

THE TROUBLE WITH CARROTS: Four Reasons Rewards Fail

It is better not to make merit a matter of reward
Lest people conspire and contend.

— Lao-tzu

CONFRONTED WITH IRREFUTABLE EVIDENCE that people who are trying to earn a reward end up doing a poorer job on many tasks than people who are not, researchers at first could only scratch their heads in puzzlement. A few tentatively suggested — or in one case, tried to prove — that the paradoxical effect of rewards must be due to the fact that they distract people from the task at hand.¹

Indeed, it makes sense that the tantalizing prospect of receiving something we like might prevent us from focusing on what we are doing and thereby prevent us from doing it well. But subsequent research has shown that a lot more is involved than simple distraction. Thinking about a reward, as it turns out, is worse than thinking about something else equally irrelevant to the task.² Evidently rewards have a peculiarly detrimental effect on the quality of our performance.

There are, I believe, five core reasons for this failure, four of which are described in the sections that follow, with the fifth occupying the whole of the next chapter. (The second half of the book will play out the implications of these five points in the workplace, the classroom, and the family, and then discuss alternatives to the use of rewards.) Not all of these reasons pertain to the results of the laboratory studies described earlier; some account for the detrimental effects on achievement found in the real world. In any case, the problems I describe are more than explanations for why people don't perform as well when they expect to be rewarded. They are also serious indictments in their

own right, raising concerns about the use of rewards beyond what they do to productivity. Collectively they constitute the central case against pop behaviorism.

I. Rewards Punish

A growing number of parents, teachers, and managers have come to believe that punishment, defined as any attempt to change someone's behavior by forcing him or her to undergo something unpleasant, is bad news. Later in this book, I will defend the position that punishing people should indeed be avoided whenever possible, both for practical and moral reasons. For now, I want to address readers who already share this view, and who therefore try to use rewards instead.

In certain circles, it has come to be taken as revealed truth that we are supposed to stop punishing and criticizing and instead attempt to "catch people doing something right" and reward them with privileges or praise. It is nearly impossible to open up a book on management, or scan an article on raising children, or attend a seminar on teaching without coming across this counsel. The underlying assumption is that there are exactly two alternatives: punitive responses or positive reinforcement, sticks or carrots, "slaps or sugar plums."³

When the choice is framed this way, of course, only a sadist or a simpleton would fail to pick the latter in each pair. Rewards are less destructive than punishments, and the difference between the two becomes more important as the punishment in question becomes more harsh. But the dichotomy is a false one: our practical choices are not limited to two versions of behavior control. And that is very good news indeed because despite the relative superiority of rewards, the differences between the two strategies are overshadowed by what they share. The troubling truth is that *rewards and punishments are not opposites at all; they are two sides of the same coin*. And it is a coin that does not buy very much.

In respects major and minor, rewards and punishments are fundamentally similar. As Kurt Lewin, the founder of modern social psychology, recognized, both are used when we want to elicit "a type of behavior which the natural field forces of the moment will not produce."⁴ Moreover, the long-term use of either tactic describes the very same pattern; eventually we will need to raise the stakes and offer more and more treats or threaten more and more sanctions to get people to continue acting the way we want.

Underlying these two features is an even more critical fact: punishment and reward proceed from basically the same psychological model, one that conceives of motivation as nothing more than the manipulation of behavior. This is not to say that behaviorists fail to distinguish between the two; in fact, Skinner argued fervently against the use of punishment in most circumstances. But the theory of learning and, ultimately, the view of what it is to be a human being are not significantly different for someone who says “Do this and you’ll get that” and someone who says “Do this or here’s what will happen to you.”

The correspondence is no less striking when we turn from theory to practice. Although many people counterpose rewards to punishments, it is interesting to observe that the two strategies often go hand in hand in the real world. In a study reported in 1991, elementary school teachers from thirteen schools were observed carefully over a period of four months. It turned out that the use of rewards and punishments in the classroom were very highly correlated; the teachers who used one were more, not less, likely to use the other.⁵ A survey of several hundred mothers of kindergarten-age children revealed a significant positive relationship between the frequent use of rewards and the frequent use of physical punishment.⁶ Other studies have found that even praise, the form of reward usually viewed as the least objectionable, is often favored by people whose style of dealing with children is conspicuously controlling or autocratic.⁷ These findings don’t prove anything about the inherent nature of rewards, but they do offer one kind of answer to the question of how rewards and punishments are related.

The most compelling aspect of that relationship, though, can be succinctly described in two words: rewards punish. Those who dispense rewards in order to avoid punishing people may not have thought about the punitive features that are built into the process of rewarding. Two such features come to mind. The first derives from the fact that rewards are every bit as controlling as punishments, even if they control by seduction. I made this argument at some length in chapter 2 in the course of identifying what might be seen as an intrinsically offensive aspect of rewards. Philosophical objections aside, though, if reward recipients feel controlled, it is likely that the experience will assume a punitive quality over the long run, even though obtaining the reward itself is usually pleasurable.⁸

One education writer compares the tendency of teachers to “blithely administer . . . knee-jerk jolts of positive reinforcement” to

the use of electric cattle prods,⁹ a comparison that may seem far-fetched until we pause to consider the ultimate purpose of rewards and how manipulation is experienced by those on the receiving end. Or try a different analogy: the question is not whether more flies can be caught with honey than with vinegar, but *why* the flies are being caught in either case — and how this feels to the fly.

That rewards punish is not due only to the fact that they are controlling. They also have that effect for a second, even more straightforward, reason: some people do not get the rewards they were hoping to get, and the effect of this is, in practice, indistinguishable from punishment. Many managers and teachers make a point of withholding or withdrawing a reward if their charges do not perform as instructed. The goody is dangled and then snatched away. In fact, this is precisely what many behaviorists recommend doing. While taking care to urge that children not be punished (by which is meant making something bad happen to them), they freely prescribe the use of “response costs” (by which is meant making something good *not* happen to them).^{*} Unfortunately, those who haven’t been trained to make such distinctions might fail to understand that when something desirable has been taken away they are not supposed to feel punished.

A parent tells a child that continued good behavior will be rewarded with a visit to the circus on Sunday. On Saturday, the child does something that annoys the parent, which prompts a familiar warning: “Keep this up and you can forget the circus tomorrow.” Can there be any doubt that this threat to remove a reward is functionally identical to a threat to employ a punishment?

