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When Smart People Behave Stupidly

RECONCILING INCONSISTENCIES IN

SOCIAL-EMOTIONAL INTELLIGENCE

A curious discrepancy exists between everyday experience and the widespread belief that intelligence is a broad, generalized attribute that characterizes a person consistently. The latter suggests that a smart person should generally be smart; the former makes it clear that smart people often behave in remarkably stupid ways. Recent documentation comes in the painful details of President Clinton's sojourn to impeachment (Marrow 1999). Even more surprising, if less publicized, was the fall of Sol Wachtler, chief judge of the State of New York and the court of appeals, to incarceration as a felon in federal prison. Judge Wachtler was well known for advocating laws to make marital rape a punishable crime, and he was deeply respected for his landmark decisions on free speech, civil rights, and right-to-die issues. After his mistress left him for another man, however, Judge Wachtler spent thirteen months writing obscene letters, making lewd phone calls, and threatening to kidnap her daughter. His descent from the court's bench as the model of jurisprudence and moral wisdom to federal prison testifies that smart people are not necessarily consistently so across different areas of their lives: as novelists (even if not all social scientists) have long known, smart lives are not without their stupid episodes. Although stupidity on the part of generally competent people can take endless forms and produce all sorts of unfortunate outcomes, in this chapter we focus on those "stupid behaviors" in which people undermine the pursuit and achievement of valued longterm goals by failing to control or forgo immediate temptations and impulses—as when the tobacco addict, coughing with emphysema, lights another cigarette after having solemnly resolved to never do so again.

Multiple Determinants of Stupid Behavior

As with any behavior, when smart people behave in stupid ways, there are usually many contributing factors, including the construals, expectations, beliefs, and values relevant to the choices and temptations these individuals confront and create (Mischel & Shoda 1995). For example, both the president and the judge may have been guided by a sense of self-entitlement-of being special and therefore immune from the consequences of their behavior. They may have not expected to be found out. Speculation aside, Clinton repeatedly told the public that he saw his affair as part of his private life, believing that it had neither moral nor legal implications for the presidency. Likewise, after his verdict, Judge Wachtler complained that his punishment was incommensurate to his crime, resenting the attorney who sought incarceration for him rather than psychological treatment (Wachtler 1997). Apparently, he had seen his behavior as minor threats of revenge with no real intention to harm. In his view, they were petty crimes of a person who needed psychological help at worst. Given such construals and beliefs, strenuous self-control may not have seemed necessary either to Clinton or to Wachtler.

Hillary Clinton's preferred explanation for her husband's infidelity, however, was that it was "a sin of weakness": an inability to control himself despite his best intentions (Blitzer 1999). Similarly, Wachtler attributed his own behavior to his problems with an uncontrollable romantic obsession (Caher 1998). Such explanations illustrate yet another reason why smart people can engage in self-defeating behavior: the failure to exert self-control or "willpower" despite knowing and wanting to do "the right thing."

Demystifying Willpower

Like Hillary Clinton, the ancient Greeks attributed failures in self-control to a character trait: akrasia, or "deficiency of the will." Although the notion of willpower as a character trait persists in contemporary lay accounts and psychological theories, it is no more informative now than it was 2,500 years ago. While trait accounts describe failures of control, they do not explain

them and they fail to address the processes involved in exerting (or failing to exert) willpower. The major concern in this chapter is to shed light on how people can transcend the temptations of the here and now, exert control in the service of long-term goals, and outsmart their own tendencies to behave stupidly just when they need to be particularly smart.

How does the dieter prevent himself from succumbing to the steaming slice of pizza in front of him, the AA member resist taking up the bottle again, or the teenager pause in the heat of the moment to put on a condom? Initial insights to these critical questions came from a series of studies involving four-year-olds, edible treats, and a bell.

In this procedure, known as the delay of gratification paradigm (e.g., Mischel & Ebbesen 1970; Mischel, Shoda, & Rodriguez 1989), a young child is shown some consumable that he or she desires, for example marshmallows or pretzel sticks. A dilemma is presented: wait until the experimenter returns and receive two of the desired treats or, alternatively, ring a bell and the experimenter will come back immediately—but then only one treat will be obtained. Most children prefer the larger outcome, and commit to wait for it. As the children actually begin to wait for the experimenter to return to the room, however, the delay becomes increasingly difficult because of the growing frustration and temptation to ring the bell and take the immediately available treat.

