motivate and educate their students (Bandura, 1997). Schools that have teachers who believe strongly in their collective instructional efficacy do well academically regardless of the sociodemographic characteristics of the student bodies. In verifying the path of influence from sociostructural conditions through familial and self-regulatory processes, these types of studies clarify how personal agency operates within a broad network of sociostructural influences.

FUNDAMENTAL HUMAN CAPABILITIES

In social cognitive theory, people are neither driven by global traits nor automatically shaped and controlled by the environment. As we have already seen, they function as contributors to their own motivation, behavior, and development within a network of reciprocally interacting influences. Persons are characterized within this theoretical perspective in terms of a number of fundamental capabilities. These are reviewed in the sections that follow.

Symbolizing Capability

Social cognitive theory assigns a central role to cognitive, vicarious, self-regulatory, and self-reflective processes in human development and functioning (Bandura, 1986). The extraordinary capacity to represent events and their relationships in symbolic form provides humans with a powerful tool for comprehending their environment and for creating and managing environmental conditions that touch virtually every aspect of their lives. Symbols serve as the vehicle of thought.

Most environmental events exert their effects through cognitive processing rather than directly. Cognitive factors partly determine which environmental events are observed, what meaning is conferred on them, what emotional impact and motivating power they have, and how the information they convey is organized and preserved for future use. Through the medium of symbols, people transform transient experiences into cognitive models that serve as guides for reasoning and action. People transcend time and place in communicating with others at any distance. By symbolizing their experiences, people give structure, meaning, and continuity to their lives.

Knowledge provides the substance and thinking operations provide the tools for cognitive problem solving. Rather than solve problems solely by performing actions and suffering the consequences of missteps, people usually test possible solutions in thought. They generate alternative solutions to problems, and discard or retain them based on estimated outcomes without having to go through a laborious behavioral search. The remarkable flexibility of symbolization also enables people to create novel and fanciful ideas that transcend their sensory experiences. One can easily think of cows jumping over the moon even though these feats are physically impossible. The other distinctive human capabilities are founded on this advanced capacity for symbolization. However, in keeping with the interactional perspective, social cognitive theory specifies the social origins of thought and the mechanisms through which social factors exert their influence on cognitive functioning (Bandura, 1986).

Although the capacity for symbolization vastly expands human capabilities, if put to faulty use, it can also breed personal distress. Many human dysfunctions and torments stem from problems of thought. This is because, in their thoughts, people often dwell on painful pasts and on perturbing futures of their own invention. They burden themselves with stressful arousal through anxiety-provoking rumination. They debilitate their own efforts by self-doubting and other self-defeating ideation. They constrain and impoverish their lives through phobic thinking. They drive themselves to despondency by harsh self-evaluation and dejecting modes of thinking. And they often act on misconceptions that get them into trouble. Thought can thus be a source of human failings and distress as well as a source of human accomplishments.

Vicarious Capability

A comprehensive theory of personality must explain the acquisition of competencies, attitudes, values, and emotional proclivities not just the enactments of behaviors that get dubbed as traits. There are two basic modes of learning. People learn by experiencing the effects of their actions and through the power of social modeling. Psychological theories have focused almost exclusively on learning from positive and negative response consequences. Natural endowment provides humans with enabling biological systems but few inborn skills. They must be developed over long periods and altered to fit changing conditions over the life course. If knowledge and skills had to be shaped laboriously by response consequences without the benefit of modeled

guidance, a culture could never transmit its language, social practices, mores, and adaptive competencies. Mistakes can produce costly or even fatal consequences. The prospects of survival would, therefore, be slim indeed if one had to rely solely on trial-and-error experiences. Moreover, the constraints of time, resources, and mobility impose severe limits on the situations and activities that can be directly explored for the acquisition of new knowledge and skills. Fortunately, the tedious and hazardous trial-and-error learning can be short cut by social modeling.

Humans have evolved an advanced capacity for observational learning that enables them to expand their knowledge and competencies rapidly through the information conveyed by the rich variety of models. Virtually all behavioral, cognitive, and affective learning from direct experience can be achieved vicariously by observing people's actions and the consequences for them (Bandura, 1986; Rosenthal & Zimmerman, 1978).

Much human learning occurs either designedly or unintentionally from the models in one's immediate environment. However, a vast amount of knowledge about people, places, and styles of thinking and behaving is gained from the extensive modeling in the symbolic environment of the electronic mass media. A major significance of symbolic modeling lies in its tremendous scope and multiplicative power. Unlike learning by doing, which requires shaping the actions of each individual through repeated consequences, in observational learning a single model can transmit new ways of thinking and behaving simultaneously to many people in widely dispersed locales. Video and computer delivery systems feeding off telecommunications satellites are now rapidly diffusing new ideas, values, and styles of conduct worldwide.

Most psychological theories were cast long before the advent of revolutionary advances in the technology of communication. As a result, they give insufficient attention to the increasingly powerful role that the symbolic environment plays in contemporary societies. For example, television has vastly expanded the range of models to which members of society are exposed day in and day out. By drawing on these modeled patterns of thought and behavior, observers transcend the bounds of their immediate environment. Because the symbolic environment occupies a major part of people's everyday lives, the study of human development and acculturation in the electronic era must be broadened to include electronic acculturation. At the societal level, symbolic modes of modeling are transforming how social systems operate and serving as a major vehicle for sociopolitical change (Bandura, 1997; Braithwaite, 1994).

Insert Figure 2 about here

Observational learning, which can take the form of behavioral, cognitive, valuational, and affective change, is governed by four component subfunctions (Figure 2). *Attentional processes* determine what people observe in the profusion of modeling influences and what information they extract from what they notice. People cannot be much influenced by observed events if they do not remember them. A second major subfunction governing observational learning concerns *representational processes*. Retention involves an active process of transforming and restructuring the information conveyed by modeled events into rules and conceptions for memory representation. In the third subfunction—*the behavioral production process*—symbolic conceptions are translated into appropriate courses of action. This is achieved through a conception-matching process in which behavioral enactments are structured until they match the conception of the activity.

Behavior operates under hierarchical levels of control. Cognitive guidance is important in early and intermediate phases of competency development. Once proficient modes of behavior become routinized, they are regulated largely by lower sensory-motor systems and no longer require higher cognitive control (Carroll & Bandura, 1990). However, when routinized behavior patterns fail to produce desired results, cognitive control again comes into play in the search for better solutions. Control reverts to lower control systems after an adequate means is found and becomes the habitual way of doing things.

Partial disengagement of thought from proficient action has considerable functional value because it frees cognitive activity for matters requiring attention. If one had to think before carrying out every routine activity, it would consume most of one's attention and create a monotonously dull inner life. Efficient functioning requires a mix of routinized and mindful action. As a result of routinization, people often react with fixed ways of thinking unreflectively and with habitual ways of behaving unthinkingly. Nonconscious information processing and routinization of thought and action should be distinguished from an unconscious mind acting as a concealed agent orchestrating behavior in an unwitting host organism. To reify, from evidence of automatic and routinized responses, a subterranean agent steering perceptions and actions is to commit a serious metaphysical transgression.

The fourth subfunction in modeling concerns *motivational processes*. Social cognitive theory distinguishes between acquisition and performance because people do not perform everything they learn. Performance of observationally learned behavior is influenced by three major types of incentive motivators—direct, vicarious, and self-produced. People are more likely to adopt modeled styles of behavior if they produce valued outcomes than if they have unrewarding or punishing effects. The observed cost and benefits accruing to others influence the adoption of modeled patterns in much the same way as do directly experienced consequences. People are motivated by the successes of others who are similar to themselves, but they are discouraged from pursuing courses of behavior that they have seen often result in aversive consequences. The evaluative reactions people generate to their own behavior also regulate which observationally learned activities they are most likely to pursue. People express what they find self-satisfying and reject what they personally disapprove.

Abstract and Creative Modeling

Modeling is not simply a process of response mimicry as commonly believed. Modeled judgments and actions may differ in specific content but embody the same rule. For example, a model may deal with moral dilemmas that differ widely in the nature of the activity but apply the same moral standard to them. Modeled activities thus convey rules for generative and innovative behavior. This higher level learning is achieved through abstract modeling. Once observers extract the rules underlying the modeled activities they can generate new behaviors that go beyond what they have seen or heard.

Creativeness rarely springs entirely from individual inventiveness. A lot of modeling goes on in creativity. By refining preexisting innovations, synthesizing them into new ways and adding novel elements to them something new is created. When exposed to models of differing styles of thinking and behaving, observers vary in what they adopt from the different sources and thereby create new blends of personal characteristics that differ from the individual models (Bandura, Ross & Ross, 1963). Modeling influences that exemplify new perspectives and innovative styles of thinking also foster creativity by weakening conventional mind sets (Belcher, 1975; Harris & Evans, 1973).

Motivational, Emotional and Valuational Effects

In addition to cultivating new competencies, modeling influences can alter incentive motivation (Bandura, 1986). Seeing others achieve desired outcomes by their efforts can instill motivating outcome expectations in observers that they can secure similar benefits for comparable performances. These motivational effects rest on observers' judgments that they have the efficacy to produce the modeled level of attainments and that comparable accomplishments will bring them similar beneficial outcomes. By the same token, seeing others punished for engaging in certain activities can instill negative outcome expectations that serve as disincentives.

People are easily aroused by the emotional expressions of others. If the affective reactions of models only aroused observers fleetingly, it would be of limited psychological import. What gives significance to vicarious emotional influence is that observers can acquire lasting attitudes and emotional and behavioral proclivities toward persons, places or things that have been associated with modeled emotional experiences. They learn to fear the things that frightened models, to dislike what repulsed them and to like what gratified them (Bandura, 1992; Berger, 1962; Duncker, 1938). Fears and intractable phobias are ameliorated by modeling influences that convey information about coping strategies for exercising control over the things that are feared. The stronger the instilled sense of perceived coping efficacy, the bolder the behavior (Bandura, 1997a; Williams, 1992). Values can similarly be developed and altered vicariously by repeated exposure to modeled preferences.

During the course of their daily lives, people have direct contact with only a small sector of the physical and social environment. In their daily routines, they travel the same routes, visit the same familiar places, and see the same group of friends and associates. As a result, their conceptions of social reality are greatly influenced by symbolic representations of society, mainly by the mass media (Gerbner, 1972). To a large extent, people act on their images of reality. The more their conceptions of the world around them depend on portrayals in the media's symbolic environment, the greater is its social impact (Ball-Rokeach & DeFleur, 1976).

To sum up, modeling influences serve diverse functions -- as tutors, motivators, social prompters, emotion arousers, and shapers of values and conceptions of reality. The vast body of knowledge on vicarious processes is being widely applied for personal development, therapeutic

purposes and social change (Bandura, 1986, 1997; Bandura & Rosenthal, 1978; Rogers, Vaughan, Swalehe, Rao & Sood, 1996; Singhal & Rogers, 1989).

Forethought Capability

Another distinctive human characteristic is the capacity for forethought. The ability to bring anticipated outcomes to bear on current activities promotes foresightful behavior. It enables people to transcend the dictates of their immediate environment and to shape and regulate the present to fit a desired future. Much human self-directedness is the product of forethought. The future time perspective manifests itself in many different ways. People set goals for themselves, anticipate the likely consequences of prospective actions, and plan courses of action likely to produce desired outcomes and avoid detrimental ones (Bandura, 1991b; Feather, 1982; Locke & Latham, 1990; Markus & Nurius, 1986; Pervin, 1989). Through the exercise of forethought, people motivate themselves and guide their actions anticipatorily. When projected over a long time course on matters of value, a forethoughtful perspective provides direction, coherence, and meaning to one's life. As people progress in their life course they continue to plan ahead, reorder their priorities, and structure their lives accordingly.