But even when the person with the power does not deliberately withdraw the reward — when meeting a clear set of criteria does result in the payoff — it often happens that some people won’t meet these criteria and therefore will not get the reward. The more desirable the reward, and the more possible it once seemed to attain, the more demoralizing it will be to miss out. Given that there are disadvantages to the use of rewards even when people do manage to get them, and to the use of contests even for the winners, “imagine the effects of working for a reward and not getting it or of competing and losing!”¹⁰

There are, it would seem, only two ways around this problem. The first is to give a reward to people regardless of whether they fulfilled

^{*}“Negative reinforcement” is different from either of these. It means making a bad thing not happen to someone — that is, removing something unpleasant. Contrary to common usage, it is thus closer to positive reinforcement (making a good thing happen to someone) than it is to punishment.

the stated requirements. Champions of equity theory, whose war cry is "Everything must be earned! No free lunches!" find this horrifying. In fact, a number of criticisms of rewarding children that have appeared in the popular press over the last few years turn out to be criticisms only of giving rewards too frequently or too easily.) I have a different sort of objection: a goody given unconditionally is not really a reward at all. A reward, by definition, is a desired object or event made conditional on having fulfilled some criterion: only if you do this will you get that. If I promise to give you a banana tomorrow, that is not a reward. If I promise to give you a banana tomorrow for helping me out today, that is a reward — and if I don't give it to you, you will probably feel as if you are being punished. To avoid having this happen, I must avoid giving you things on a contingent basis.

The only other alternative is not to set out any criteria or promise any rewards in advance. Instead, the person in charge could present something after the fact: "For having helped me out yesterday, here's a banana." As it happens, most studies have found that unexpected rewards are much less destructive than the rewards people are told about beforehand and are deliberately trying to obtain. But apart from the practical problems of trying to keep people from expecting another reward tomorrow, it is no coincidence that the great majority of rewards *are* promised in advance. The whole point is to control people's behavior, and the most effective way to do this is to describe what will be given to them if they comply — or done to them if they don't comply. For this very reason, the possibility of ending up without the reward, which makes the process essentially punitive, is always present. The stick is contained in the carrot.

The objection here is anything but academic. Most businesspeople can remember an instance when they, or their colleagues, were expecting a bonus, only to become demoralized when they ended up, for whatever reason, not getting it. Parents readily tell stories of exactly the same thing happening when their children failed to get some reward at school that they were counting on. Most of us are familiar with this phenomenon, but few of us have considered that it is not merely widespread but endemic to the use of rewards.

The new school, which exhorts us to catch people doing something right and reward them for it, is therefore not all that much of an improvement over the old school, which had us catching people doing something wrong and threatening to punish them if they ever did it again. What is mostly taking place in both approaches is that a lot of people are being caught. This is more than a play on words. What we are talking about is the experience of being controlled and feeling

punished. These are problematic realities in their own right, and they also happen to be impediments to working or learning effectively.

II. Rewards Rupture Relationships

Earlier I suggested that rewards and punishments flourish in asymmetrical relationships, where one person has most of the power. Even more troubling, rewards and punishments create, or at least exacerbate, that imbalance. If, as a matter of principle, we would like to see disparities in power among people minimized whenever possible, we already have reason to turn away from applied behaviorism.

But this general principle is only the beginning of the story. Rewards also disrupt relationships in very particular ways that are demonstrably linked to learning, productivity, and the development of responsibility. They have these effects both with respect to horizontal relationships (those among peers) and vertical relationships (those among people whose status is different, such as teacher and student, parent and child, supervisor and employee).

In considering the question of relationships among workers or students, we need to begin by recognizing that cooperation does not just make tasks more pleasant; in many cases, it is virtually a prerequisite for quality. More and more teachers and managers are coming to recognize that excellence is most likely to result from well-functioning teams in which resources are shared, skills and knowledge are exchanged, and each participant is encouraged and helped to do his or her best.

Rewards, by contrast, are typically based on the faulty assumption “that the organization’s effectiveness is the simple additive combination of individuals’ separate performances,” in the words of organizational psychologist Jone L. Pearce¹¹ — a reductive view that overlooks the nature and value of group interaction. In the classroom, one of the central messages communicated by teachers, especially those enamored of rewards and punishments, is that tired old slogan “I want to see what you can do, not what your neighbor can do.” This training in individualism persists despite considerable evidence that when students learn together in carefully structured groups, the quality of their learning is typically much higher than what even the sharpest of them could manage in solitude. As one pair of educational psychologists likes to say, “All of us are smarter than any of us.”¹²

At best, rewards do nothing to promote this collaboration or a sense of community. More often, they actually interfere with these

goals: an undercurrent of “strifes and jealousies” is created whenever people scramble for goodies, as educators in New York City found nearly two centuries ago after watching a behavior modification program in action (see footnote at page 5). “Complaints of unequal treatment” and “playing favorites” are common.¹³

As a rule, rewards are not conducive to developing and maintaining the positive relationships that promote optimal learning or performance. But two common arrangements for rewarding people take a bad thing and make it much worse by explicitly setting people against each other. The first of these is a condition of artificial scarcity. Imagine that you are one of twenty or thirty students in a classroom. The teacher announces at the beginning of the year that whoever makes the highest score on each Friday’s quiz will be eligible to wear a *GENIUS OF THE WEEK* badge and enjoy a set of privileges that go with it. How is this likely to affect the way you view your fellow students? How inclined will you be to help someone else with an assignment? How easy will it be for a sense of community to take root in that room?

In this scenario, no matter how well everyone in the class does on each test, only one student is permitted to get the prize. The central message that is taught here — the central message of all competition, in fact — is that everyone else is a potential obstacle to one’s own success. If the reward system sets people up as one another’s rivals, the predictable result is that each will view the others with suspicion and hostility and, depending on their relative status, perhaps with contempt or envy as well.¹⁴

Of all the ways by which people are led to seek rewards, I believe the most destructive possible arrangement is to limit the number that are available. To do so is to replace the possibility that people will try to assist each other with the near certainty that they will try to defeat each other. But whether it is simply permitted by a standard individual incentive system* or actually required by a race for awards, contests are destructive for several reasons beyond the fact that they preclude the sort of teamwork that leads to success.

