

Self-Defeating Behavior Patterns Among Normal Individuals: Review and Analysis of Common Self-Destructive Tendencies

Roy F. Baumeister
Case Western Reserve University

Steven J. Scher
Princeton University

Three conceptual models of self-defeating behavior can be distinguished on the basis of intentionality (desiring and foreseeing harm). In *primary self-destruction*, the person foresees and desires harm to self; in *tradeoffs*, the harm is foreseen but not desired; and in *counterproductive strategies*, the harm is neither foreseen nor desired. We review 12 categories of self-defeating behavior patterns from the research literature in social psychology. No clear evidence of primary self-destruction is found. Several tradeoff patterns have been shown: Typically, the individual favors short-term benefits despite long-term costs and risks, especially under the influence of aversive emotional states and high self-awareness. Counterproductive strategies have also been found, usually based on misjudging self or misjudging contingencies. It is concluded that normal people do harm themselves and defeat their projects by means of poor judgments, by maladaptive responses, through unforeseen consequences of nonoptimal methods, and by disregarding costs and risks in favor of immediate pleasure or relief; however, there is no clear evidence of intentional, deliberate self-destructiveness among normal (non-clinical) individuals.

Self-preservation and the pursuit of self-interest are essential features of rational behavior. Accordingly, self-destruction appears as the quintessential example of irrationality. Do people actually harm or defeat themselves in systematic, even intentional, ways? An understanding of human self-destructiveness may shed light on the limits of rationality in human social behavior. Most psychologists have refused to accept Freud's ultimate conclusion that self-destructiveness is part of the biological endowment of human personality. But why, then, would people engage in self-defeating behavior?

It is frequently claimed that people do indeed engage in self-defeating or self-destructive behaviors. Clinical psychologists define many categories of pathological behavior as self-destructive (e.g., Menninger, 1966/1938). Moreover, many clinicians and others subscribe to the implicit Freudian view that the difference between sane and neurotic people is largely one of degree and quantity, not of kind. If normal people differ only in degree from the mentally ill, and if the mentally ill do self-destructive things, then normal people presumably engage in self-destructive behavior patterns too.

To learn about human self-defeating behavior, we embarked on a survey of the research literature on the behavior of normal human adults, that is, of social psychology. If human beings do indeed exhibit self-destructive behaviors, we reasoned, these be-

havior patterns would be too important and too counterintuitive to have escaped the notice of social psychologists. And indeed they have not. By surveying the field and assembling all available demonstrations of self-defeating behavior, we hoped to have an effective basis for evaluating theories about self-destruction.

To make the inquiry reasonably coherent and manageable, we made an a priori decision to limit it to studies of normal human adults. In particular, studies of groups were excluded. The self-defeating patterns in group behavior probably differ from those of individuals. Groupthink, social loafing, social inhibition, social traps, and other group processes can be seen as self-destructive at the group level, and these may resemble the individuals' patterns in some respects, but they deserve a full-length treatment in their own right. In addition, studies of abnormal and clinical populations were excluded. One could argue that self-defeating behavior is never normal, but probably it should be considered normal to the extent that it has been demonstrated in studies that sample from nonclinical populations.

Definitions and Models

Defining Self-Defeating Behavior

The first task was to define the topic. The present inquiry was restricted to cases in which the harm to self was clearly known or shown rather than being merely plausible or suggested. Self-defeating or self-destructive behavior (we use the terms interchangeably) is here defined as any deliberate or intentional behavior that has clear, definitely or probably negative effects on the self or on the self's projects. Thus, the behavior must be intentional, although harm to self did not have to be the intended or primary goal of the action.

The intentionality of self-destructive behavior is of central

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Correspondence concerning this article should be addressed to Roy F. Baumeister, Department of Psychology, Case Western Reserve University, Cleveland, Ohio 44106.

interest. It is clear that people sometimes harm themselves accidentally; but do they ever harm themselves deliberately? The Freudian argument held that people do indeed act on such intentions, although they may not be conscious of them. Intentionality is important to issues of rationality, abnormality, and avoidability of self-destruction. Three process models for self-defeating behavior can be distinguished by their varying degrees of intentionality.

Three Models of Self-Destructiveness

Regarding self-destruction, the concept of intentionality can be broken down into whether the harm to self is foreseen and whether it is desired. At one extreme, the person desires to harm the self and chooses a course of action that will foreseeably lead to that result. Thus, in this case, the harm to self is the primary intention behind the action, and hence this category can be labeled *deliberate* or *primary self-destruction*. In contrast, harm to self that is neither desired nor foreseen must be considered unintentional. This category borders on accidental self-destruction, except that we restricted our focus to general, systematic patterns of responses rather than isolated or exceptional accidents. In this category, then, people are typically seeking normal goals and outcomes, but they defeat themselves by using approaches or responses that are ineffective. This category may be designated *counterproductive strategies*.

The third category lies in between the others, for it involves harm to self that is foreseeable but not desired. In this category, the person chooses some response that may plainly lead to an undesirable outcome. Presumably, the response involves some benefits as well, so the undesirable outcome is accepted as a cost of achieving the desired outcome. Because such choices involve conflicting or incompatible goals, this category may be designated as *tradeoffs*. We turn now to an elaboration of these three models.

Primary self-destruction. The first model entails the deliberate intention to defeat or harm the self. The person chooses an action because it is likely to bring harm or failure to the self. This is the most irrational and therefore most incomprehensible form of self-destruction. It is also closest to the conceptions of self-destructiveness as elaborated in clinical theories (e.g., Menninger, 1966/1938). For example, some theorists regard masochism as reflecting hostility toward the self, possibly because of inner guilt (see Pankon, 1983, for a review). Likewise, some have treated anorexia as based on a wish to make one's body disappear because of intolerant dislike of oneself (e.g., Orbach, 1986).

The desire to harm or defeat the self expresses a clearly negative attitude toward the self, and so its causes should reflect this negative attitude. Low self-esteem may be one central cause. The negative attitude toward the self must be quite strong to lead to self-destructiveness, so the low self-esteem presumably extends beyond mere insecurity to an active, acute dislike of self.

The intensity of negative attitude may be facilitated by powerful, negative emotional states. Strong feelings of guilt, remorse, or perhaps anxiety may produce an acute disvaluation of self, leading to self-destructiveness. In addition to emotion, high self-awareness may be implicated in this type of self-destructiveness.

The desire to harm or frustrate the self takes the self as its target, which presupposes that attention is focused on the self, presumably with special awareness of the self's shortcomings (cf. Duval & Wicklund, 1972). This self-focus may help intensify the emotional state that produces the self-destructive intention insofar as self-focus intensifies emotion (Scheier & Carver, 1977).

Guilt-motivated desire for suffering provides one possible explanation for the appeal of harming the self. The person may wish to do penance for misdeeds in order to be cleansed of guilt. Another possibility is that the person seeks to defeat or harm the self as one might desire to harm or defeat any disliked person. A third possibility would simply be the desire for escape. In suicide, for example, one gets rid of the unwanted, undesirable self.

To summarize primary self-destruction: Intense negative affect, combined with a focusing of attention on the self's deficiencies or misdeeds, creates an acutely negative attitude toward the self. In this state, the person forms the intention of harming or defeating the self. This intention may reflect a desire to be punished, a desire to harm a disliked entity (i.e., the self), or a desire to escape from the disliked self.

Tradeoffs. A second model of self-defeating behavior involves choosing some response option that has certain benefits but also some self-harmful costs. The harm or costs to self are thus foreseeable but not desired. The individual presumably regards the harmful consequences as undesirable, in contrast to primary self-destruction. The harm or risk to self is accepted as a necessary accompaniment to achieving some other goal.

Tradeoffs depend on a certain situational structure. Specifically, the situation must invoke two competing goals, often ones that might normally be irrelevant to each other. This contrasts with the other two models of self-defeating behavior, both of which focus on single goals. In primary self-destruction, the goal of harming the self is paramount, and in counterproductive strategies, the person's goal is successful performance of some social task. In the tradeoff pattern, however, the individual confronts a situation that establishes a link of incompatibility between two desired goals, such that pursuing one of them will undermine one's chances of achieving the other.

Some tradeoff options involve only minor costs to self but offer substantial benefits. These can scarcely be regarded as self-destructive choices. Of greater interest are cases in which the person makes a poor bargain, that is, cases in which the costs outweigh the benefits, at least according to some possible rational perspective. The individual might eventually agree that the tradeoff is a poor one.

Self-defeating tradeoff behavior thus involves making a poor choice of response to a situation with multiple, conflicting goals. Selecting an option that has costs that outweigh the benefits can be regarded as an error in judgment, so self-destruction in tradeoffs can be approached by examining the relevant causes of judgment errors.

One source of poor judgment is people's tendency to neglect or misuse statistical, probabilistic information (e.g., Kahneman, Slovic, & Tversky, 1982). In particular, if the harm to self is not certain but merely a possible outcome, then people may have difficulty making rational decisions that might simply increase the likelihood of this possible harm.

Many tradeoff situations involve one immediate and one dis-

tal goal, and it is plausible that people make a poor choice by focusing on the immediate, short-term consequences (cf. Platt, 1973). Immediacy may create greater salience, such that short-term benefits are quite apparent to the individual but long-term, eventual, or possible costs seem remote and unlikely. In particular, people tend to underestimate the likelihood of future negative events, and the farther in the future these are, the less likely they seem (Milburn, 1978). Such distortions may promote choices that are eventually seen as self-destructive.

Factors that increase a short-term focus may increase the frequency of self-destructive responses in tradeoffs. Emotional states are inherently transient and short term, so they may foster a style of decision making that gives undue weight to immediate, short-term outcomes. Negative affective states may be especially powerful in this regard, for they produce a desire to take immediate steps to end them (e.g., Isen, 1984; also Cialdini, Darby, & Vincent, 1973). But positive emotions might also create a short-term focus in which the person desires to perpetuate the pleasant affective state. There is some evidence that positive affect can foster simplistic approaches to making some decisions (Isen, Means, Patrick, & Nowicki, 1982).

