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Failures in Self-Regulation: Energy Depletion or Selective Disengagement?

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Baumeister and Heatherton address the all too common social transgressions, dysfunctional adaptations, and inhumanities in terms of widespread breakdowns in self-regulation. The issues they raise are of considerable import both theoretically and socially. This commentary examines the nature of their conceptual scheme and contrasts it with a more ecologically oriented sociocognitive theory of self-regulation.

Baumeister and Heatherton's conception of self-regulatory failure is grounded in the negative feedback-loop model. In this psychocycbernetic system, a perceived negative discrepancy between a sensed feedback and an inner referent triggers adjustments to reduce the negative incongruity. There is a serious question whether the feedback loop is equipped to bear the explanatory burden placed on it given the complexities of human self-regulation. The occurrence of perceived negative discrepancies, in fact, says little about how people will react to them. Some assuredly generate better strategies and redouble their efforts to match their internal standard, others lower their standard and become resigned to a humbler aspiration, still others continue to impose on themselves the elusive standard but debilitate their efforts through gnawing despondency, and some, surprisingly, even raise their standard in the face of failure. The explanatory challenge is why the same level of perceived negative discrepancy produces such variable cognitive, behavioral, affective, and motivational effects. Three self-reactive factors in social cognitive theory (Bandura, 1991a; Bandura & Cervone, 1986) do a pretty good job in predicting whether perceived negative discrepancies will be motivating, demotivating, depressing, or uplifting. These factors include perceived self-efficacy to fulfill given standards, affective self-reaction to substandard perfor-

mance, and readjustment of personal standards in light of the progress being made.

To capture the complexities of human self-regulation requires a control system with evaluative agentive properties known to govern self-directedness. These include (a) proactive adoption of standards rooted in a value system and subserving advantageous purposes; (b) self-appraisal of personal efficacy to fulfill given standards; (c) anticipatory regulation of the strategies and effort needed to turn cognized standards into reality; (d) outcome expectations for fulfillment or unattainment of the standards; (e) affective self-evaluative reactions to one's performances; and (f) metacognitive activity concerning the accuracy of one's efficacy appraisals, the suitability of one's standard setting, and the adequacy of one's effort and strategies.

The feedback-loop model has recently come under heavy fire. Locke (1991, 1994) documented how adherents to this version of control theory have now grafted so many ideas from other theories on the negative feedback loop to remedy its prediction problems that control theory has lost its distinctiveness.

Discrepancy reduction clearly plays a role in any system of self-regulation. However, self-regulation via negative discrepancy tells only half the story and not necessarily the more interesting half. People are proactive, aspiring organisms. They set for themselves performance challenges that create motivating discrepancies to be mastered. Self-regulation thus involves a hierarchical dual-control process of disequilibrating discrepancy production followed by equilibrating discrepancy reduction. It requires proactive control as well as reactive control. In some circles, the challenges people set for themselves may serve antisocial or evil purposes. It takes proficient self-reg-

ulation to be a successful burglar, terrorist, unscrupulous businessperson, or corrupt politician.

The term *breakdown* implies a failure in self-regulatory function. Some of the transgressions and inhumanities Baumeister and Heatherton cite may, indeed, result from lapses in the exercise of personal control. However, most transgressive and inhumane conduct represents selective disengagement of self-sanctions rather than a breakdown of self-regulation. Development of self-regulatory functions does not create an invariant internal control system that continually oversees conduct except for occasional perturbations. Self-reactive influences do not operate unless they are activated and there are many psychosocial mechanisms by which controlling self-sanctions can be selectively disengaged from detrimental conduct (Bandura, 1991a). Figure 1 shows the four major points in the self-regulatory system at which the moral disengagement can occur.

Self-sanctions can be disengaged at the level of the behavior by cognitively transforming harmful conduct into good conduct through moral justification, palliative characterizations that confer a respective status on it, and cleansing contrasts with more flagrant transgressions or inhumanities. Another set of disengagement mechanisms operates by negating personal causal agency through diffusion and displacement of responsibility. Additional self-exonerative mechanisms come into play at the point of outcomes by disregarding or distorting the injurious effects inflicted on others. The final set of disengagement mechanisms operates on the recipients of detrimental acts by dehumanizing them or blaming them for bringing the suffering on themselves.

The monstrous inhumanities perpetuated by the Nazi regime were a product, not of a breakdown in self-regulation through energy depletion, but of all too efficient self-regulation in the service of an evil ideology promoted by thorough moral disengagement. Even the more mundane aggressive acts usually reflect selective moral disengagement rather than self-regulatory breakdown. For example, gang members are skillfully self-regulated in their behavior toward each other but take pride in violent acts toward rival gang members.