For the young child, this type of conflict, when it is carefully structured in age-appropriate ways, is utterly real and involving and has yielded a route to examine the underlying processes systematically. Although this method is simple in its structure, it has been found to tap the types of skills and self-regulatory strategies crucial for impulse control and for persisting with will-power or "strength" in the face of temptation.

Studies of the delay situation have shown large individual differences in children's willingness and ability to delay. In follow-up studies continuing into participants' early thirties, these differences in the number of seconds children were able to wait for the preferred but delayed treats turned out to be remarkably indicative of important social and cognitive outcomes in later life. For example, these studies revealed that the longer a preschooler waited for the delayed treats, the higher his or her sat scores tended to be a dozen years later, and the more he or she exhibited effective, planful, goal-oriented behavior as well as personal and cognitive efficacy both in adolescence and in adulthood (e.g., Ayduk et al. 2000; Mischel, Shoda, & Peake 1988; Shoda, Mischel, & Peake 1990).

Given that behavior in this situation has much diagnostic value, the question becomes: What is happening psychologically that makes some children ring the bell quickly and others wait for what seems forever?

Understanding the transition from the young infant, who has virtually no impulse control and delay ability, to the adult who must have at least some self-control to survive, is one of the greatest challenges for students of human development. When the caretaker ceases to be constantly available and responsive, the young child's need to delay gratification soon becomes indispensable. Freud (1911/1959) was one of the first to try to understand what enables delay of gratification to become manageable in the course of development. He theorized that when delay is externally imposed, the young infant forms realistic "hallucinationary" images of the physically absent objects of desire and cathects energy onto them; these images provide some time of temporary gratification that allows "time binding" and are the first steps toward making delay bearable. In a similar vein, but in a very different language, learning theories suggest that both animal and human organisms reinforce their own delay behavior by anticipating the delayed reward they expect to receive in the form of "fractional anticipatory goal responses." Thus, both the psychodynamic and learning approaches imply that internal or mental representations of the desirable features of the delayed outcomes mediate progress along the route to a delayed goal (see Mischel 1974, 1996).

Despite much theorizing, however, the effects of mental representations in making delay of gratification manageable were never experimentally tested in either tradition (see Mischel 1996). This is understandable given the difficulty of measuring and testing such internal representations objectively. In an attempt to examine whether mental representations of the delayed rewards mediate the ability to delay gratification, a delay experiment was conducted with young children at age four—the point in development at which delay of gratification is assumed to develop. In this experiment both the delayed and the immediate rewards were either exposed and available for attention or covered and thus unavailable for attention (Mischel & Ebbesen 1970). In two other conditions, either the delayed or the immediate reward was exposed while the other was covered. It was reasoned that children would be more likely to form a mental representation of the rewards if the rewards were exposed during the delay period than if they were covered. The results showed that, contrary to the predictions of psychodynamic and learning approaches, children who were exposed to the rewards (whether they were the delayed ones, the immediate ones, or both) were able to wait only for a few minutes. In contrast, they waited over eleven minutes on average when both the delayed and the immediate rewards were obscured from view.

To get a possibly closer approximation of internal representations or "mental images" (in a sense, "pictures in the head"), in the next phase of the research the delay procedure was repeated but with an important difference. Instead of waiting while facing the actual rewards, children were shown pictures of the reward objects they were waiting for on a slide projector (Mischel & Moore 1973). These slides depicted realistic, life-sized pictures of the reward objects. In this situation, then, the image of the rewards was present for attention even though the rewards themselves were physically absent. The results with these images were the opposite of those found with the actual objects: whereas exposure to the actual rewards made it difficult for children to delay, exposure to the pictures or the images of the delayed objects made the waiting task easier for them.

To further explore this reversal, another study investigated the effect of pictorial mental representations of rewards on delay (Moore, Mischel, & Zeiss 1976). In one condition, the experimenters presented children with the actual rewards but asked them to "put a frame around them." In another, they showed the children pictures of the rewards but asked them to imagine that they were real. The findings indicated that regardless of whether the children were looking at the real rewards or at the pictures, thinking about them as real made it harder to delay whereas thinking about them as pictures made it easier to wait.

