

Giving in to Feel Good: The Place of Emotion Regulation in the Context of General Self-Control

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Understanding how emotion regulation is similar to and different from other self-control tasks can advance the understanding of emotion regulation. Emotion regulation has many similarities to other regulatory tasks such as dieting, and abstaining from smoking, drugs, alcohol, ill-advised sexual encounters, gambling, and procrastination, but it differs in a few important respects. Emotion regulation is similar to other kinds of self-regulation in that it consists of three components: standards, monitoring, and strength. Emotion regulation involves overriding one set responses with another, incompatible set, just like with other types of self-control. And like other regulatory tasks, emotion regulation can fail either because of underregulation or because of misregulation. Although emotion regulation is similar in many respects to other regulatory tasks, it is a special case of self-regulation in that it can often undermine attempts at other kinds of self-control. Specifically, focusing on regulating moods and feeling states can lead to a failure of self-control in other areas.

In this target article, we attempt to place emotion regulation and mood control in the context of general self-control and self-regulation. We identify some of the basic principles of self-regulation and show how emotion regulation fits in with other self-regulatory patterns in an effort to illuminate some of the issues central to emotion regulation. It can be useful to see emotion regulation in the broader context as one specific kind of self-regulation, because principles and issues that are relevant to other forms of self-control might affect emotion regulation as well. We also show that emotion regulation is a special case of self-regulation in that it can often undermine attempts at other kinds of self-control. Specifically, focusing on regulating moods and feeling states can lead to a failure of self-control in other areas such as dieting, time management, impulse control, and so on.

Most forms of self-control involve denying impulses or forcing the self to do something contrary to hedonistic tendencies. It takes self-control to curb one's temper, give up smoking or other addictions, work on or persist at a difficult task, save money, decline adulterous sexual advances, diet, and so forth. Denying one's hedonistic impulses can lead to negative affect.¹ Many people report that they eat, drink, smoke, gamble, and so on to feel good (e.g., Bennett, 1988; Capaldi & Powley, 1990), and that refraining from these activities results in a nega-

tive feeling state (Kozlowski & Hennan, 1984). Procrastinators report that working on a difficult task makes them feel anxious and worried, and that they can avoid this negative mood if they procrastinate (Ferrari, 1991; Solomon & Rothblum, 1984).

Thus, emotion or mood can contribute to self-control problems. When in a bad mood, people want to feel better, and many ways of feeling better involve indulging appetites—things that one normally uses self-control to resist. In other words, negative mood predisposes people to fail at self-regulation. Additionally, exercising self-control can result in negative moods. Thus, emotion regulation has important consequences for general self-control and self-management.

In principle, there are at least six main types of emotion-control tasks: A person could be trying to get into, get out of, or prolong either a good or a bad mood (e.g., Parrott, 1993; see also Clark and Isen, 1982; Morris & Reilly, 1987; Wegner & Erber, 1993). The most common attempt to control moods involves getting out of various bad moods (Parrott, 1993; Tice & Baumeister, 1993); thus most research on mood regulation investigates the control of negative emotion. However, the other forms of mood control are also important. At first glance, one might ask when would someone ever desire to get into a bad mood, but such cases do arise and are important. For example, a human rights activist might seek to work up a state of anger in preparation for giving a speech about injustice, health care workers might need to put themselves into a somber mood when it is necessary to tell a patient that he has a terminal illness, and a parent might have to get into a disap-

¹Some writers distinguish between mood, affect, and emotion, whereas others use them interchangeably. Although we recognize that greater specificity is often useful, the distinctions are not important for our purposes, and so we shall follow the latter practice.

pointed or outraged mood when discussing failing grades with a teenager. Mood-regulation strategies may also differ depending on which specific emotion one is trying to regulate. Getting out of an angry mood may differ from getting out of a sad mood. Because getting out of a bad mood of some kind is the most common and important form of self-control, that is what will receive most attention in our paper here.

Emotion Regulation as a Specific Example of General Self-Regulation Patterns

It may be useful to examine emotion regulation in the context of general self-regulation patterns and to focus on the similarities and differences of emotion regulation compared to other types of self-regulation. To the extent that emotion regulation is similar to patterns of, say, dieting or controlling procrastination tendencies, the dieting or procrastination literatures might offer valuable clues to emotion-control researchers about variables to examine or personality or situational constraints that may affect regulatory efforts.