The impact of social conditions conducive to moral disengagement on detrimental conduct is well documented in both naturalistic and laboratory situations (Bandura, 1991; Diener, 1977; Haritos-Fatouros, 1988; Keen, 1986; Kelman & Hamilton, 1989; Milgram, 1974). Methodological advances in the measurement of disengagement mechanisms now permit direct tests of disengagement theory. Proneness to moral disengagement fosters transgressive and injurious conduct both directly and by reducing prosocialness and moral self-sanctions (Bandura, Barbaranelli, Caprara, & Pastorelli, 1994). Facility in moral disengagement predicts detrimental conduct across age, gender, socioeconomic level, religious affiliation, and in diverse domains of activities.

Self-regulation does not operate in a social vacuum. Social cognitive theory adopts an interactive ecological perspective on self-regulation rather than solely an intrapsychic one (Bandura, 1986, 1991b). Detrimental conduct is the result of a dynamic interplay of personal and environmental influences. Social ideologies and practices and exculpatory institutional arrangements facilitate self-exonerative modes of thinking that effec-

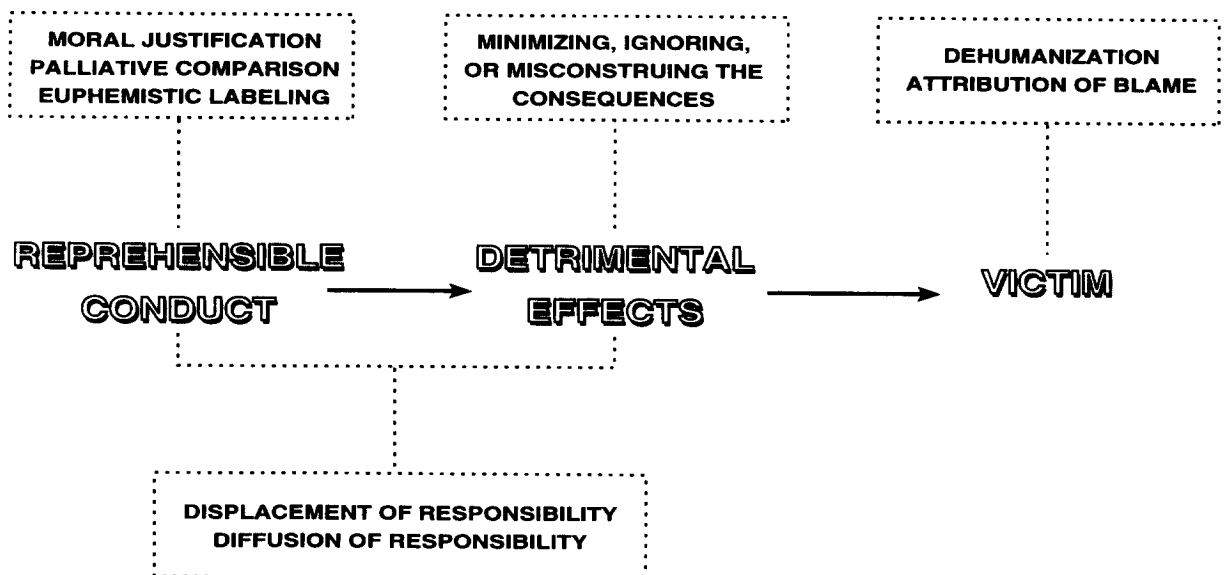


Figure 1. Mechanisms through which self-sanctions are selectively activated and disengaged from detrimental conduct at different points in the self-regulatory process (Bandura, 1986).

tively disengage moral self-sanctions from detrimental conduct. In this theoretical perspective, sociostructural and personal influences function as codeterminants within an integrated causal structure rather than as rival theories.

Psychological theorizing and research on inhumane conduct has focused heavily on impulsive expressions reflecting breakdowns in personal control (Berkowitz, 1990). The massive threats to human welfare stem mainly from deliberate acts of principle, rather than from unrestrained acts of impulse. It is the morally justified and principled resort to destructiveness that is of greatest social concern but largely ignored in psychological analyses of inhumanities. Over the years, much reprehensible and destructive conduct has been perpetrated on certain classes of foes by ordinary, otherwise considerate people in the name of religious principles, righteous ideologies, nationalistic imperatives, and ruthless social policies.

In Baumeister and Heatherton's conceptual analysis, self-regulatory failures can result from faulty standards, defective self-monitoring, or weakness in overriding an activated response sequence. The overriding dysfunction, which receives the major share of the attention in their theory, is rooted in a finite energy model. People have only so much controlling energy to spare. If they deplete too much of this energy in one sphere there is not enough left to regulate behavior in another sphere with resulting breakdowns in self-regulation. However, the depleted energy is renewable and can be increased by practice.

