

---

Yielding to Temptation: Self-Control Failure, Impulsive Purchasing, and Consumer Behavior

Author(s): Roy F. Baumeister

Source: *The Journal of Consumer Research*, Vol. 28, No. 4 (Mar., 2002), pp. 670-676

Published by: [The University of Chicago Press](#)

Stable URL: <http://www.jstor.org/stable/3131982>

Accessed: 20/09/2010 01:20

---

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at <http://links.jstor.org/page/info/about/policies/terms.jsp>. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at <http://links.jstor.org/action/showPublisher?publisherCode=ucpress>.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).



*The University of Chicago Press* is collaborating with JSTOR to digitize, preserve and extend access to *The Journal of Consumer Research*.

# Reflections and Reviews

---

## Yielding to Temptation: Self-Control Failure, Impulsive Purchasing, and Consumer Behavior

ROY F. BAUMEISTER\*

Self-control is a promising concept for consumer research, and self-control failure may be an important cause of impulsive purchasing. Three causes of self-control failure are described. First, conflicting goals and standards undermine control, such as when the goal of feeling better immediately conflicts with the goal of saving money. Second, failure to keep track of (monitor) one's own behavior renders control difficult. Third, self-control depends on a resource that operates like strength or energy, and depletion of this resource makes self-control less effective. Trait differences in self-control predict many behaviors. Implications for theory and research in consumer behavior are discussed.

The shopper says, "I really shouldn't," transfixed with infatuated desire. The budget is tight, the price is too high, the item is not desperately needed, and so the shopper should not buy it. Ranged against these sensible concerns is a murky alliance of wants, impulses, and emotions, all clamoring for the gratification of the purchase and wanting to believe that the purchased product will bring true happiness, at least for a while. As Hoch and Loewenstein (1991) have written, the outcome of such consumer decision points depends considerably on the conflict between the competing strengths of self-control and desire.

The purpose of this article is to apply new insights about self-control and its failures to consumer behavior, particularly in reference to dilemmas like the one in the previous paragraph. I have spent much of the past decade studying failures of self-control. No one will argue, I assume, that the battle between self-control and desire depends partly on

how strong the desire is. My focus is on the other side, however: The strength of self-control varies systematically with several crucial factors, and these can play a decisive role in determining whether the "I really shouldn't" dilemma is resolved by doing what one should not or what one supposedly should.

By way of definition, I use the terms "self-control" and "self-regulation" interchangeably; both refer to the self's capacity to alter its own states and responses. Thus, self-control overrides one incipient pattern of response and replaces it with another. These responses may include thoughts (e.g., by suppressing unwanted thoughts or forcing oneself to concentrate), changing emotions (getting into, getting out of, or unnaturally preserving some emotion or mood), regulating impulses (e.g., resisting temptation), and altering performances (e.g., persisting). Impulses refer to incipient behavioral responses that normally result from the encounter between a motivation and some activating stimulus, such as when the hungry person sees food and feels an impulse to eat it. Impulsive behavior is understood as behavior that is not regulated and that results from an unplanned, spontaneous impulse. In particular, impulsive purchasing involves getting a sudden urge to buy something, without advance intention or plan, and then acting on that impulse without carefully or thoroughly considering whether the purchase is consistent with one's long-range goals, ideals, resolves, and plans. Impulsive behavior is most interesting and relevant when it contradicts some of those long-term goals (such as

---

\*Roy F. Baumeister is currently the E. B. Smith Professor in Liberal Arts at Case Western Reserve University in the Department of Psychology, Cleveland, OH 44106-7123 (rfb2@po.cwru.edu). He received his Ph.D. in social psychology from Princeton in 1978. He currently has nearly 250 publications, including the books *Evil: Inside Human Violence and Cruelty*, *Meanings of Life*, *Losing Control: How and Why People Fail at Self-Regulation*, and *The Social Dimension of Sex*. His research has been supported by the National Institute of Mental Health (this essay was supported by grant MH 57039) and by the Templeton Foundation. His research interests include self-regulation and self-control, interpersonal rejection, sexuality, aggression, self-esteem, and human nature.

saving money) because the person may regret having yielded to the impulse.