The capacity for intentional purposive action is rooted in symbolic activity. Future events cannot, of course, be causes of current motivation and action because they have no actual existence. However, by being represented cognitively in the present, foreseeable future events are converted into current motivators and regulators of behavior. In this form of anticipatory self-guidance, behavior is motivated and directed by anticipated outcomes rather than being pulled by an unrealized future state.

Outcome Expectations

People regulate their behavior partly by outcome expectations. Courses of action that are likely to produce positive outcomes are generally adapted and used; those that bring unrewarding or punishing outcomes are usually discarded. Response consequences do not automatically shape and control actions as claimed by radical behaviorists. Rather, people construct outcome expectations from observed conditional relations between environmental events and between

given actions and outcomes (Bandura, 1986). In social cognitive theory, “reinforcement” is a form of incentive motivation operating through outcome expectations rather than an automatic strengthener of responses.

Because outcomes exert their influence through forethought, they have little or no motivational or behavioral impact until people discover how outcomes are linked to actions in their environment. This is no easy matter. In everyday life, actions usually produce mixed effects: The outcomes may occur immediately or far removed in time; the same behavior may have different effects depending on where, when, and toward whom it is performed, and many situational factors affect behavioral outcomes. Such causal ambiguity provides a fertile ground for misjudgment. When belief about the effects of actions differs from actuality, behavior is weakly controlled by its actual consequences until repeated experience instills realistic beliefs. Yet it is not always one’s beliefs that change in the direction of social reality. Acting on erroneous beliefs can alter how others behave, thus shaping the social reality in the direction of the misbeliefs (Snyder, 1980).

External consequences are not the only kind of outcomes that influence human behavior. As noted earlier, people profit from the successes and mistakes of others as well as from their own experiences. As a general rule, they do things they have seen succeed and avoid those they have seen fail. However, observed outcomes exert their influence through perceived similarity that one is likely to experience similar outcomes for similar courses of action and that one possesses the capabilities to achieve similar performances.

Observed outcomes can also affect the level of motivation by altering the value of external outcomes through social comparison processes. People weigh their own outcomes by those accruing to others for similar performances. For example, the same monetary raise is likely to be viewed negatively by persons who have seen colleagues compensated more generously, but viewed positively if colleagues have been compensated less well. The relational properties of incentives affect not only motivation and performance but personal satisfaction and discontent. Equitable outcomes foster a sense of well-being; inequitable ones breed discontent and resentment (Bandura, 1973; Martin, 1981).

Self-Regulatory Capability

People are not only knowers and performers guided by outcome expectations. They are also self-reactors with a capacity for self-direction. This capability is grounded in a self-regulatory structure. Successful development requires the substitution of internal regulation and direction for external sanctions and demands. Once the capability for self-direction is developed, self-demands and self-sanctions serve as major guides, motivators, and deterrents. In the absence of internal standards and self-sanctions, people would behave like weather vanes, constantly shifting direction to conform to whatever momentary influence happened to impinge upon them.

Subfunctions of self-regulation

The self-regulation of motivation, affect, and action operates through a set of psychological subfunctions (Figure 3). They include self-monitoring, judgmental, and self-reactive subfunctions.

 Insert Figure 3 about here

People cannot influence their own motivation and actions very well if they do not pay adequate attention to their thought processes and performances, the conditions under which they occur, and to the immediate and distal effects they produce. Therefore, success in self-regulation partly depends on the fidelity, consistency, and temporal proximity of self-monitoring (Kazdin, 1974). Depending on people's values and the functional significance of different activities, they attend selectively to certain aspects of their functioning and ignore those that are of little import to them.

Observing one's pattern of behavior is the first step toward doing something to affect it, but in itself, such information provides little basis for self-directed reactions. Actions give rise to self-reactions through a judgmental function that includes several subsidiary processes. Personal standards for judging and guiding one's actions play a major role in self-motivation and in the exercise of self-directedness (Bandura, 1991b; Bandura & Cervone, 1986; Locke & Latham, 1990). Whether a given performance is regarded favorably or negatively will depend upon the personal standards against which it is evaluated. Once people commit themselves to a valued goal, they seek self-satisfaction from fulfilling it and are prompted to intensify their efforts by

discontent with substandard performances. The anticipated affective self-reactions serve as incentive motivators for personal accomplishments.

For most activities, there are no absolute measures of adequacy. People must, therefore, evaluate their performances in relation to the attainments of others (Festinger, 1954; Goethals & Darley, 1977). The referential comparisons may take the form of performance attainments of others in similar situations, standard norms based on representative groups, one's own past attainments, or comparative group performance in societies organized around collectivistic principles (Bandura, 1986; Bandura & Jourden, 1991). Another factor in the judgmental component of self-regulation concerns the valuation of activities. The more relevant performances are to one's value preferences and sense of personal adequacy, the more likely self-evaluative reactions are to be elicited in that activity. Self-reactions also vary depending on how people perceive the determinants of their behavior (Weiner, 1986). They are most likely to take pride in their accomplishments when they ascribe their successes to their own abilities and efforts. They respond self-critically to faulty performances for which they hold themselves responsible but not to those they perceive as due to unusual circumstances, to insufficient capabilities, or to unrealistic demands.

Motivation based on personal standards involves a cognitive comparison process between the standards and perceived performance attainments. The motivational effects do not stem from the standards themselves but rather from several self-reactive influences. These include perceived self-efficacy to fulfill one's standards, affective self-evaluation of one's attainments, and adjustment of proximal subgoals depending on the progress one is making (Bandura 1991b; Bandura & Cervone, 1986).

Performance judgments set the occasion for self-reactive influence. Self-reactions provide the linking mechanism by which standards regulate courses of action. The self-regulatory control is achieved by creating incentives for one's own actions and by anticipative affective reactions to one's own behavior depending on how it measures up to personal standards. Thus, people pursue courses of action that give them self-satisfaction and a sense of self-worth, but they refrain from behaving in ways that result in self-censure.

Some of the self-motivating incentives may be tangible outcomes, as when people get themselves to do things they would otherwise put off or avoid altogether by making tangible rewards dependent upon performance attainments. However, people value their self-respect and

the self-satisfaction derived from a job well done more highly than they do material rewards. The self-regulation of behavior by self-evaluative reactions is a uniquely human capability. Self-evaluation gives direction to behavior and creates motivators for it.

Most theories of self-regulation are founded on a negative feedback system (Carver & Scheier, 1981; Lord & Hanges, 1987; Powers, 1973). In this view, negative discrepancy between one's perceived performance and an adopted standard motivates action to reduce the disparity. However, self-regulation by negative discrepancy tells only half the story and not necessarily the more interesting half. People are proactive, aspiring organisms. Human self-motivation relies both on discrepancy production and discrepancy reduction. It requires proactive control as well as reactive control. People initially motivate themselves through proactive control by setting themselves valued performance standards that create a state of disequilibrium and then mobilizing their effort on the basis of anticipatory estimation of what it would take to reach them. Feedback control comes into play in subsequent adjustments of effort expenditure to achieve desired results. After people attain the standard they have been pursuing, those who have a strong sense of efficacy generally set a higher standard for themselves. The adoption of further challenges creates new motivating discrepancies to be mastered.

Interplay Between Personal and External Outcomes

After self-regulatory capabilities are developed, behavior usually produces two sets of consequences: self-evaluative reactions and external outcomes. They may operate as complementary or opposing influences on behavior (Bandura, 1986). External outcomes are most likely to wield influence when they are compatible with self-evaluative ones. This condition exists when externally rewardable actions are a source of self-satisfaction and self-pride and when externally punishable ones bring self-censure. Behavior is also highly susceptible to external influences in the absence of countervailing internal standards. People with weak commitment to personal standards adopt a pragmatic orientation, tailoring their behavior to fit whatever the situation seems to call for (Snyder, 1987). They become adept at reading social cues and varying their self-presentation accordingly.

People commonly experience conflicts of outcomes when they are rewarded socially or materially for behavior they personally devalue. When self-devaluative consequences outweigh the force of external rewards they have little sway. There is no more devastating consequence than self-contempt. But if the allure of rewards outweigh self-censure, the result can be cheerless

compliance. However, people possess sociocognitive skills for reconciling perturbing disparities between personal standards and conduct. The mechanisms by which losses of self-respect for devalued conduct are reduced is considered shortly.

Another type of conflict of outcomes arises when individuals are punished for activities they value highly. Principled dissenters and nonconformists often find themselves in such predicaments. The relative strength of self-approval and external censure determine whether the courses of action will be pursued or abandoned. There are individuals, however, whose sense of self-worth is so strongly invested in certain convictions that they will submit to prolonged maltreatment rather than accede to what they regard as unjust or immoral. Sir Thomas More, who was beheaded for refusing to compromise his resolute convictions, is a notable example from history. It is not uncommon for people to endure hardships for unyielding adherence to ideological and moral principles.

Another common situation is one in which both the external support and reward for given activities are minimal or lacking, and individuals have to sustain their efforts largely through self-encouragement. For example, innovators persevere despite repeated failures in endeavors that provide neither rewards nor recognition for long periods, if at all during their lifetime. Innovative pursuits that clash with existing preferences bring criticism and social rejection. To persist, innovators must be sufficiently convinced of their efficacy, the worth of their pursuit to self-reward their efforts, and not be much concerned with the opinions of others (Shepherd, 1995; White, 1982).

Disengagement of Moral Self-Regulatory Agency

In development of competencies and aspirational pursuits, the self-regulatory standards selected as a mark of adequacy are progressively raised as knowledge and skills are acquired and challenges are met. In many areas of social and moral behavior, the self-regulatory standards have greater stability. People do not change from week to week what they regard as right or wrong or good or bad. After people adopt a standard of morality, their negative self-sanctions for actions that violate their personal standards, and their positive self-sanctions for conduct faithful to their moral standards serve as the regulatory influences (Bandura, 1991). These self-referent processes provide the motivational as well as the cognitive regulators of moral conduct. Self-sanctions keep conduct in line with personal standards. The exercise of moral agency has dual aspects – *inhibitive* and *proactive* (Bandura, in press). The inhibitive form is manifested in the power to refrain from behaving inhumanely, whereas the proactive form of morality is expressed in the power to behave humanely.

Moral standards do not function as fixed internal regulators of conduct, as implied by theories of internalization that posit global entities such as conscience and superego as constant overseers of conduct. There are many social and psychological maneuvers by which moral self-reactions can be selectively disengaged from inhumane conduct (Bandura, 1991a). Figure 4 shows that the disengagement may center on the conduct itself, on the sense of personal agency for the actions taken, the consequences that flow from actions, or on the victims of mistreatment.

 Insert Figure 4 about here

One set of disengagement practices operates on the cognitive construal of the conduct itself. In this process of *moral justification*, detrimental conduct is made personally and socially acceptable by portraying it as serving socially worthy or moral purposes. People can then act on a moral imperative. Voltaire put it well when he said, “*Those who can make you believe absurdities can make you commit atrocities.*” Over the centuries, much destructive conduct has been perpetrated by ordinary, decent people in the name of righteous ideologies, religious principles, and nationalistic imperatives (Kelman & Hamilton, 1989; Rapoport & Alexander, 1982; Reich, 1990; Sanford & Comstock, 1971).

Language shapes thought patterns on which actions are based. Activities can take on very different appearances depending on what they are called. Not surprisingly, *sanitizing euphemistic language* is widely used to make harmful conduct respectable and to reduce personal responsibility for it (Bolinger, 1982; Lutz, 1987). How behavior is viewed is also colored by what it is compared against. The more flagrant the inhumanities against which one's destructive conduct is contracted, the more likely will lose its repugnancy or even appear benevolent. *Exonerating comparison* relies heavily on moral justification by utilitarian arguments that one's injurious actions will prevent more human suffering than they cause.