Overriding Responses

The term self-regulation is often used to refer to any effort by an organism to alter its own responses. Although some regulatory systems, such as the regulation of heart rate, operate automatically with little or no conscious or cognitive input, these systems are probably more appropriately described as auto-regulating rather than self-regulating. Among human beings, the capacity for self-regulation far exceeds what most other living beings can do primarily because of our greater cognitive capacity and because the conscious mind can be involved in the regulatory process.

The essential nature of self-regulation involves overriding one's impulses. People have impulses to behave in a certain way, whether because of learning, innate tendencies, inclination, or habit. Self-regulation involves overriding this normal or natural tendency and substituting another response (or lack of response) in its place. Most forms of self-control failure are characterized by the desire for short-term gains despite long-term costs (Baumeister, 1997; Baumeister, Heatherton, & Tice, 1994; Mischel, 1974; Mischel, Canter, & Feldman, 1996). People have multiple levels of action or goals, and self-regulation involves substituting a short-term goal (such as satisfying one's immediate desire to purchase an extravagant item) with a long-term goal (such as satisfying one's desire to save enough money to purchase a house).

Thus, emotion regulation involves substituting an emotion expression (and perhaps even the feeling

state) with an incompatible emotional expression or emotional experience. A person who wishes to control feelings of anxiety or anger may try to relax and take deep breaths to reduce physiological arousal, a person who is trying to regulate depressive feelings may try to substitute happier thoughts for the sad ones, or a person who doesn't want others to know how badly he or she feels about losing may try to smile instead of crying.

Three Components of Self-Regulation

Self-regulation consists of three components: *standards*, *monitoring*, and *strength*. Much of the theorizing about self-regulation has emphasized feedback loops, a concept borrowed from systems theory (e.g., Carver & Sheier, 1981, 1982, 1998; Powers, 1973). The most familiar example of a feedback loop from everyday life is the room thermostat, which turns on the furnace or air conditioner whenever the temperature departs from a preset range. Feedback loops are also commonly called TOTE loops, which is an acronym for test-operate-test-exit, reflecting the sequence of steps in the loop. The feedback loop model presupposes that standards, monitoring, and strength are important ingredients in self-regulation.

Standards are abstract concepts of how things should be, and when people seek to control themselves, they invoke various standards. For example, a person may have standards that prevent him from expressing his grief when his dog dies, or there may be cultural norms and standards that demand that joy be experienced only upon the birth of a son and not a daughter. When standards are unclear, ambiguous, lacking, or conflicting, self-regulation will be problematic.

Second, a feedback loop requires some way of monitoring the current circumstances (in the test phases). People can only regulate themselves successfully if they pay attention to what they are doing or have some other way of acquiring knowledge of their responses. People need to recognize that they are behaving in a depressive or angry fashion to regulate that behavior.

Third, people must have some means of operating on themselves to bring about the desired changes, that is, they must be able to alter themselves to conform to their standards. People must have the strength to override their (sometimes strong) impulses with their more long-term, higher order goals. The concept of strength resembles the colloquial concept of willpower—strong people will be able to resist, weak people will not. Like a muscle, strength is affected by both long-term practice effects that build the strength of the muscle (Muraven, Tice, & Baumeister, in press) and by recent exertions that can deplete strength (Baumeister, Bratslavsky, Muraven, & Tice, 1998; Muraven, Tice, & Baumeister, 1998). It takes a certain amount of

strength to control one's temper. A person who is well practiced at controlling his or her temper is more effective at this task than someone who rarely tries to exert control, but trying to control one's temper when one is depleted from engaging in other self-control tasks is more difficult than when one is fresh and rested.

A review of the self-control literature suggests that there may be two stages of failure of self-control: an initial, small lapse and a subsequent full-blown binge, referred to as a lapse-activated failure (Baumeister et al., 1994). The initial small lapse can provoke a kind of snowball effect (also termed the "what the hell" effect; Polivy & Herman, 1985), such that the dieter who ate one cookie may experience a feeling of "what the hell, I've already broken the diet for today" and finish the entire plate of cookies. Individual differences in responsiveness to the initial lapse may be able to explain why some individuals may experience short feelings of intense anger or sadness and then engage in mood repair, while others wallow in longer term depression or indulge themselves in violent temper tantrums.

The Place of Emotion Regulation in the Context of General Self-Control

As we stated earlier, emotion or mood is related to self-control in two ways. First, exercising self-control can result in negative moods. Second, negative mood predisposes people to fail at self-regulation. Thus, emotions have the potential to create negative spirals in one's effort to control oneself. One may try to control one's spending, but denying oneself desirable items from the mall may create negative affect. In an effort to reduce the negative affect, people may indulge themselves by making an extravagant purchase, even though this creates long-term budget problems, which lead to even more negative affect, which leads to a further desire to improve mood, and so on.