### IMPULSES IRRESISTIBLE AND RESISTIBLE

Some writers on consumer behavior are fond of the concept of irresistible impulses among shoppers. Rook (1987, p. 189) asserted that "impulses sometimes prove irresistible," and shoppers in his study reported feeling "helpless against the dictates of their impulses" (p. 195). Thompson, Locander, and Pollio (1990) found that shoppers sometimes report an experience of losing control of their behavior, resulting in excessive purchases.

Claims of irresistible impulses are popular among people whose self-control has failed, but over the years I have become increasingly skeptical of such claims. If an impulse were literally irresistible, then restraining it would be truly impossible. People would act out their impulses even if someone were holding a gun to their heads and threatening to shoot them if they did so. Douglas (1995) observed that serial murderers have the reputation of suffering from irresistible impulses to commit violent and homicidal acts, yet somehow their crimes are never committed in the presence of an armed police officer. Somehow even these individuals manage to control their behavior when it is to their advantage.

True, there do exist a few genuinely irresistible impulses, such as when the urge to stop standing, to breathe, to urinate, or to sleep have been deferred as long as is physically possible. In such cases, even the gun to the head will not prevent the impulse from being enacted. But impulses to purchase some item or service rarely or never reach that intensity. My colleagues and I have concluded that most claims of irresistible impulses are more a matter of rationalization than of genuinely being helpless against strong desires (Baumeister, Heatherton, and Tice 1994), and the same probably applies to shopping. Returning home with an unnecessary and expensive purchase, the buyer probably would rather explain to the disapproving spouse that "I couldn't resist" than "I was too lazy and selfish to resist."

On the contrary, it is precisely because purchasing impulses are resistible that they are of such great interest—both to research psychologists and to marketers and advertisers. The shopper who says "I really shouldn't" even while tentatively reaching for the wallet can really go either way, and the outcome depends on a variety of situational and inner forces. If American businesses had to depend on irresistible impulses for their sales, the economy would come to a screeching halt. Most purchasing impulses are quite resistible, but people fail to resist them often enough to keep the economy humming along.

Why, then, do people fail to resist these impulses? In the long run, or sometimes even by later that same day, they may wish they had resisted the impulse. But resisting an impulse depends on the person's capacity for self-control. The causes of self-control failure are thus important for

understanding impulse buying and similar aspects of consumer behavior.

### WHY SELF-CONTROL FAILS

Effective self-control depends on at least three major ingredients. These are the standards, a monitoring process, and the operational capacity to alter one's behavior. If any of these fails, self-control can be undermined.

#### Standards

Standards refer to goals, ideals, norms, and other guidelines that specify the desired response. If you do not want to change, there is no need for self-regulation. Examples of standards may indicate an ideal weight or shape that is the dieter's goal, a desired emotional state (or the absence of a particular state, such as unwanted anger), or a certain level of performance or persistence.

Consumers who know precisely what they want are probably less likely than others to indulge in impulse buying, and in general are probably less vulnerable to influences from sales personnel, advertisers, and the like. Uncertain or conflicting goals undermine the basis for self-control and make people more susceptible. People who go to the mall with no particular purchasing goal in mind, for example, are more promising candidates.

Conflict among goals has been shown to undermine self-control too, although the relevance to consumer behavior has not (to my knowledge) been confirmed. Studies with children have shown that if two adults give different rules or prescriptions, children's behavior is less consistent (Maphet and Miller 1982).