Cognitive restructuring of harmful conduct through moral justifications, sanitizing language, and exonerating comparisons is the most effective psychological mechanism for disengaging moral control. Investing harmful conduct with high moral purpose not only eliminates self-censure, but it engages self-approval in the service of destructive exploits as well. What was once morally condemnable, becomes a source of self-pride.

Moral control operates most strongly when people acknowledge that they are contributors to harmful outcomes. The second set of disengagement practices operates by obscuring or minimizing the agentive role in the harm one causes. This is achieved by *displacement and diffusion of responsibility*. People will behave in ways they normally repudiate if a legitimate authority accepts responsibility for the effects of their conduct (Diener, 1977; Milgram, 1974; Zimbardo, 1995). Disclaim of personal agency removes self-condemning reactions to one's harmful conduct. As Snow insightfully observed, "*More hideous crimes have been committed in the name of obedience than in the name of rebellion.*" The exercise of moral control is also weakened when personal agency is obscured by diffusing responsibility for detrimental behavior by group decision making, subdividing injurious activities into seemingly harmless parts, and exploiting the anonymity of collective action.

Additional ways of weakening moral control operate by *disregarding or distorting harm* caused by one's conduct (Klass, 1978). As long as the harmful effects are ignored, minimized, distorted or disbelieved, there is little reason for self-censure to be activated. The final set of disengagement practices operates on the recipients of detrimental acts. Blaming one's adversaries or compelling circumstances can serve self-exonerative purposes. In this process, people view themselves as faultless victims driven to harmful conduct by provocation. Through *ascription of blame*, injurious conduct becomes a justifiable defensive reaction to perceived provocations and

mistreatments. Victims get blamed for bringing the suffering on themselves (Ferguson & Rule, 1983).

The strength of moral self-censure depends partly on how the perpetrators view the people they mistreat. To perceive another as human activates empathetic and vicarious emotional reactions through perceived similarity (Bandura, 1992). Self-censure for cruel conduct can be disengaged by *dehumanization* that strips people of human qualities. Once dehumanized, they are no longer viewed as persons with feelings, hopes and concerns but as subhuman objects. If dispossessing one's foes of humanness does not weaken self-censure, it can be eliminated by attributing demonic or bestial qualities to them. It is easier to brutalize people when they are viewed as low animal forms (Bandura, Underwood, & Fromson, 1975; Haritos-Fatouros, 1988; Keen, 1986).

Psychological research tends to emphasize how easy it is to get good people to perform cruel deeds through dehumanization and other self-exonerative means (Milgram, 1974). What is rarely noted is the striking evidence that most people refuse to behave cruelly, even with strong authoritarian commands, toward people who are humanized (Bandura et al., 1975). The affirmation of common humanity can bring out the best in others.

Developmental research sheds some light on how the mechanisms of moral disengagement promote antisocial and destructive conduct. They weaken self-censure for harmful conduct, reduce prosocialness, and foster cognitive and emotional reactions conducive to antisocial conduct (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996b). Facility in moral disengagement combined with a low sense of efficacy to resist peer pressure for transgressive activities foster heavy engagement in antisocial conduct (Kwak & Bandura, 1997).

Growing Primacy of Self-Regulation

The accelerated pace of social and technological changes has placed a premium on people's capabilities to exert a strong hand in their own development and functioning through the life course. For example, information technologies are transforming the educational system. In the past, students have had to rely heavily on classroom teachers for their knowledge. Students now have the best libraries, museums and multimedia instruction at their fingertips through the global Internet for educating themselves. Efficacious self-regulators gain knowledge, skills and

intrinsic interests in intellectual matters (Bandura, 1997; Zimmerman, 1990). Weak self-regulators do not achieve much progress in self-development. As in the case of modeling, sociocognitive principles of self-regulation provide explicit guidelines for educational development (Schunk, 1989, 1996).

The recent years have witnessed a major change in the conception of health from a disease model to a health model. Viewed from this perspective, human health is heavily dependent on lifestyle habits and environmental conditions. It emphasizes health enhancement not just disease prevention. By exercising control over health habits, people can live longer and healthier. New health promotion systems structured around self-regulatory principles are reducing major health risks, slowing the rate of biological aging and enhancing health (Bandura, 1998b).

Self-regulation is also becoming a key factor in occupational life. In the past, employees learned a given trade and performed it much the same way during their lifetime in the same organization. Much of the world of work is now being structured so that employees assume operational control in flexible self-managed teams. In the modern workplace, knowledge and technical skills are quickly outmoded unless they are updated to fit the new technologies. Employees have to take charge of their self-development over the full course of their worklife. Efficacious innovativeness and adaptability has become a premium at the organizational level as well. These new realities place increasing demands on individual and collective efficacy to shape personal destinies and the national life of societies.

A favorable self-regulatory system provides a continuing source of motivation, self-directedness and personal satisfaction. However, a dysfunctional self system can also breed much human misery. For people who adopt stringent personal standards, most of their accomplishments bring them a sense of failure and self-disparagement (Bandura, 1997; Rehm, 1988). In its more extreme forms, harsh standards of self-evaluation give rise to despondency, chronic discouragement, feelings of worthlessness and lack of purposefulness. Effective treatments must remedy each of the dysfunctional aspects of the self-system. They correct self-belittling interpretative biases, promote adoption of attainable subgoals that provide a sense of accomplishment, and get clients to be more self-rewarding (Rehm, 1981). High aspirations do not produce self-demoralization as long as current attainments are measured against attainable subgoals of progress rather than in terms of lofty ultimate goals.

The preceding discussion portrays the personal misery that can result from stringent self-evaluative standards. Deficient or deviant standards also create problems, although the adverse effects are more likely to be social than personal. Unprincipled individuals who pursue an ethic of expediency and those who pride themselves on excelling at antisocial activities readily engage in injurious conduct unless deterred by external sanctions.

Self-Reflective Capability

The capability to reflect upon oneself and the adequacy of one's thoughts and actions is another exclusively human attribute that figures prominently in social cognitive theory. People are not only agents of action but self-examiners of their own cognitive, affective, and behavioral functioning. Effective functioning requires reliable ways of distinguishing between accurate and faulty thinking. In verifying the adequacy of thought by self-reflective means, people generate ideas and act upon them or predict occurrences from them. They then judge from the results the accuracy and functional value of their thinking and try to improve it if necessary.

Thought Verification by Self-Reflectiveness

The process of thought verification involves comparing how well one's thoughts match some indicator of reality. There are four modes of thought verification: enactive, vicarious, persuasory, and logical. Enactive verification relies on the closeness of the fit between one's thoughts and the results of the actions they spawn. Good matches lend validity to the thoughts; mismatches refute them. In the vicarious mode of thought verification, seeing the effects of other people's actions provides the check on the correctness of one's own thinking. Vicarious thought verification is not simply a supplement to enactive validation. Symbolic modeling vastly expands the range of verification experiences that cannot be attained by personal action because of the constraints of time, resources, and mobility.

Some spheres of life involve highly specialized knowledge requiring dependence on experts or metaphysical ideas that are not amenable to empirical confirmation. When experiential verification is difficult or unfeasible, people evaluate the soundness of their views by checking them with what others, to whom they give credence, believe. Thoughts are also verified by

inferential means. In logical verification, people can check for fallacies in their thinking by deducing from knowledge that is known and what necessarily follows from it.

Such metacognitive activities usually foster dependable thought, but they can produce faulty thought patterns as well. Forceful actions arising from erroneous beliefs often create social environments that confirm the misbeliefs (Snyder, 1980). Verification of thought by comparison with distorted media versions of social reality can foster shared misconceptions of people, places, or things (Hawkins & Pingree, 1991; Signorielli & Morgan, 1989).

Social verification can foster bizarre views of reality if the shared beliefs of the reference group with which one affiliates are eccentric and the group is encapsulated from outside social ties and influences (Bandura, 1982a). This is most strikingly illustrated in cultist beliefs (Hall, 1987). Similarly, deductive reasoning will be flawed if the propositional knowledge on which it is based is faulty or biases intrude on reasoning processes (Falmagne, 1975).

Perceived Self-Efficacy

Among the self-referent thoughts that influence human motivation, affect and action, none is more central or pervasive than people's judgments of the personal efficacy (Bandura, 1997). Perceived self-efficacy is concerned with people's beliefs in their capabilities to perform in ways that give them some control over events that affect their lives. Efficacy beliefs form the foundation of human agency. Unless people believe that they can produce desired results by their actions, they have little incentive to act or to persevere in the face of difficulties.

Sources of Self-Efficacy

Self-efficacy beliefs are constructed from four principal sources of information. The most authentic and influential source is *mastery experiences*. This can be achieved by tackling problems in successive attainable steps. Successes build a robust belief in one's efficacy. Failures undermine it, especially in earlier phases of self-development. Moreover, if people have only easy successes, they are readily discouraged by failure or setbacks. Development of resilient self-efficacy requires experiences in overcoming obstacles through perseverant effort.

The second way of creating and strengthening beliefs of personal efficacy is through *vicarious experiences*. If people see others like themselves succeed by sustained effort, they come to believe that they, too, have the capacity to succeed. Conversely, observing the failures of others instills doubts about one's own ability to master similar activities. Competent models also build efficacy by conveying knowledge and skills for managing environmental demands.

Social persuasion is the third way of strengthening people's beliefs in their efficacy. If people are persuaded that they have what it takes to succeed, they exert more effort and are more perseverant than if they harbor self-doubts and dwell on personal deficiencies when problems arise. But effective social persuaders do more than convey faith in people's capabilities. They arrange activities for others in ways that bring success and avoid placing people prematurely in situations where they are likely to fail.

People also rely on their *physical and emotional states* to judge their capabilities. They read their tension, anxiety and depression as signs of personal deficiency. In activities that require strength and stamina, they interpret fatigue, windedness, and aches and pains as indicators of low physical efficacy. Thus, the fourth way of altering efficacy beliefs is to enhance physical status, reduce negative emotional states and correct misinterpretations of somatic sources of information.

Cognitive Processing of Efficacy Information

Information that is relevant for judging personal efficacy is not inherently informative. It is only raw data. Experiences become informative through cognitive processing of efficacy information and self-reflective thought. The information conveyed by events must be distinguished from how that information is selected, weighted and integrated into self-efficacy judgments. A host of factors, including personal, social, and situational ones affect how experiences are interpreted.

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. Sociocognitive theory specifies the set of efficacy indicators that are distinctive for each of the four major modalities of influence (Bandura, 1997a). For example, the judgments people make about their efficacy based on performance attainments may vary depending on their 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 selective biases in how they monitor and recall their attainments.

The particular indicators people single out provide the information base on which the self-appraisal process operates. The second function involves the combination rules or heuristics people use to integrate efficacy information conveyed enactively, vicariously, socially, and physiologically. This involves a complex process of self-persuasion concerning one's capabilities.

Diverse Effects of Self-Efficacy

Beliefs of personal efficacy regulate human functioning through four major processes (Bandura, 1997). They include cognitive, motivational, emotional, and choice processes. The cognitive pathway takes a variety of forms. 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 perceived efficacy show greater cognitive resourcefulness, strategic flexibility, and effectiveness in managing their environment (Bouffard-Bouchard, Parent & Larivée, 1991; Wood & Bandura, 1989). They also set cognized challenges for themselves and visualize success scenarios that provide positive guides for performance. Those who doubt their efficacy visualize failure scenarios that undermine performances by dwelling on things that can go wrong. In appraising situations, people who are assured in their efficacy focus on the opportunities worth pursuing rather than dwell on risks (Krueger & Dickson, 1993; 1994). They take a future time perspective in structuring their lives (Eppel, Bandura, & Zimbardo, in press).