Why did representing the rewards as pictures make it easier for children to wait? Drawing on the distinction between the motivational (consummatory, arousal, action-oriented) function and informational (cognitive cue) functions of a stimulus (Berlyne 1960; Estes 1972), it was reasoned that the actual rewards or their mental representations by the child as real may have made the arousing, consummatory features of the delayed outcomes more salient, increasing the conflict between their opposing desires to wait for the larger reward and to take the immediately available treat. The heightened difficulty of the delay task under such circumstances may have eventually led to a failure of the regulatory system. In contrast, the pictures of the rewards or their mental representations as pictures may have emphasized the cognitive, informational features of the rewards rather than their consummatory features. After all, as one child noted, "You can't eat the picture." Focusing on the nonarousing aspects of the rewards may have reduced the conflict between wanting to wait and wanting to ring the bell, decreasing the frustration of the delay situation and making it easier for children to wait,

Hot/Cool System Analysis of Delay of Gratification

Drawing on diverse areas of research on self-regulation, and consistent with the reasoning and the findings presented, two systems have been proposed to account for self-regulatory behavior: an emotional "hot" system and a cognitive "cool" system (Metcalfe & Mischel 1999). The hot system is an emotional "go" system, specialized for quick reactions to strong, emotion-provoking stimuli that trigger pleasure and pain. It is fully developed at birth, and in current neural models its processing has been associated with the amygdala (Gray 1987; LeDoux 1996; Metcalfe & Jacobs 1996, 1998). Once activated, hot system processing calls for instantaneous action: rapid hot reactions to appetitive and sexual stimuli, and the automatic enactment of defensive reactions when faced with threat. Similar to what Freud (1911/1959) referred to as the "id," the unconscious structure of the mind that responds to sexual and aggressive impulses and seeks immediate gratification or tension reduction, the hot system is under stimulus control (e.g., the steaming pizza for the dieter, the cocaine for the drug addict). Put another way, it responds to consummatory aspects of the stimulus, and motivates individuals for the ultimate goal response (e.g., ringing the bell and eating the pretzels).

The cool system, on the other hand, is an emotionally neutral "know" system—cognitive, complex, and contemplative—that develops with age. It is attuned to the informational, cognitive, and spatial aspects of stimuli and generates rational, reflective and strategic-behavior. This system is thought to be associated with hippocampal and frontal lobe processing, two structures of the brain that, like delay ability, begin to develop around the age of four (Metcalfe & Mischel 1999).

The hot/cool system analysis makes the specific prediction that focusing attention on the consummatory features of the delayed rewards should activate hot system processing and hinder delay, whereas focusing on its informational, abstract, cool features should activate the cool system and enhance delay. Data that support the predicted effects of "hot" and "cool" representations on delay come from a study in which some children were cued to think about the exposed rewards in one of two ways. Some children were instructed to think about the cool, abstract qualities of the rewardsfor example, by thinking about the marshmallows they were waiting for as puffy, round clouds. Other children were told to think about how sweet and chewy the marshmallows would be in their mouth, thus activating a hot representation of the rewards. As expected, when children thought about the rewards in hot terms, they were able to wait only for five minutes,

whereas when they thought about them in cool terms, delay time increased to thirteen minutes (Mischel & Baker 1975).

Overall, the evidence reviewed so far shows that regardless of the objective situation (i.e., whether one's temptations are present or absent from view), people can activate either hot or cool system processing through the ways in which they construe and mentally represent events. Despite inherent difficulties and frustration in certain self-regulatory tasks, then, people have the power to create the mental conditions that can help them resist temptation and cope with adversity.

The Role of Purposeful Self-Distraction in "Cooling" Operations

An alternative control strategy to cooling representations of "hot" temptations may be to avoid thinking about them altogether. Such purposeful self-distraction should prevent hot system activation and make self-control efforts more manageable. Indeed, compared to focusing on the cool aspects of temptations, purposeful self-distraction may be a more efficient selfcontrol strategy because cool and hot representations are mentally connected (Metcalfe & Mischel 1999) and cool thoughts themselves may unintentionally prime hot, arousing thoughts.