Of particular importance are cases in which people may hold goals that are in conflict with regard to a particular indulgence. This situation probably is an accurate reflection of the condition of many shoppers. That is, they would like to save their money, but they would also like to own something that will make them happy. Naturally, they cannot be sure whether a particular purchase will confer a great deal of happiness on them, and so it is difficult to resolve the conflict between the two goals. Even more relevant, the process of purchasing may itself make them happy, at least in the short run. O'Guinn and Faber's (1989) research on compulsive buying concluded that compulsive shoppers derive more pleasure and satisfaction from the buying process than from actually owning the item. In fact, Katz (1989) drew the same conclusion about shoplifters: They enjoyed the process of acquiring the object more than they enjoyed the object itself, and many of the stolen items were quickly relegated to an obscure drawer or closet and forgotten, even while the intense satisfaction of stealing it remained a source of pleasure in memory.

People generally want to feel good, and when people are upset the goal of feeling better becomes increasingly central to their actions. Thus, to the extent that a consumer is torn between saving money and spending it for the sake of feeling

good, emotional distress may shift the balance in favor of making the purchase.

When my colleagues and I reviewed the literature on self-control, we found over and over that emotional distress contributed to breakdowns in self-control (Baumeister et al. 1994). Subsequently we conducted laboratory experiments to test the hypothesis that a shift in priorities mediates the link between emotional distress and failure at self-control. Specifically, we reasoned that when people are upset, the goal of feeling better comes to take precedence over other self-regulatory goals (such as saving money or doing other things that will lead to long-term desirable outcomes). In one experiment, we studied people's resistance to eating unhealthy snack foods (Tice, Bratslavsky, and Baumeister 2001). Participants were put into a sad mood, and then we asked them to eat some snack foods in order to furnish questionnaire ratings of them (ostensibly as part of a marketing study). We did not really care about their questionnaire ratings. We used the ploy only as a means of measuring how much they would eat. Sure enough, the sad people ate more than did the others. However, in a variation on this procedure, we told half the participants that eating would not improve their mood or emotional state. These participants did not show any increased eating. The implication is that eating more snack food when depressed is done only when one thinks it will help cheer oneself up. In other studies, we told people that their emotional or mood states had been artificially frozen so that these would be unable to change for the next hour, with the implication that any effort at regulating one's emotional state would be useless. Such a manipulation removed the tendency of emotional distress to push people toward immediate gratification or toward procrastination (Tice et al. 2001), and it also eliminated the tendency of people to express their anger by aggressing against another person who had irritated them (Bushman, Baumeister, and Phillips 2001).

All these studies point to the same conclusion. Normally people control their behavior so as to pursue high standards and desirable, long-term goals. They try to eat healthy foods, they avoid procrastination, they delay gratification when delay will produce better rewards, and they restrain their aggressive impulses. When people are emotionally upset, these restraints break down, so that people become more likely to eat unhealthy foods, procrastinate, seek immediate gratification, and engage in aggression. Our studies showed that these behaviors are done specifically for the sake of making people feel better (because when we eliminated the prospect of feeling better, people did not indulge in these behaviors).

Applied to consumer behavior, the implication is that people who are emotionally upset may be more likely to cast prudent self-control aside in the hope that purchasing goods or services will make them feel better. This conclusion fits well with observations by Mick (1996; Mick and DeMoss 1990) that people sometimes give themselves gifts in order to make themselves feel better, and they do this particularly when they consciously think to do so.

## Monitoring

A second crucial ingredient of self-control is the process of monitoring, which means keeping track of the relevant behavior. My grandmother once told me her system to help manage money effectively: write down every time you spend money, including how much you spent and what you bought. Ample research has borne out the wisdom of her comments. When people lose track of their behavior, self-control breaks down.

For example, a pair of studies by Polivy et al. (1986) linked monitoring to self-control of eating. Dieters and non-dieters were first induced to consume two large milkshakes (or nothing, in the control condition), which should have made them full. Afterward they had an opportunity to eat candy (in the guise of a marketing study). Not surprisingly, nondieters ate substantially less if they had consumed the milkshake, but dieters paradoxically ate more after the pre-load. The findings fit a pattern suggesting that the dieters regarded their diets as ruined for the day, and so they indulged in further eating. More important, some of the dieters who consumed the milkshakes then had their attention drawn to themselves through several manipulations (such as having to put their candy wrappers in an obvious place where the amount could easily be seen); these dieters ate significantly less. Thus, the dieters who consumed the milkshake typically stopped monitoring their food intake, enabling them to go on a small binge and eat plenty of candy. If monitoring was restored by focusing attention on the self's eating, the dieters kept their eating under control. The implication is that when a dieter has broken her diet, she stops keeping track of her food, and this can contribute to eating binges. In contrast, successful dieters typically keep careful track of the foods they eat and how many calories these contain.