Efficacy beliefs play a central role in the self-regulation of motivation. Most human motivation is cognitively generated. There are three forms of cognitive motivators, around which different theories have been built (Figure 5). These include *causal attributions*, *outcome expectancies*, and *cognized goals*. The corresponding theories are attribution theory, expectancy-value theory and goal theory. Efficacy beliefs play a key role in each of these motivational systems.

 Insert Figure 5 about here

The causal attributions people make for their performances affect their motivation (Weiner, 1986). Efficacy beliefs influence causal attributions, regardless of whether the activities involve cognitive attainments, interpersonal transactions, physical performances, or management of health habits (Bandura, 1997a). 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).

We have seen in the earlier discussion of self-regulatory capabilities that much human motivation and behavior are regulated anticipatorily by the outcomes expected for given actions (Feather, 1982). However, there are many activities that, if done well, produce valued outcomes, but they are not pursued by people who doubt they can do what it takes to succeed. 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 (Bandura, 1997). Perceived self-efficacy not only sets the slate of options for consideration, but also regulates their implementation. Making decisions in no way ensures that the needed courses of action will be executed successfully, especially in the face of difficulties. A psychology of decision making requires a psychology of action grounded in enabling and sustaining efficacy beliefs (Bandura, 1997; Harré, 1983).

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. Efficacy beliefs play a key role in this form of cognitive motivation as well. It is partly on the basis of efficacy beliefs that people choose which goal challenges to undertake, how much effort to invest and how long to persevere in the face of difficulties (Bandura, 1991b; 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 capabilities redouble their effort and figure out better ways to master the challenges. In short, people of high perceived efficacy set motivating goals for themselves, expect their efforts to produce favorable outcomes, ascribe failures to

factors that are potentially controllable through ingenuity and effort, view obstacles as surmountable, and figure out ways to overcome them.

People's beliefs in their coping efficacy affect how much stress, anxiety, and depression they experience in threatening or taxing situations. There are four major ways in which efficacy beliefs regulate emotional states (Bandura, 1997). They do so by influencing how threats are cognitively processed, by supporting coping actions that alter the threats, by exercising control over perturbing thought patterns and by alleviating aversive affective states.

Efficacy beliefs influence how threats and taxing demands are perceived and cognitively processed. People who believe they can manage threats and adversities view them as less inimical and are not distressed by them. Those who believe they cannot control them 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 (Bandura, 1997; Sanderson, Rapee, & Barlow, 1989).

People who have a high sense of coping efficacy lower their stress and anxiety by acting in ways that transform threatening environments into benign ones. 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, 1997; Williams, 1992).

People have to live with a psychic environment that is largely of their own making. Many human distresses result from failures to control disturbing, ruminative 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.*" What causes distress is not the sheer frequency of disturbing thoughts, but the perceived helplessness to turn them off (Kent, 1987; Kent & Gibbons, 1987).

In addition, people can exercise control over their affective states by palliative means without altering the causes of their emotional arousal. They do things that bring relief from unpleasant emotional states when these arise. Belief that one can relieve unpleasant emotional states makes them less aversive (Arch, 1992a,b).

Perceived inefficacy to control things one values also produces depression in varied ways. One route is through unfulfilled aspirations. People who impose on themselves standards of self-worth they judge they cannot attain drive themselves to depression (Bandura, 1991b; Kanfer & Zeiss, 1983). Depression, in turn, weakens people's beliefs in their own 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 life and make chronic stressors easier to bear. A low sense of social efficacy contributes to depression both directly and by curtailing development of social supports (Holahan & Holahan, 1987a, b). Perceived efficacy and social support operate bidirectionally in human adaptation and change. Supportive relationships, in turn, can enhance personal efficacy. Indeed, social support has beneficial effects only to the extent that it raises perceived coping efficacy (Cutrona & Troutman, 1986; Major, Mueller, & Hildebrandt, 1985).

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).

So far, the analysis of pathways of influence has focused on how efficacy beliefs enable people to create beneficial environments and to exercise control over them. People are partly the product of their environment. By choosing their environments, they can have a hand in what they become. Beliefs of personal efficacy 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 (Lent, Brown, & Hackett, 1994). In self-development through choice processes, destinies are shaped by selection of environments known to cultivate valued potentialities and lifestyles.

To sum up, people with a low sense of efficacy avoid difficult tasks, which they view as threats. They have low aspirations and weak commitment to the goals they choose to pursue. They turn inward on their self-doubts instead of thinking about how to perform successfully under pressure. When faced with difficulties, they dwell on obstacles, the negative consequences of failure and their personal deficiencies. Failure makes them lose faith in themselves because they take it as evidence of their inherent incapability. They slacken their efforts or give up quickly in the face of obstacles. They are slow to recover their sense of efficacy after failures or setbacks and easily fall victim to stress and depression.

People with high perceived self-efficacy, by contrast, approach difficult tasks as challenges to be mastered rather than threats to be avoided. They develop interest in what they do, set challenges for themselves, and sustain strong commitments to them. They concentrate on how to perform successfully rather than on themselves and disruptive personal concerns when they encounter problems. They attribute their failures to lack of knowledge or skill, faulty strategies, or insufficient effort, all of which are remediable. They redouble their efforts in the face of obstacles and soon recover their self-assurance after setbacks. This outlook sustains motivation, reduces stress, and lowers vulnerability to depression

That self-efficacy beliefs yield functional dividends is amply documented by meta-analyses centered on different spheres of functioning (Gillis, 1993; Holden, 1991; Holden, Moncher, Schinke, & Barker, 1990; Stajkovic & Luthans, 1998). Because social cognitive theory articulates the ways in which a strong sense of efficacy can be instilled and delineates the operative mechanisms, this knowledge has been extensively applied to enhance human functioning in diverse spheres of life (Bandura, 1995, 1997a; Maddux, 1995; Schwarzer, 1992). These wide-ranging applications include education, health, psychopathology, athletics, organizational innovations and large-scale social change.

DIFFERENT FORMS OF AGENCY

The exercise of human agency can take different forms. It includes production of effects through *direct personal agency*; through *proxy agency* relying on the efforts of intermediaries; and by *collective agency*, operating through shared beliefs of efficacy, pooled understandings, group aspirations and incentive systems, and collective action. Each of these expressions of agency is rooted in belief in the power to make things happen.

Proxy Agency

The preceding analyses addressed the direct exercise of personal agency. In many spheres of life, people do not have direct control over social conditions and institutional practices that affect their lives. Under these circumstances, they seek their well-being and security through the exercise of proxy agency rather than through direct control. In this socially mediated mode of

agency, people try to get those who wield influence and power to act on their behalf to get what they want (Bandura, 1997). Moreover, people often turn to proxy control in areas in which they can exert direct influence because they have not developed the means to do so, they believe others can do it better, or they do not want to saddle themselves with some of the burdensome aspects of direct control.

Personal control is neither universally desired nor universally exercised as is commonly assumed. There is an onerous side to direct personal control that can dull the appetite for it. The exercise of control requires mastery of knowledge and skills attainable only through long hours of arduous work. Moreover, maintaining proficiency under ever changing conditions of life demands continued investment of time, effort and resources. A noted composer put it succinctly when he said, *“The toughest thing about success, is that you’ve got to keep on being a success.”*

In addition to the hard work of continual self-development, in many situations the exercise of personal control carries heavy responsibilities, stressors, and risks. All too often, people surrender control to intermediaries in areas over which they can command some direct influence. They do so to free themselves of the performance demands and onerous responsibilities that personal control entails. Part of the price of proxy agency is a vulnerable security that rests on the competence, power, and favors of others.

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 outcomes they desire but cannot accomplish on their own. Social cognitive theory, therefore, extends the conception 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. Rather, it is an emergent group-level property. A group, of course, operates through the behavior of its members. It is people acting collectively on a shared belief not a disembodied group mind that is doing the cognizing, aspiring, motivating, and regulating. Personal and collective efficacy differ in the unit of agency, but in both forms, efficacy beliefs serve similar functions and operate

through similar processes. The stronger the beliefs people hold about their collective capabilities, the more they achieve (Bandura, 1993; Hodges & Carron, 1992; Little & Madigan, 1994; Prussia & Kinicki, 1996; Sampson, Raudenbush, & Earls, 1997).

The patterning of perceived collective political efficacy and trust in the governmental system predicts the form and level of political participation and social activism. People who believe that they can achieve desired changes through citizen action and regard their governmental system as trustworthy and socially responsive display high involvement in conventional models of political action (Craig, 1979; Finkel, 1985; Pollock, 1983; Zimmerman & Rappaport, 1988). In contrast, those who believe they can produce political change through tenacious collective action but view the governmental systems and its leaders as fundamentally unresponsive and untrustworthy favor more confrontive and coercive tactics outside the traditional political channels. The politically apathetic have a low sense of efficacy that they can influence governmental functioning through collective initiatives and are disaffected from the political system as not acting in their interest (Bandura, 1997).

Some people live their lives in individualistically oriented social systems, whereas others do so in collectivistically oriented systems (Triandis, 1995). 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. If people are to work together successfully, the members of a group have to perform their roles with a high sense of efficacy. 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.

Cross-cultural research on organizational functioning corroborates the universal functional value of efficacy beliefs (Earley, 1993, 1994). Beliefs of personal efficacy contribute to productivity by members of collectivist cultures just as they do by those raised in individualistic cultures. But cultural context shapes how efficacy beliefs are developed, the purposes to which they are put, and the social arrangements through which they are best expressed. People from individualistic cultures, such as the United States, feel most efficacious and perform best under an individually-oriented system. Those from collectivistic cultures, namely Hong Kong and China, judge themselves most efficacious and work most productively under a group-oriented system.

Cultures are not static, uniform entities as the stereotypic portrayals would lead one to believe. Collectivistic systems, founded on Confucianism, Buddhism, or Marxism favor a communal ethic, but they differ from each other in the values, meanings, and customs they promote (Kim, Triandis, Kâgitçibasi, Choi, & Yoon , 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 an individualistically oriented culture, such as exists in 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 is substantial heterogeneity among individuals in communality within both individualistic and collectivistic cultures and even greater intraindividual variation in communality across social relationships with family members, friends, and colleagues (Matsumoto, Kudoh & Takeuchi, 1996). There are generational and socioeconomic variations in collectivistic cultures with younger and more affluent members adopting more individualistic orientations. Moreover, people express their cultural orientations conditionally rather than invariantly depending on incentive conditions (Yamagishi, 1988).

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 (Earley, 1994). Thus, American collectivists do better under a group-oriented system, 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, a strong perceived efficacy fosters high group effort and performance attainments.

Cultures are no longer insular. Global market forces are restructuring national economies and shaping the political and social life of societies. Advanced telecommunications technologies are disseminating ideas, values and styles of behavior transnationally at an unprecedented rate. These new realities call for broadening the scope of cross-cultural analyses beyond the focus on social forces operating within the boundaries of given societies to the forces impinging upon them from abroad. With growing international imbeddedness and interdependence of societies, the issues of interest center on how national and global forces interact to shape the nature of cultural life.

Underminers of Collective Efficacy in Changing Societies

Life in the societies of today is increasingly shaped by transnational interdependencies (Keohane & Nye, 1977; Keohane, 1993). Because of extensive global interconnectedness, 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. 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.

Some of the transnational market forces may erode or undermine valued cultural aspects of life when they are disregarded or considered detractors from profitability. Social bonds and common commitments that lack marketability are especially vulnerable to erosion by global market forces. There are no handy social mechanisms or global agencies through which people can shape and regulate 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.