The role of distraction in enhancing delay ability was examined in an experiment (Mischel, Ebbesen & Zeiss 1972) in which some children were cued to think about fun thoughts ("If you want to, while you're waiting, you can think about Mommy pushing you on a swing") and some others to think about the rewards ("If you want to, while you're waiting, you can think about the cookies"). When children were prompted to think about the rewards, delay time was low, regardless of whether the rewards were exposed or covered. However, when they were led to think about pleasant, distracting thoughts, delay time was long, again regardless of whether the rewards were covered or exposed. In other experiments (Mischel et al. 1972), instead of cueing children to "Think fun thoughts," the experimenters led children to distract through overt activity by leaving a toy with them in the waiting room and telling them that they could play with it as long as they wanted. \$imilar to prompting children directly with distracting thoughts during the delay period, providing them with distracting activities helped them take their minds off the rewards and enhanced their ability to delay.

Not Everything Is a Good Distracter

In the experiments described above, the kinds of thoughts and activities that helped children delay longer were fun and pleasant in nature. Can aversive, negative thoughts (e.g., "Last time you fell off the swing and really hurt your knee") facilitate delay ability equally well? To address this question, children were also cued to think about sad thoughts (e.g., "Think about the last time you fell off the swing") when the rewards were exposed to them (Mischel et al. 1972). The results showed that thinking sad thoughts had the same effect on delay time as thinking about the rewards themselves and led to lower waiting times than did thinking fun thoughts.

Negative thoughts may have had an adverse effect on delay time because the very aversiveness of such thoughts increases stress and frustration, and motivates people to avoid thinking them. In the delay situation, one way to avoid thinking unpleasant thoughts is to think pleasant thoughts, such as the yummy and chewy rewards themselves. Ironically, then, instead of focusing on the negative distracters to decrease the aversiveness of the delay situation, children may have preferred to focus on reward-related thoughts to attenuate the effects of negative distracters, giving in to temptation more readily in the delay task.

The Role of Planning in the Pursuit of Long-Term Goals

In contrast to the childhood delay of gratification paradigm in which children needed to "just" wait to pursue long-term goals, many real-life control situations require one to work (as well as wait) to gain desired outcomes. A life goal like getting a college degree, for example, requires more than just waiting four years; it calls for studying, taking and passing courses, and resisting the diverse distractions and temptations along the route (Cantor & Fleeson 1991; Gollwitzer 1993; Mischel & Patterson 1978). Current self-regulatory analyses of goal attainment point to the importance of implementation plans in the actualization of the objectives one has set for oneself (Gollwitzer 1999). Implementation plans specify where, when, and how to pursue a goal intention by linking a specific situation to a specific response (e.g., I will read the textbook for my course from 5 to 8 p.m. everyday) (Gollwitzer 1993, 1999; Gollwitzer & Schall 1998). Implementation intentions, when properly planned, structured, and rehearsed, help selfcontrol because goal-directed action is initiated automatically when the relevant situational cues present themselves (e.g., when the clock hits 5 p.m.) (Gollwitzer 1993, 1999). For instance, they facilitate action initiation (e.g., I

will start writing the paper the day after Christmas) (Gollwitzer & Brandstätter 1997), inhibition of unwanted habitual responses (e.g., when the dessert menu is served, I will not order the chocolate cake), as well as resistance to temptation (e.g., whenever the distraction arises, I will ignore it) (Schall & Gollwitzer 1999).

These adult studies were based on earlier research that investigated the role of similar self-instructional implementation plans in goal attainment among young children. In a resistance-to-temptation paradigm, preschool children were told that they could play with attractive, desirable toys, but only if they completed a boring, repetitive task of placing pegs in a pegboard. During the work period, however, children were periodically distracted by "Mr. Clown Box," a mechanical clown that talked to the children by means of a tape recording and produced noises and flashing lights to engage their attention. In one study (Patterson & Mischel 1975) the experimenter suggested to the children ways to resist distraction when Mr. Clown Box attempted to get their attention. For example, children were told that when Mr. Clown Box said "Hey, look," they could say "No I can't, I'm working." Those who were given such strategies resisted distraction and kept on working for longer than those who were not given strategies. In other studies (Mischel & Patterson 1976; Patterson & Mischel 1976), children were provided with either task-facilitating plans (e.g., "I am going to look at my work"), temptation-inhibiting plans (e.g., "I am not going to look at Mr. Clown Box"), or reward-oriented plans (e.g., "I want to play with Mr. Clown Box and the toys later") in the face of distraction. The results showed that the temptation-inhibiting and the reward-oriented implementation plans facilitated self-control better than the task-facilitating plans.