Alcohol has been shown to contribute to failure of self-control in nearly every domain in which people control their behavior (see Baumeister et al. [1994] for review). One explanation is that alcohol intoxication makes people stop monitoring their behavior. Hull (1981) showed that alcohol reduces people's attention to themselves, and self-focused attention is a vital part of monitoring oneself for the sake of self-regulation (see Carver and Scheier 1981, 1982). Drunken people stop keeping track of their spending, the wisdom of their comments, their eating, their smoking, and even of their drinking itself—and so the inner controls that typically restrain these behaviors are undermined.

Monitoring is likely to be relevant to consumer behavior as well. When people keep careful track of their money and expenditures, impulsive purchases are less likely. The willingness of many people to buy on time at high interest rates is probably more due to their failure to calculate what they actually end up paying for the item rather than to a genuine willingness to pay the high cost of the item.

## The Capacity to Change

The third ingredient of self-control is the capacity to alter the self. The other two ingredients are useless without it,

for the person might know what he or she wants and be quite aware of his or her own behavior but not be able to make the self perform the necessary actions. In the specific situation of the contemplated impulse purchase, the crucial question is whether the person can muster up whatever is needed to resist the temptation to buy.

How does the self actually produce these changes in its responses, such as restraining impulses and overriding incipient responses? A review of past theorizing revealed three main types of theories (Baumeister et al. 1994). One involved willpower or strength. In this view, self employs some kind of strength or energy resource that matches or surpasses the power of the impulse. A second type of theory involved cognitive processes, including knowledge about the self and contingencies, such as if self-control is essentially akin to a software program that can be loaded so as to direct the person's behavior. The third type of theory depicted self-control as a skill.

These three theories make different predictions as to what will happen if people have to perform several acts of self-control in a row. The willpower or strength model suggests that some of this energy would be expended on the first act, so the second act of self-control would be less effective than it would normally be. The cognitive theory, in contrast, would predict facilitation: The first act of self-control would "load the software" or prime the relevant self-control schemas, and so subsequent acts of self-control should be improved because the self is already in its self-regulating mode. The third theory, based on skill, would predict little effect of acts of self-control on subsequent acts because skill remains essentially the same over consecutive trials, although over the long run it shows gradual improvement.

A series of experiments has provided consistent support for the strength model rather than the cognitive or skill models (see Baumeister et al. 1998; Muraven, Tice, and Baumeister 1998). In these studies, people were first instructed to engage in some act of self-regulation. In different studies, the manipulation involved stifling (or amplifying) one's emotional response to an upsetting film, suppressing thoughts about a white bear, acquiring and then breaking a habit of crossing out every "e" in a page of text, and resisting the temptation to eat chocolates and cookies so as to force oneself to eat radishes instead. To provide a comparison, participants in various control conditions were exposed to similar stimuli but did not have to regulate their behavior. For example, they watched the same upsetting film without having to regulate their emotions, or they were permitted to eat the chocolates and cookies instead of the radishes. Afterward, we measured self-regulation in ostensibly unrelated other tasks, such as physical stamina on a handgrip exerciser, persistence in the face of failure on unsolvable anagrams, or refraining from laughing and smiling while watching a comedy video. The findings repeatedly showed that self-control was poorest among people who had already performed a prior act of self-control.

Thus, performing any act of self-control seems to deplete some crucial resource within the self, and that resource is

then no longer available to help the person on the subsequent self-control task. This state of reduced capacity for self-control is called "ego depletion" because it indicates that the self's crucial resources have been depleted. These resources operate like an energy or strength. Not only do they show short-term exhaustion and replenishment after rest, but also (like a strength) they seem to be able to grow stronger through regular exercise (Muraven, Baumeister, and Tice 1999).