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 similarly 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 (Keohane, 1993). Some sectors of the society gain from the pacts, other lose.

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. 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. Social change does not come easily because beneficiaries build their privileges into protective institutional structures and processes.

Those who exercise authority and control wield their power to maintain their advantages. Long delays between action and noticeable results discourage efforts at change.

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 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 addition, mass migration of people fleeing tyranny or seeking a better life is changing cultural landscapes. Societies are thus becoming more diverse and harder to unite around a national vision and purpose.

The magnitude of human problems also undermines perceived efficacy to find effective solutions for them. Profound global changes, arising from burgeoning populations, deforestation, desertification of croplands, ozone depletion, and rapid extinction of species by razing their habitats are destroying the intertwined ecosystems that sustain life. 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. Macrosocial applications of sociocognitive principles via the electronic media illustrate how small collective efforts can have huge impacts on such urgent global problems as the soaring population growth (Singhal & Rogers, 1989; Vaughn, Rogers, & Swalehe, 1995; Westoff & Rodriguez, 1995).

PERSONALITY AS INTEGRATED SELF SYSTEM

Sociocognitive theories are commonly misconstrued as atomistic without an overarching “personality.” The umbrella term “personality” represents a complex of interacting attributes not a self-contained entity describable by a few pithy terms creating the illusion of a high-order structure. Personality is multifaceted, richly contextualized, and conditionally expressed in the diverse transactions of everyday life. The totality of an individual’s cognitive, behavioral, and affective proclivities is not shrinkable to a few static descriptive categories.

Unity of Agency and Personal Identity

People express their individuality and give structure, meaning and purpose to their lives by acting on their beliefs about themselves, their values, personal standards, aspirations and construals of the world around them. These multiform belief systems, self structures and self-referent processes through which one's "personality" is manifested in its totality function in concert not isolatedly. It is through coordinative and integrative activity that the diverse sources of influence produce unity of experience and action. The self embodies all of the endowments, belief systems and distributed structures and functions through which personal agency is exercised rather than residing as a discrete entity in a particular place. In short, the self is the person not a homunculan subpart. "Personality" is the integrated self system within which the previously identified constituents operate in complex mutual interaction in the management of diverse and changing environmental circumstances. The various constituents must be orchestrated in an integrated way because, whatever options are considered, the choices finally made and the actions taken at a given time require unity of agency. Given but a single body, one cannot perform incompatible acts simultaneously. People may, of course, exhibit contradictory behavior, but these are instances of the same being doing discordant things on different occasions not different selves doing their separate things.

Personal identity refers to self-characterizations that tell what one is. Social cognitive theory and research not only examine the individual properties of these key constituents but how they contribute to personal identity and functioning within the organized multifaceted system of determinants (Bandura, 1997). The exercise of agency through the interrelated self structures and regulatory processes shapes the kind of life people live and what they consider themselves to be. The personal identity they create for themselves derives, in large part, from how they live their life and reflect upon it. The continuity of personal identity resides more in psychological factors and the experiential continuity of the course of life followed than in physical constancy. An amnesic remains the same physically but has lost a sense of personal identity. Continuing self-identity is preserved in memories that give temporal coherence to life (McAdams, 1996), in continuance of belief and value commitments that link the present to the past and shape the course of future events, and in the connectedness of human relationships and one's life work over time.

Continuing self-identity is not solely a product of an intrapsychic autobiographical process that preserves a sense of personal continuity over time. Others perceive, socially label and treat one as the same person over the course of life. Personal identity is partially constructed from one's social identity as reflected in how one is treated by significant others. In keeping with the model of triadic reciprocal causation, a sense of selfhood is the product of a complex interplay of social and personal construal processes. Others, of course, have only a limited sample of a given person's social life and know even much less of that individual's experiential life. Consequently, the social identity conveyed by others is more heavily dependent on the sameness of physical characteristics, social roles, and habitual behaviors that are publicly observable than on personal uniqueness and experiential factors.

Identity formation is an ongoing process not one characterized by fixedness in time. Moreover, the self view is multifaceted rather than monolithic. There are many aspects to the self. They are not equally salient, valued, or functional in different spheres of life or under different circumstances. In a dynamic, multifaceted model, continuity of personal identity requires neither high consistency among different aspects of self nor invariance across different social environments or domains of functioning. For given individuals, their personal identities are likely to be composed of unique amalgams of identities with national, social, political, ethnic, occupational, and familial aspects of life depending on their value commitments. Thus, for a particular individual, a strong occupational identity may coexist with a moderate ethnic identity and a weak political identity without any felt discordance because these aspects differ in the value placed on them. Another individual, with dissimilar value commitments, may exhibit a quite different constellation of identities, combining a strong ethnic and political identity with a weak occupational identity. Similarly, a person's self view with parents may differ significantly from the self view in relationships with peers because these social worlds actualize different aspects of the self. In each case, however, it is one and the same person manifesting a multifaceted personal identity. It is the temporal stability of the patterned self view rather than high coherence of aspects that defines one's personal uniqueness and sense of continuity. Theories that construe personal identity as a fixed monolith are discordant with a vast body of evidence.

With further experiences over time, people evolve and integrate some new aspects into their self-identity. This raises the issue of how they extract continuity from variability across

time, activity domains, and social contexts. To the extent that they consider mainly core aspects or focus on different aspects of themselves as relevant in different life situations, they can change in particulars but preserve a sense of continuity in their view of themselves. However, if they undergo major life changes, they consider themselves to be different persons from whom they were in the past. Taken as a whole, the findings of diverse lines of research on the various personal properties subsumed under the spacious construct of “personality,” attest to the explanatory, predictive and operative efficacy of theories that specify multiform personal structures operating conditionally through self-regulatory mechanisms within the contextual influences in which people construct and conduct their lives (Bandura, 1986, 1997). The oft repeated query, “*Where is the person in the personality theory?*,” is essentially a call for a homuncular self.

The Nature of Human Nature

Social cognitive theory acknowledges the influential role of evolutionary factors in human adaptation and change, but rejects one-sided evolutionism in which social behavior is the product of evolved biology but social and technological innovations that create new environmental selection pressures for adaptiveness have no effect on biological evolution. In the bidirectional view of evolutionary processes, evolutionary pressures fostered changes in biological structures and upright posture conducive to the development and use of tools, which enabled an organism to manipulate, alter and construct new environmental conditions. Environmental innovations of increasing complexity, in turn, created new selection pressures for the evolution of specialized biological systems for functional consciousness, thought, language and symbolic communication.

All too often, the multicausality of human behavior is misleadingly framed in terms of partitioning behavioral variance into percent nature and percent nurture. This causal dualism is mistaken for several reasons. It disregards the interdependence of nature and nurture. Socially constructed nurture has a hand in shaping nature. It also fails to address fundamental issues concerning the operational nature of human nature. Human evolution provides bodily structures and biological potentialities not behavioral dictates. Psychosocial influences operate through these biological resources in the construction and regulation of human behavior acting in the service of diverse purposes. Having evolved, the advanced biological capacities can be used to create diverse cultures--aggressive ones, pacific ones, egalitarian ones or autocratic ones. As Gould (1987) notes, biology sets constraints that vary in nature, degree and strength across different spheres of functioning, but in most domains of human functioning biology permits a broad range of cultural possibilities. He argues cogently that evidence favors a potentialist view over a determinist view. In this insightful analysis, the major explanatory battle is not between nature and nurture as commonly portrayed, but whether nature operates as a determinist or as a potentialist. He makes the further interesting point that biological determinism is often clothed in the language of interactionism, to make it more palatable. The bidirectional biology-culture coevolution is acknowledged but then the major causation of human behavior is ascribed to evolved biology. The cultural side of this two-way causation, in which genetic make-up is shaped by the adaptational pressures of socially constructed environments, receives little notice.

Biological determinism is also often clothed in the language of changeability: The malleability of evolved proclivities is acknowledged but determinative potency is then ascribed to them with caution against efforts to change existing sociostructural arrangements and practices allegedly ruled by evolved dispositions. Such efforts are regarded as not only doomed to failure but socially harmful because they go against the rule of nature (Wilson, 1998). The conception of the operational nature of human nature affects the relative explanatory weight given to genetic mismatch and to the counterforce of entrenched vested interests for resistance to sociostructural changes. Biological determinists favor heavily the rule of nature, whereas biological potentialists see human nature as permitting a range of possibilities that gives greater saliency to the rule of distributed opportunities, privileges and power. Thus, a biological determinist view highlights inherent constraints and limitations. A biological potentialist view of human nature emphasizes multiform human possibilities.

Theories that heavily attribute human social behavior to the rule of nature are disputed by the remarkable cultural diversity. Consider aggression, which is presumably genetically programmed as a biological universal and more so for males than for females. There are three types of cultural diversity that challenge the view that people are inherently aggressive. The first concerns intercultural diversity. There are fighting cultures that breed aggression by modeling it pervasively, attaching prestige to it, and according it functional value for gaining social status, material benefits and social control. There are pacific cultures in which interpersonal aggression is a rarity because it is devalued, rarely modeled and has no functional value (Alland, 1972; Bandura, 1973; Sanday, 1981). Is the genetic make-up of the Germans who perpetrated unprecedented barbarity really different from the genetic make-up of peaceable Swiss residing in the German canton of Switzerland? People possess the biological potentiality for aggression, but the answer to the differential aggressiveness in the latter case lies more in ideology than in biology.

The second form of variability concerns intracultural diversity. Ours is a relatively violent society but American Quakers and Hutterites, who adopt pacifism as a way of life, eschew aggressive conduct. The third form of variability involves rapid transformation of warring societies into peaceful ones. For ages the Vikings plundered other nations. After a prolonged war with Russia that exhausted Sweden's resources, the populous rose up and collectively forced a constitutional change that prohibited kings from starting wars (Moerk, 1995). This political act

promptly transformed a fighting society into a peaceable one that has served as a mediator for peace among warring nations. Sweden ranks at the very bottom of all forms of violence with virtually no incidence of domestic violence.

A biologically deterministic view has problems not only with cultural diversity, but with the rapid pace of social change. The process of biological selection moves at a snails pace, whereas societies have been undergoing major changes in sexual mores, family structures, social and occupational roles and institutional practices. Ancestral origin and the determinants governing contemporary social practices are quite different matters. Because evolved potentialities can serve diverse purposes, ancestral origin dictates neither current function nor a singular sociostructural arrangement. Social systems and practices are being changed by social means rather than by reliance on the slow protracted process of biological selection. Dobzhansky (1972) reminds us that the human species has been selected for learnability and plasticity of behavior adaptive to remarkably diverse habitats and socially constructed environments, not for behavioral fixedness. The pace of social change gives testimony that biology, indeed, permits a range of possibilities.

Seen from the social cognitive perspective, human nature is characterized by a vast potentiality that can be fashioned by direct and vicarious experience into a variety of forms within biological limits. To say that a major distinguishing mark of humans is their endowed plasticity is not to say that they have no nature or that they come structureless (Midgley, 1978). The plasticity, which is intrinsic to the nature of humans, depends upon specialized neurophysiological structures and mechanisms that have evolved over time. These advanced neural systems are specialized for channeling attention, detecting the causal structure of the world around one, transforming that information into abstract form, integrating it and using it for adaptive purposes. The evolved morphology and special purpose systems facilitate acquisitional processes. Social cognitive theory does not assume an equipotential mechanisms of learning (Bandura, 1986). In addition to biological biases, some things are more easily learnable because the properties of the events can facilitate or impede acquisitional processes. The evolved informative processing systems provide the capacity for the very characteristics that are distinctly human -- generative symbolization, forethought, evaluative self-regulation, reflective self-consciousness, and symbolic communication.