Note that although attention to rewards hinders self-control in the delay of gratification paradigm (depending on just how the rewards are represented cognitively), reward-oriented plans assist self-control in resisting distraction. Thus, whether a reward focus will improve or impair efforts toward self-control may depend upon whether goal pursuit requires individuals to perform active, instrumental behaviors or to wait passively. In the former scenario, reward-related thoughts may motivate action toward goal attainment by reminding people of the positive consequences of completing the instrumental task (i.e., "the light at the end of the tunnel"), enhancing resistance to distraction. During passive waiting, however, delay is facilitated only if the reward-related thoughts focus on the cool, informational aspects of the rewards.

Delay Ability as a Protective Factor against Dispositional Vulnerabilities

The cognitive-attentional strategies necessary for exertion of willpower and impulse control discussed so far may also help protect people against their personal vulnerabilities. Consider the disposition to anxiously anticipate and severely react to personal rejection, referred to as rejection sensitivity. A cognitive-affective vulnerability characterized by heightened fears and expectations of rejection, rejection sensitivity is believed to stem from experiences of neglect and rejection in early life (Downey & Feldman 1996; Feldman & Downey 1994). When people high in rejection sensitivity encounter behaviors that could be interpreted as rejection (e.g., one's partner talking to somebody else at a party), they tend to construe them as intentionally hurtful. Perceptions of intentional rejection trigger strong negative emotions such as anger, resentment, or jealousy, and activate maladaptive, automatic behavioral scripts. For example, rejection-sensitive men who seek and value intimacy are more physically violent toward their partners than are men who are low in rejection sensitivity (Downey, Feldman, & Ayduk 2000). Similarly, highly rejection-sensitive women express more hostility during conflicts, and withdraw support and start fights when they feel rejected (Ayduk et al. 1999). Not surprisingly, the relationships of highly rejectionsensitive people end sooner than those of low rejection-sensitive people (Downey et al. 1998). In sum, when people who are sensitive to rejection feel that they have been rebuffed, "hot" responses occur without the mediation and benefit of more complex, "cool" cognitive processes that enable reflection and rational problem solving (Metcalfe & Mischel 1999).

Not all people who fear and expect rejection, however, end up in a jealous rage or lash out at their partners at the slightest sign of inattentiveness. Some highly rejection-sensitive people may be able to cope better than others with situations likely to elicit impulsive, potentially relation-destructive reactions. The self-regulatory task for the rejection-sensitive person may be similar to that of the four-year-old waiting for the marshmallows: the former must deal with the sense of threat and stress elicited by signs of rejection, while the latter must attenuate the frustration and aversiveness of the waiting period. In both cases the regulatory task is to inhibit reflexive, hot system reactions by accessing cool system processing. Thus, theoretically, there is reason to believe that the attentional processes that enable people to delay gratification and inhibit impulsive reactions in the face of temptation may also help protect them from their own tendencies to react maladaptively in situations that activate their rejection concerns (Metcalfe & Mischel 1999; Mischel, Cantor, & Feldman 1996; Lang, Bradley & Cuthbert 1990).

Therefore, we examined whether delay of gratification ability protects

people high in rejection sensitivity against negative outcomes in terms of both their personal well-being (self-esteem, depression) and their relationships with others (aggression) (Ayduk et al., 2000). Preschoolers who had participated in the original delay experiments were followed up when they were around the age of twenty-seven, more than twenty years after the initial assessment of their delay ability. The results from this study showed that rejection-sensitive people who had low ability to delay gratification as preschoolers reported lower self-esteem, self-worth, and general coping ability as adults compared to those low in rejection sensitivity in young adulthood. By contrast, highly rejection-sensitive adults who had high delay ability as preschoolers were not distinguishable from low rejection-sensitive individuals. They were also perceived by their parents as having higher self-esteem and being more able to deal with stress than were rejection-sensitive people with low delay ability. This general pattern was replicated in a preadolescent, at-risk sample. Highly rejection-sensitive middle schoolers who had shown low delay of gratification ability in kindergarten were more susceptible to low self-worth, to heightened physical aggression against peers, and to being shunned by their peers than were their similarly rejection-sensitive peers who had been able to wait-longer in the delay situation.