The implications for consumer behavior seem clear. People in a state of ego depletion are more likely to yield to temptation and buy impulsively. Ego-depleted consumers will be less able to regulate their behavior toward their long-range goals of saving their money and purchasing only things that will be of maximum advantage in the long run. When people are depleted from dieting, breaking habits, trying to adopt an exercise regimen, or controlling their emotions, they may be especially likely to engage in impulsive purchases.

Our more recent findings have extended the concept of ego depletion beyond self-regulation. In particular, making choices and decisions appears to reduce the same resource as is used for self-control (Twenge et al. 2001). This may be especially relevant to consumer behavior, insofar as consumers often must make multiple decisions and may also be coming from a context (such as a job) in which decisions are required. In fact, some purchases (such as automobiles or building contracts) require the consumer to make a series of decisions. If each decision along the way depletes the resource slightly, then people should show a tendency to become more impulsive and less self-controlled toward the end of the series. By the same token, toward the end of a long day at the mall or even a long trip to the grocery store, many small decisions along the way will have depleted the person's resources, and so self-control will be weakened while behavior (including buying) will be more impulsive.

We also believe that many of the apparent effects of stress are actually consequences of ego depletion. Coping with stress may require both self-regulation and decision making. Self-regulation is involved in managing one's own feelings of pressure, stress, worry, and frustration, and likewise self-regulation may be required in steering one's thoughts toward solving problems and making oneself continue working at a task when one would prefer to quit. Meanwhile, coping with stress may also involve making many difficult choices under uncertain conditions. All these will deplete the self's resources and leave the self more vulnerable to impulsive behavior, including impulsive purchases.

The diurnal cycle of everyday life may also be relevant to ego depletion. The self's resources are restored during sleep and then become progressively depleted during the day, especially insofar as the day makes demands for choices and self-control. Hence failures of self-control are rare in the morning and become progressively more likely as the day wears on. Many patterns of self-control show these temporal patterns. Hardly anyone gets up and breaks a diet first thing in the morning, for example. Instead, it is late at

night that one yields to temptation. Similar patterns are found for addictive relapse, alcohol indulgence, impulsive crimes, regrettable sexual indiscretions, and the like. I am not aware whether consumer research has shown similar patterns, but the predictions based on ego depletion would be straightforward. Impulsive purchasing behavior should become more and more likely as the day wears on, and sleep-deprived people should be most vulnerable to making them.

Another implication of ego depletion is that conscious self-control and decision making are costly, which is why people may tend to minimize them. It is probably no accident that the complex lives of modern individuals are often organized around stable patterns, habits, and routines. Regularity avoids the need for expending the self's resources on conscious, deliberate decisions. The resource used in self-regulation and decision making is quite limited as well as valuable for many different activities, and so people need to conserve it. Living much of life on automatic pilot is an effective way to conserve this resource.

In the same way, it seems plausible that habits of thrift and regular purchasing patterns are likely to minimize the impulsive purchase. Buying the same groceries every Wednesday will leave little room for impulsive choices that will be regretted later. Indeed, shopping lists remove the room for decision and impulse, and they too may reduce the chances of spending too much and getting home with things one does not really want or need. But the majority of grocery purchases are unplanned, in the sense that the purchaser did not have a clear intention of buying them when he or she entered the store, nor were they on any shopping list. The shoppers who do make a list or regulate their buying in some disciplined, planned fashion form a minority.

### SELF-CONTROL AS TRAIT

Much of what I have said so far points toward the idea that certain people have chronically more problems with self-control than others. Intuition and anecdotal experience certainly support the view that there are individual differences in self-control that form a seemingly stable aspect of personality. Recent research supports this conclusion empirically as well.