Although neurophysiological systems have been shaped by evolutionary pressures, people are not just reactive products of selection pressures. They are producers of new selection pressures. Through agentic action, they devise ways of adapting flexibly to remarkably diverse environments, they circumvent environmental constraints, redesign and construct environments to their liking, create styles of behavior that enable them to realize desired outcomes and pass on the effective ones to others by social modeling and other experiential means. Indeed, growth of knowledge has greatly enhanced human power to control, transform and create environments of increasing complexity. We build physical technologies that drastically alter how we live our daily lives; we create mechanical devices that compensate immensely for our sensory and physical limitations; we develop medical and psychological methods that enable us to exert some measure of control over our physical and psychosocial lives; through contraceptive ingenuity that disjoined sex from procreation, humans have outwitted and taken control over their evolved reproductive system; we have created biotechnologies to change the genetic make-up of plants and animals, and are now even cloning clones; and we are exploring methods that could alter the genetic codes of humans. People have changed little genetically over the decades, but they have changed markedly through rapid cultural and technological evolution in their thinking, styles of behavior, and the roles they perform. There is much genetic homogeneity across cultures but vast diversity in belief systems and conduct. Given this variability, genetic coding that characterizes humans underscores the power of the environment orchestrated through agentic action. As people devise ever more powerful technologies that transform environments, the psychosocial side of coevolution is gaining ascendancy. By creating ever more complex environments, humans are becoming major agents of their own evolution.

Most patterns of human behavior are organized by individual experience and retained in neural codes rather than having been provided ready-made by inborn programming. Although human behavior is fashioned largely through experience, innately determined factors enter into every form of behavior to varying degrees. Genetic factors affect behavioral potentialities, which, through their actualization, can influence the kinds of environments that are experienced and constructed. The experiences produced by agentic action shape the nature of brain development and quality of functioning. Both experientially derived factors and genetically determined ones interact, often in intricate synergistic ways, to determine behavior. The level of psychological and biological development, of course, limits what can be acquired at any given time.

Humans have an unparalleled capacity to become many things. The qualities that are cultivated and the life paths that realistically become open to them are partly determined by the nature of the societal systems to which their development is entrusted. Social systems that cultivate generalizable competencies, instill a robust sense of efficacy, create opportunity structures, provide aidful resources, and allow room for self-directedness increase the chances that people will realize what they wish to become.

References

- Alland, A., Jr. (1972). *The human imperative*. New York: Columbia University.
- Almagor, M., Tellegen, A., & Waller, N. G. (1995). The Big Seven model: A cross-cultural replication and further exploration of the basic dimensions of natural language trait descriptors. *Journal of Personality and Social Psychology*, *69*, 300-307.
- Arch, E. C. (1992a). Affective control efficacy as a factor in willingness to participate in a public performance situation. *Psychological Reports*, *71*, 1247-1250.
- Arch, E. C. (1992b). Sex differences in the effect of self-efficacy on willingness to participate in a performance situation. *Psychological Reports*, *70*, 3-9.
- Austin, J. H. (1978). *Chase, chance, and creativity: The lucky art of novelty*. New York: Columbia University Press.
- Baldwin, C., Baldwin, A., Sameroff, A., & Seifer, R. (1989, April). *The role of family interaction in the prediction of adolescent competence*. Paper presented at the Biennial Meeting of the Society for Research in Child Development, Kansas City, MO.
- Ball-Rokeach, S., & DeFleur, M. (1976). A dependency model of mass media effects. *Communication Research*, *3*, 3-21.
- Baltes, P. B., Lindenberger, U., & Staudinger, U. M. (in press). Life-span theory in development psychology. In R. M. Lerner (Ed.), *Handbook of child psychology, (5th ed.): Vol. 1, Theoretical models of human development (5th ed., Editor-in-Chief: William Damon, pp. 1029-1143)*. New York: Wiley.
- Bandura, A. (1973). *Aggression: A social learning analysis*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1982a). Self-efficacy mechanism in human agency. *American Psychologist*, *37*, 122-147.
- Bandura, A. (1982b). The psychology of chance encounters and life paths. *American Psychologist*, *37*, 747-755.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.

- Bandura, A. (1991a). Social cognitive theory of moral thought and action. In W. M. Kurtines & J. L. Gewirtz (Eds.), *Handbook of moral behavior and development* (Vol. A, pp. 45-103). Hillsdale, NJ: Erlbaum.
- Bandura, A. (1991b). Self-regulation of motivation through anticipatory and self-regulatory mechanisms. In R. A. Dienstbier (Ed.), *Perspectives on motivation: Nebraska symposium on motivation* (Vol. 38, pp. 69-164). Lincoln: University of Nebraska Press.
- Bandura, A. (1992). Social cognitive theory and social referencing. In S. Feinman (Ed.), *Social referencing and the social construction of reality in infancy* (pp. 175-208). New York: Plenum Press.
- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist*, 28, 117-148.
- Bandura, A. (Ed.) (1995). *Self-efficacy in changing societies*. New York: Cambridge University Press.
- Bandura, A. (1997a). *Self-efficacy: The exercise of control*. New York: Freeman.
- Bandura, A. (1998a). Exploration of fortuitous determinants of life paths. *Psychological Inquiry*, 9, 95-99.
- Bandura, A. (1998b). Health promotion from the perspective of social cognitive theory. *Psychology and Health*, 13, 623-649.
- Bandura, A. (in press). Moral disengagement in the perpetration of inhumanities. *Personality and Social Psychology Review*. [Special Issue on Evil]. *Personality and Social Psychology Review*.
- Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C. (1996a). Multifaceted impact of self-efficacy beliefs on academic functioning. *Child Development*, 67, 1206-1222.
- Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C. (1996b). Mechanisms of moral disengagement in the exercise of moral agency. *Journal of Personality and Social Psychology*, 71, 364-374.
- Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C. (1999). *Efficacy beliefs as shapers of aspirations and occupational trajectories*. Submitted for publication.
- Bandura, A., & Cervone, D. (1986). Differential engagement of self-reactive influences in cognitive motivation. *Organizational Behavior and Human Decision Processes*, 38, 92-113.

- Bandura, A., & Jourden, F. J. (1991). Self-regulatory mechanisms governing the impact of social comparison on complex decision making. *Journal of Personality and Social Psychology*, *60*, 941-951.
- Bandura, A., Pastorelli, C., Barbaranelli, C., & Caprara, G. V. (1999). Self-efficacy pathways to childhood depression. *Journal of Personality and Social Psychology*, *76*, 258-269.
- Bandura, A., & Rosenthal, T. L. (1978). Psychological modeling: Theory and practice. In S. L. Garfield & A. E. Bergin (Eds.), *Handbook of psychotherapy and behavior change* (2nd ed. Pp. 621-658). New York: Wiley.
- Bandura, A., Ross, D., & Ross, S. A. (1963). A comparative test of the status envy, social power, and secondary reinforcement theories of identificatory learning. *Journal of Abnormal and Social Psychology*, *67*, 527-534.
- Bandura, A., Underwood, B., & Fromson, M. E. (1975). Disinhibition of aggression through diffusion of responsibility and dehumanization of victims. *Journal of Research in Personality*, *9*, 253-269.
- Bandura, A., & Walters, R. H. (1959). *Adolescent aggression*. New York: Ronald Press.
- Bandura, A., & Wood, R. E. (1989). Effect of perceived controllability and performance standards on self-regulation of complex decision-making. *Journal of Personality and Social Psychology*, *56*, 805-814.
- Barrett, P., & Kline, P. (1982). An item and radial parcel factor analysis of the 16 PF questionnaire. *Personality and Individual Differences*, *3*, 259-270.
- Barrick, M. R., Mount, M. K., & Strauss, J. P. (1993). Conscientiousness and performance of sales representatives: Test of the mediating effects of goal setting. *Journal of Applied Psychology*, *76*, 715-722.
- Belcher, T. L. (1975). Modeling original divergent responses: An Initial investigation. *Journal of Educational Psychology*, *67*, 351-358.
- Berger, S. M. (1962). Conditioning through vicarious instigation. *Psychological Review*, *69*, 450-466.
- Block, J. (1995). A contrarian view of the five-factor approach to personality description. *Psychological Bulletin*, *117*, 187-215.
- Bolinger, D. (1982). *Language: The loaded weapon*. London: Longman.

- Bouffard-Bouchard, T., Parent, S., & Larivée, S. (1991). Influence of self-efficacy on self-regulation and performance among junior and senior high-school age students. *International Journal of Behavioral Development, 14*, 153-164.
- Braithwaite, J. (1994). A sociology of modeling and the politics of empowerment. *British Journal of Sociology, 45*, 445- 479.
- Brandstädter, J., Krampen, G., & Heil, F. E. (1996). Personal control and emotional evaluation of development in partnership relations during adulthood. In M. M. Baltes & P. B. Baltes (Eds.), *The psychology of control and aging* (pp. 265-296). Hillsdale, NJ: Erlbaum.
- Bromley, D. G., & Shupe, A. D. (1979). *"Moonies" in America: Cult, church, and crusade*. Beverly Hills: Sage.
- Bunge, M. (1977). Emergence and the mind. *Neuroscience, 2*, 501-509.
- Burns, T. R., & Dietz, T. (in press). Human agency and evolutionary processes: Institutional dynamics and social revolution. In B. Wittrock (Ed.), *Agency in social theory*. Thousand Oaks, CA.: Sage.
- Caprara, G. V., Barbaranelli, C., & Pastorelli, C. (1998, July). *Comparative test of longitudinal predictiveness of perceived self-efficacy and big five factors*. Paper presented at the 9th Conference on Personality, University of Surrey, United Kingdom.
- Carlson, R. (1992). Shrinking personality: One cheer for the big five. *Contemporary Psychology, 37*, 644-645.
- Carroll, W. R., & Bandura, A., (1990). Representational guidance of action production in observational learning: A causal analysis. *Journal of Motor Behavior, 22*, 85-97.
- Carver, C. S., & Scheier, M. F. (1981). *Attention and self-regulation: A control-theory approach to human behavior*. New York: Springer-Verlag.
- Costa, P. T., Jr., & McCrae, R. R. (1994). "Set like plaster?" Evidence for the stability of adult personality. In T. Heatherton & J. Weinberger (Eds.), *Can personality change?* (pp. 21-40). Washington, D.C.: American Psychological Association.
- Craig, S. C. (1979). Efficacy, trust, and political behavior: An attempt to resolve a lingering conceptual dilemma. *American Politics Quarterly, 7*, 225-239.
- Cutrona, C. E., & Troutman, B. R. (1986). Social support, infant temperament, and parenting self-efficacy: A mediational model of postpartum depression. *Child Development, 57*, 1507-1518.