The desire to escape from self-awareness may also contribute to a short-term focus. People often desire to escape self-aware states, especially after failure or rejection casts the self in a negative light (e.g., Duval & Wicklund, 1972; Gibbons & Wicklund, 1976; Greenberg & Musham, 1981; Steenbarger & Aderman, 1979; Wicklund, 1975a). Thus, focusing attention on the self's deficiencies or failures, perhaps especially the attention of other people, may lead to a short-term focus that can result in self-destructive choices. There is also evidence that self-attention makes people less likely to think that bad things might happen to them in the future (Pyszczynski, Holt, & Greenberg, 1987).

To summarize self-defeating tradeoffs: The individual has multiple goals and desires, but the situation sets two of them in opposition. Self-defeating behavior occurs when the person makes a poor choice among the available options. This may occur simply because of poor judgment arising from common inability to perceive the social environment accurately or to use probabilistic information appropriately. It may also occur because short-term benefits falsely seem to outweigh long-term risks and costs. The disproportionate weighting of short-term benefits over long-term ones may simply be a product of relative salience, or it may be intensified by the demands of short-term psychological states, perhaps especially the desire to escape from unpleasant emotions or aversively high self-awareness.

Counterproductive strategies. Our third category involves self-defeating behaviors in which the person neither desires nor foresees the harm to self. Rather, the person is actively pursuing some goal but chooses some approach or method that prevents the desired outcome. As noted earlier, this category involves situations having essentially one goal or dimension of performance, and the person is trying to succeed at it. But the person systematically selects maladaptive or ineffective ways of pursuing this success.

This category can thus be considered as unintentional self-destruction. The person makes some seemingly rational and adaptive response in the service of normal, rational goals, only to discover later that the response was counterproductive. As with the tradeoffs, a judgment error appears to be an important

part of this form of self-defeat. In this case, the person erroneously regards some course of action as an optimal or effective strategy.

A strategy may fail for two reasons: Either the person is unable to carry it out, or the strategy (even if carried out properly) does not produce the desired result. The first case involves misjudging the self's capacities and resources. The second case involves misjudging contingencies, that is, failing to understand that a certain response will not elicit a particular outcome.

People may misjudge their own capacities and resources because of flaws in self-perception. Self-deceptive distortions in information processing may cause people to misperceive themselves (e.g., Goleman, 1985; Greenwald, 1980). Low self-awareness may also be associated with lack of self-knowledge. Salient experiences might mislead one about one's qualities and abilities. Thus, a recent and salient success experience might cause the person to overestimate his or her capacity to carry out certain strategies.

Misjudging contingencies might be caused by an inaccurate assessment of probabilities or of other people, similar to the errors suggested previously in self-defeating tradeoff responses. With counterproductive responses, however, there is little reason to predict that emotion or short-term focus would be important causal factors.

To summarize counterproductive strategies: In attempting to succeed at some social performance, the person adopts a strategy that paradoxically promotes failure. The choice of response or strategy was presumably led astray either by misjudging the self's capability to carry it out or by misjudging the response-outcome contingencies. Lack of insight into self, distorted perception of others, or distortions of probabilistic judgment seem the most likely causal factors.

Review of the Three Types of Self-Defeating Behavior

We turn now to a review of social psychology's findings of self-defeating behavior patterns. Our intention was to be exhaustive with respect to social psychology, that is, to include all groups of findings that purport to show general patterns in which people defeat their goals or harm themselves. Again, the focus was restricted to normal, adult individuals. Separate reviews may assemble theory and evidence regarding clinical populations, children, and groups.

The completeness of the current literature in social psychology, as well as the adequacy of our coverage, may be debated, for social psychology lacks objective criteria for ascertaining conceptual or empirical exhaustiveness. Still, the findings we accumulated seem adequate to evaluate the three models and suggest directions for further research.

Primary Self-Destruction

The first set of findings pertains to the purest and clearest form of self-defeating behavior. In primary (or deliberate) self-destruction, the person both foresees and desires the harm to self. Thus, self-destructive intentions guide this form of behavior.

Trying to Fail

Deliberately trying to fail at some task constitutes clear evidence of self-defeating behavior. People who set out to perform badly or to avoid success are intentionally defeating themselves. Several researchers have suggested that certain unusual circumstances can indeed motivate people to try to fail.

One early demonstration of motivated failure was provided by Aronson and Carlsmith (1962), who argued that the drive for cognitive consistency would cause people who had failed in the past to seek to fail again. In their study, subjects performed a series of tests requiring them to guess at which of a group of pictures represented a mental patient. Half the subjects (chosen at random) were told they failed each time, while others received success feedback. On the fifth and final test, half the subjects in each group received feedback that differed from their previous outcomes. Thus, in the critical condition, subjects experienced a series of failures followed by a lone success. The experimenter said, however, that he had not recorded the data properly and asked the subject to retake the fifth test. Subjects who had had four failures and then a success changed more answers on the retaken test than did other subjects, which Aronson and Carlsmith interpreted as a desire to replace their success with a failure experience, thus bringing their last performance into consistency with their record of failure.

Aronson and Carlsmith's conclusions have been criticized on several counts. There was no evidence that the changing of answers in response to the inconsistent success feedback was motivated by a desire to fail or a preference for failure. Several alternative explanations are possible, including disruption of memory processes and even a desire to improve. Moreover, the robustness of Aronson and Carlsmith's findings has been questioned by several failures to replicate, even failures at exact replication (Brock, Edelman, Edwards, & Schuck, 1965; Cottrell, 1965; Lowin & Epstein, 1965; Ward & Sandvold, 1963).

Rejection of success was also studied by Maracek and Mettee (1972; also Mettee, 1971). These researchers concluded that a small subsample of people with low self-esteem are motivated to preserve their low opinions of themselves, even to the extent of avoiding success. In this study, people with subjectively certain, low self-esteem failed to increase effort following an unexpected success. Although Maracek and Mettee interpreted this as "rejection of success," their actual data suggest that these subjects continued at about the same level of effort whereas other subjects worked harder after initial success. More recently, Baumeister and Tice (1985) showed that people with low self-esteem had less motivation to pursue a task after success than after humiliating failure, which they interpreted in two ways: (a) as an unwillingness to jeopardize the success feedback by submitting to further tests and (b) as a preference for remedying the self's deficiencies rather than cultivating talents. Either way, the loss of interest and reduced persistence after success do not appear as rejection of success or as desire to fail. The hypothesis of rejection of success may deserve further study, but at present it cannot be regarded as correct. Jones (1973) and McFarlin and Blascovich (1981) both concluded that people with low self-esteem have clear affective preferences for success over failure, contrary to the hypothesis that they desire to fail (see also Swann, Griffin, Predmore, & Gaines, 1987).

Another personality dimension associated with trying to fail was the construct of "fear of success" (Horner, 1972). In Horner's study, women showed negative or aversive connotations to certain forms of success. Some subsequent work suggested that women performed below their intellectual ability levels when in the presence of a desirable male who held a traditional stereotype of women (Zanna & Pack, 1975). The broad hypothesis that women or a subset of women fear success and therefore try to fail has not, however, received clear or consistent support, to our knowledge. Fear of success may cause some individuals to desire to fail, but these are sufficiently rare that they should perhaps be classified as a deviant or pathological pattern. Most women do not try to fail.

Two final approaches have yielded evidence of motivated failure under strongly mitigating circumstances. Both of these studies appear to involve tradeoffs rather than deliberate, primary self-destruction, however. Baumeister, Cooper, and Skib (1979) had subjects perform an anagram task after being told that the experimenter expected them to fail. Although all subjects were confronted with the same failure expectancy, performance was poor in only one condition, in which task failure was publicly linked to some desirable traits (see also Sigall, Aronson & Van Hoos, 1970). Thus, by performing poorly, subjects could communicate a positive image of themselves to others. This hardly seems like deliberate self-destruction; rather, performance quality is sacrificed to the more important goal of favorable self-presentation.

Baumgardner and Brownlee (1987) have proposed that people prone to social anxiety may intentionally fail in order to escape the burden of high audience expectations. As in the Baumeister et al. (1979) study, the motivation arose from self-presentational factors. If success entailed that others would expect the individual to perform well in the future, people tended to perform poorly. Citing evidence that audience expectations for success are an aversive or anxiety-provoking source of pressure, Baumgardner and Brownlee proposed that certain individuals may fail in order to prevent these expectations from forming, thus enabling them to escape anxiety and pressure. Again, the self-destructive intention does not seem primary. Rather, this pattern seemingly reflects either a rational adaptation or at best a tradeoff (task success vs. affective benefits).

Thus, intentional failure might indeed qualify as primary self-destruction, but the research evidence that people try to fail is alternately weak and dependent on other factors, especially the strategic pursuit of personal advantage—which disqualifies it as deliberate self-destruction. The hypothesis that people deliberately seek failure in order to confirm their pessimistic expectations has not been consistently supported. In our view, there is not sufficient evidence to conclude that people sabotage their own performances in order to confirm their low opinions of themselves. Likewise, the argument that women try to fail because they fear the implications of success has not received clear or consistent support.

Motivated failure may occur when it is associated with benefits that are more attractive than maintaining a dismal self-image. Isolated studies suggest that people may indeed try to fail when there are self-presentational benefits to such failure. The presence of such benefits, however, means that the behavior must be regarded as a tradeoff rather than as deliberate or pri-

mary self-destruction. In other words, the person does not desire the failure itself but rather desires the benefits associated with failure. Moreover, given the isolated nature of such examples, we feel that the phenomenon of motivated failure should be regarded with caution. It may be quite rare that people actually try to fail while performing a task. At present, the accumulated evidence for motivated failure is inadequate to support the belief in primary self-destruction.