A trait measure of self-control has been developed by Tangney and Baumeister (2001). It was based on the survey of self-control problems and failures by Baumeister et al. (1994). Various items assess how well people control impulses, regulate emotions, manage performances, maintain self-discipline, break out of bad habits, and the like. This may be a useful tool for researchers interested in initial studies of how self-control predicts consumer behavior. There is also a short form with about a dozen items that can be used quite quickly and conveniently, for researchers who cannot afford to administer the full scale.

The trait self-control scale has been shown to predict a wide range of desirable outcomes, consistent with the view that self-control is a highly adaptive capacity that confers

an appealing range of benefits on the individual. People with high levels of self-control have better interpersonal relationships, stronger and more cohesive families, fewer psychological symptoms and problems (such as somatization, obsessive-compulsive patterns, paranoid ideation), fewer emotional problems (anxiety, hostile anger, depression), and higher self-acceptance and self-esteem (Tangney and Baumeister 2001). Students with high self-control get better grades than other students (e.g., Smith 2001; see also Wolfe and Johnson [1995], who used a different measure), and leaders with high self-control are rated by their subordinates as fairer and more trustworthy than other leaders (Cox 2000). There is also some evidence that people with high self-control manage their money better than other people, saving more and spending less (Romal and Kaplan 1995).

The fact that self-control is linked to managing one's money better supports the speculation that it will predict consumer behavior, at least with regard to high and moderately priced items that can have a discernible impact on the household budget. Scores on trait self-control should predict behavior in the situation with which I began this article, namely, the "I really shouldn't" possible (impulsive) purchase.

Beyond that difference, however, it is further plausible that self-control will predict receptiveness to different kinds of marketing strategies. The person with low self-control may be vulnerable to being seduced by the moment, and a sales pitch emphasizing immediate gratification would be appealing and successful. In contrast, the person with high self-control is more likely to purchase based on being convinced of long-term value and benefits. The shopper with low self-control is likely to respond to an approach such as, "You will look and feel great in this car." In contrast, a person with high self-control is more likely to buy a car based on something like, "This car will be reliable and durable and will have a high resale value."

### IMPLICATIONS FOR THEORY AND RESEARCH IN CONSUMER BEHAVIOR

Self-control research seemingly has much to offer researchers interested in consumer behavior. My central argument has been that the processes that undermine self-control should lead to more buying and more impulsive buying. This could be tested by examining whether the behavior of consumers changes systematically as a function of the factors that undermine or weaken self-control. Self-control should therefore be weakened by conflicting standards and goals. In particular, I mentioned research suggesting that people make purchases in order to cheer themselves up. This could be tested directly by means of a bogus mood-freeze manipulation (see Tice et al. 2001). If shoppers are led to believe that their moods will not be able to change for the next hour or so, then they should be less inclined to buy themselves gifts or indulge in other purchases that are aimed at affect regulation (because the frozen mood makes affect regulation ostensibly impossible). The

content and nature of purchases should also be discernibly different among people who are seeking to feel better (as opposed to other shoppers) because they would most likely buy things that hold the promise of pleasure. That is, sad or distressed shoppers may show an increase in purchases of snack foods, music CDs, and flashy clothes, but much less change in their purchases of lightbulbs, toilet paper, or oven cleansers.

The degree to which people monitor their spending should also predict consumer behavior and impulsive purchasing. If researchers can identify people who habitually keep close track of their spending, they could investigate whether such people are indeed less likely than others to buy impulsively. (The trait scale developed by Tangney and Baumeister [2001] for measuring individual differences in self-control could also be used to predict resistance to impulsive spending.) One could also investigate the role of monitoring by studying or even experimentally manipulating factors that make monitoring difficult. Thus, when people are highly distracted, they should be less able to keep track of how much they spend. Likewise, when spending is not transacted in dollars, American consumers should have greater difficulty keeping track. International travelers, for example, must often make purchases in currencies that vary in the ease with which one can calculate the price in dollars. At present, for example, many currencies are close to half or two-thirds of a dollar (such as the Australian, New Zealand, and Canadian dollars), making it relatively easy to calculate the American price, whereas others such as the British pound or the Italian lira are much harder to convert mentally and, by extension, cause American tourists to spend more. This could also be manipulated experimentally, such as if laboratory subjects have to make purchasing or consumption decisions in artificial money that is easily or not so easily converted into dollars.