Negative emotional states contribute to self-control failure because people attempt to regulate the negative emotion at the cost of other self-control. The central idea of this target article is that people want to feel better when they are in a bad mood, and many ways of feeling better involve indulging oneself in the things that one normally uses self-control to resist. People in bad moods have more difficulty controlling their violent tendencies (e.g., Berkowitz, 1978; Zillman, 1993), their eating and drinking habits (e.g., Sayette, 1993), and their impulses (e.g., Marlatt, 1985). Emotional distress is so aversive that people often give top priority to ending it, in an attempt try to feel better. However, while people are busy controlling or repairing their bad moods, other self-control goals become abandoned, resulting in self-control failures. In fact, because many forms of self-control lead to negative affect (people sometimes feel distress, anxiety, anger, or sadness

when they are denying themselves nicotine, caffeine, alcohol, favorite foods, or when they are forcing themselves to work on a difficult task, for examples), emotion regulation can have a direct effect on self-control failure in other spheres. Denying oneself creates a negative mood, and in an attempt to repair the negative mood, long-term self-regulation goals are abandoned. People's preoccupation with mood control frequently takes precedence over other self-control goals. Someone who most times is concerned with controlling his or her food intake may abandon this long-term goal when in a bad mood, leading to a self-control failure. We review the literature on a number of kinds of self-control failures that result from emphasizing emotion regulation and feeling better immediately at the expense of long-term goals.

Eating, Drinking, Smoking, and Gambling

Giving top priority to mood control may involve using many pleasant distractors as a way of regulating one's emotions. Unfortunately, many distractors, such as alcohol, drugs, fattening foods, gambling, and so on, are the very things that one may be trying to control. There is a great deal of evidence pointing to the connection between negative affect and breakdown in self-control. Excessive drinking, smoking, and eating often follow bad moods (e.g., Herman & Polivy, 1975; Kozłowski & Herman, 1984). In fact, negative moods are related to relapses in addictive behaviors, such as alcoholism and gambling (Marlatt, 1985). People often drink to control their moods (Sayette, 1993), which can be counterproductive. Similar motivation is evident in most gamblers, who expect that gambling will cheer them up (Dickerson, 1991). People fail to pursue their long-term goals because alcohol, food, gambling, and so on are used in an attempt to control negative emotions.

Negative moods or other emotional distress have been shown to trigger relapses among dieters and to cause dieters to eat more (Baucom & Aiken, 1981; Frost, Goolkasian, Ely, & Blanchard, 1982; Grille, Shiffman, & Wing, 1989; Herman & Polivy, 1975; Rosenthal & Marx, 1981). Emotional distress can help set off an eating binge, which can be a strategy for negative mood control. Heatherton and Polivy (1992) proposed a model of spiraling distress for eating binges, which argues that a violation of one's diet leads to emotional distress. One then attempts to repair his or her negative moods by eating more, leading to greater negative affect. Prioritizing mood control is evident here as well: The person makes mood control the number one goal, and self-control of eating behavior (the diet) is abandoned in favor of mood control. Dieters, therefore, may concentrate their immediate attention on mood control and feeling better while neglecting

long-term goals (Heatherton & Baumeister, 1991). In recent studies, Heatherton, Strieppe, and Wittenberg (1998) found that negative mood increased eating, especially if the participants were induced to feel badly about themselves. They concluded that self-relevant negative affect is an important contributor to self-control failures.

Delay of Gratification and Shopping

Additional examples of self-control failures resulting from negative moods can be found in the evidence on mood and the ability to delay gratification. People in negative moods tend to engage in greater subsequent self-gratification and self-reward than people in neutral moods (Fry, 1975; Mischel, Coates, & Raskoff, 1968; Schwartz & Pollack, 1977; Seeman & Schwartz, 1974). Other studies have also demonstrated that negative affect leads to a preference for immediate smaller rewards over more distant but larger rewards (Mischel, Ebbesen, & Zeiss, 1973; Underwood, Moore, & Rosenhan, 1973; Wertheim & Schwartz, 1983). Thus, people have been shown to sacrifice long-term gains for the short-term goal of emotion regulation.