Choosing to Suffer

If people actually choose to suffer, they may well be engaging in deliberate self-destruction. The alleged masochistic desire to endure pain, abuse, and humiliation, which we have suggested as prototypical of primary self-destruction, entails the active quest for suffering. Do normal adults ever choose to suffer when they could escape or avoid it?

The expectation of suffering has been shown to cause individuals paradoxically to choose that suffering when offered a last-minute reprieve (Aronson, Carlsmith, & Darley, 1963; Foxman & Radtke, 1970; Walster, Aronson & Brown, 1966). Comer and Laird (1975) demonstrated that attributional coping strategies can mediate such choices. In their study, subjects were led to expect to eat worms, and they coped with this disgusting expectancy by inferring that they were brave or that they deserved to suffer, or by reevaluating worm eating as relatively tolerable. When offered a choice between eating the worm or performing a nonaversive psychophysical judgment task, those who had coped by means of the revised attributions elected to suffer (in other words, to eat the worm).

Eating a worm is only marginally self-destructive, for it represents only a temporary and minor unpleasantness. Moreover, in these studies, the choice to suffer was elicited by first creating the firm expectation of suffering. This procedure renders the evidence for primary self-destruction somewhat circular (i.e., the desire to suffer only arises after one accepts the necessity of suffering). It is also possible that subjects felt implicit pressure from the experimenter to stay with the task to which they had been assigned. If the desire to suffer does arise, it is as a product of a cognitive coping strategy that appears in response to the expectation of suffering.

Another strategy of cognitive coping is the belief that the world is fair and just (Lerner, Miller, & Holmes, 1976). One ironic consequence of this belief in the just world is the notion that one will receive a fixed quota of suffering, which entails that future suffering may be reduced by choosing to suffer now. Curtis, Smith, and Moore (1984) showed that suffering by means of self-administered electric shock led to improved expectations about future luck and about future performance success. Curtis, Rietdorf, and Ronell (1980) showed that subjects chose more shock when future suffering was probable but not definite, as opposed to definitely high or definitely absent. Taken together, these studies suggest that people may be motivated to suffer as a result of their belief that current suffering will reduce future suffering. Although this belief may be unfounded, it nonetheless indicates that the choice to suffer represents a tradeoff to the individual rather than a primary desire to suffer. The experimental subjects did not apparently want to suffer. Rather, they simply believed that they would suffer

eventually anyway, so they might as well get it over with; or else they believed that current suffering was a means of achieving future pleasure.

There is thus little evidence to show that people sometimes desire to suffer. They may choose to suffer in a perceived tradeoff that accepts current pain to reduce future pain. They may also choose to suffer as a product of how they have coped with the expectancy of suffering.

Conclusion

The evidence currently available in social psychology fails to provide much support for the first model of self-defeating behavior, which assumes that harm to self is both foreseen and desired. Upon inspection, much of the apparent evidence that subjects try to fail or choose to suffer turns out to be flawed or equivocal. The clearest demonstrations of such behaviors conform to the tradeoff model rather than to the primary self-destruction model, for subjects apparently expect their failure or suffering to bring various benefits. Lastly, a few studies show that the expectation of mild, temporary suffering can cause people to choose to proceed with that suffering despite a last-minute offer of a neutral alternative. These studies, although important, are too narrow and limited to stand alone as evidence that people do sometimes act from self-destructive intentions.

Our review of current evidence therefore indicates that normal adult behavior does not conform to the pattern of deliberate self-destruction. The desire to harm or defeat the self does not emerge as a primary cause of human behavior in social psychology research. If normal adults do engage in deliberate self-destruction, it may be only under highly personal and idiosyncratic circumstances that have defied nomothetic demonstration and laboratory simulation.

Tradeoffs

This section reviews studies of behavioral choices that bring a combination of costs and benefits to the individual. Of particular interest are cases in which there is some basis for asserting that the costs outweigh the benefits, for such cases clearly qualify as irrational and self-destructive.

Tradeoffs presuppose that both the benefits and the costs (risk or harm to self) are foreseeable to the individual who makes the choice. In most cases, however, it is reasonable to assume that the person chose for the sake of the benefits and accepted the costs reluctantly. The harm to self is thus foreseen but not desired. Such choices cannot be regarded as fully intentional self-destruction, but they do reflect intentional behavior that is self-destructive.

We have already presented some evidence for self-defeating tradeoff behavior, in that some purported demonstrations of deliberate self-destruction turned out actually to be tradeoffs. Subjects sought to fail in order to gain self-presentational benefits (Baumeister et al., 1979; Baumgardner & Brownlee, 1987), and they chose to suffer to alleviate future suffering (Curtis et al., 1980) or to increase future good fortune (Curtis et al., 1984).

We suggested that causes of self-destructive tradeoff behavior

include both situational factors and intrapsychic processes. The situation links two otherwise unrelated goals in a conflicting fashion, so that one goal must be sacrificed for the sake of the other. Poor choices may reflect judgment errors, especially favoring short-term benefits that are associated with long-term costs. Aversive short-term states, including emotion and high self-awareness, may increase these errors and the resulting self-destructive tendencies.

Self-Handicapping

Self-handicapping was originally defined as "any action or choice of performance setting that enhances the opportunity to externalize (or excuse) failure and to internalize (reasonably accept credit for) success" (Berglas & Jones, 1978). In subsequent empirical work, two forms of this concept have been pursued (Arkin & Baumgardner, 1985; Leary & Shepperd, 1986). The first consists of creating obstacles to one's own success that can carry the blame for anticipated failure. The second consists of citing external excuses that may have interfered with performance. Only the first definition (creating obstacles to oneself) involves self-destructive behavior, for simply making excuses does not necessarily harm the self.

The self-destructive form of self-handicapping has been operationalized as doing things that decrease the likelihood of success at some evaluative task (e.g., Berglas & Jones, 1978; Tucker, Vuchinich, & Sobell, 1981). It is based on two attributional principles (Kelley, 1971, 1972). These are the *discounting principle*, whereby failure under extenuating circumstances is not taken as proof of incompetence, and the *augmentation principle*, whereby success despite obstacles is seen as evidence of especially high ability. By creating an impediment to performance, the self-handicapper minimizes the implications of failure, because failure is discounted—that is, it is attributed to the obstacle rather than to low ability. Likewise, the impediment enables the self-handicapper to maximize the favorable implications of success.

Self-handicapping thus confers attributional benefits on the individual regardless of whether the individual succeeds or fails. The drawback is that self-handicapping objectively increases the probability of failure. After all, performance impediments do impede performance. Self-handicapping is thus a tradeoff that sacrifices one's chances for success in exchange for attributional benefits (i.e., protection from the implications of failure, and extra credit for success). The tradeoff aspect was made especially clear by Greenberg, Pyszczynski, and Paisley (1984). They showed that people would self-handicap when the stakes were low but that when a large amount of money could be won, people abandoned self-handicapping and simply tried to do their best. The attributional benefits of self-handicapping apparently outweighed the increased risk of a small failure but not that of a costly failure. Thus, the decision to self-handicap seems to involve some subjective weighing of the costs and benefits involved.

Research has demonstrated a variety of handicaps that people use. Jones and Berglas (1978) suggested alcohol consumption and underachievement (low effort) as self-handicapping strategies, arguing that failure blamed on drunkenness or on lack of effort is normally preferable to failure that clearly indi-

cates stupidity or incompetence. Berglas and Jones (1978) showed that people may choose a performance-inhibiting drug in order to self-handicap, and Tucker et al. (1981) provided direct evidence of alcohol consumption as self-handicapping. Reduction of effort to avoid the implications of failure has been suggested by several studies (Frankel & Snyder, 1978; Harris & Snyder, 1986; Pyszczynski & Greenberg, 1983; Snyder, Smoller, Strenta, & Frankel, 1981). Similarly, people sometimes self-handicap by practicing inadequately prior to an evaluation (Rhodewalt, Saltzman, & Wittmer, 1984; Tice & Baumeister, 1985). The underlying principle presumably is that failure does not prove incompetence if one was not really trying or was inadequately prepared. Lastly, choice of goals has also been used as a self-handicapping strategy. Greenberg (1985) found that subjects who were led to feel uncertain about their ability to succeed on a task were more likely to choose extremely difficult goal levels for an upcoming task, presumably because failure would be attributed to the difficulty of reaching the goal.

The second form of self-handicapping (i.e., claiming excuses) may suggest self-destructive patterns if people do seek to acquire these excuses in advance. Confronted with attributional threats such as the possibility of failure, people have been shown to claim that they were hampered by test anxiety (Greenberg et al., 1984; Smith, Snyder, & Handelsman, 1982), disruptive moods (Baumgardner, Lake, & Arkin, 1985), hypochondriasis (Smith, Snyder, & Perkins, 1983), and shyness (Snyder, Smith, Augelli, & Ingram, 1985). If these claimed excuses are merely retrospective fabrications, then they have nothing to do with self-defeating behavior. On the other hand, if people cultivate their test anxiety or their bad moods in order to have excuses ready for potential failures, then these too can be seen as self-destructive.

The central cause of self-handicapping appears to be some form of induced insecurity about future performances, especially when coupled with high external expectations for success. Berglas and Jones (1978) created this insecurity by giving some subjects a noncontingent success experience. Specifically, subjects performed a difficult multiple-choice test with mostly unsolvable problems, but they were repeatedly told that their guesses were correct. Although subjects knew that they had been guessing on most of the problems—and would therefore probably perform worse on an upcoming retest—they believed that the experimenter expected them to succeed. Subjects who received solvable problems and contingent feedback did not self-handicap. The threat of evaluation has also been used as a source of insecurity (e.g., Tice & Baumeister, 1985). Thus, the focal situation is one in which the individual privately anticipates failure but other people expect success. Such situations represent some of the most difficult performance contexts (cf. Baumeister, Hamilton, & Tice, 1985), and so people cope with them by self-handicapping.