The strength model in particular offers specific predictions for consumer behavior. When the self is depleted by prior exertions, behavior should become more impulsive. People who report being under stress, having had a difficult day, or having had to cope with more problems and crises recently should end up spending more money and doing so more impulsively. Experimental manipulations such as having people try to regulate their emotional responses, perform minor acts of physical stamina, suppress particular thoughts, or resist specific temptations have been shown to deplete people's resources, and in the aftermath of such manipulations consumers should become less disciplined and more impulsive.

Consistent with the observation that the self's resources are gradually depleted during the course of a day, one could make a simple prediction about how spending would change as a function of time of day. Later in the day there should be more impulsive purchases, resulting in more spending in general.

Another prediction was that making choices and decisions would itself deplete the self's executive resources, thereby making behavior less disciplined and more impulsive. One

could, for example, approach shoppers leaving a store and ask them how long they have spent at the mall, and correlate that with how much they spent (if anything) at this final store. The hypothesis would be that the longer they had spent at the mall, the more decisions they had already made, resulting in a more severe state of ego depletion, and so the more they would spend at this particular store.

The consequences of purchasing may also involve ego depletion. Making a big purchasing decision (either to buy or not to buy), or making a series of lesser decisions, will also deplete the self, and hence after such events self-control may be impaired. To be sure, a large dose of positive emotion resulting from purchasing or consuming something may boost the self's resources, but apart from offsetting consequences of that nature, it may be worth investigating whether in the aftermath of consumer decisions people become more likely to break their diets, relapse into smoking or drinking or other bad habits, or yield to temptations. Such processes might well reflect an otherwise hidden impact of consumption on everyday life.

## CONCLUSION

The ability to alter one's own responses is one of the most important features of the human psyche and is substantially responsible for the immense range and diversity of human behavior as well as for the adaptive success of our species. For consumer behavior, self-control represents the capacity to resist temptations, especially those relevant to impulsive purchases and other expenditures that are likely to be regretted later on. The factors and processes that undermine self-control are worth studying insofar as they may contribute to causing people to spend more money. The effectiveness of self-control depends on multiple factors, including chronic traits and weaknesses, clarity of goals (and absence of conflicting standards), careful monitoring of one's behavior, and depletion of self-regulatory strength caused by prior exertion or decision making. In the long run, such purchases may lead to higher profits for manufacturers and retailers, but more unsatisfied and unhappy consumers.

[David Glen Mick served as editor for this article.]

## REFERENCES

- Baumeister, Roy F., Ellen Bratslavsky, Mark Muraven, and Dianne M. Tice (1998), "Ego Depletion: Is the Active Self a Limited Resource?" *Journal of Personality and Social Psychology*, 74 (June), 1252-1265.
- Baumeister, Roy F., Todd F. Heatherton, and Dianne M. Tice (1994), *Losing Control: How and Why People Fail at Self-Regulation*, San Diego, CA: Academic Press.
- Bushman, Brad J., Roy F. Baumeister, and Colleen M. Phillips (2001), "Do People Aggress to Improve Their Mood? Catharsis Beliefs, Affect Regulation Opportunity, and Aggressive Responding," *Journal of Personality and Social Psychology*, 81 (July), 17-32.
- Carver, Charles S. and Michael F. Scheier (1981), *Attention and*