Role of Cognitive-Attentional Strategies in Coping with Rejection Sensitivity

To more directly address the role of cognitive-attentional strategies in protecting rejection-sensitive individuals from their own maladaptive tendencies, a self-control strategies measure for college students was developed, and its interactions with rejection sensitivity were explored (Ayduk 1999). The measure asks participants to imagine they are on a diet and have the intention of not eating a slice of hot, steaming pizza in front of them. Thus, the measure activates the basic conflict inherent in the childhood delay situation of wanting to consume an immediate reward after having committed to not eating it. The scenario is followed by a series of potential cognitive-attentional strategies, some of which are theoretically ineffective (e.g., thinking about how yummy the pizza is) and some effective (e.g., thinking about how unhealthful fat and grease are) in exerting willpower. Strategic self-control is indexed by the use of effective strategies and the avoidance of ineffective strategies.

In a study that examined hostility in relationship conflict using this measure (Ayduk 1999), people high in rejection sensitivity reported higher levels of verbal aggression (e.g., yelling, insulting, cursing) toward their partners

than people low in rejection sensitivity only if they also had lower levels of strategic self-control. Those highly rejection-sensitive people with high strategic self-control, however, reported lower levels of hostility and were similar to people low in rejection sensitivity.

Taken together with the previous findings reviewed, these results suggest that attention deployment and cognitive reconstrual may play a role in regulating the interpersonal self. In interpersonal situations, for example, highly rejection-sensitive individuals who cannot deploy attention strategically may have an attentional bias to focus on rejection cues as well as their own internal emotional states. This may make it difficult for them to encode contextual information that could provide alternative explanations for others' behaviors (Dodge 1980; Downey & Feldman 1996), leading them to readily perceive intentional rejection in a perpetrator's behavior. Conversely, rejection-sensitive individuals with high self-regulatory ability may strategically and purposefully avoid focusing on negative behaviors of others or the sense of foreboding that they typically feel when facing potential rejection. Such cooling strategies should enable them to instead attend to situational information, and generate alternative explanations to others' behavior. By making finer distinctions between intentional rejection and ambiguous behavior that may be benignly intended, they may be less susceptible to false alarms and a rapid generation of the fight-or-flight response.

Rejection-sensitive people high in delay of gratification ability also may be better in attenuating the threat they perceive in rejection cues through cognitive reappraisal (Kelley 1955; Mischel 1974). Rather than taking an argument with a romantic partner as indicative of the end of their relationship, they may reconstrue it as simply a difference of opinion, restrict the event's negativity to a single occasion, and prevent themselves from overemphasizing its significance. Likewise, a partner's currently negative behavior can be understood as transitory and situationally induced (e.g., owing to stress), and its importance or centrality for the person's long-term goals can be attenuated by placing such behavior in a broader context.

Summarizing the Cognitive-Attentional Strategies of Social-Emotional Intelligence

Adaptive and intelligent functioning requires one to voluntarily postpone immediate gratification in the pursuit of preferred but delayed goals and outcomes. The frustration and conflict involved in such delay is particularly challenging when the immediate situation includes "hot" cues that activate a biologically hardwired automatic response system. Different things are

"hot" for different people—for one person, the possibility of rejection may test his or her self-regulatory strength, while for another, chocolate cake may be the ultimate test. Ironically, it is particularly in these situations that selfregulatory strength is needed to inhibit tendencies to react reflexively and to act adaptively and purposefully.

This chapter has outlined some of the principles of willpower based on findings from three decades of research on preschool delay of gratification. Self-regulatory success or failure seems to be contingent on the attentional deployment strategies people use and the way they cognitively transform temptations and obstacles (Baumeister, Heatherton, & Tice 1994; Carver & Scheier 1981; Mischel et al. 1996). Strategies that involve diverting attention away from the tempting stimulus generally involve self-distraction, and lead to effective self-control because they facilitate a shift away from its hot, "here and now" features and their compelling pull.