- Diener, E. (1977). Deindividuation: Causes and consequences. *Social Behavior and Personality*, 5, 143-156.
- Digman, J. M. (1997). Higher-order factors of the big five. *Journal of Personality and Social Psychology*, 73, 1246-1256.
- Dobzhansky T. (1972). Genetics and the diversity of behavior. *American Psychologist*, 27, 523-530.
- Duncker, K. (1938). Experimental modification of children's food preferences through social suggestion. *Journal of Abnormal Social Psychology*, 33, 489-507.
- Earley, P. C. (1993). East meets West meets Mideast: Further explorations of collectivistic and individualistic work groups. *Academy of Management Journal*, 36, 319-348.
- Earley, P. C. (1994). Self or group? Cultural effects of training on self-efficacy and performance. *Administrative Science Quarterly*, 39, 89-117.
- Elder, G. H., & Ardelt, M. (1992, March 18-20). *Families adapting to economic pressure: Some consequences for parents and adolescents*. Paper presented at the Society for Research on Adolescence, Washington, D.C.
- Endler, N. S., & Parker, J. D. A. (1992). Interactionism revisited: Reflections on the continuing crisis in the personality area. *European Journal of Personality*, 6, 177-198.
- Eppel, E. S., Bandura, A., & Zimbardo, P. G. (in press). Escaping homelessness: Influence of self-efficacy and time perspective on coping with homelessness. *Journal of Applied Social Psychology*.
- Epstein, S. (1983). The stability of behavior across time and situations. In R. Zucker, J. Aronoff, & A. I. Rabin (Eds.), *Personality and the prediction of behavior* (pp. 209-268). San Diego, CA: Academic Press.
- Eysenck, H. J. (1991). Dimensions of personality: 16, 5 or 3?—Criteria for a taxonomic paradigm. *Personality and Individual Differences*, 12, 773-790.
- Falmagne, R. J. (1975). *Reasoning: Representation and process in children and adults*. Hillsdale, NJ: Erlbaum.
- Feather, N. T. (Ed.) (1982). *Expectations and actions: Expectancy-value models in psychology*. Hillsdale, NJ: Erlbaum.
- Feldman, D. H. (1980). *Beyond universals in cognitive development*. Norwood, NJ: Ablex.

- Ferguson, T. J., & Rule, B. G. (1983). An attributional perspective on anger and aggression. In R. G. Geen, & E. I. Donnerstein (Eds.), *Aggression: Theoretical and empirical*, (Vol. 1, pp. 41-74). New York: Academic Press.
- Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, 7, 117-140.
- Finkel, S. E. (1985). Reciprocal effects of participation and political efficacy: A panel analysis. *American Journal of Political Science*, 29, 891-913.
- Flavell, J. H. (1978b). Developmental stage: Explanans or explanandum? *Behavioral and Brain Sciences*, 2, 187-188.
- Gerbner, G. (1972). Communication and social environment. *Scientific American*, 227, 153-160.
- Giddens, A. (1984). *The constitution of society: Outline of the theory of structuration*. Cambridge: Polity Press; Berkeley, CA: University of California Press.
- Gillespie, W. H. (1971). Aggression and instinct theory. *International Journal of Psychoanalysis*, 52, 155-160.
- Goethals, G. R., & Darley, J. M. (1977). Social comparison theory: Attributional approach. In J. M. Suls & R. L. Miller (Eds.), *Social comparison processes: Theoretical and empirical perspectives* (pp. 259-278). Washington, DC: Hemisphere.
- Gould, S. J. (1987). *An urchin in the storm*. New York: Norton.
- Green, C. D., & Vervaeke, J. (1996). What kind of explanation, if any, is a connectionist net? In C. W. Tolman, F. Cherry, R. van Hezewijk, & I. Lubek (Eds.), *Problems of theoretical psychology* (pp. 201-208). North York, ON: Captus.
- Greenwood, J. D. (1992). Against eliminative materialism: From folk psychology to Völkerpsychologie. *Philosophical Psychology*, 5, 349-367.
- Guastello, S. J. (1993). A two-(and-a-half)-tiered trait taxonomy. *American Psychologist*, 48, 1298-1299.
- Hall, J. R. (1987). *Gone from the promised land: Jonestown in American cultural history*. New Brunswick, NJ: Transaction Books.
- Hamburg, D. A. (1992). *Today's children: Creating a future for a generation in crisis*. New York: Times Books.
- Haritos-Fatouros, M. (1988). The official torturer: A learning model for obedience to the authority of violence. *Journal of Applied Social Psychology*, 18, 1107-1120.
- Harré, R. (1983). *Personal being: A theory for individual psychology*. Oxford: Blackwell.

- Harré, R., & Gillet, G. (1994). *The discursive mind*. Thousand Oaks, Calif.: Sage.
- Harris, M. B., & Evans, R. C. (1973). Models and creativity. *Psychological Reports*, *33*, 763-769.
- Hawkins, R. P., & Pingree, S. (1991). Divergent psychological processes in constructing social reality from mass media content. In N. Signorielli & M. Morgan (Eds.), *Cultivation analysis: New directions in media effects research* (Vol. 108, pp. 35-50). Beverly Hills, CA: Sage.
- Hodges, L., & Carron, A. V. (1992). Collective efficacy and group performance. *International Journal of Sport Psychology*, *23*, 48-59.
- Holahan, C. K., & Holahan, C. J. (1987a). Self-efficacy, social support, and depression in aging: A longitudinal analysis. *Journal of Gerontology*, *42*, 65-68.
- Holahan, C. K., & Holahan, C. J. (1987b). Life stress, hassles, and self-efficacy in aging: A replication and extension. *Journal of Applied Social Psychology*, *17*, 574-592.
- Hough, L. M. (1992). The "Big Five" personality variables—Construct confusion: Description versus prediction. *Human Performance*, *5*, 139-155.
- Jackson, D. N., Ashton, M. C., & Tomes, J. L. (1996). The six-factor model of personality: Facets from the big five. *Personality and Individual Differences*, *21*, 391-402.
- Jackson, D. N., Paunonen, S. V., Fraboni, M., & Goffin, R. D. (1996). A five-factor versus six-factor model of personality structure. *Personality and Individual Differences*, *20*, 33-46.
- Kanfer, R., & Zeiss, A. M. (1983). Depression, interpersonal standard-setting, and judgments of self-efficacy. *Journal of Abnormal Psychology*, *92*, 319-329.
- Kavanagh, D. J., & Bower, G. H. (1985). Mood and self-efficacy: Impact of joy and sadness on perceived capabilities. *Cognitive Therapy and Research*, *9*, 507-525.
- Kavanagh, D. J., & Wilson, P. H. (1989). Prediction of outcome with a group version of cognitive therapy for depression. *Behaviour Research and Therapy*, *27*, 333-347.
- Kazdin, A. E. (1974). Comparative effects of some variations of covert modeling. *Journal of Behavior Therapy and Experimental Psychiatry*, *5*, 225-232.
- Keen, S. (1986). *Faces of the enemy*. San Francisco: Harper & Row.
- Kelman, H. C., & Hamilton, V. L. (1989). *Crimes of obedience: Toward a social psychology of authority and responsibility*. New Haven, CT: Yale University Press.
- Kent, G. (1987). Self-efficacious control over reported physiological, cognitive and behavioural symptoms of dental anxiety. *Behaviour Research and Therapy*, *25*, 341-347.

- Kent, G., & Gibbons, R. (1987). Self-efficacy and the control of anxious cognitions. *Journal of Behavior Therapy & Experimental Psychiatry, 18*, 33-40.
- Keohane, R. O., & Nye, J. S. (1977). *Power and interdependence: World politics in transition*. Boston: Little, Brown.
- Keohane, R. O. (1993). Sovereignty, interdependence and international institutions. In L. Miller & M. Smith (Eds.), *Ideas and ideals: Essays on politics in honor of Stanley Hoffman* (91-107). Boulder, CO: Westview Press.
- Kim, U., Triandis, H. D., Kâgitçibasi, C., Choi, S., & Yoon, G. (1994). *Individualism and collectivism: Theory, method, and applications*. Thousand Oaks, CA: Sage.
- Klass, E. T. (1978). Psychological effects of immoral actions: The experimental evidence. *Psychological Bulletin, 85*, 756-771.
- Kolb, B., & Whishaw, I. Q. (1998). Brain plasticity and behavior. *Annual Review of Psychology, 49*, 43-64.
- Krantz, D. L. (1998). Taming chance: Social science and everyday narratives. *Psychological Inquiry, 9*, 87-94.
- Kroger, R. O., & Wood, L. M. (1993). Reification, "Faking," and the big five. *American Psychologist, 48*, 1297-1298.
- Krueger, N. F., Jr., & Dickson, P. R. (1993). Self-efficacy and perceptions of opportunities and threats. *Psychological Reports, 72*, 1235-1240.
- Krueger, N., Jr., & Dickson, P. R. (1994). How believing in ourselves increases risk taking: Perceived self-efficacy and opportunity recognition. *Decision Sciences, 25*, 385-400.
- Kwak, K., & Bandura, A. (1997). *Role of perceived self-efficacy and moral disengagement in antisocial conduct*. Unpublished manuscript, Osan College, Seoul, Korea.
- Lachman, M. E. (1986). Personal control in later life: Stability, change, and cognitive correlates. In M. M. Baltes & P. B. Baltes (Eds.), *The psychology of control and aging* (pp. 207-236). Hillsdale, NJ: Erlbaum.
- Lent, R. W., Brown, S. D., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior, 45*, 79-122.

- Little, B. L., & Madigan, R. M. (1994, August). *Motivation in work teams: A test of the construct of collective efficacy*. Paper presented at the annual meeting of the Academy of Management, Houston, TX.
- Locke, E. A., & Latham, G. P. (1990). *A theory of goal setting and task performance*. Englewood Cliffs, NJ: Prentice-Hall.
- Lord, R. G., & Hanges, P. J. (1987). A control system model of organizational motivation: Theoretical development and applied implications. *Behavioral Science, 32*, 161-178.
- Lutz, W. D. (1987). Language, appearance, and reality: Doublespeak in 1984. In P. C. Boardman (Ed.), *The legacy of language - a tribute to Charlton Laird* (pp. 103-119). Reno, NV: University of Nevada Press.
- Maddux, J. E. (Ed.). (1995). *Self-efficacy, adaptation, and adjustment: Theory, research and application*. New York: Plenum Press.
- Major, B., Mueller, P., & Hildebrandt, K. (1985). Attributions, expectations, and coping with abortion. *Journal of Personality and Social Psychology, 48*, 585-599.
- Markus, H., & Nurius, P. (1986). Possible selves. *American Psychologist, 41*, 954-969.
- Martin, J. (1981). Relative deprivation: A theory of distributive injustice for an era of shrinking resources. In B. Staw & L. Cummings (Eds.), *Research in organizational behavior* (Vol. 3, pp. 53-107). Greenwich, CT: JAI Press.
- Masten, A. S., Best, K. M., & Garmezy, N. (1990). Resilience and development: Contributions from the study of children who overcome adversity. *Development and Psychopathology, 2*, 425-444.
- Matsumoto, D., Kudoh, T., & Takeuchi, S. (1996). Changing patterns of individualism and collectivism in the United States and Japan. *Culture & Psychology, 2*, 77- 107.
- McAdams, D. P. (1992). The five-factor model in personality: A critical appraisal. *Journal of Personality, 60*, 329-361.
- McAdams, D. P. (1996). Personality, modernity, and the storied self: A contemporary framework for studying persons. *Psychological Inquiry, 7*, 295-321.
- McAvay, G. J., Seeman, T. E., & Rodin, J. (1996). A longitudinal study of change in domain-specific self-efficacy among older adults. *Journal of Gerontology: Psychological Sciences, 51B*, 243-253.