The causal role of performance demands and insecurity suggests that self-attention and emotion may help cause self-handicapping. Concern about the adequacy of one's upcoming performance, especially coupled with others' expectations, implies that evaluative attention is focused on the self. Doubt about one's ability to succeed implies that the upcoming performance is associated with worry and possibly anxiety. Although there is little direct evidence that self-awareness or aversive emotion

help cause self-handicapping, the evidence is at least broadly consistent with that argument.

One controversial issue is whether people self-handicap to protect the private self-image or to protect one's public reputation. Berglas and Jones (1978) found no difference between public and private responses, leading them to conclude that self-handicapping is aimed at the person's own self-concept. On the other hand, Kolditz and Arkin (1982) found self-handicapping only when other people knew the relevant circumstances, causing them to conclude that self-handicapping is mainly a self-presentational strategy (also Tice & Baumeister, 1985). It is plausible that self-handicapping may sometimes be directed at the self and other times at audiences. Also, some authors have questioned how thoroughly one can distinguish between self-esteem and self-presentational motives, for they show substantial overlap (e.g., Greenberg, Pyszczynski, & Solomon, 1986; Schlenker, 1982; Tesser & Moore, 1986; Tetlock & Manstead, 1985).

Self-handicapping has both immediate costs and immediate benefits. One sacrifices one's best chance for success at the upcoming task, but one gains protection from the implications of failure. Long-term costs are also apparent. Some theorists have proposed that these behaviors may lead to the development of chronic destructive patterns such as drug abuse, alcoholism, and underachievement (Jones & Berglas, 1978; Snyder & Smith, 1982). Self-handicapping may thus provide a link to some self-destructive patterns encountered in clinical practice.

Self-handicapping constitutes a good illustration of the trade-off model of self-defeating behavior. It arises when the situation places two desirable goals in opposition: succeeding at a task versus deriving maximum attributional benefit from the task outcome. Self-destruction is evident in the deliberate acquisition of obstacles to success. There are both costs and benefits to self-handicapping in the short run, but in the long run, self-handicapping is likely to lead to a performance record that falls far short of one's true capabilities—along with other possible costs such as alcohol addiction. Thus, the pattern of accepting long-term costs for short-term benefits is broadly consistent with evidence about self-handicapping, although there are short-term costs as well. The causal role of aversive emotional states and self-attention has been suggested, but direct evidence is lacking.

Substance Abuse

Although self-handicapping has been proposed as a possible cause of alcoholism in some cases, it seems clear that most instances of alcohol abuse have other causes. Alcohol, tobacco, and many drugs have been shown to have harmful effects on personal health, and most users are aware of these risks, yet they continue to use these substances anyway. Drinking, smoking, and possibly taking drugs thus clearly fit the pattern of potentially self-destructive behaviors.

Two principal benefits of substance abuse motivate people to smoke and drink despite the risks, and these benefits indicate that the self-destructive aspect of substance abuse falls in the tradeoff category.¹ First, the substances cause pleasant sensations (e.g., McCollam, Burish, Maisto, & Sobell, 1980). Alcohol intoxication, drug intoxication, and perhaps even the effects of

nicotine are subjectively pleasant, so individuals pursue these effects. Among regular users, the subjective pleasure at ingestion is intensified by the appeasement of addictive cravings. Thus, for example, Silverstein (1982) addressed the paradox that cigarettes produce arousal yet heavy smokers report relaxation as a consequence of smoking. Silverstein demonstrated that cigarette addicts who are deprived of tobacco develop high arousal patterns that return to normal levels when they smoke; thus, tobacco does not relax them compared with nonsmoker control subjects, but it does relax them subjectively in comparison with the aversive, aroused state of addictive withdrawal (see also Nesbitt, 1973; Schachter, 1977). The addictive cravings and patterns of alcohol abuse are also well known, affecting roughly 5% of the U.S. population (Mayer, 1983). Of course, nonaddicted use of alcohol is common too. There may be far more nonaddicted drinkers than nonaddicted smokers (cf. Mayer, 1983, and Schachter, Silverstein, & Perlick, 1977).

The second attraction of alcohol use is as a means of lowering self-awareness (Hull, 1981). Loss of self-awareness may be appealing for several reasons, including reducing inhibitions and coping with stress by blotting out undesirable thoughts about oneself. Several studies have demonstrated that alcohol ingestion reduces self-attention (Hull, Levenson, Young & Sher, 1983) and that alcohol consumption increases when self-awareness would be aversive (such as after failure; Hull & Young, 1983). Related evidence shows that alcohol ingestion reduces cognitive dissonance, although it is not clear whether the mediating mechanism is reduction of self-awareness or physiological reduction of unpleasant arousal (Steele, Southwick, & Critchlow, 1981).

Smoking cigarettes has likewise been treated as a means of reducing self-awareness. The activities of smoking may serve to distract the smoker's attention from him- or herself (Wicklund, 1975a, 1975b). Unpleasant emotional states appear to be an important cause of smoking. Self-reports of smokers frequently include increased tranquility and decreased emotion (Gilbert, 1979; Nesbitt, 1973), as well as increases in smoking during periods of stress (e.g., Schachter, Silverstein, Kozlowski, Herman, & Liebling, 1977; Silverstein, 1982; Silverstein, Kozlowski, & Schachter, 1977). Laboratory studies have shown that smokers smoke more under periods of anxiety or stress (Mangan & Golding, 1978; Schachter, Silverstein, et al., 1977). In particular, smoking appears to reduce anxiety (Gilbert, 1979).

It is plausible that the appeal of drugs as escape from self-awareness and from stresses and anxieties may be similar to the appeal of alcohol. To our knowledge, however, laboratory work with normal individuals has not explored drug abuse as much as alcohol abuse, partly because legal restrictions pose pragmatic obstacles to aspiring researchers.

The costs of substance abuse are far less immediately apparent than the benefits. The main costs are the long-term increases

¹ We do not mean to disparage the role of genetic, biochemical, political, and socioeconomic factors that may predispose individuals toward addiction to dangerous substances. We consider the contribution of these factors to be compatible with the causes we discuss and to be irrelevant to our primary concern with how people choose to act in self-defeating ways. Consequently, our review focuses on the psychological processes associated with such choices and responses.

in statistical risks of disease and death. The media and other sources frequently contain warnings about these dangers, so it seems likely that most substance abusers can at least foresee the costs, but in many cases the desire for immediate pleasure or relief appears to outweigh concern about long-term risks.

Substance abuse, then, appears to fit the pattern of self-destructive tradeoffs. The benefits are immediate, whereas the costs are distant and probabilistic, so substance abuse fits the general hypothesis of favoring short-term goals despite long-term costs. Unpleasant emotional states and high self-awareness have been shown to cause people to abuse these substances, presumably as means of reducing or escaping the aversive state.

Health Care Negligence

It is generally accepted in health care that patients often fail to comply with the advice and recommendations of medical practitioners. Sackett and Snow (1979) reviewed the literature on compliance and reported that patients keep only about 75% of the medical appointments they make themselves and only 50% of the appointments made for them by others. Studies of short-term medical regimens have shown compliance rates ranging from 60 to 78% (e.g., Burnip, Erickson, Barr, Shinefield, & Schoen, 1976; Donabedian & Rosenfeld, 1964). When the treatment regimen is long term, compliance rates fall to about 50% (Sackett & Snow, 1979). Some studies report even lower rates of compliance. A broad review by Dunbar and Stunkard (1979) concluded that compliance with physicians' regimens ranges from 82% down to 20%.

It seems clearly self-destructive for people to disregard expert advice about treating or preventing physical illness. Such negligence can lead to more frequent illnesses, more severe illnesses, slower recovery, and even death.

Early research sought to identify a personality type that characterized persistent noncompliers, possibly because physicians have tended to regard personality factors as the principal causes of noncompliance (e.g., Davis, 1966). Most researchers have, however, ceased to believe that a noncomplying personality type exists (Blackwell, 1973; Kirscht & Rosenstock, 1979). Demographic characteristics have also failed to predict compliance (Haynes, 1979). More recent approaches have treated the patient's compliance or noncompliance as a tradeoff between the costs of treatment (or prevention) and the benefits of health. Of course, the crucial determinants are not the actual costs and benefits but rather the patient's subjective beliefs and perceptions about these costs and benefits (Rosenstock, 1966).

Among the benefits of complying with health treatment recommendations, relief of painful or annoying symptoms may be the most important in enhancing compliance. Perception of symptoms as intolerable generally leads to seeking treatment (Zola, 1973). Treatment programs that aim to relieve symptoms typically show high compliance rates (Haynes, 1976). Once the troublesome symptoms are gone, however, compliance drops rapidly, and many patients discontinue treatment even if severe underlying problems remain (Becker, Drachman, & Kirscht, 1972).

Whereas the pain and discomfort of symptoms cause people to seek out treatment and comply with its recommendations, the pain and discomfort (or other costs) of treatment reduce

compliance. For example, discomfort and expectations of pain have been identified as causes of the avoidance of dental care (Antonovsky & Kats, 1970; Kegeles, 1963; Tash, O'Shea, & Cohen, 1969).

Several other costs reduce compliance. Increases in the financial cost of treatment have been associated with decreases in compliance (Alpert, 1964; Brand, Smith, & Brand, 1977; Hemminki & Heikkila, 1975). Costs in time are important in several ways: The likelihood of discontinuing treatment increases with the duration of treatment (Haynes, 1979); annoying delays at medical appointments decrease patients' likelihood of showing up for future appointments (Alpert, 1964; Geersten, Gray, & Ward, 1973); people comply less with time-consuming regimens than with simple, quick ones (Haynes, 1979); and people (even chronically ill patients) are less likely to show up for appointments that interfere with their daily routines than for less disruptive ones (Tagliacozzo & Ima, 1970). Each of these apparently confirms the pattern of favoring short-term goals over long-term ones, for the long-term risks and costs are accepted in order to save time or money in the short run.