This fatigue model of self-regulatory failure raises a host of conceptual and empirical concerns. On the conceptual side, it fails to specify the nature and source of this energy force. It does not explain how successful self-regulation depletes energy. It is also unclear how it gets replenished. If the energy is spontaneously regenerated by self-regulatory rest, where is the locus of the regenerator and how does it work? Practice can build skill in self-regulation but how does it resupply energy?

Ambiguity of theory and lack of any measure of self-regulatory energy raise serious questions about whether the fatigue model is capable of empirical verification. The authors claim "broad and consistent" evidence for it. However, the validation is by presumption rather than by empirical corroboration. Consider some of the tendered support. People are most prone to blow their diets, get soused, act violently, and commit crimes in the evening. Presumably, it is because they are fatigued late in the day. The patterning of such problem behavior has a much more plausible explanation. People have little opportunity to overeat, overdrink, and beat up others while

at work during the daytime. However, they have a lot of free time to get themselves into trouble in the evenings. Committing crimes in broad daylight with a lot of people around would be acts of stupidity that only invite apprehension. Most violent acts are committed in intoxicated states. Inebriated individuals are not noted for lucid forethought and careful calculation of the long-term consequences of their actions. Stress impairs self-regulation presumably because it depletes self-regularity capabilities. Conditions that create stress can impair self-management through a variety of mechanisms that do not involve fatigue (Bandura, *in press*). Military-style training in self-discipline presumably strengthens self-regulation. Practice can obviously improve proficiency, but does it replenish self-regulatory energy?

Inertia and attentional transcendence are proposed as additional determinants of self-regulatory failure. The evidence cited for metaphoric inertia is that behavior is easier to control in its incipient phase than when it is well into the consummatory phase. It is certainly easier for a heavy drinker to curb the urge to drink when far removed from a bar than when seated on a bar stool with the beckoning sight and smell of liquor within easy reach and the sight of others relishing the intoxicating beverage. I would be willing to bet the coin of the realm that it is heightening instigation, rather than the inherent inertia of behavior, that taxes self-regulatory capabilities. Indeed, drinking rates can be raised and lowered with remarkable ease simply by varying whether models to whom one is exposed drink lightly or heavily (Collins & Marlatt, 1981; Garlington & Dericco, 1977). Such evidence further underscores that need for an interactive ecological conception of self-regulation.

Attentional problems are said to jeopardize self-regulation. According to Baumeister and Heatherton, attention to the here and now weakens the capacity for self-regulation, whereas a distal focus bolsters it. This may be true under some conditions but, in most endeavors, distal vision alone will not transport one very far and disregarding current reality can seriously jeopardize realization of those desired futures. A safecracker has a much better chance of extending longevity and escaping a barred cell by paying close attention to the immediate situation than by conjuring up visions of wondrous vacations amidst balmy palms while attaching delicate explosive devices to the money box and ignoring the ever vigilant alarm systems.

In the pursuit of goals requiring hard work, success is best achieved by combining a long-range vision with proximal subgoals that get one there. Distal goals alone are too far removed in time to exert much control over current behavior. In the absence of proximal goals to concentrate and direct their efforts, people postpone tak-

ing needed steps, find convenient detours in interesting current activities, and, when they get on track, they dawdle along the way. Premedical students with visions of social status and fortune had better be effective self-regulators of their study activities in the here and now if they are to gain entry to medical schools and survive once they get there. Proximal subgoals enlist self-reactive motivators that build personal efficacy, create satisfaction and intrinsic interest through subgoal attainments, and promote performance accomplishments (Bandura & Schunk, 1981; Morgan, 1985; Stock & Cervone, 1990). People not only perform better under goal proximity, but they also much prefer a proximal to a distal focus (Jobe, 1984). When assigned only distal goals, most convert them to proximal self-challenges to better guide and motivate their efforts along the way (Bandura & Simon, 1977). Those who do so outperform their counterparts who think only distally.

Our proficiently self-regulated safecracker raises the issue of creepage of value biases in the diagnoses of self-regulation failures. In antisocial activities, what is viewed as self-regulatory failure by societal agents is viewed as proficient occupational pursuit by transgressors. It is often proclaimed in conflicts of power that one group's terroristic activity is another group's liberation movement fought by heroic fighters. In Baumeister and Heatherton's examples of the societal "epidemic" of self-regulatory failures, freelancing transgressors and crimes of poverty are well represented but the crimes in circles of power and privilege are conspicuously absent. The illegalities and thievery on Wall Street in savings and loan boardrooms and in governmental agencies are considerably more serious manifestations of the transgressive epidemic but rarely make the pages of our periodicals. The theory of selective moral disengagement is an "equal opportunity" theory that is just as applicable to crimes of power and greed as to crimes of poverty.