Impulse buying is fundamentally a problem of failing to delay gratification (Rook, 1987). Hoch and Loewenstein (1991) proposed a model of failure to control one's shopping that is similar to the inability to delay gratification in that immediate rewards and temptations outweigh long-term planning, which results in the person making unplanned purchases. They suggested that mood can contribute to a shopping control loss if the consumer focuses on his or her relative deprivation ("others have nice things like that"). They concluded that if consumers lose control of their budgets as a result of these unplanned purchases, they may need to engage in self-regulatory strategies such as distraction or trying to increase willpower to reduce temptation. Shoppers will often overtly state the link between shopping and negative affect (such as the slogan, "when the going gets tough, the tough go shopping," or "shop till you drop," and therapists and researchers suggested that mood regulation is an important determinant of impulsive shopping (Faber, 1992; O'Guinn & Faber, 1989; Rook, 1987).

Procrastination

One common failure of self-control is procrastination, which can be operationalized as yielding to impulses to avoid or postpone work. A majority of people report that they procrastinate on some things, and a substantial minority of people report that their procrastination habits are serious enough to cause personal, financial, or occupational problems (Ferrari, Johnson, &

McCown, 1995). A common feature of procrastination is the emphasis on repairing negative moods at the expense of pursuing other important self-control goals (Ferrari, 1991; Solomon & Rothblum, 1984). This emphasis on short-term gratification will often come at the expense of abandoned long-term goals. A person may have work or school deadlines in the near future; however, working on a project causes anxiety and emotional distress. Putting a project off is an effective way of regulating one's mood in the short run, because one can avoid the negative affect by avoiding the project. Of course, by giving priority to mood control, a person is likely to end up worse off in the long run. Not only will the person be likely to do a substandard job at the last minute, but the final and overall level of negative affect is likely to be even greater than if the person had worked on the task all along (Tice & Baumeister, 1997). Thus, people attempt to regulate their moods by procrastinating, but this form of mood regulation frequently backfires.

We argue in this target article that people frequently make mood repair their top priority, leading to self-control failures in all these other areas. The research reviewed above on eating, drinking, smoking, gambling, delay of gratification, shopping, and procrastination all suggest that emotion regulation is an important component in the self-control failure of these diverse areas of self-control. However, the vast majority of studies reviewed so far have been correlational, post hoc, self-report, or observational in nature. Whereas these studies are important because they have a high degree of validity and often have real-world settings, they can be augmented by converging evidence from controlled laboratory research that pinpoints the causal connection and reduces alternative explanations.

We conducted a study to test whether people who are emotionally distressed in the laboratory should be more likely to experience self-control failure in the area of self-management and procrastination (Baumeister, Bratslavsky, & Tice, 1998). We predicted that participants that we induced to be in bad moods should procrastinate more than participants we induced to be in happy or neutral moods. In other words, we predicted that negative affect would undermine self-regulation and cause procrastination.

In this study, participants were randomly assigned among three mood manipulation conditions: happy, sad, or neutral moods. They were asked to read emotionally evocative or neutral stories (adapted and modified from Wenzlaff, Wegner, & Roper, 1988). Participants in the sad condition received a story in which the main character, being in a hurry, drives through a red light and causes an accident, resulting in the death of a child. Participants in the happy condition received a story in which the main character saves a child's life. Participants in the neutral condition re-

ceived a story in which the main character is following road directions. Participants were asked to imagine themselves in the situation. The experimenter then instructed them to think about the emotions they experienced and write an essay describing what they felt while they imagined themselves as the actor in the story.

After the mood was induced, the experimenter explained that the second part of the experiment involved taking an important test. Participants were told that performance on the test improves with practice and every participant would be given 20 min of practice time before the test. The experimenter explained that all the participants have to practice at least some time before taking the test; however, it is up to each participant how much time he or she practices. The experimenter gave the participant the practice test (which involved three-digit multiplication problems) and pointed out several alternative activities in the room (magazines, puzzles, and games). The experimenter reminded the participant to practice at least some of the time and left the room. For the next 20 min, the experimenter observed the participant through a one-way mirror, recording how much time the participant spent on each activity.

Happy participants exhibited more self-control and made themselves work on the task longer than sad participants. Participants who felt sad spent less time practicing for the math test and more time procrastinating than the other participants did. Happy participants prepared for their longer term goal of doing well on the test, whereas sad participants replaced this longer term goal with the shorter term goal of feeling better.

These results demonstrated that negative mood led to a self-control failure in the form of procrastination. Practicing for an upcoming test made participants feel anxious and worried about their performance. On the other hand, procrastinating or spending time on activities other than the practice test made participants feel better. Mood repair took priority over other self-control goals, so that sad participants chose to make themselves feel better at the expense of performing worse on an important task. Even a seemingly artificially induced negative mood proved to be enough to make people postpone an important self-control goal.