*Some writers have acknowledged many of these problems and suggested that the solution is to stop rewarding individuals and use small group incentives instead, either in the workplace or the classroom. Unfortunately, offering goodies to teams simply shifts the rivalry to another level, maximizing the competition and thereby minimizing the coordination among groups. Moreover, the four other major problems discussed in this chapter and the next are not alleviated by changing how many people receive a reward. There is research to show that “shared incentives do not ameliorate the negative effects of performance-contingent rewards.”¹⁵

First, most competition creates anxiety of a type and level that typically interferes with performance.¹⁶ Second, those who believe they don't have a chance of winning are discouraged from making an effort; having been given no reason to apply themselves except to defeat their peers, and convinced that they cannot do so, these people are almost by definition demotivated.¹⁷ Third, according to a series of studies by psychologist Carole Ames, people tend to attribute the results of a contest, as contrasted with the results of noncompetitive striving, to factors beyond their control, such as innate ability or luck. The result is a diminished sense of empowerment and less responsibility for their future performance.¹⁸

But competition is only one variation on the behaviorist theme that practically guarantees enmity. The other is the deployment of a collective reward. "If all of us stay on our very best behavior," intones the teacher (speaking here in the first person even though the teacher's own behavior is never at issue), "we will have an ice cream party at the end of the day!" An excited murmur in the room soon fades with the realization that any troublemaker could spoil it for everyone else. This gambit is one of the most transparently manipulative strategies used by people in power. It calls forth a particularly noxious sort of peer pressure rather than encouraging genuine concern about the well-being of others.¹⁹ And pity the poor child whose behavior is cited that afternoon as the reason that "the party has been, I'm sorry to say, boys and girls, canceled." Will the others resent the teacher for tempting and then disappointing them, or for setting them against one another? Of course not. They will turn furiously on the designated demon. That, of course, is the whole idea: divide and conquer.

Collective punishment is widely seen as unfair, but collective reward is not much better. What's more, neither collective nor artificially scarce rewards are confined to elementary school. Many corporations explicitly rank employees against each other or hold out the possibility of an incentive based on an entire department's performance. In this setting there is no need to announce who was responsible for the disappointing results last quarter. Someone will be found to take the blame, irrespective of whether it is deserved. Furthermore, general distrust and stress flourish in just such a system. At one company where "the pay of all depends on everyone's efforts . . . peer pressure can be so high that the first two years of employment are called purgatory."²⁰

Several studies have examined the way we come to regard others when their actions determine whether we get a reward. When older

girls were promised a reward for tutoring younger girls (see page 44), they not only became less effective teachers but also “valued the younger child as a function of her utility in obtaining the desired goal”: if she wasn’t learning fast enough, she came to be viewed negatively.²¹ In a very different kind of experiment, merely calling the attention of young adults to the possible rewards of being involved in a romantic relationship (for example, impressing one’s friends) led them to report less love for their partners than was expressed by people who hadn’t focused on those factors.²²

The major point here is that whether or not people are offered a direct incentive to wish each other ill, the very fact that they have been led to see themselves as working or learning in order to get something means that they are not very likely to feel well disposed toward others and to put their heads together.²³ Some reward programs promote competition and inhibit cooperation more than others do. But to whatever extent they have this effect, the result is ultimately likely to be to the detriment of quality.

So far I have been talking about the effects of rewards on relationships among people of comparable status. The other sort of relationship affected by a reward is that between the person who gives it and the one who gets it. Even in situations in which we have no objection to the fact of this unequal status, we need to understand what the process of rewarding does to the interaction between giver and receiver. Someone who is raising or teaching children, for example, probably wants to create a caring alliance with each child, to help him or her feel safe enough to ask for help when problems develop. This is very possibly the single most fundamental requirement for helping a child to grow up healthy and develop a set of good values. For academic reasons, too, an adult must nurture just such a relationship with a student if there is to be any hope of the student’s admitting mistakes freely and accepting guidance. The same goal applies to the workplace, where it is critical to establish a good working relationship characterized by trust, open communication, and the willingness to ask for assistance.

This is precisely what rewards and punishments kill. If your parent or teacher or manager is sitting in judgment of what you do, and if that judgment will determine whether good things or bad things happen to you, this cannot help but warp your relationship with that person. You will not be working collaboratively in order to learn or grow; you will be trying to get him or her to approve of what you are doing so you can get the goodies. If, for example, “the principal basis

for compensation is the boss' whim, the only real incentive is to stay on his good side."²⁴ A powerful inducement has been created to conceal problems, to present yourself as infinitely competent, and to spend your energies trying to impress (or flatter) the person with power. At least one study has confirmed that people are less likely to ask for help when the person to whom they would normally turn wields the carrots and sticks.²⁵ Needless to say, if people do not ask for help when they need it, performance suffers on virtually any kind of task.

This result is somewhat easier to see when the individual in charge is perceived as a punisher: the parent who might send the child to her room, the teacher who might write a zero in his book, the supervisor who might turn in a negative performance appraisal. If you are the person who might be punished, you are approximately as glad to see that person coming as you are to see a police car in your rearview mirror. (This is one price that parents pay for presenting themselves as enforcers of "consequences" for misbehavior.)

What some observers have missed is that relationships are ruptured just as surely when we see the powerful person as someone to be pleased as when we see him or her as someone to be feared. William Glasser has labored for a quarter of a century to transform schools into places where students are not perpetually punished and made to feel like failures. But he errs in suggesting that teachers can "reduce the adversarial atmosphere" if they use "rewards instead of punishment."²⁶ Such a shift will not produce a different atmosphere; at least, it will not be different in the ways that matter. Both rewards and punishments induce a behavior pattern whereby we try to impress and curry favor with the person who hands them out. Whether we are looking to secure a reward or avoid a punishment is almost beside the point. Either way, what we *don't* have is the sort of relationship that is defined by genuine concern and that invites us to take the risk of being open and vulnerable — the sort of relationship that inspires people to do their best and can truly make a difference in their lives.

Just as the essentially controlling nature of rewards is most easily noticed by those who are being controlled, so the effects of rewards on relationships are most readily seen by those who must depend on others to get what they want. This is why it is important once again for someone who dispenses rewards to imaginatively put herself in the position of whoever is dependent on her, and to reflect on the kind of relationship that now exists between the two of them (and the consequences to the other person of not having a different kind of relation-

ship). This act of perspective taking is easier for someone who plays both roles at once, someone who is responsible for deciding what happens to his subordinates while simultaneously remaining at the mercy of a superior for his own rewards.

The presence or absence of rewards is, of course, only one factor among many that affect the quality of our relationships. But it is a factor too often overlooked in its tendency to cause flattery to be emphasized in place of trust and to create a feeling of being evaluated rather than supported. This, combined with its impact on the relationships among those seeking the goodies, goes a long way toward explaining how rewards often reduce achievement.