The effectiveness of strategies that involve attention to the desired objects, on the other hand, depends on the features attended to by the individual. For example, if attention is focused on the taste of a slice of pizza, self-control failure is likely despite the dieter's best intentions because the conflict-arousing qualities of the stimulus are intensified (see Mischel et al. 1989). This intensification, in turn, makes one's short-term goals (e.g., the satisfaction one would get from eating the pizza) more salient, making it harder to exert willpower in delaying gratification. In contrast, focusing on the grease and sodium content of the slice of pizza can change the meaning of the stimulus (Lazarus, Averill, & Opton 1970; Mischel 1973, 1974) and the nature of the behavioral tendencies associated with it. Focusing on grease may activate avoidance instead of approach tendencies, making it easier for the individual to go beyond the immediate environment and focus instead on more distal, abstract, but ultimately desirable outcomes (e.g., good health).

It would be a mistake, however, to think that a strategy that is effective in one situation will lead to more intelligent social behavior across all contexts. Rather, being sensitive to the demands of different situations and adjusting one's behavior flexibly in accordance with the situational constraints may lie at the heart of adaptive social and emotional behavior (Cantor & Kihlstrom 1987; Chiu et al. 1995; Shoda, Mischel, & Wright 1993). The connection between social competence and sensitivity to situational demands in behavior is evident in children as young as six years old. Shoda, Mischel, and Wright (1993) have shown that cognitive social competence predicted the extent to which children (ages six to twelve) in a summer camp varied their pro-social behavior in relation to particular situations in a consistent and predictable manner (e.g., pro-social when warned by counselors but aggressive when teased by peers). In a similar vein, the literature on stress and coping indicates that people who are high in social competence show a discriminative, adaptive pattern in how they seek information about potential stressors. Socially competent adults tend to monitor (seek) information during threatening, controllable events because information in this situation helps them gain control but avoid information (blunt) during uncontrollable events because information cannot be used in a way to alleviate distress (Chiu et al. 1995).

As these findings imply, effective self-control requires one to be strategic in knowing when to "cool" and when to "warm," taking into account characteristics of each situation. Indeed, self-distraction, when employed across all contexts, may actually lead to mental disengagement and wishful thinking, resulting in further emotional distress (e.g., Bolger 1990).

Other Mediators of Strategic Self-Regulation in Adulthood

In addition to the cognitive-attentional strategies that have been explored in the preschool delay of gratification experiments, effective self-control and adaptive behavior has many other psychological mediators. For instance, people high in self-regulation may be more motivated to attain their longterm goals than people low in self-regulation (Cantor & Blanton 1996). Higher levels of motivation to attain one's long-term goals may help transcend the often overwhelming salience of one's short-term goals under emotional arousal or threat. The transcendence of a here-and-now motivational state, in turn, reduces the likelihood of reflexive responses and helps ensure that individuals behave in more thoughtful and strategic ways (Baumeister & Heatherton 1996; Mischel 1996).

The ability to access and utilize self-regulation strategies may also critically depend on perceived control and self-efficacy beliefs (Bandura 1977; Thompson 1981). If people approach difficult tasks with the belief that the outcomes are under their control, they may actually try harder to access attentional, motivational, and emotional control strategies that facilitate effective self-regulation. These beliefs may also serve as protective factors against adversity directly by promoting an active coping style, and indirectly by maintaining optimism even in the face of obstacles (Taylor & Aspinwall 1996; Scheier & Carver 1987).

This chapter began with the seemingly paradoxical question of how "smart" people like Bill Clinton and Judge Wachtler could have behaved in such self-defeating, nearsighted ways. Historically, psychologists have dealt with such inconsistencies in behavior by trying to differentiate between the "surface" person and the deeper, "real" person, assuming there could be only a single, genuine self (Mischel 1968). Over the past decade, however, a growing body of research has begun to recognize that people's behavior varies stably and predictably across situations (e.g., if situation A then he does X, but if situation B then he does Y), and that such variability reflects the core of personality and provides a window through which to glimpse the underlying goals and motivations of the person (Mischel & Shoda 1995; Shoda & Mischel 1998; Shoda, Mischel, & Wright 1993, 1994).