Mood Repair Studies

Although the study we just described and the eating, smoking, shopping, and gambling studies described previously suggest that negative moods can lead to increases in self-control failure, the question remains whether people are engaging in the eating, drinking, smoking, gambling, or procrastinating behavior in order to repair their mood. There may be a number of reasons why bad mood could lead to increases in

self-control failure besides our hypothesis that people engage in these behaviors in order to repair their negative moods. Thus, we conducted another set of studies that tried to study directly whether people gave up self-control to regulate their emotions (Bratslavski, Baumeister, & Tice, 1998). In these studies we predicted that people would yield to temptation only when they expect that yielding would lead to improved mood. If sad participants' ability to repair their moods is removed, they should abandon emotion regulation and be successful at other self-control tasks. We describe one of the studies in this set.

We adapted the mood-freezing method used by Manucia, Baumann, and Cialdini (1984) to manipulate participants' focus on mood repair. The mood-freezing instructions involved telling some participants that they would not be able to change their mood. To demonstrate self-regulatory consequences of mood repair, we chose eating as a mood enhancing yet often self-destructive strategy. People use foods to escape negative moods (e.g., Herman & Polivy, 1975), and overeating can certainly be considered a self-control failure (Heatherton & Baumeister, 1991). Eating binges may occur because people think that eating will help them escape emotional distress (Baumeister & Heatherton, 1996). We predicted that participants in sad moods would eat as much or more than participants in happy moods in an effort to improve their moods. However, sad participants who are led to believe that eating will not make them feel better would eat less than other participants would.

Participants' moods were induced using the same procedure as described in the procrastination study explained previously. In this study, we only assigned participants to happy and sad conditions. After the mood manipulation, participants were told that it was necessary for them to wait at least 15 min before completing the study. During that time they were asked to participate in an ostensibly unrelated pilot study which examined the differences among people in the perception and taste of various kinds of foods. The taste test was presented as if it were unrelated to mood manipulations; however, it made up the main dependent measure.

All participants were asked to taste three kinds of foods: pretzels, chocolate chip cookies, and goldfish crackers. Participants were randomly assigned to either mood freezing or no instructions condition. All the participants were given general directions concerning food tasting and filling out taste questionnaires. Participants in the mood freezing condition were told the following:

Even though people believe that eating makes them feel better, scientific evidence points to the contrary. Eating does not make you feel better; if anything, it prolongs your current mood for a period of time. Whatever mood you are in right now, you are very likely to stay in the same mood throughout the experiment.

These instructions were designed to remove eating as a strategy of improving mood. Participants in the no instructions condition received no additional instructions. All participants were then told to eat as much food as they needed to make a proper taste evaluation. The experimenter then left the room to give participants time to perform the taste test.

All three foods offered to the participants were counted to record the exact amount of each food eaten, which served as the main dependent variable. Participants in the sad/no instructions condition ate more than other participants, whereas participants in the sad/mood freezing condition ate less than others. Participants in happy conditions (both mood freezing and no instructions) ate more than participants in the sad/mood freezing condition but less than participants in the sad/no instructions condition. The same pattern of results was found with the all three foods.

These results suggest that participants in sad moods used conscious and deliberate techniques to make themselves feel better. However, sad participants yielded to temptation only when they expected eating to improve their moods. One participant said, "I felt better after eating. I didn't feel as sad. The food helped me to distance myself from the bad feeling I had from the story." It appears then that the self's concern with mood repair may mediate many self-control failures.

We have conducted additional studies using other mood freezing manipulations (such as lighting a candle and telling participants that the aromatherapy effects of the candle will cause the participants to remain in the same mood as long as they are exposed to the candle) and different operationalizations of self-control failure (such as self-management of resources in a commons dilemma game) to eliminate any demand characteristics or other confounds from the study described previously. In the additional studies we again found that people only prioritized emotion regulation at the expense of other self-control if they thought that mood repair was possible. People in good moods (regardless of their beliefs about the mutability of the mood) and people in bad moods who thought their moods were unchangeable exerted self-control and self-management, but people in bad moods who thought they could improve their moods by sacrificing long-term goals for short-term mood repair were less effective at managing the resources in the commons dilemma.

Conclusions

Thus, the studies reviewed in the previous section suggest that people give priority to mood repair even at the expense of other, longer term goals. People will engage in behaviors that may be self-destructive (gambling, excessive shopping, overeating, smoking, procrastinating) if the behaviors make them feel better

in the short term. Thus, emotion regulation may have a special place in the field of self-control, because emotion regulation takes precedence over other self-control behaviors and even undermines other self-control efforts.