III. Rewards Ignore Reasons

Except for the places where their use has become habitual, punishments and rewards are typically dragged out when somebody thinks something is going wrong. A child is not behaving the way we want; a student is not motivated to learn; workers aren't doing good work — this is when we bring in the reinforcements.

What makes behavioral interventions so terribly appealing is how little they demand of the intervener. They can be applied more or less skillfully, of course, but even the most meticulous behavior modifier gets off pretty easy for one simple reason: *rewards do not require any attention to the reasons that the trouble developed in the first place.* You don't have to ask why the child is screaming, why the student is ignoring his homework, why the employee is doing an indifferent job. All you have to do is bribe or threaten that person into shaping up. (Notice that this too describes a fundamental similarity between punishments and rewards.)

A mother in Virginia wrote to me not long ago to challenge my criticism of behavioral manipulation. "If I cannot either punish (or allow consequences) or reward (bribe) my children . . . what do I do when my almost three year old . . . wanders out of her room again and again at bedtime?" she asked. Fair enough: let us consider three possible ways of dealing with a child who will not stay in bed. Behaviorist A favors "consequences": "If you're not back in that bed by the time I count to three, young lady, you won't be watching television for a week!" Behaviorist B favors rewards: "If you stay in bed until morning for the next three nights, honey, I'll buy you that teddy bear you wanted."

But the nonbehaviorist wonders how anyone could presume to propose a solution without knowing *why* the child keeps popping out of bed. With very little effort we can imagine several possible reasons for this behavior. Maybe she's being put to bed too early and simply isn't sleepy yet. Maybe she feels deprived of quiet time with her parents, and the evening offers the best opportunity for her to cuddle or talk with them. Maybe she's still wound up from what happened a few hours earlier and needs to rehearse and clarify the day's events to try to make sense of what happened. Maybe there are monsters under her bed. Or maybe she can just hear people talking in the living room. (Is there anyone too old to remember how all the excitement seemed to start after we were put to bed?)

The point is we don't yet know what's really going on. But the behaviorists' solutions don't *require* us to know. Echoing a beer commercial of the late 1980s, their credo seems to be "Why ask why?" That posture helps to explain the popularity of the reward-and-punishment model — and also its ineffectiveness over the long run. Each of the possible explanations for why this girl doesn't stay in bed at night would seem to call for a different solution. (This is one reason it is difficult to give a simple reply to people who demand to know what "the alternative" is to using rewards.) Rewards are not actually solutions at all; they are gimmicks, shortcuts, quick fixes that mask problems and ignore reasons. They never look below the surface.*

From one perspective, this sort of criticism is not new. It was offered decades ago by Freudians, who argued that behavioral therapy in effect addressed only the symptoms of deeper problems. It was said that the underlying emotional issues would force their way up again in the form of a new symptom. But one doesn't have to be a psychoanalyst to see what is deficient about the behavioral approach. It is not necessary to attribute our actions to unconscious wishes and fears or repressed childhood events to recognize that merely controlling an individual's behavior with bribes or threats misses most of what is going on.

*Things are happening beneath the surface even when we think the reason for a behavior is straightforward. A child eats candy after being told not to do so, and we assume the motive is obvious: candy tastes good. But perhaps there is more than meets the eye here. Did lunch at school not fill him up? Is his blood sugar low? Are other, healthier snacks unavailable? Is he reaching for something forbidden as a way of expressing anger about something else? Even when we are sure that nothing complicated is going on and the cause of the objectionable behavior is really as obvious as it seems, we nevertheless need to address that cause somehow rather than just trying to change the behavior.

Let's say that a student repeatedly comes to class late or daydreams while the teacher is talking. Such behavior might signal that the student has given up on the subject matter after having struggled unsuccessfully to understand the assignments — perhaps for lack of adequate study skills, perhaps because of how the teacher presents the material, perhaps for some other reason. Whatever the real problem is, it remains unsolved if our intervention consists of promising a reward for an improvement in punctuality and attentiveness (or threatening a punishment if there is no improvement). Moreover, this reward will not be delivered if the student doesn't show sufficient progress, in which case the entire exercise is likely to lead to further alienation, an even more negative self-image, and a spiral of defeat.

The same goes for adults at work, regardless of the kind of work they do. A sudden deterioration in performance frequently turns out to be due to problems at home. A chronic record of mediocre performance, meanwhile, may indicate, among many other possibilities, that there is something wrong with the job itself or with an organizational structure that holds employees responsible for things that they are powerless to control. Turning the workplace into a game show ("Tell our employees about the fabulous prizes we have for them if their productivity improves . . .") does exactly nothing to solve these underlying problems and bring about meaningful change. Often it takes no great psychological sophistication to identify what is going on — only a willingness to do something other than dangle a goody in front of people.

Take another example, this one from the pages of public policy. Some politicians, noting that poor teenagers often give up on high school, have resorted to rewarding them with additional public assistance payments if they attend classes regularly, punishing them by cutting their benefits if they drop out, and sometimes even threatening to stop the checks to their parents in order to generate sufficient family pressure to get the teenagers back in school. Apart from concerns about the fairness of these tactics,²⁷ what interests me is the failure to consider the underlying reasons that someone, particularly in the inner city, might decide not to continue attending school. Rather than addressing the structural causes of poverty or the lack of perceived relevance of what the curriculum has to offer, the inclination is simply to manipulate people's behavior with a carrot or stick. If the money is needed desperately enough, the manipulation may succeed in increasing school attendance for a while. It will, of course, do nothing about the deeper issues.

Some people use rewards because they are impatient for results, however fleeting or superficial: their attention is focused on the bottom line and they don't particularly care about "deeper issues." But others are guided by the view that these issues actually make no difference. The core of behaviorism, on which some decisions to use behavioral strategies are based, is that human beings are no more than what they do. Change what they do and you have dealt with the problem. One writer concisely describes behaviorism as the "confusion of inner motives with their outward expression."²⁸ But my point is not just that the psychological theory is inadequate; it is that the practice is unproductive. If we do not address the ultimate cause of a problem, the problem will not get solved.

This is not to say that people who resort to incentives are necessarily so dull or insensitive that they will fail to see or care about other factors. A teacher who brandishes a grade book (on the theory that an appetite for A's or a fear of F's is "motivating") may nevertheless realize that a student is failing because of an abusive home environment, and may even endeavor to do something about this. My purpose, therefore, is not to generalize about the kind of people who use rewards but to examine the implications of the strategy itself. In principle, behavioral interventions *exclude* from consideration the factors that may matter most. In practice, behavioral interventions *distract* those who use them from attending to such factors. This gives us one more explanation for why trying to motivate people by rewarding them is not a very useful strategy.