The diagnosis of misregulation is also subject to evaluative biases. In Baumeister and Heatherton's view, people who are overly optimistic are misregulated. Resolute optimism thus becomes a personal failing requiring correction. The functional value of optimism depends on the nature of the endeavor. In activities in which missteps can produce costly or injurious consequences, personal well-being is best served by fidelity of judgment. It is a different matter in difficult activities that can yield substantial personal benefits and the costs involve time, effort, and expendable resources. Individuals have to decide for themselves which talents to cultivate, whether to invest their efforts and resources in endeavors that are difficult to fulfill, and how much hardship they are willing to endure in the pursuit of goals they value.

In most endeavors, human accomplishments and well-being require an optimistic belief in personal capabilities to achieve results. This is because realities are usually strewn with difficulties. They are full of impediments, adversities, failures, setbacks, frustrations, and inequities. It takes a resilient belief in one's capabilities to override the numerous dissuading impediments to significant accomplishments. The path to innovative achievement is even more heavily strewn with impediments and unmerciful rejections. The striking characteristic of people who have made valuable contributions to human betterment is an unshakable belief in their capabilities and in the worth of what they are doing (Bandura, *in press*; White, 1982). This resilient self-belief system enabled them to override repeated early rejections of their work. Societies enjoy the considerable benefits of the eventual accomplishments in the arts, sciences, and technologies of their extraordinary persisters. We owe them a heavy debt of gratitude for their steadfast "misregulation."

Self-regulatory lapses figure prominently in efforts to exercise control over disordered eating and addictive behaviors. Baumeister and Heatherton describe several processes whereby a minor lapse creates a full-blown relapse: A lapse may impair monitoring of the behavior or generate escalating distress that leads to abandonment of self-control. A theory of relapse must explain the variability in reaction to lapses and attainment of lasting successes as well as failures in self-regulation. After all, in the case of smoking, about 40 million people have managed to quit smoking on their own without ever receiving any professional help. Why did not lapses on the road to eventual success keep them on the nicotine fix?

Perceived self-efficacy has been shown to be a uniformly good predictor of self-regulatory success and vulnerability to relapse regardless of whether the problem is overeating, smoking, or alcohol and drug abuse (DiClemente, Fairhurst, & Piotrowski, 1995; Marlatt, Baer, & Quigley, 1995). People who have a high sense of efficacy initiate behavioral changes, use flexibility, the skills and strategies they have at their command, mobilize a high level of effort, persevere in the face of difficulties, attribute failures to situational difficulties that are surmountable, redouble their efforts following failure, and show low proneness to stress and depression under adversity (Bandura, 1992, *in press*). Those of low perceived efficacy readily convince themselves of the futility of effort when they encounter difficulties. These diverse efficacy-activated processes similarly contribute to self-regulatory outcomes in the other domains of functioning reviewed in the target article.

The need to explain variability of reaction to lapses and successful self-regulatory attainments is further

illustrated in Baumeister and Heatherton's explanation of disinhibited eating in restrained dieters. Having breached their diet by eating a trivial amount of high-calorie food, they allegedly generate self-indulgent thoughts and then eat unrestrainedly. The problem with such explanations is that not all restrained dieters lapse into recurrent overeating. Indeed, most maintain a stable self-regulatory pattern with only small weight fluctuations. Stotland, Zuroff, and Roy (1991) demonstrated experimentally that efficacy beliefs account for a major share of the variability in response to a dietary infraction. After a helping of cake, women high in dietary restraint who had a high sense of efficacy ate less in an appetizing cookie paradise than those who had a low sense of efficacy. Tests of other possible determinants revealed that neither anxious distress, dietary thoughts, nor negative patterns of thinking predicted overeating following a lapse.

Human adaptation and change are rooted in social systems. Therefore, self-regulatory agency operates within a broad network of sociostructural influences. Success in overcoming heroin addiction provides but one example of the codetermination of self-regulatory outcomes (Gossop, Green, Phillips, & Bradley, 1990). The factors that emerge as significant predictors of self-regulatory success are perceived efficacy to surmount pressures to use drugs, supportive social ties, and involvement in purposeful occupational activities that contribute to a satisfying life. Framing the issue of self-regulatory failure individualistically as volitional acquiescence versus passive vanquishment is likely to fuel moralistic disputations that generate more heat than light. An interactive ecological model of self-regulation holds greater promise of advancing understanding of how people are both products and producers of their life circumstances.

Notes

Preparation of this commentary was supported by research grants from the Spencer Foundation and the Johann Jacobs Foundation.

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