Self-Control Failure and Emotion Regulation

There are two types of self-control failure: underregulation and misregulation (Baumeister et al., 1994). Underregulation occurs because one does not have or does not exert adequate strength to control the impulse. Misregulation occurs when one attempts to control the impulse using a strategy that is ineffective or that even backfires.

We believe that making emotion regulation a top priority over other forms of self-control is a form of misregulation. Not only does prioritizing immediate emotion regulation lead to failure of other long-term self-control goals (as described in the previous section), but also it can even lead to a failure of emotion regulation in the long run. In other words, focusing on feeling better now by regulating one's mood at the expense of one's long-term goals can lead to a later failure of emotion regulation, thus the strategy is ineffective over the long term. For example, if one is attempting to give up cigarettes and feels anxious and distressed due to depriving oneself of the pleasure of smoking, one could regulate one's emotions in the short term by smoking the cigarette and reducing the current anxiety and distress, but the long term consequences may be bad for one's mood states. One may end up feeling even worse because of an inability to give up smoking and because of all the costs associated with being a smoker.

The same may be true for making extravagant purchases, breaking one's diet, giving in to sexual temptations, procrastinating, and so on. Giving in to impulses so that one feels better in the short term may have long-term consequences that create even worse moods in the future. Giving emotion regulation precedence over other forms of self-control may thus be a form of misregulation even for emotion regulation. Other types of emotion regulation failure are described later.

Venting: Underregulation or Misregulation?

Venting may be defined as the unrestrained expression of emotions, ranging from mere disclosure of emotional states to outrageous or wildly inappropriate behavior resulting from emotions. Modern adherents of venting often cite a hydraulic view of emotion. Such views depict the human psyche as similar to a con-

tainer of water, where emotions resemble increases in water pressure and need to be allowed to discharge periodically to prevent explosion or destruction. The most famous hydraulic model was proposed by Breuer and Freud (1893/1982; drawing heavily on Helmholtz's principle of the conservation of energy), who used the term *catharsis* to describe the discharge of emotional impulses.

A great deal of research demonstrates that venting is ineffective at decreasing or eliminating the mood state—in fact, venting is often shown to prolong the negative affect, mood, or emotion, rather than reducing it.² For example, in his book on spouse abuse, Gondolf (1985) disputed the hypothesis that venting (or “letting it all out short of violence”) is a good way to defuse angry hostility. Rather, he cited evidence that “physical abuse by the man is shown to be marked by escalating verbal and physical aggression between the partners” (p. 31). In other words, domestic violence often follows from the venting of anger between spouses. Gondolf interviewed a number of men who had battered their wives. These men frequently claimed that the venting of negative feelings was causal and instrumental in beginning the cycle the violence. Steinmetz (1977), Strauss (1974), and Strauss, Gelles, and Steinmetz, (1980) all provided evidence supporting the idea that venting is likely to lead to more angry aggression, not less. When one member of a couple angrily vents his or her negative feelings to the partner, the partner frequently responds in an angry fashion, leading to an escalation of angry exchanges that often ends in physical aggression.

To understand why venting is ineffective, it is important to consider some of the details about what venting does. Venting may often fail to reduce anger or other emotions because the components of venting are directly incompatible with other self-regulatory responses. For example, venting involves focusing attention on one's negative emotions to express them in detail—but research has demonstrated that focusing on one's negative feelings is ineffective for escaping from, the negative mood (e.g., Carver, Sheier, & Weintraub, 1989; Lyubomirsky & Nolen-Hoeksema, 1993; Morrow & Nolen-Hoeksema, 1990). In contrast, distracting oneself from the negative thoughts or emo-

tions is an effective way of getting out of a mood (e.g., Miller, 1987; Nolen-Hoeksema, 1990, 1993; Wegner, 1989; Wenzlaff et al., 1988), but venting prevents people from distracting themselves. Venting directs attention to precisely the wrong place, namely to one's distress and to what is causing it. In addition, because venting involves emotional expression, the physical feedback from the facial muscles, posture, and other bodily systems plays a role in prolonging the negative mood (e.g., Cacioppo, Petty, Losch, & Kim, 1986; Cupchick & Leventhal, 1974; Gellhorn, 1964; Izard, 1990; Kleinke & Walton, 1982; Kraut, 1982; Laird, 1974, 1984; Lanzetta, Cartwright-Smith, & Kleck, 1976; Leventhal & Mace, 1970; Riskind, 1984; Strack, Martin, & Stepper, 1988).