IV. Rewards Discourage Risk-taking

Rewards can sometimes increase the probability that we will act the way someone wants us to act. But they do something else at the same time that many of us fail to recognize: they change the way we engage in a given behavior.²⁹ To start with, when we are driven by rewards, our focus is typically more narrow than when no rewards are involved; we are less likely to notice or remember things that aren't immediately relevant to what we are doing.

Say you are handed a pile of index cards, each of which has a different word printed on it. Each card also happens to be a different color. You are told that you will win a prize for successfully memorizing all of the words, and you set to work learning them. Later, after reciting as many as you can remember, you are unexpectedly asked to

try to recall the color of the card that corresponds to each word. Chances are you will not do nearly as well on this task as someone who was given the identical instructions but wasn't promised a prize.³⁰

This is an example of what researchers call "incidental learning," a type of performance that rewards invariably undermine. But the reason this happens is even more important than the effect itself. The underlying principle can be summarized this way: *when we are working for a reward, we do exactly what is necessary to get it and no more*. Not only are we less apt to notice peripheral features of the task, but in performing it we are also less likely to take chances, play with possibilities, follow hunches that might not pay off. Risks are to be avoided whenever possible because the objective is not to engage in an open-ended encounter with ideas; it is simply to get the goody. One group of researchers explained that when we are motivated by rewards, "features such as predictability and simplicity are desirable, since the primary focus associated with this orientation is to get through the task expediently in order to reach the desired goal."³¹ Another psychologist was more succinct: rewards, he said, are the "enemies of exploration."³²

This doesn't mean that we can't get people to take some kinds of risks by holding out the possibility of a reward if they are successful. The sports section and the business section of the newspaper are full of activities on which people gamble money in the hopes of making more. But notice how narrow this sort of risk-taking is. First, gamblers try to maximize their winnings by minimizing the risks: this is why they study horses or stocks carefully before betting on them. The more they are concerned about the payback, the more certainty they seek — even within an activity that, by definition, cannot provide absolute certainty. Second, gamblers are engaged in doing something where the nature (and sometimes even the precise extent) of the risks has been clearly laid out. They are not involved in challenging the bounds of an activity by approaching it from a new direction. By playing the odds, they are, paradoxically, doing something quite straightforward.

By contrast, the far more meaningful kind of risk-taking entailed by exploring new possibilities is precisely what people are unlikely to do when they are trying to obtain a reward. Far more common in most activities is an orientation of unreflective expedience — the very opposite of what creativity requires.

Teresa Amabile, who specializes in this topic, asks us to picture a rat in the behaviorist's maze trying to find its way to the cheese. The rat does not stop to weigh the advantages of trying another route,

starting off on a path where the cheddar smell is less pronounced in the hope of finding a clever shortcut. No, it just runs toward where it thinks its breakfast waits, as fast as its tiny legs can take it. "The safest, surest, and fastest way out of the maze [is] the well-worn pathway, the uncreative route," says Amabile. "The more single-mindedly an external goal is pursued, the less likely . . . that creative possibilities will be explored." The narrow focus induced by rewards is similarly worrisome, she adds, since being open to "the seemingly irrelevant aspects [of a task] might be precisely what is required for creativity."²³ Incidental learning may turn out to be integral.

But what if creativity is built into the process? If people will do whatever is required to obtain a reward, won't they think creatively if that's what it takes to get it? Alas, it's not that easy, as Barry Schwartz discovered. Using reinforcements, he tried unsuccessfully to get pigeons to peck in a sequence that was different from their pecking pattern in the preceding session. Eventually, he concluded that it was possible to produce variation, but only in the form of random responses. The difficulty of trying to operantly condition genuinely novel behavior, he argued, is not due to the fact that pigeons aren't very smart. It is inherent in the nature of reinforcement. We have to be able to specify a set of characteristics shared by certain behaviors so that we can offer a reward when they (and only they) appear. But this is impossible to do when what we are looking for is something new.³⁴

Schwartz then switched to human subjects and more complicated tasks (see page 44). He found that rewards sometimes seemed to elicit a "stereotypic" or repetitive approach to doing things. After all, "once one finds some response pattern that works reliably [to secure a reward], it is pointless, even foolish, to deviate from it."³⁵ Unfortunately, Schwartz found, when we are rewarded for what we are doing, we are less likely to be flexible and innovative in the way we solve problems — even very different problems — that come along later. Why? "Reinforcement encourages the repetition of what has worked in the past, in part because the aim of the activity is not to produce something like a general principle or a rule, but to produce another reinforcer."³⁶

To be a good scientist, behavioral or otherwise, one has to expect and even welcome some negative results. It is only by comparing events that lead to a certain outcome with those that don't lead to it that we can figure out what is going on and why. But, as Schwartz observes, people working for rewards don't want to risk negative results; they want to succeed as often and as quickly as possible. This,

of course, has important implications not only for how we train physicists but also how we set up organizations and classrooms in which we want to encourage people to think systematically about anything.

It is not entirely accurate, though, to say that when we are working for rewards we just want fast and frequent success. The truth is even worse than that. Our objective is not really to succeed at the task at all (in the sense of doing it well); it is to succeed at obtaining the reward. If it were somehow possible to obtain it without finishing the assignment, we would abandon the task in a minute. Kurt Lewin said as much in the 1930s; two researchers confirmed this effect empirically in the 1980s.^{37*}

If we do usually complete the task, it is only because doing so is a prerequisite for getting the goody. But even when this is true, we will, given a choice, select the easiest possible task. At least ten studies have found just that, with preschoolers working for toys, older children working for grades, and adults working for money all trying to avoid anything challenging.³⁹ Furthermore, research indicates that (1) the bigger the reward, the easier the task that people choose;⁴⁰ (2) when the rewards stop, those who received them earlier continue to prefer to do as little as possible;⁴¹ and (3) easier tasks are selected not only in situations where rewards are offered but by people who are, as a general rule, more reward oriented.⁴²

The basic proposition here makes logical sense. If you have been promised a reward, you come to see the task as something that stands between you and it. The easier that job is, the faster you can be done with it and pick up your prize.⁴³ It's logical, all right, but the practical implications are staggering. Our workplaces and classrooms, saturated in pop behaviorism as they are, have the effect of discouraging people from taking risks, thinking creatively, and challenging themselves.