Conflicts with personal and social norms also tend to reduce compliance with some treatments. People accustomed to personal independence were found to be less likely to complete a rehabilitation program than were others (Ludwig & Adams, 1968). Similarly, cardiac patients with a high work orientation resisted prescriptions for decreased activity (Davis & Eichhorn, 1963). Social norms assigning priority to food, transportation, and living arrangements may often take precedence over compliance with health care recommendations (DiMatteo & DiNicol, 1982; Koos, 1954). Social norms promoting alcohol consumption may likewise induce people to disregard medical advice to reduce drinking.

Lastly, it is plausible that some people may be attracted to the secondary benefits of illness and may therefore fail to comply fully with treatments. The sick role provides a legitimate exemption from the obligations and responsibilities of normal social life, including job and family demands (Parsons, 1951, 1979), and some people may be attracted by this.

Some instances of noncompliance arise from faulty notions about health. Childhood experiences with illness may furnish people with false commonsense theories about illness (Baumann & Leventhal, 1985; Leventhal, Meyer, & Nerenz, 1980; Meyer, Leventhal, & Gutmann, 1985). These may often associate disease with symptoms, so that the disappearance of certain symptoms is mistaken for cure. Indeed, sometimes patients have symptoms that are wholly unrelated to the disease, yet they discontinue treatment when these symptoms disappear (Meyer et al., 1985). In other cases, the treatment's failure to relieve these (unrelated) symptoms caused patients to lose faith in the treatment and discontinue it.

Thus, compliance with health care recommendations involves various tradeoffs among multiple factors. The desire to escape from short-term, aversive states appears quite important. It may increase compliance, if compliance promises relief from aversive symptoms, but it may also reduce compliance, if treatment is unpleasant. Research has shown several instances of the self-destructive pattern of accepting long-term costs for short-term benefits, such as the avoidance of painful treatment

and the premature discontinuance of treatment once symptoms are relieved.

Evidence for the role of aversive emotional states in causing health care noncompliance is limited, although fear of treatment apparently contributes to noncompliance, and anger or annoyance likewise decrease compliance. To our knowledge, the possible causal role of self-awareness has not been investigated. Erroneous beliefs and judgments, including disregard of probabilistic information about risks, have been indicated as causal factors. Still, the causes suggested in our model clearly do not exhaust the factors that influence self-destructive disregard of health care recommendations, for other factors include financial costs, personal and social norms, and possible attractions of the sick role.

Face-Work

Tradeoffs between opposing types of goals were the focus of a series of studies on *face-work*, a term coined by Goffman (1955) to refer to the maintenance of a favorable public image. Brown (1968) conceptualized face-work as the willingness to sacrifice tangible rewards in order to escape embarrassment. In one study, Brown set up a competitive situation with a non-zero-sum matrix such that one player's costs increased if he tried to inflict maximum damage on the other player, who was actually a confederate. All subjects were exploited by the confederate during the first phase of the game. During the second phase, subjects had an opportunity to retaliate, and they had to choose between maximizing their own financial reward and minimizing their opponent's reward. Subjects' responses to this tradeoff depended on how they were told an audience perceived them. Some subjects were told that the audience felt they had not lost face despite being outplayed during the first phase, and these subjects tended to maximize their own gain. Other subjects were told that they had been made to look foolish, and they preferred to inflict maximum (retaliatory) damage on their opponent even if it meant losing money themselves. Thus, aversive emotional states (anger and embarrassment) caused subjects to retaliate even at relatively high cost to themselves.

In a later study (Brown & Garland, 1971), subjects had to choose between escaping an embarrassing task and earning more money by remaining at it longer. Again, the perceived audience made the difference. Subjects who expected further interactions with the audience were most willing to give up the money to escape embarrassment.

One additional study (Baumeister & Cooper, 1981) confronted subjects with various expectations about their emotional state and then confronted them with the same tradeoff used by Brown and Garland (1971), namely, money versus escape from embarrassment. Expectations based on core features of the self succeeded in generating an aversive state and causing people to sacrifice money to escape embarrassment. Thus, attention to core versus peripheral features of the self helped determine responses to this tradeoff.

These studies of face-work are not strong evidence about self-defeating behavior, for both the costs and rewards were relatively small. Still, these subjects' primary reason for participating in the experiment was to earn money, and they defeated that primary goal in order to save face in front of strangers they

might never see again. The results suggest that the emotional desire to avoid embarrassment might motivate irrational and even self-harmful choices.

The face-saving studies were deliberately set up to foster a tradeoff between tangible, financial goals and social goals. People sacrificed the monetary goal to escape embarrassment. Although both receiving money and avoiding embarrassment were somewhat immediate and short-term goals, it seems plausible that ending the embarrassment was the most immediate goal (it could be served instantly, whereas the money would not be received until the end of the session), so these results at least do not contradict the pattern of favoring the most immediate goal. Aversive emotions, including anger and embarrassment, were shown to be causal factors. High public self-awareness was strongly suggested in these findings, for people's face-saving efforts were motivated by the concern about how they appeared to others, and results depended on what features of the self were involved.

Shyness

Shyness has been defined in multiple ways. Leary (1986) has identified 14 different definitions of shyness in the research literature. As he points out, however, all the definitions have either an affective component, such as social anxiety (Buss, 1980), or a behavioral component, such as reticence in social situations. A combination of those two components seems best to capture the concept of shyness. Shyness is extremely common; self-reported levels of shyness hover around 40% of the population (e.g., Pilkonis, 1977a; Pilkonis & Zimbardo, 1979; Zimbardo, 1977). Moreover, almost everyone has felt shy or socially anxious at some point in life, so in a sense shyness is nearly universal.

Shyness is characterized by the desire to present a positive image in a social interaction, combined with the fear that one will project a negative or undesirable impression (Arkin, 1981; Schlenker & Leary, 1982). High public self-consciousness is implicit in the shy person's painfully high awareness of how he or she may be perceived by others (Schlenker & Leary, 1982). High self-awareness may contribute in various ways to shy people's tendencies to withdraw from social interaction (Carver & Scheier, 1986). The fear of making a bad impression causes the shy person to adopt a protective self-presentational style (Arkin, 1981). Rather than risk embarrassment and rejection, the shy individual avoids making any impression at all, especially by avoiding social encounters. When thrust into social interaction, the shy person tends to nod and smile but is reluctant to disclose substantive information about the self (Leary, Knight, & Johnson, 1987). As a result, the development of intimacy is often precluded.

Shy behavior is self-destructive in the context of the nearly universal desire to be liked and to have friends. When social anxiety or discomfort causes shy people to avoid interactions with others, the chances for making friends or experiencing intimacy are diminished. Indeed, shyness can become self-perpetuating, for social isolation prevents the individual from developing the social skills and contacts that could enable him or her to overcome the isolation. As a result, shy people report being lonelier (Cheek & Busch, 1981; Jones, Freeman, & Goswick,

1981; Maroldo, 1981), are less likely to enter long-term or intimate dating relationships (Maroldo, 1982), and report less sexual experience than nonshy people (Leary & Dobbins, 1983).

Several studies have documented the social skill deficits associated with chronic shyness. Mandell and Shrauger (1980), for example, showed that shy males took longer to initiate a conversation with a female confederate, spent less time talking with her, had less eye contact with her, exhibited less facial expressiveness, and smiled less than did nonshy males (see also Pilkonis, 1977b; Daly, 1978). Shy people's fear of being unable to make a good impression may be well founded. Ironically, though, their avoidance of social interaction may prevent them from learning how to present themselves favorably. Shyness and its associated tendencies toward social isolation may thus form a self-defeating cycle. The person desires to make a good impression and to experience friendship and intimacy. Fear of failure and rejection causes the person to avoid social encounters, and as a result the person fails to develop social skills adequate to the original goals of making a good impression and winning friends.

The tradeoff in shyness, then, involves sacrificing long-term satisfactions of intimacy and friendship for short-term protection against anxiety and rejection. The shy isolate may be aware that it is a bad bargain in the long run, but the short-term motivations are sufficiently compelling to make the tradeoff anyway.

Once again, then, self-defeating responses to tradeoffs reflect a regrettable preference for short-term benefits at the cost of long-term suffering. High self-awareness and aversive emotion (especially anxiety) are clearly indicated as causal factors.

Conclusion

There is ample evidence that people do sometimes engage in self-destructive behavior in circumstances that force a tradeoff between competing goals. People make choices that they may eventually perceive as not optimal and even as severely harmful to themselves.

Our review suggests that self-defeating responses to tradeoffs involve choosing immediate benefits, such as pleasure or relief, despite long-term costs of increased harm, loss, or risk. Most of the evidence we reviewed supported this pattern. A few cases were ambiguous. No evidence showed self-destruction in the reverse pattern (i.e., neglecting substantial immediate benefits in favor of lesser, long-term ones). The closest we came to such a reversal was the evidence of choosing to suffer immediately in the illusory belief that current suffering would bring eventual benefits (Curtis et al., 1980, 1984). But those subjects may have felt that their total suffering would be reduced by such a choice, for they may have expected the immediate suffering to be less than the future suffering, especially if one includes the aversive anticipation of suffering in the calculation. In general, then, it appears that people defeat themselves by placing too much weight on immediate benefits and by neglecting or undervaluing long-term factors.

There was also some indication that neglect or misuse of probabilistic information, especially concerning long-term risks, contributed to some of these self-destructive choices. The costs involved in self-handicapping, substance abuse, and health care noncompliance all tend to be increments in proba-

bility of eventual harm to the self or its projects. In some cases, then, the person's choice involves benefits that are certain and costs that remain uncertain, which may look like a good bargain.