Thus, venting is largely ineffective at reducing negative moods. Although it is frequently considered to be a form of underregulation because people do not exert the effort to control their emotional outbursts, it may be better understood as a form of misregulation. The idea that people need to vent their emotions is deeply ingrained in the public and therapeutic literature. Tavis (1989) suggested that the vast majority of modern Western citizens believe that it is physically and mentally harmful to themselves to refrain from venting their emotions and are unaware of the scientific evidence to the contrary. Thus, people may be venting negative emotions not just because they are not trying hard enough or do not possess sufficient strength to control their emotional expression, but rather because of a mistaken belief that venting is an effective form of emotion regulation. Venting is therefore an important form of misregulation of emotion control.

Misregulation and Emotion Control: Using an Ineffective Strategy

In addition to venting, there are a number of other strategies that people use to control their moods that are ineffective or even backfire. For example, many people try to regulate their negative feelings by avoiding or suppressing the thoughts that cause them to feel bad. Most empirical studies, however, have found that suppressing or avoiding unwanted thoughts or feelings (or suppressing thoughts about the problems that cause these unwanted feelings) is an ineffective method of reducing the unwanted feelings (e.g., Billings & Moos, 1984; Morrow & Nolen-Hoeksoma, 1990; Rachman & de Silva, 1978; Wegner, 1992). Wegner, Shortt, Blake, and Page (1990) showed that trying to suppress thoughts about an exciting or arousing topic (like sex) can even lead to greater physiological arousal than trying to think about the topic.

Although trying to merely suppress thoughts can be difficult, especially in the long run, the use of distractions to take one's mind off of the distressing problems

²It must be acknowledged that some researchers found what seems to be an opposite result, namely that refraining from expressing one's anger produces harmful effects. In particular, holding one's anger in (as opposed to venting it) is positively associated with greater heart rate and blood pressure reactivity, coronary heart disease, and hypertension (Funkenstein, King, & Drolette, 1954; Harburg et al., 1973; Haynes, Feinleib, & Kannel, 1980; Holroyd & Gorkin, 1983; MacDougall, Dembroski, Dimsdale, & Hackett, 1985; MacDougall, Dembroski, & Krantz, 1981; Schalling, 1985). Attempts to resolve this controversy have been undertaken by Engebretson, Mathews, and Scheier (1989), Gross (Gross, 1998; Gross & Levenson, 1997), and Tice and Ciarocco (in press).

does appear to be a useful means of regulating cognitions and emotions (e.g., Billings & Moos, 1984; Miller, 1987; Morrow & Nolen-Hoeksema, 1990; Nolen-Hoeksema, 1993; Wegner, 1989; Wentzlaff, Wegner, & Roper, 1988; Zillman, 1988, 1993). Distraction can also backfire. In particular, if the distracters are themselves distressing; then the person may end up merely exchanging one source of distress for another. Wentzlaff et al. (1988) found that depressed individuals were more likely than nondepressed individuals to try to use other negative thoughts to distract themselves from a depressing thought. Depressed individuals were less effective at regulating their bad moods because of their use of this ineffective form of distraction.

If the attempted suppression of unhappy thoughts is ineffective for overcoming a bad mood, it is not surprising that some people will try the opposite technique, namely focusing their thoughts on precisely what is bothering them. Ruminating about a bad mood or brooding about what caused a bad mood is not likely to result in mood change (e.g., Billings & Moos, 1984; Lyubomirsky & Nolen-Hoeksema, 1993; Morrow & Nolen-Hoeksema, 1990; Nolen-Hoeksema, 1990, 1993). Indeed, it may be just as ineffective as trying to suppress the thoughts.

Not all mood control strategies work equally well for all moods. Emotion regulation might fail because people have used a strategy successfully in the past to control one bad mood and so are likely to use it again when they feel bad, even if they are experiencing a different unpleasant emotion. This form of misregulation may be especially confusing to people, because a strategy that worked many times in the past suddenly is not effective. In a recent summary of research on using the media for emotion regulation, Zillman (1988) suggested that arousing stimuli, even if they are absorbing and pleasant, are not as effective at reducing anger as are calming or at least nonarousing stimuli (Bryant & Zillman, 1984; Zillman, Hezel, & Medoff, 1980). A fan of exciting action movies may find, for example, that watching such a movie will fail to cure an angry mood, although it may have worked well to cure a sad mood in the past. Likewise, socializing can effectively reduce some bad moods, but make other worse. One of the reasons that socializing with others can fail to improve a bad mood is that the other people may end up sharing the bad mood after listening to the person's problems. The sad person may seek out a happy person to talk to in the hope that both people will leave the interaction happy, but sometimes the outcome may be bilateral sadness (e.g., Pennebaker, 1993). For example, Strack and Coyne (1983) demonstrated that people who talked with a depressed person for only 15 min subsequently reported feeling depressed, anxious, and hostile themselves, and that talking to an angry person about one's angry feeling can create anger in the lis-

tener (e.g., Tavris, 1989). Living with a depressed person leads to greater depression (Coyne et al., 1987), perhaps because the depressed person communicates his or her sad thoughts and feelings to the roommate.