- McCrae, R. R., & Costa, P. T. (1996). Toward a new generation of personality theories: Theoretical contexts for the five-factor model. In J. S. Wiggins (Ed.), *Five-factor model of personality: Theoretical perspectives* (pp. 51-87). New York: Guilford Press.
- McCrae, R. R., & Costa, P. T. (1997). Personality trait structure as a human universal. *American Psychologist*, *52*, 509-516.
- McCrae, R. R., Zonderman, A. B., Costa, P. T., Bond, M. H., & Paunonen, S. V. (1996). Evaluating replicability of factors in the Revised NEO Personality Inventory: Confirmatory factor analysis versus procrustes rotation. *Personality and Social Psychology*, *70*, 552-566
- Midgley, M. (1978). *Beast and man: The roots of human nature*. Ithaca, NY: Cornell University Press.
- Milgram, S. (1974). *Obedience to authority: An experimental view*. New York: Harper & Row.
- Mischel, W., & Shoda, Y. (1995). A cognitive-affective system theory of personality: Reconceptualizing situations, dispositions, dynamics, and invariance in personality structure. *Psychological Review*, *102*, 246-268.
- Moerk, E. L. (1995). Acquisition and transmission of pacifist mentalities in Sweden. *Peace and Conflict: Journal of Peace Psychology*, *1*, 291-307.
- Nagel, E. (1961). *The structure of science*. New York: Harcourt, Brace and World.
- Nolen-Hoeksema, S. (1991). Responses to depression and their effects on the duration of depressive episodes. *Journal of Abnormal Psychology*, *100*, 569-582.
- Pajares, F., & Kranzler, J. (1995). Self-efficacy beliefs and general mental ability in mathematical problem-solving. *Contemporary Educational Psychology*, *20*, 426-443.
- Pajares, F., & Miller, M. D. (1994). Role of self-efficacy and self-concept beliefs in mathematical problem solving: A path analysis. *Journal of Educational Psychology*, *86*, 193-203.
- Pajares, F., & Miller, M. D. (1995). Mathematics self-efficacy and mathematics performances: The need for specificity of assessment. *Journal of counseling Psychology*, *42*, 190-198.
- Parker, J. D. A., Bagby, R. M., & Summerfeldt, L. J. (1993). Confirmatory factor analysis of the Revised NEO Personality Inventory. *Personality and Individual Differences*, *15*, 463-466.
- Patterson, G. R. (1976). The aggressive child: Victim and architect of a coercive system. In E. J. Mash, L. A. Hamerlynck, & L. C. Handy (Eds.), *Behavior modification and families* (pp. 267-316). New York: Brunner/Mazel.

- Pervin, L. A. (1989). *Goal concepts in personality and social psychology*. Hillsdale, NJ: Erlbaum.
- Pervin, L. A. (1994). A critical analysis of current trait theory. *Psychological Inquiry*, 5, 103-113.
- Piaget, J. (1950). *The psychology of intelligence*. New York: International Universities Press.
- Pollock, P. H. (1983). The participatory consequences of internal and external political efficacy. *Western Political Quarterly*, 36, 400-409.
- Powers, W. T. (1973). *Behavior: The control of perception*. Chicago: Aldine.
- Prussia, G. E., & Kinicki, A. J. (1996). A motivational investigation of group effectiveness using social cognitive theory. *Journal of Applied Psychology*, 81, 187-199.
- Rapoport, D. C., & Alexander, Y. (Eds.) (1982). *The morality of terrorism: Religious and secular justification*. Elmsford, NY: Pergamon Press.
- Rehm, L. P. (1981). A self-control therapy program for treatment of depression. In J. F. Clarkin & H. Glazer (Eds.), *Depression: Behavioral and directive treatment strategies* (pp. 68-110). New York: Garland Press.
- Rehm, L. P. (1988). Self-management and cognitive processes in depression. In L. B. Alloy (Ed.), *Cognitive processes in depression* (pp. 143-176). New York: Guilford Publications.
- Reich, W. (Ed.), (1990). *Origins of terrorism: Psychologies, ideologies, theologies, states of mind*. Cambridge, England: Cambridge University Press.
- Reichard, G. A. (1938). Social life. In F. Boas (Ed.), *General anthropology* (pp. 409-486). Boston: Heath.
- Relich, J. D., Debus, R. L., & Walker, R. (1986). The mediating role of attribution and self-efficacy variables for treatment effects on achievement outcomes. *Contemporary Educational Psychology*, 11, 195-216.
- Rogers, C. R. (1959). A theory of therapy, personality, and interpersonal relationships, as developed in the client-centered framework. In S. Koch (Ed.), *Psychology: A study of a science (Vol. III). Formulations of the person and the social context* (pp. 184-256). New York: McGraw-Hill.
- Rogers, E. J., Vaughan, P. W., Swalehe, R. M. A., Rao, N., & Sood, S. (1996). *Effects of an entertainment-education radio soap opera on family planning and HIV/AIDS prevention behavior in Tanzania*. Unpublished manuscript, Department of Communication and Journalism, University of New Mexico, Albuquerque.

- Rosenthal, T. L., & Zimmerman, B. J. (1978). *Social learning and cognition*. New York: Academic Press.
- Rottschaefer, W. A. (1985). Evading conceptual self-annihilation: Some implications of Albert Bandura's theory of the self-system for the status of psychology. *New Ideas Psychology, 2*, 223-230.
- Rottschaefer, W. A. (1991). Some philosophical implications of Bandura's social cognitive theory of human agency. *The American Psychologist, 46*, 153-155.
- Rushton, J. P., Brainerd, C. J., & Pressley, M. (1983). Behavioral development and construct validity: The principle of aggregation. *Psychological Bulletin, 94*, 39-53.
- Rutter, M. (1990). Psychosocial resilience and protective mechanisms. In J. Rolf, A. S. Masten, D. Cicchetti, K. H. Neuchterlein, & S. Weintraub (Eds.), *Risk and protective factors in the development of psychopathology* (pp. 181-214). New York: Cambridge University Press.
- Sampson, R., Raudenbush, S., & Earls, F. (1997). Neighborhood and violent crime: A multi-level study of collective efficacy. *Science, 277*, 918-924.
- Sanday, P. R. (1981). The socio-cultural context of rape: A cross-cultural study. *The Journal of Social Issues, 37*, 5-27.
- Sanderson, W. C., Rapee, R. M., & Barlow, D. H. (1989). The influence of an illusion of control on panic attacks induced via inhalation of 5.5% carbon dioxide-enriched air. *Archives of General Psychiatry, 46*, 157-162.
- Sanford, N., & Comstock, C. (1971). *Sanctions for evil*. San Francisco: Jossey-Bass.
- Schooler, C. (1990). Individualism and the historical and social-structural determinants of people's concerns over self-directedness and efficacy. In J. Rodin, C. Schooler, & K. W. Schaie (Eds.), *Self-directedness: Cause and effects throughout the life course* (pp. 19-58). Hillsdale, NJ: Erlbaum.
- Schunk, D. H. (1989). Self-efficacy and cognitive skill learning. In C. Ames and R. Ames (Eds.), *Research on motivation in education, Vol. 3: Goals and cognitions* (pp. 13-44). San Diego: Academic Press.
- Schunk, D. H. (1996). Goal and self-evaluative influences during children's cognitive skill learning. *American Educational Research Journal, 33*, 359-382.
- Schunk, D. H., & Gunn, T. P. (1986). Self-efficacy and skill development: Influence of task strategies and attributions. *Journal of Educational Research, 79*, 238-244.

- Schunk, D. H., & Rice, J. M. (1986). Extended attributional feedback: Sequence effects during remedial reading instruction. *Journal of Early Adolescence*, 6, 55-66.
- Schwarzer, R. (1992). *Self-efficacy: Thought control of action*. Washington, DC: Hemisphere.
- Shepherd, G. (Ed.). (1995). *Rejected: Leading economists ponder the publication process*. Sun Lakes, AZ: Thomas Horton.
- Signorielli, N., & Morgan, M. (Eds.). (1989). *Cultivation analysis: New directions in media effects research*. Newbury Park, CA: Sage.
- Singhal, A., & Rogers, E. M. (1989). Pro-social television for development in India. In R. E. Rice & C. K. Atkin (Eds.), *Public communication campaigns* (2nd ed., pp. 331-350). Newbury Park, CA: Sage.
- Skinner, B. F. (1971). *Beyond freedom and dignity*. New York: Knopf.
- Snyder, M. (1980). Seek, and ye shall find: Testing hypotheses about other people. In E. T. Higgins, C. P. Herman, & M. P. Zanna (Eds.), *Social cognition: The Ontario symposium on personality and social psychology* (Vol. 1, pp. 105-130). Hillsdale, NJ: Erlbaum.
- Snyder, M. (1981). On the self-perpetuating nature of social stereotypes. In D. L. Hamilton (Ed.), *Cognitive processes in stereotyping and intergroup behavior* (pp. 182-212). Hillsdale, NJ: Erlbaum.
- Snyder, M. (1987). *Public appearances/private realities: The psychology of self-monitoring*. New York: Freeman.
- Sperry, R. W. (1993). The impact and promise of the cognitive revolution. *American Psychologist*, 48, 878-885.
- Tellegen, A., & Waller, N. G. (1987, August). *Re-examining basic dimensions of natural language trait descriptors*. Paper presented at the 95th Annual Convention of the American Psychological Association, New York.
- Triandis, H. C. (1995). *Individualism and collectivism*. Boulder, CO: Westview Press.
- Vaughan, P. W., Rogers, E. M., & Swalehe, R. M. A. (1995). *The effects of "Twende Na Wakati," an entertainment-education radio soap opera for family planning and HIV/AIDS prevention in Tanzania*. Unpublished manuscript, University of New Mexico, Albuquerque.
- Weiner, B. (1986). *An attributional theory of motivation and emotion*. New York: Springer-Verlag.

- Westoff, C. F., & Rodriguez, G. (1995). The mass media and family planning in Kenya. *International Family Planning Perspectives, 21*, 26-31.
- White, J. (1982). *Rejection*. Reading, MA: Addison-Wesley.
- Williams, S. L. (1992). Perceived self-efficacy and phobic disability. In R. Schwarzer (Ed.), *Self-efficacy: Thought control of action* (pp. 149-176). Washington, D.C.: Hemisphere.
- Wilson, E. O. (1998). *Consilience: The unity of knowledge*. New York: Knopf.
- Winfrey, C. (1979, February 25). Why 900 died in Guyana. *The New York Times Magazine*, p.39.
- Wood, R. E., & Bandura, A. (1989). Social cognitive theory of organizational management. *Academy of Management Review, 14*, 361-384.
- Wylie, R. C. (1974). *The self-concept: A review of methodological considerations and measuring instruments* (rev. ed.). Lincoln: University of Nebraska Press.
- Yamagishi, T. (1988). The provision of a sanctioning system in the United States and Japan. *Social Psychology Quarterly, 51*, 265-271.
- Zimbardo, P. G. (1995). The psychology of evil: A situationist perspective on recruiting good people to engage in anti-social acts. *Japanese Journal of Research in Social Psychology, 11*, 125-133.
- Zimmerman, B. J. (1990). Self-regulating academic learning and achievement: The emergence of a social cognitive perspective. *Educational Psychology Review, 2*, 173-201.
- Zimmerman, B. J. & Rappaport, J. (1988). Citizen participation, perceived control, and psychological empowerment. *American Journal of Community Psychology, 16*, 725-750.

Footnote

Preparation of this chapter and some of the cited research were supported by grants from the Grant Foundation, the Spencer Foundation and the Johann Jacobs Foundation. Some sections of this chapter include revised, updated and expanded material from the books, *Social Foundations of Thought and Action: A Social Cognitive Theory*, Prentice-Hall, 1986, and *Self-Efficacy: The Exercise of Control*, Freeman, 1997.

Figure Captions

Figure 1. Schematization of the interplay of constituent determinants in alternative interactional causal models. B represents behavior, P the internal personal factors in the form of cognitive, affective and biological events; and E the external environment.

Figure 2. Four subprocesses governing observational learning (Bandura, 1986).

Figure 3. Structure of the system of self-regulation of motivation and action through internal standards and self-reactive influence (Bandura, 1986).

Figure 4. Mechanisms through which moral self-sanctions are selectively activated or disengaged from reprehensible conduct at different points in the self-regulatory process (Bandura, 1986).

Figure 5. Schematic representation of conceptions of cognitive motivation based on cognized goals, outcome expectancies and causal attributions.