High self-awareness and aversive emotional states were implicated in many of these findings. Focus of attention on oneself, especially public attention to oneself, was repeatedly associated with self-destructive choices, as were anxiety, fear, anger, and embarrassment. Although the evidence was not uniformly strong, its direction was uniform. No studies suggested that *low* self-awareness caused self-destructive behavior or that unpleasant emotions reduced self-defeating tendencies. The importance of high self-focus and negative affect in causing self-destructive behavior was thus confirmed, although some further evidence is desirable.

Some theorists might suggest that focusing attention on the self's shortcomings or experiencing negative affect causes people to form self-destructive intentions, but we found little to support this view. Rather, it appears that self-destructive behavior results from people's efforts to relieve and escape these aversive states. Negative affect or aversive self-attention, both temporary mental states, appear to foster a short-term focus that increases the willingness to disregard long-term risks or consequences.

Counterproductive Strategies

This section reviews studies showing systematic patterns of self-defeating behavior in which the person neither desires nor even foresees the harmful consequences. The person seeks some positive goal but uses a technique or strategy that impairs the chances of success. The focus is neither on normal behaviors that occasionally turn out badly nor on isolated accidents or mishaps. Rather, it is on systematic behavior patterns that have been shown to be common or typical among normal adults and to lead reliably to self-harmful outcomes.

Interest in these patterns is due in part to their irrationality. Unlike tradeoffs, these patterns offer the individual little in the way of apparent benefits, yet people acquire and maintain these self-defeating patterns anyway.

We suggested that counterproductive responses are generally mediated by misjudging either one's capacity to carry out the intended response or the contingencies associated with the response. Low self-awareness may be a contributing factor if it leads to poor self-knowledge.

Perseveration

Although persistence is often regarded as a virtue, misguided persistence can waste time and resources and can therefore defeat one's chances of success at superordinate goals. Whether persistence is adaptive or self-defeating depends on whether continued patience and exertion are likely to bring success at the immediate task. The ideological heritage in American culture, especially the Protestant work ethic, promotes the belief that persistence will generally be rewarded with success (e.g., Rodgers, 1978), but in everyday life many circumstances determine outcomes independently of individual persistence. For example, an investor who refuses to give up on a losing stock may

end up losing even more money, or a scientist who persists with unsuccessful methodologies or hypotheses may end up with a failed career. Rather than assuming that persistence is generally adaptive, the issue should be conceptualized as making judgments about when persistence will be effective and when it will be useless or even self-defeating (Janoff-Bulman & Brickman, 1982).

Several studies have suggested that people with high self-esteem persist longer than do people with low self-esteem (Perez, 1973; Schalon, 1968; Shrauger & Sorman, 1977). Although most early studies were set up such that persistence would increase chances for eventual success, one study attempted to ensure that persistence would be counterproductive (McFarlin, Baumeister, & Blascovich, 1984). In that study, subjects had a limited amount of time to solve a series of problems, and time spent on unsolvable problems was thus unavailable for the solvable ones. Thus, maximum achievement depended on knowing when to quit. McFarlin et al. found that people with high self-esteem were more prone than lows to persist at working on unsolvable problems, and that initial failure intensified the nonproductive persistence of people with high self-esteem. The implication is that high self-esteem may cause people to overestimate their likelihood of succeeding.

The role of expectancies in mediating nonproductive persistence has been analyzed by Janoff-Bulman and Brickman (1982). They argue that people who expect to succeed will persist longer than those who expect to fail; therefore, if the expectations of success are unfounded or erroneous, these individuals will persist fruitlessly. They cite Feather's (1961, 1962) demonstrations that expectations of success cause people to persist on unsolvable tasks, ending with nothing to show for their expenditure of time and effort. These erroneous expectations of success can be based on either misjudging the self's abilities or misjudging the objective contingencies (i.e., the objective difficulty of the task).

An important factor in perseveration is the feeling that one has already invested a certain amount of time and energy into the endeavor, so quitting would entail wasting that investment. Staw (1976) and Rubin and Brockner (1975) opened research into how people become entrapped in such situations. These researchers developed procedures in which subjects had to choose between keeping the money they were paid or investing it in the hope of winning more. Despite the failure of investments to yield more money, subjects continued to invest. Rubin and Brockner found that 87% of subjects persisted past the optimal point, and more than half stayed past the break-even point (at which their net return *even if they were to succeed* would be less than their initial stake). Thus, people are quite susceptible to such entrapments, which apparently reflect poor judgment of contingencies.

Subsequent research has uncovered a variety of factors that moderate the tendency to become entrapped in counterproductive persistence. Staw (1976) studied the effect of personal responsibility by having people decide how much to invest in a hypothetical project after an initial investment had turned out badly. Subjects invested much more when the initial (bad) investment had been their own decision than when it had been someone else's decision, suggesting that perseveration is produced especially by feeling personally responsible for negative

consequences. Bazerman, Giuliano, and Appelman (1984) showed that high personal responsibility for such negative outcomes is associated with high feelings of commitment to the initial course of action and with high confidence that further investments will bring success. Like Staw, these authors favor a dissonance explanation: Responsibility for negative consequences engenders feelings of dissonance, which in turn create a desire to justify one's course of action. Achieving success would vindicate that course of action, so the individual tries harder to achieve that success by pouring more time and effort (and money) into that course.

Thus, an initial decision creates a feeling of commitment, and if the decision turns out badly, the individual may paradoxically feel all the more committed to it and all the more determined to stick with it until it succeeds. In Teger's (1980) words, the individual has "too much invested to quit." If the individual made the initial decision in the face of resistance or controversy, he or she becomes even more likely to persist in the face of failure (Fox & Staw, 1979). Under such circumstances, quitting would seem to constitute a public admission that one's initial judgment was wrong and the other people were correct. In self-presentational terms, the person would lose face and suffer humiliation, which people are reluctant to accept (Baumeister, 1982; Schlenker, 1980). The importance of self-presentation has been suggested by several other studies. Brockner, Rubin, and Lang (1981) showed that people become entrapped in perseveration partly out of concern with audience evaluations and impressions; but if people think the audience would regard them favorably for withdrawing, they withdraw, thereby avoiding entrapment. Brockner, Shaw, and Rubin (1979) found that if people publicly set limits in advance about how far they will persist, they are better able to withdraw from the entrapping situation. Some evidence suggests that people may initially become entrapped in escalating situations for reasons other than self-presentation, but the need to save face becomes increasingly important in the later stages of entrapment (Teger, 1980).

Often it is easier to persist than to make the definite decision to quit and withdraw, and so people persevere out of a kind of psychological inertia. Brockner et al. (1979) contrasted two situations: In the first, the subject would automatically continue unless he or she made an active move to stop, whereas in the second the subject would automatically stop unless he or she actively expressed the decision to continue. The first situation produced far more perseveration than the second. Thus, self-defeating behavior occurs more when it is associated with the passive rather than the active response.

Several further causes have been identified. Modeling can either increase or decrease counterproductive persistence (Brockner et al., 1984). In particular, if the model persisted and then said explicitly that his persistence had been a mistake, subjects were less likely to persist. Educating subjects in advance about entrapment helped them avoid the mistake of excessive persistence (Nathanson et al., 1982). Lastly, if subjects make careful and accurate calculation of probabilities and contingencies, they are less likely to become entrapped in perseveration (Conlon & Wolf, 1980). These results all suggest that counterproductive perseveration often results from poor or inadequate consideration of contingencies.

Perseveration is self-destructive because it can prevent one

from engaging in alternative, more auspicious endeavors, and because valuable resources are wasted in futile endeavors. The individual presumably persists in the hope that persistence will bring success, but sometimes this hope reflects an erroneous understanding of contingencies, and so persistence becomes a counterproductive strategy. Inflated views of one's abilities, concern over how others will evaluate one, and other factors sometimes take precedence over rational consideration of probabilities and contingencies, resulting in counterproductive persistence. Additional causal factors include personal investment and a situational structure that links persistence to a passive response.

Choking Under Pressure

Pressure situations are defined as those in which it is highly desirable and important to perform well. Those situations have been shown to elicit suboptimal performance, termed "choking under pressure" (Baumeister, 1984, 1985; Baumeister & Showers, 1986). Choking may be considered as the result of a counterproductive response to pressure, because the individual's efforts to succeed paradoxically lead to failure.

According to one model (Baumeister, 1984), situational pressures elicit a conscious desire to perform well. The individual then attempts to ensure successful performance by consciously monitoring the process of performance. Skilled performance, however, is often a matter of executing overlearned or automatic chains of responses, and conscious attention may disrupt execution by destroying the automaticity of performance (Kimble & Perlmuter, 1970). Thus, the self-focusing response to pressure may become self-defeating by preventing optimal performance. In a sense, the conscious mind overestimates its ability, for it assumes control of performance only to discover that it lacks full knowledge of how to execute the response (insofar as that knowledge is overlearned or automatic). Thus, the self selects a strategy that it is unable to carry out.

In support of this model, Baumeister (1984) showed that attention to performance process lowered the quality of skilled performance, that situational pressures (implicit competition, audience presence, and explicit cash incentives) lowered performance quality, and that dispositional self-consciousness moderated tendencies to choke under pressure. Subsequent work has shown that professional athletes show skill decrements when playing for a championship in front of a home audience (Baumeister & Steinilber, 1984), that an audience's expectations for success can constitute pressure and therefore impair problem-solving skills (Baumeister et al., 1985), and that audience pressure is most disruptive to teenagers (Tice, Buder, & Baumeister, 1985).

Research on test anxiety has likewise suggested that a self-focusing response to the pressure in a test situation mediates poor performance on the test. Optimal performance is prevented by the inward focus of test-anxious individuals (Wine, 1971). An inward, evaluative focus likewise interferes with optimal sexual performance (Masters & Johnson, 1970).

Thus, when it is most important to perform well, many people exhibit a self-focusing response that impairs skilled performance. It seems likely that the conscious monitoring of one's own internal performance process is originally an attempt to

ensure good performance, but it is self-defeating and counterproductive. The disruption of automaticity and consequent performance decrements are not the intended result of the self-focusing response, so they must be considered unforeseen as well as undesirable.