Consider the popular program that offers free pizza to children for reading a certain number of books. If you were a participant in this program, what sort of books would you be likely to select? Probably short, simple ones. And what would be the likely effect of this prefer-

*By contrast, from the perspective of the individual doling out the rewards, "the ultimate goal of behavior modification should always be to get the maximum behavior for the minimum reinforcement," as two advocates of token economies put it.³⁸ The very essence of rewarding people, then, sets the reward giver and recipient to working at cross-purposes — another way to think about its effects on relationships.

ence on your reading skills and your attitude toward books? The answer is distressingly obvious. If we want children to read more, to read carefully, and to care about reading, then offering them bribes — edible or otherwise — is exactly the wrong way to go about it.

Likewise, in getting students to concentrate on the grades they will receive for successfully completing an assignment, we may manage to get them to do it. But what sort of tasks will they come to prefer as a result? Every time a teacher reminds the class what an assignment is “worth” (not in terms of its meaning, of course, but in terms of how many points toward a grade it represents), every time a parent asks a child what he “got” on a paper (rather than what he got from the act of writing it), an important lesson is being taught. The lesson is that school is not about playing with ideas or taking intellectual risks; it is about doing what is necessary, and only what is necessary, to snag a better letter or number. Most students will quickly accommodate us, choosing “to do that which will maximize the grade and not attempt[ing] tasks in which they might fail, even though they would choose to challenge themselves to a greater degree under other circumstances.”⁴⁴

The last part of that quotation is critical. If it has escaped our notice up until now that rewards — grades, of course, being only one example — have these unhappy effects, this may be because we assume that people naturally avoid challenging themselves, that it is “human nature” to be lazy. The evidence shows that if anything deserves to be called natural, it is the tendency to seek optimal challenge, to struggle to make sense of the world, to fool around with unfamiliar ideas. Human beings are inclined to push themselves to succeed at something (moderately) difficult.⁴⁵ As a rule, we retreat from doing so and take the easy way out only when something else intervenes — something like rewards. If people all around us generally pick the easy task, it may be because rewards are all around us too.

Just as it is possible for a behaviorally oriented teacher to think about the deeper reasons for a student’s actions, so it is conceivable that someone promised a reward could choose to take risks and work on challenging tasks. Theoretically, for that matter, almost any psychological effect can be overcome by someone who is sufficiently determined. But for this to happen, one must swim upstream, attempting to transcend the mindset that rewards, by their very nature, tend to induce. Most people prodded by the promise of a reward will approach tasks in the manner described here. If that orientation disturbs us, then urging people to “be creative” or “go the extra mile” is

apt to be far less effective than taking a hard look at our use of rewards to get people to perform.

“Do this and you’ll get that” makes people focus on the “that,” not the “this.”⁴⁶ Prompting employees to think about how much will be in their pay envelopes, or students to worry about what will be on their report cards, is about the last strategy we ought to use if we care about creativity. We can summarize this discussion as follows: *Do rewards motivate people? Absolutely. They motivate people to get rewards.*

CUTTING THE INTEREST RATE: The Fifth Reason Rewards Fail

Who would have thought that play could be turned into work by rewarding people for doing what they like to do?

— Rosemarie Anderson et al., 1976

WE COME NOW to what is probably the most tragic single consequence of applied behaviorism and, at the same time, the most important reason for its failure: how rewards change the way people feel about what they do.

Psychologists sometimes refer to rewards and punishments as “extrinsic” motivators, because they are inducements outside of the task itself. People who have been led to think in terms of what they will get for doing something can be described as extrinsically motivated. The opposite of this is *intrinsic* motivation, which basically means enjoying what one does for its own sake.*

If our goal is quality, or a lasting commitment to a value or behavior, no artificial incentive can match the power of intrinsic motivation. Think about someone you know who is truly superlative at his job. Now ask yourself whether he has a bumper sticker on his car that says I OWE, I OWE . . . IT'S OFF TO WORK I GO OR THANK GOD IT'S FRIDAY OR WORK SUCKS, BUT I NEED THE BUCKS. (One could scarcely imagine more vivid signs of an economic system in crisis.) Clearly, this is not the sort of sentiment we associate with people who do excellent work. Such people may be glad to be paid, and even more glad to be well paid, but they do not see themselves as

*For a fuller discussion of the concept of intrinsic motivation, see Appendix B.

working primarily in order to collect a paycheck. They love what they do. Sometimes they even keep doing it on their own time.

This doesn't mean that our interest in a task fully accounts for how well we do it¹ — or even completely explains why performance drops in the presence of rewards.² But intrinsic motivation remains a powerful predictor of how good a job someone will do in the workplace or how successfully he or she will learn in school. As one group of researchers summed up the available evidence, "Intrinsically motivated people function in performance settings in much the same way as those high in achievement motivation do: They pursue optimal challenges, display greater innovativeness, and tend to perform better under challenging conditions."³

Few readers will be shocked by the news that extrinsic motivators are a poor substitute for genuine interest in what one is doing. What is likely to be far more surprising and disturbing is the further point that rewards, like punishments, actually undermine the intrinsic motivation that promotes optimal performance. I have already offered hints about this phenomenon in describing how coming to see ourselves as engaging in a task to get a reward typically alters the way we view that task. We will now explore this effect more carefully.

The Old Man's Plan

Psychology, and social psychology in particular, is often accused of doing little more than ratifying common sense and describing what we already knew to be true in more impressive-sounding language. When researchers find something that upsets the conventional wisdom, it is therefore worth paying attention. The discovery of how rewards affect achievement offers a textbook example of such a counterintuitive finding (even if it is still ignored by many psychology textbooks). And if we peel back the effect on achievement, we find ourselves looking at something no less fundamental and significant: the effect of rewards on interest.

This research first appeared in the early 1970s, with two investigators stumbling onto the same finding independently, as often happens in science. In this case, the two were psychologists in their late twenties who lived across the country from each other and favored different experimental approaches. Edward Deci, at the University of Rochester, performed the first of what turned out to be a series of

experiments with college students. The basic design was ingeniously simple and, as tends to be the case in social psychology, a little deceptive. Each subject was asked to work on an interesting spatial-relations puzzle. Half were promised money; the other half weren't. Then the experimenter announced that it would be a few minutes before the next phase of the study got started. The subject was left alone in a room to wait, where he or she could continue playing with the puzzle, read a magazine, or daydream.