To illustrate, consider the example of Jack, who is a generally calm, sociable person. Every time his girlfriend attempts to do something with others that does not involve him, however, he becomes hostile and lashes out. Now imagine James, who is also a calm and sociable person. He does not mind so much if his girlfriend wants to do things without him. Instead, he gets very angry and spiteful when his girlfriend tells him what to do. Whereas both Jack and James are calm and friendly in general, each gets predictably angry and hostile in certain situations: Jake when his significant others try to establish independence from him, and James when they try to control him. Thus, being both gentle and hostile—like being smart and stupid—may be equally genuine facets that can coexist in the same, "real" person.

As noted at the beginning of the chapter, behavior has multiple determinants. The relationship between situational features and behaviors generated is determined by the individual's construals, goals, affects, beliefs, and self-regulatory competencies that are relevant to and get activated in those circumstances (Mischel & Shoda 1995, 1998). Sometimes stupid behavior in smart people may arise from faulty expectations, erroneous beliefs, or merely a lack of motivation to enact control strategies even when one has them. But sometimes it is an inability to regulate one's affective states and the behavioral tendencies associated with them that leads to stupid and self-defeating behavior.

In situations that contain "hot" features and activate automatic response tendencies, the power of the hot system may make it difficult for even the smartest people to exert self-control. As Clinton recently remarked, "Presidents are people too" (CNN 1999). Hot reflexive reactions may be part of the overall arousal state that mobilizes the body's resources efficiently in response to sudden danger. The accentuation of the hot system may have

survival value in evolutionary terms, preventing humans from wasting time thinking and contemplating, and instead allowing them to fight, run from danger, or seize the moment for an appetizing meal or an opportunity for procreation. On the other hand, such an emergency system can become destructive if it governs reactions in situations that require patience and reflective, strategic behavior (LeDoux 1996).

Unlike lower animals on the evolutionary ladder, however, human beings have the capacity to eventually take control with high-level brain centers (e.g., involving the frontal lobe and hippocampus areas) and to start thinking and planning their way through the problem that the amygdala had already begun to respond to automatically and emotionally—although not necessarily wisely. As the delay of gratification experiments show, rather than being slaves to our impulses and automatic response tendencies, humans have the ability to change the ways they construe and represent the objects and events around them. Through such transformations, reconstruals, and attention deployment strategies, people can exert volitional control even in situations that might otherwise be dominated by hot system processing. For example, those highly rejection-sensitive people who can access and utilize cooling strategies in interpersonal interactions do not experience the negative outcomes that are typically associated with this vulnerability.

Final Remarks

The individual's "self-regulatory system" includes a number of interconnected components, all relevant to how complex, relatively long-term patterns of goal-directed behavior are planned, generated, and maintained even when the environment offers weak supports, diverse impediments, and frustrating and conflicting elements. To a considerable degree, individuals direct and control their own behaviors toward delayed (i.e., future) outcomes and goals. They influence the quality of their performance by self-imposed goals and standards—by self-monitoring, self-evaluations, and self-produced consequences as they generate and pursue their plans and projects (e.g., Bandura 1986; Cantor & Kihlstrom 1987). Even in the absence of external constraints, people set goals for themselves, monitor their own behavior, and encourage or demoralize their own efforts through their own ideation as they progress toward subgoals.

William James (1890/1981) differentiated between *wishing* and actively *willing* in the opening to his chapter on the will over one hundred years ago: "Desire, wish, will, are states of mind which everyone knows and which no definition can make plainer. If with the desire there goes a sense that attain-

ment is not possible we simply wish; but if we believe the end is in our power, we will that desired feeling, having, or doing shall be real... and real it presently becomes, either immediately upon the willing or after certain preliminaries have been fulfilled" (p. 486). As James insightfully noted, to go from wishing something to actually willing it, not only must one believe that attainment of the goal is under potential control but one must also fulfill a set of "preliminary" conditions. Research in the past three decades has shown that although expectancies, beliefs, and goals are all essential preliminaries for even attempting to exert effortful control, the success of those efforts depends critically on the self-control skills and strategic competencies that are employed to pursue them—and that are so often forgotten when they are most urgently needed.

NOTES

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