Although choking appears to be most common among people whose dispositional level of self-consciousness is low, the choking itself apparently results from a rapid increase in self-focus. Thus, it appears that this self-defeating response follows from a state of high self-focus, contrary to the suggestion that low self-awareness leads to counterproductive responses.

Learned Helplessness

An important category of self-destructive behavior is composed of forming expectations or making attributions, in response to stress, that later turn out to be maladaptive or harmful. The prototypical case of this is learned helplessness (Seligman, 1975; also Roth & Kubal, 1975).

The principle behind learned helplessness is that the individual infers on the basis of unhappy experience that he or she is incapable of exerting control and achieving desirable outcomes. This inference then prevents the individual from acquiring control and acting effectively in subsequent situations (Overmier & Seligman, 1967; Seligman & Maier, 1967). Although discontinuities between human and animal response patterns to uncontrollable stimuli soon appeared (e.g., Roth & Bootzin, 1974), there is evidence that people will indeed learn to be helpless in some situations. In particular, some attributions for failure experiences may lead to self-destructive behaviors. Attributions that one's failure reflects a global and stable incapacity are particularly harmful, because they create the expectation that future efforts are useless and doomed to failure (Abrams, Seligman, & Teasdale, 1978; Alloy, 1982). People may then fail to try even when their objective chances for success would be good. Thus, learned helplessness becomes self-defeating as the individual misjudges his or her ability to exert control and achieve success, or because the individual misjudges the probable response contingencies.

There is some evidence that high self-awareness may help cause learned helplessness (Carver, Blaney, & Scheier, 1979), perhaps especially among people with low self-esteem (Brockner et al., 1983). On the other hand, self-awareness can also contribute reactions opposite to helplessness, such as reactance (Brockner, 1979; Carver, 1977; Carver & Scheier, 1981), so one might argue that self-awareness merely intensifies reactions to noncontingency. Still, the hypothesis that low self-awareness causes counterproductive responses is not supported in the evidence about learned helplessness.

Not all researchers agree about learned helplessness and its self-destructive nature (e.g., Boyd, 1982). Frankel and Snyder (1978) provided evidence that some learned helplessness phenomena have a *self-protective* quality and should therefore be understood as a rational response pattern or at least as a tradeoff (see the section on self-handicapping). In their view, people withdraw effort after failure so that if they fail again their self-esteem will not be damaged further. Rothbaum, Weisz, and Snyder (1982) proposed that attributions of inability following uncontrollable failure can be understood as a form of second-

ary, interpretive control and have psychic benefits, so they too consider many cognitive responses to uncontrollability as trade-offs. Refusing to try may protect the individual from frustration and disappointment in the short run, but in the long run such refusals may contribute to a broad pattern of failure and worthlessness. Thus, the tradeoff view of learned helplessness again seems to indicate a pattern of accepting long-term costs for the sake of more immediate benefits.

Learned helplessness, then, is self-defeating when the individual stops trying and therefore fails at tasks at which he or she might have succeeded with effort. When it is not a tradeoff, it qualifies as a counterproductive response or strategy. It appears to result from underestimating the self's abilities and misjudging the environmental contingencies.

Counterproductive Bargaining Strategies

There are at least three approaches that can lead to undesirable outcomes in bargaining (Pruitt, 1981; Pruitt & Rubin, 1984). These are misperceiving the situation as a zero-sum conflict or competition, overconfidence or aiming too high, and aiming too low. In these, the individual's efforts to reach a satisfactory settlement are defeated by a strategy based on an erroneous judgment—either of the objective contingencies or of the relative strengths of the bargaining positions of self and opponent.

The first approach, perceiving the situation as a zero-sum conflict, rests on a fallacious assumption that there is a fixed, limited quantity of resources to be allocated among the bargaining parties, when in fact there may be additional options or resources. The purpose of bargaining is to achieve some consensus about fair distribution of these limited resources. Bazerman (1986a, 1986b) argued that such fallacious assumptions lie at the heart of most negotiation stalemates. These assumptions cause bargainers to tend to remain rigid in their demands, which makes negotiations unsuccessful. We consider this a counterproductive strategy because the person's bargaining stance was presumably not intended to prevent successful negotiations—but that is its result.

A second self-destructive approach to bargaining rests on overconfidence or false consensus effects. Overestimating the strength or rectitude of one's position may create false expectations that a judge or arbitrator will rule in one's favor. As a result, one makes strong demands that become excessive and jeopardize one's victory. Bazerman (1986b) illustrated this pattern with the example of a professional athlete filing for salary arbitration, which typically follows the procedure of having both sides submit a final bid and then having the arbitrator choose whichever bid seems closest to the fair amount. The bargainer's goal is thus to make a bid that is slightly closer to the fair amount than the other side's bid. In Bazerman's example, the athlete wants an annual salary of \$800,000, whereas management offers only \$400,000. The athlete believes that the arbitrator will consider \$600,000 as the fair price, so he bids \$775,000, slightly closer to the fair salary than management's bid. But if the athlete has succumbed to overconfidence or false consensus, he may have overestimated the fair price. If the arbitrator thinks \$575,000 is fair, then management's offer of \$400,000 will win, and a slight miscalculation has cost the athlete a small fortune.

In laboratory research, Neale and Bazerman (1985) have shown that unsuccessful negotiations can follow from overconfidence. In particular, they found that overconfident negotiators were reluctant to make concessions, leading to stalemated negotiations and failure to reach agreements.

Lastly, aiming too low can also harm a negotiator. In this case, a potential negotiator erroneously appraises his or her position as weak and makes unnecessary concessions (Pruitt & Rubin, 1984).

Self-defeating behavior in bargaining has thus been associated with judgment errors and with erroneously favorable or unfavorable appraisals of oneself and one's position. These fit the general hypotheses that counterproductive strategies arise from faulty self-perceptions and from misjudging environmental contingencies.

Ineffective Ingratiation Strategies

Nearly everyone wants to be liked, and most people perform some actions designed to win the liking and approval of others. However, some strategies for winning affection can actually backfire and reduce liking. In particular, if the ingratiation target perceives the behavior as a ploy to win affection, it will tend to backfire. Jones and Wortman (1973) labeled this pattern the *ingratiator's dilemma*, namely, that approval-seeking behaviors will fail if they are perceived as approval seeking.

If the ingratiator fails to anticipate the tendency of target persons to discount behaviors that are overtly designed to win affection, then the ingratiator's efforts may often become self-defeating. For example, individuals with low status tend to use flattery to win the liking of high-status individuals (Jones, Gergen, & Jones, 1963). But high-status individuals tend to perceive flattery by low-status individuals as blatant or manipulative efforts at ingratiation, and they consequently tend to respond negatively (Jones et al., 1963). Thus, the tendency of low-status individuals to flatter their betters may be self-defeating (Jones & Wortman, 1973).

Another very effective and common ingratiation technique is doing favors for the target person. But when the favor is perceived as an attempt to gain attraction, it loses effectiveness (Jones & Wortman, 1973). Favors that create a sense of obligation to reciprocate are particularly onerous and may be resented. Brehm and Cole (1966) had a confederate perform a favor (giving a soft drink) for each subject. When the favor created an obligation by removing an important dimension of freedom, subjects were unlikely to return the favor. Indeed, they were less likely to help the confederate than were subjects who had not received any prior favor. Thus, when a favor creates a sense of obligation, it may actually reduce the recipient's willingness to do something for the ingratiator. Doing favors can be self-defeating.

Ineffective ingratiation techniques thus appear to revolve around misjudging how the target person will interpret and respond to one's behavior. The person overestimates the likelihood of positive response to flattery or doing a favor.

Conclusion

We have reviewed five patterns of findings that involved counterproductive strategies or responses. In each, the person seeks

a positively valued goal, but his or her efforts are defeated by nonoptimal strategies. It is safe to conclude that people sometimes defeat themselves by counterproductive responses.

Judgment errors appear to underlie most counterproductive responses. People overestimate or underestimate their own capacities, or they misjudge various contingencies such as others' reactions or objective probabilities. Each of these errors can lead to self-defeating behavior.

There was little to suggest that emotional states or low self-awareness contributed to these counterproductive responses. In fact, high self-awareness was implicated more often than low, although the evidence was too fragmented and inconsistent to generalize. Concern with personal esteem (including responsibility, self-protection, and attractiveness to others) was implicated in various ways, though.

General Discussion

We have suggested three models of self-defeating behavior. They differ in intentionality, that is, in whether the individual foresees and desires the harm to self. We have also reviewed studies of normal, adult individuals for evidence pertaining to these models.

The first model, primary self-destruction, refers to cases in which the harm to self is both foreseen and desired by the individual. We focused on studies that show people trying to fail or choosing to suffer. Experimental findings for these patterns were few, ambiguous, and problematic, and on close examination many of them appeared to fit the second model (tradeoffs) rather than the first model. We concluded that there is insufficient evidence to support the view that normal individuals exhibit this pattern of deliberate self-destruction. If the mentally ill engage in actions that are deliberately and primarily harmful to self, then they may be qualitatively different from the normal people studied by social psychologists, for normal people apparently do not engage in such actions in laboratory studies.

It is possible that normal people do *occasionally* do things that are purely and primarily self-destructive. The occasions for these might be sufficiently rare or idiosyncratic that they do not show up in laboratory research. We can conclude only that normal individuals do not show primarily self-destructive behavior in general patterns of responses, as documented by social psychologists. A further possibility is that purely self-destructive behavior is itself proof of insanity or neuroticism, so that anyone who engages in it is immediately excluded from the category of normal persons. Research on suicide, for example, has struggled with the question of whether suicide is itself sufficient to regard someone as mentally ill (Douglas, 1967).