Actually, this *was* the next phase of the study; the subjects were secretly watched to see how long they worked on the puzzle when they had a choice. Those who had been paid, it turned out, now spent less time on it than those who hadn't been paid. It appeared that working for a reward made people less interested in the task. Or, as Deci put it, "money may work to 'buy off' one's intrinsic motivation for an activity."⁴

When the published report of this experiment arrived with his mail, Mark Lepper of Stanford University was already busy writing up the results of his own study. Lepper's interest in the subject had been kindled in the late 1960s, when he observed young children in Head Start classrooms. Many teachers there used rewards to induce children to play with learning games, which they dutifully did. But when the rewards were no longer available, Lepper noticed that the kids wanted nothing to do with these activities anymore — whereas in classrooms that left it up to the children to decide what to play with, lots of them eagerly played with the very same games.

"You didn't have to be a psychologist to see that the rewards worked — they really controlled kids' behavior," Lepper remarked many years later. "But the negative effects were harder to see. I'm not sure I would have noticed them myself if I hadn't gone to these other schools [that didn't use rewards] where kids were loving the activities."⁵

Lepper and his colleagues set about conducting an experiment to figure out what had been going on in those Head Start classrooms. They gave fifty-one preschoolers a chance to draw with Magic Markers — something that most children of that age find very appealing. Some of them, however, were told that if they drew pictures they would each receive a special, personalized certificate, decorated with a red ribbon and a gold star. Between a week and two weeks later, the children were observed in their classrooms. Those who had been told in advance of the certificate they would receive, Lepper discovered, now seemed to be less interested in drawing with Magic Markers than

the other children were — and less interested than they themselves had been before the reward was offered.⁶

Deci's study looked at the immediate effects that a financial reward had on adults' interest in a puzzle. Lepper's study looked at the delayed effects that a symbolic reward had on children's interest in drawing. Despite the differences in design, the two experiments converged on a single conclusion: *extrinsic rewards reduce intrinsic motivation*. People's interest in what they are doing typically declines when they are rewarded for doing it. Over the next two decades, scores of other studies confirmed this conclusion.⁷ Although various factors, which I will talk about later, do have an impact on the strength of this effect, and while criticisms of varying degrees of persuasiveness have been leveled against this body of research (see Appendix C), the central finding has been documented beyond any reasonable doubt. Remarkably, however, it is not widely known even in the neighboring fields of educational and organizational psychology, much less in the culture at large.

On the one hand, most people are surprised to learn that rewards kill interest. It is widely and erroneously assumed that if you add an inducement (such as money or grades) to do something, an individual's motivation to do it will automatically increase. On the other hand, once the finding is described and explained, many people immediately recognize its plausibility.⁸ Most of us, after all, can think of something we used to do just because we found it enjoyable — until we started getting paid for engaging in the activity, after which there was no way we would consider doing it for free. Somehow our intrinsic interest evaporated after rewards were introduced.

An old joke captures this phenomenon as well as any study could. It is the story of an elderly man who endured the insults of a crowd of ten-year-olds each day as they passed his house on their way home from school. One afternoon, after listening to another round of jeers about how stupid and ugly and bald he was, the man came up with a plan. He met the children on his lawn the following Monday and announced that anyone who came back the next day and yelled rude comments about him would receive a dollar. Amazed and excited, they showed up even earlier on Tuesday, hollering epithets for all they were worth. True to his word, the old man ambled out and paid everyone. "Do the same tomorrow," he told them, "and you'll get twenty-five cents for your trouble." The kids thought that was still pretty good and turned out again on Wednesday to taunt him. At the first catcall, he walked over with a roll of quarters and again paid off

his hecklers. "From now on," he announced, "I can give you only a penny for doing this." The kids looked at each other in disbelief. "A penny?" they repeated scornfully. "Forget it!" And they never came back again.

The old man's plan was sly but also elegantly simple. He rewarded the children for something they had been doing voluntarily, something they thought was fun, and right away they came to see themselves as harassing him in order to get paid. As soon as the reward was no longer there, neither were they. This, of course, was the whole idea: to sap their intrinsic motivation. But that is also what millions of us — well-meaning parents, teachers, and managers — are doing to the people *we* reward, whether we realize it or not: killing off their interest in the very things we are bribing them to do.

One of the most memorable studies to confirm this effect was conducted by a researcher whose specialty is the investigation not of rewards but of food preferences. Leann Lipps Birch and her colleagues at the University of Illinois took a group of children and got them to drink kefir, a fruit-flavored yogurt beverage they had never tasted before. The children were divided into three groups: some were just handed a full glass, some were praised ("That's very good, you drank it all the way down"), and some were given a free movie ticket for drinking it.

Who drank more? Skinner, of course, would predict higher levels of consumption by those who received either verbal or tangible reinforcement. Was he right? Whenever I put this question to a group of people who have just listened to an account of how rewards are bad news, most of them now assume that everything Skinner says must be wrong — or at least that I wouldn't bring up the study unless it refuted his prediction. In fact, though, his prediction is absolutely correct. If a reward is attractive enough, people will do almost anything to get it. A few extra gulps of liquid yogurt are surely worth a movie ticket.

But Birch was not interested in who would drink more kefir at the time the rewards were offered. What she wanted to know was how the incentives would affect the children's long-term preferences. What she found was that those who got nothing for drinking it liked the beverage just as much, if not more, a week later. But those who had received tickets — or, to her surprise, praise — now found the stuff much less appealing.⁹

With the possible exception of dairy farmers, no one particularly cares what children think about kefir. The point, of course, is that reinforcement can also kill a taste for creative writing or financial analysis or generous behavior or anything else we value. In fact, this

effect is so predictable that rewarding people might even be regarded as a clever strategy for deliberately undermining interest in something. Recently I was told about a Sunday school teacher who handed out candy bars when her students correctly recited Bible verses. It occurred to me that this, given the probable long-term effects, would be a shrewd tactic for an ardent opponent of religion to use.

All those reading incentive campaigns inflicted on elementary school children across the country provide sobering evidence of just how many parents and educators are trapped by Skinnerian thinking. They also illustrate the consequences of extrinsic motivators more generally. Asked about the likely results of Pizza Hut's popular food-for-reading program, educational psychologist John Nicholls replied, only half in jest, that it would probably produce "a lot of fat kids who don't like to read."¹⁰

Consider the following excerpt from a recent article in *USA Today*:

When school let out for the summer, a Philadelphia mother was concerned her 9-year-old son would take a three-month vacation from reading.