- Self-Regulation: A Control Theory Approach to Human Behavior*, New York: Springer-Verlag.
- (1982), "Control Theory: A Useful Conceptual Framework for Personality-Social, Clinical, and Health Psychology," *Psychological Bulletin*, 92 (July), 111–135.
- Cox, Sally P. (2000), "Leader Character: A Model of Personality and Moral Development," unpublished dissertation, Department of Psychology, University of Tulsa, Tulsa, OK 74104.
- Douglas, James (1995), *Mind Hunter: Inside the FBI's Elite Serial Crime Unit*, New York: Scribner.
- Hoch, Stephen J. and George F. Loewenstein (1991), "Time-Inconsistent Preferences and Consumer Self-Control," *Journal of Consumer Research*, 17 (March), 492–507.
- Hull, Jay G. (1981), "A Self-Awareness Model of the Causes and Effects of Alcohol Consumption," *Journal of Abnormal Psychology*, 90 (December), 586–600.
- Katz, Jack (1989), *Seductions of Crime: The Moral and Sensual Attractions of Doing Evil*, New York: Basic.
- Maphet, Harold W. and Arthur L. Miller (1982), "Compliance, Temptation, and Conflicting Instructions," *Journal of Personality and Social Psychology*, 42 (January), 137–144.
- Mick, David Glen (1996), "Self-Gifts," in *Gift Giving: A Research Anthology*, ed. Cele Otnes and Richard F. Beltramini, Bowling Green, OH: Bowling Green State University Popular Press, 99–120.
- Mick, David Glen and Michelle DeMoss (1990), "Self-Gifts: Phenomenological Insights from Four Contexts," *Journal of Consumer Research*, 17 (December), 322–332.
- Muraven, Mark, Roy F. Baumeister, and Dianne M. Tice (1999), "Longitudinal Improvement of Self-Regulation through Practice: Building Self-Control through Repeated Exercise," *Journal of Social Psychology*, 139 (August), 446–457.
- Muraven, Mark, Dianne M. Tice, and Roy F. Baumeister (1998), "Self-Control as Limited Resource: Regulatory Depletion Patterns," *Journal of Personality and Social Psychology*, 74 (March), 774–789.
- O'Guinn, Thomas C. and Ronald J. Faber (1989), "Compulsive Buying: A Phenomenological Exploration," *Journal of Consumer Research*, 16 (September), 147–157.
- Polivy, Janet, C. Peter Herman, Rick Hackett, and Irka Kuleshnyk (1986), "The Effects of Self-Attention and Public Attention on Eating in Restrained and Unrestrained Subjects," *Journal of Personality and Social Psychology*, 50 (June), 1253–1260.
- Romal, Jane B. and Barbara J. Kaplan (1995), "Difference in Self-Control among Spenders and Savers," *Psychology: A Quarterly Journal of Human Behavior*, 32 (2), 8–17.
- Rook, Dennis W. (1987), "The Buying Impulse," *Journal of Consumer Research*, 14 (September), 189–199.
- Smith, Stephen M. (2001), "Self-Control and Academic Performance," paper presented at the Society for Personality and Social Psychology, San Antonio, TX.
- Tangney, June P. and Roy F. Baumeister (2001), "High Self-Control Predicts Good Adjustment, Less Pathology, Better Grades, and Interpersonal Success," unpublished manuscript, Department of Psychology, George Mason University, Fairfax, VA 22030.
- Thompson, Craig J., William B. Locander, and Howard R. Pollio (1990), "The Lived Meaning of Free Choice: An Existential-Phenomenological Description of Everyday Consumer Experiences of Contemporary Married Women," *Journal of Consumer Research*, 17 (December), 346–361.
- Tice, Diane M., Ellen Bratslavsky, and Roy F. Baumeister (2001), "Emotional Distress Regulation Takes Precedence over Impulse Control: If You Feel Bad, Do It!" *Journal of Personality and Social Psychology*, 80 (January), 53–67.
- Twenge, Jean M., Roy F. Baumeister, Dianne M. Tice, and Brandon Schmeichel (2001), "Decision Fatigue: Making Multiple Personal Decisions Depletes the Self's Resources," unpublished manuscript, Department of Psychology, Case Western Reserve University, Cleveland, OH 44106.
- Wolfe, Ray N. and Scott D. Johnson (1995), "Personality as a Predictor of College Performance," *Educational and Psychological Measurement*, 55 (April), 177–185.