The second pattern involves tradeoffs, in which the harm to self is foreseeable but not desirable to the individual. Tradeoffs occur in situations that set two desirable goals in opposition to each other, so that pursuing one of them defeats one's chances of achieving the other. Self-defeating behavior is particularly indicated when the person's pursuit of one goal defeats his or her chances of reaching a more important or more valuable goal—in other words, when the harm outweighs the good. There was ample evidence that people sometimes do self-defeating things in such situations. We reviewed studies of self-handicapping,

substance abuse, negligence regarding health care, sacrifices involved in face-work, and shyness.

Poor judgment was implicated in most of the self-defeating behaviors in tradeoff situations. The most common tendency involved making a choice that brought immediate benefits but long-term or eventual costs. A tendency to ignore or downplay long-term risks may contribute to this effect. Several of the long-term factors involved mere increases in probabilistic risks rather than assured harm, and the self-destructive choices in such situations may reflect a broad tendency to neglect or misuse probabilistic information.

High self-awareness and negative emotion were implicated in most of the tradeoff patterns. It appears that self-defeating behavior may often result from the desire to escape from (or otherwise cope with) a transient, aversive state. It would be misleading to conclude that all emotion or all self-attention leads to self-destructive behaviors, because current evidence implicates these states only when they are aversive, such as arising from a threat to self-esteem. Transient, aversive states may produce a desire for immediate relief, even at the expense of long-term costs or risks. As a result, negative emotions or high self-awareness may increase the tendency to choose immediate benefits over long-term ones.

The third model involves counterproductive responses. We found a variety of evidence that fit this pattern, including excessive persistence in the face of failure, choking under pressure, learned helplessness, ineffective approaches to bargaining, and ineffective strategies of ingratiation. These self-defeating patterns involved judgment errors arising from overestimating one's strengths or abilities, underestimating one's strengths or abilities, neglect or misuse of probabilistic information, or inaccurate perception of others. Evidence about the role of self-awareness was mixed, and the hypothesis that low self-awareness contributes to counterproductive strategies must be rejected at present. There was little direct evidence of emotion, although some procedures involved threats to esteem that may have generated some anxiety.

Public and Private Esteem

Self-esteem and public esteem were implicated in many of the patterns we reviewed. It is quite ironic to think that people would become self-destructive as a means of protecting and enhancing the self. Yet several patterns suggest precisely that.

Individual differences in self-esteem were associated with perseveration, with self-handicapping, and with trying to fail. There was, however, no consistent pattern. Sometimes self-defeating behavior was associated with high self-esteem, other times with low self-esteem. Similarly, ineffective bargaining strategies arise both from overconfidence and from too little confidence. There was also inconsistency as to whether private self-esteem or public esteem was involved. Apparently all forms of evaluation of self are involved in some self-destructive processes, although perhaps in somewhat different ways.

Aside from individual differences, it appears that the general desire to maximize esteem is involved in several self-destructive patterns. That desire can motivate people to try to fail, can lead to self-handicapping, can motivate destructive revenge-seeking after embarrassment, can contribute to the social avoidance in

shyness, can increase counterproductive persistence, and can cause individuals to choke under pressure. Alcohol abuse may increase when that desire is thwarted. Evaluative threat to self thus emerges repeatedly as a contributing cause of self-destructive behavior. Given the inconsistency of the individual difference findings, there may be multiple pathways and involvements. It is also clear that many evaluative threats do not elicit self-defeating responses. Further work is needed to clarify the role of self-evaluation in eliciting self-destruction. At present, it appears that the crucial factor is the evaluative threat to self, rather than the specific type of evaluation or threat.

Overlapping Cases

Some of the patterns we have reviewed might have been classified differently. The distinctions among our three models are not absolute. We have already noted that the clearest evidence of trying to fail and choosing to suffer apparently resembled tradeoffs more than primary self-destruction.

We have treated perseveration as a counterproductive strategy, but it could be analyzed as a tradeoff if one posits subjective benefits to persistence (other than success). For example, someone might persist out of reluctance to avoid the label "quitter." It is noteworthy that perseveration contains some features associated with our tradeoff model. Persisting to avoid a stigma associated with quitting is a strategy that sacrifices eventual benefits (optimal performance) in favor of immediate benefits (preserving face). At the same time, perseveration resembles our model of counterproductive responses in the overestimation of self's abilities and in the misjudging of contingencies.

Another way to treat perseveration as a tradeoff would be to consider the subjective costs and benefits of someone invested in a certain course of action that has proved unsuccessful so far. Brockner, Rubin, and Lang (1981) noted that persistence risks further losses, whereas withdrawal entails losing all that one has invested. Their procedure, which emphasized the tradeoff approach to persistence, was one of the few studies to show that anxiety levels predicted responses. In general, we have argued that aversive emotions such as anxiety are more important in tradeoffs than in counterproductive responses, and the findings of Brockner et al. mesh well with that conclusion.

The phenomenon of learned helplessness could also be regarded as a tradeoff, as some past authors have suggested (e.g., Frankel & Snyder, 1978), in contrast to our classification. In this view, people withdraw effort to protect themselves from immediate failure. Again, the evidence includes features we have associated with both counterproductive responses and tradeoffs. The misjudging of self and of contingencies invokes the former model, whereas the latter model is suggested by the sacrifice of long-term goals for immediate security, perhaps along with negative affect.

Thus, two patterns seem to permit classification as either tradeoffs or counterproductive strategies. The fact that these borderline cases also show features associated with both models provides further support for our analysis.

Future Research

One purpose of this article is to encourage psychologists to think of self-destructive behavior as an important and interest-

ing problem in its own right. Further study is warranted on several issues.

A first issue is the paucity of evidence for primary self-destruction. It seems clear that this pattern is quite rare, if it exists at all. Any future evidence for this pattern would be an important contribution. Simply put, does the behavior of normal people ever reflect a deliberate intention to harm the self, apart from tradeoffs or other benefits? And if so, what circumstances elicit such intentions?

Our failure to find evidence of deliberate self-destruction casts doubt on theories that posit such motivations. Thus, analyses of masochism as a desire for harm or suffering are difficult to reconcile with the lack of evidence for such desires (at least to the extent that masochism occurs in nonclinical populations). It may be useful to attempt to reconceptualize masochism as a tradeoff involving certain benefits to the masochist (e.g., Baumeister, 1988).

We have found negative affect to be a cause of many different patterns of self-defeating behavior. A next step would be to examine the role of stress as a cause of self-destruction. Stress may often generate aversive, short-term states, and these may often lead to the judgment errors and neglect of long-term costs that characterize many self-defeating behavior patterns.

Likewise, we found erroneous appraisals of the self to be implicated in several self-destructive patterns, and this has implications for further work. Although many studies have explored biases and distortions in self-perception, few have considered the potentially self-destructive consequences of these biases and distortions. It seems likely that some success experiences may produce overly positive perceptions of the self, leading to self-defeating responses, but more evidence of this pattern is needed. In addition, the role of self-deception in causing self-destruction deserves further study. Self-deception reflects a motivated distortion of self-knowledge, so it may especially foster the types of errors that cause self-defeating, counterproductive responses.

Our hypothesis that low self-awareness could contribute to the erroneous appraisals of the self that lead to counterproductive strategies was not supported, although it was not thoroughly contradicted either. Further work may examine whether low self-awareness ever contributes to self-destructive behavior.

We found the desire to maximize self-esteem to be a frequent cause of self-defeating responses. The desire to maintain a consistent image of the self has been treated as the opposite of the desire to maximize esteem (Swann, 1987); it may be worth examining whether the desire for self-consistency also leads to self-destructive responses.

It seems likely that future work will explore additional patterns of self-defeating behavior. These can be used to test and extend our models. For example, procrastination seems a likely candidate for study. We suspect that procrastination may often involve a tradeoff of long-term goals for short-term benefits; if procrastination is indeed a tradeoff, then it should respond to aversive self-awareness and negative affect, like the patterns we have reviewed.

A last issue for further work concerns the limiting conditions of self-defeating behaviors. By exploring situational and intrapsychic boundary conditions (including individual differences),

it may become possible to understand how self-destruction can be avoided.

Concluding Remarks

It is apparent from our review that normal people do indeed engage in self-defeating and self-destructive acts. It is even apparent that they sometimes choose responses that will foreseeably lead to harm to themselves. On the other hand, there was little evidence that normal people ever *desire* harm or failure. Rather, self-destruction occurs either as an unforeseen and unintended outcome of strategies aimed at positive goals or as the result of a tradeoff in which strongly desired benefits accompany the harm to self.

Negative affect, such as anxiety, fear, anger, and embarrassment, appears to be an important cause of self-destructive behavior. Some theorists might suggest that negative affect engenders hostility toward the self, leading to self-destructive intentions, but we found no evidence for this. Rather, such states apparently cause people to desire to escape from them as quickly as possible, and these desires make short-term relief seem more important than long-term risks or costs. For example, feelings of misery and self-pity following a failure or rejection experience might motivate people to seek intoxication. Their consumption of alcohol is probably not motivated by a desire to harm themselves (as in destroying brain cells, harming the liver, and risking addiction), but rather, to obtain the short-term relief that accompanies intoxication, and this desire makes the long-term risks seem minor or irrelevant. This example may serve as a prototype of how negative affect causes self-destructive responses to tradeoffs.

We found high self-awareness to be a cause of many self-defeating behaviors—nearly all of the tradeoffs and even some of the counterproductive responses. Psychologists have tended to regard high self-awareness as a desirable feature of good mental health. Its role in causing self-destructive behavior may be reason enough to reassess its desirability. High awareness of the self, like the motivation to maximize self-esteem, may turn out to be a mixed blessing (cf. Taylor & Brown, 1988).

We began with the suggestion that the study of self-defeating behaviors might shed light on the limits of human rationality. On the basis of current evidence, we may cautiously conclude that normal people do not often deliberately renounce the rational pursuit of self-interest. But distorted appraisals of self and environment, or overriding desires to escape from short-term, aversive states, can cause people to act in ways that defeat self-interest and even bring harm to the self.

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