Thus, there may be a number of reasons why people attempt to engage in emotion regulation, but the attempt fails or even backfires. The person may not realize that a particular strategy is ineffective (such as venting, rumination, or thought suppression). A strategy that worked for getting out of one mood may be ineffective at eliminating another mood, and may even prolong it.

Acquiescence

Popular conceptions of self-regulation failure depict people becoming overwhelmed by irresistible impulses that they are powerless to control. A more accurate view may be that people do feel that their strength is depleted and their capacity overwhelmed, and so they decide to give up trying to control themselves. Then they go on and take an active role in indulging their impulses.

Acquiescence may play a special role in the failure of emotion regulation, and also in the failure of other forms of self-control that are caused by focusing on emotion regulation. Sometimes people may not control their emotions because they actively allow themselves to be overcome by the power of their "passions" (e.g., Averill, 1979, 1980, 1982). There appears to be some kind of perverse pleasure that people get out of wallowing in their negative moods and indulging themselves by acting cranky, depressed, irritable, and so forth (Tice & Baumeister, 1993). Although people who do not control their emotions often claim that they cannot do so (e.g., Tavris, 1989), it is clear that people do acquiesce and allow themselves to act emotionally rather than exerting the control necessary to regulate their feelings and emotional expressions. For example, Gelles (1979) described a man who beat his wife and justified his actions on the basis of the alleged uncontrollability of anger when he was drinking. The man claimed he could not help himself because his wife made him so angry that he wanted to kill her, and he was totally unable to control his anger or the actions it elicited. Yet the man refrained from stabbing or shooting his wife, and when this control of his behavior was pointed out to him by his therapist he began to realize that his "uncontrollable" angry aggression might indeed be controllable. Likewise, the Malay people long sustained the practice of *running amok*, in which individuals completely lost control of their actions and became wildly destructive. On closer examination, the loss of control was revealed to be highly selective, for the targets of aggression were not random victims but people who had provoked the amok. In addition, when

the government changed and instituted severe punishments for running amok, the Malay discovered suddenly that they could control it after all, and the practice decreased dramatically (Carr & Tan, 1976). Thus, many people do in fact control their emotions and emotional actions even if they seem to insist and believe that such control is not possible for them.

Summary

Emotion regulation is one specific form of self-control and conforms to the same principles as other forms of self-control such as time management, addiction control, dieting, budget control, and control of sexual impulses. Like other forms of self-regulation, emotion regulation involves substituting an emotion expression or feeling state with an incompatible emotional expression or emotional experience. To effectively regulate emotions, one must have clear standards about what emotional feelings or expressions are appropriate, one must be able to effectively monitor one's emotional status or expressivity, and one must have the strength to override inappropriate feelings or emotional expressions. The failure of emotion regulation can occur either because of underregulation or because of misregulation, and the two types of failure can differ in the kind of therapy or advice to prevent a reoccurrence. It can be useful to see emotion regulation in the broader context as one specific kind of self-regulation, because principles and issues that are relevant to other forms of self-control might also affect emotion regulation. For example, the failure of many kinds of self-control may be due to either misregulation or to underregulation, and researchers who look for such differences in emotion regulation may find two distinctly different categories of reasons that mood repair might fail. Likewise, knowing that monitoring is an important component of most self-regulation can lead to the study of self-monitoring of one's physiological activity on various different kinds of feeling states.

Whereas it is similar to many other kinds of self-control, emotion regulation has a special place in self-control theory because it can be central in the failure of other types of self-control. Emotion can contribute to self-control problems in two ways. First, exercising self-control can result in negative moods, and second, negative mood predisposes people to fail at self-regulation. Thus, emotions have the potential to create repeating cycles of failure in the effort to control oneself. Not only does emotion regulation lead to failure of other long-term self-control goals, but it can even lead to a failure of emotion regulation over the long term. Focusing on feeling better now by regulating one's mood at the expense of one's long-term goals can lead to a later failure of emotion regulation, thus

the strategy is ineffective at mood repair over the long term.

Notes

The authors gratefully acknowledge research grant #MH-57039 from the National Institutes of Health, which facilitated the preparation of this article.

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