"He has not learned to love books," Christina Long said then. "He only reads what's required of him."

That was before Greg Prestegord learned he could earn packs of baseball cards and other prizes by reading books through his library's summer reading program.

Two days later the avid baseball fan checked out six books.

"That's why I'm doing it," Greg says. "I must have a million baseball cards."¹¹

The article goes on to note that this summer program is similar to others around the country that offer movie parties, zoo passes, and other prizes to children who pick up enough books. Presumably the librarians who administer them and the parents who support them have the very best of intentions. But if Ms. Long is typical, they are not listening to what their children are telling them. Greg is both candid and unequivocal: the baseball cards are "why I'm doing it," he says. Thus, he is still reading (as his mother puts it) "only . . . what's required of him"; all that has changed is that reading is now required to get a card instead of a grade. A program that turns vacation reading into something one has to do to obtain a reward is hardly likely to produce children who have "learned to love books." Quite the contrary.

"But at least he's reading now," Ms. Long might protest. "At least he's being introduced to new books!" And this is true. The reward

buys us a behavior — in this case, the act of checking out a book and reading it. But at what price? The quality of performance in general (as we saw in chapter 3) and of learning in particular (as we'll see in chapter 8) tend to decline significantly when people are extrinsically motivated. Once the library runs out of baseball cards, children are not only unlikely to continue reading; they are less likely to read than they were before the program began. Think about it: reading has been presented not as a pleasurable experience but as a means for obtaining a goody. The experience of children in an elementary school class whose teacher introduced an in-class reading-for-reward program can be multiplied hundreds of thousands of times:

The rate of book reading increased astronomically . . . [but the use of rewards also] changed the pattern of book selection (short books with large print became ideal). It also seemed to change the way children read. They were often unable to answer straightforward questions about a book, even one they had just finished reading. Finally, it decreased the amount of reading children did outside of school.¹²

Notice what is going on here. The problem is not just that the effects of rewards don't last — although, as we saw in chapter 3, that is true in one sense: long-term change of the kind we want is not effected by manipulating people's behavior with incentives. The more significant problem is precisely that the effects of rewards do last, but these effects are the opposite of what we were hoping to produce. What rewards do, and what they do with devastating effectiveness, is smother people's enthusiasm for activities they might otherwise enjoy.

The Scope of the Effect

Further scientific examinations of how rewards affect intrinsic motivation have turned up additional evidence of the extent of their destructive power. A single, one-time reward for doing something you used to enjoy can kill your interest in it for weeks.¹³ It can have that effect on a long-term basis, in fact, even if it didn't seem to be controlling your behavior at the time you received it.¹⁴ The reward may also spill over to spoil your attitude about brand-new activities,¹⁵ in effect making you more dependent on extrinsic incentives generally. And just as you don't have to be the one smoking a cigarette in order to be harmed by it, merely watching someone else get a reward for engaging in some activity can have at least a temporary motivation-killing effect.¹⁶

The scores of studies that have documented the harms of rewards have used many different types of incentives without any apparent difference in result. Candy can spoil one's appetite for the activity in question, but so too can money, a chance to play with a toy (for young children) or a camera (for older children), a certificate or award, a tour of a college psychology department (for high school students), movie tickets, and many other extrinsic incentives.

That doesn't mean that all rewards should be treated as if they were equal. There may be other reasons for objecting more strenuously to the use of certain goodies. For example, we should be especially concerned about presenting food as a prize on a regular basis if there is any chance that doing so could contribute to eating disorders. More important, some things ought to be made available unconditionally, such as love and affection for children or certain basic rights for people in institutions, and therefore should not be presented as rewards for acting in certain ways.

These specific concerns aside, though, any reward has the power to make a task seem less interesting. The basic demotivating effect, moreover, occurs with all kinds of people.

Age. Clearly, as we have seen, "the effects of rewards on intrinsic motivation have been found to be similar across the ages," from very young children to adults.¹⁷ One is never too young or too old to have one's interest in a task reduced when that task is presented as a way of getting a reward.

Sex. Men and women, boys and girls, respond to rewards in pretty much the same way; most researchers have had no reason to expect different results on the basis of gender and have found none.¹⁸ (The one exception to this trend concerns responses to praise, which tends to affect females more negatively than males, for reasons to be discussed in chapter 6.) There hasn't been much research on gender differences in overall extrinsic or intrinsic orientation, and that which has been published doesn't point to a clear conclusion.¹⁹ Of course, males and females may respond differently to a particular reward (such as grades or money) depending on what they have been raised to value. But given rewards that are equivalently desirable, the tasks for which they are given will themselves be valued less by people of either gender.

Race and social class. As far as I can determine, no researcher has ever set out to investigate whether rewards affect one's interest in a task differently depending on race or social status. There are some data, however, on how rewards affect task performance. Studies in the 1950s and 1960s found that "lower-class" children, unlike their

middle-class counterparts, tended to perform better on certain isolated tasks when given tangible incentives such as candy.²⁰ The reason, some theorists proposed, is that “the ‘extrinsic context’ is more common in lower-income homes.”²¹ Since rewards can, in effect, displace an intrinsic orientation, it is conceivable that a steady diet of them (with or without punishments) could make someone more dependent on extrinsic motivators. But as of the 1970s, most researchers stopped finding these class differences: tangible rewards either didn’t improve or actually impeded the quality of performance by black children of low socioeconomic status, just as they did with middle-class whites.²² Moreover, surveys designed to measure the intrinsic motivation of students have found no differences by race or social class.²³ (Not surprisingly, though, adults in the workplace do tend to be a lot more concerned about money if they aren’t making much of it and have very little say over what they do all day: “Man tends to live for bread alone when there is little bread,” as Douglas McGregor once put it.)²⁴

The Reason for the Effect

I have offered five separate reasons to account for the decline in performance associated with rewards, one of them being the decline in interest in the task. But how do we account, in turn, for *that* effect — for what rewards do to interest? Various explanations have been proposed over the years,²⁵ and it is probably impossible to prove once and for all that any one of them is correct. Two seem to stand out, though, as especially plausible and straightforward.

The first explanation has an appealing simplicity to it and seems to make sense on the basis of our real-life experience: *anything presented as a prerequisite for something else — that is, as a means toward some other end — comes to be seen as less desirable*. “Do this and you’ll get that” automatically devalues the “this.” The recipient of the reward figures, “If they have to bribe me to do this, it must be something I wouldn’t want to do.” Or as the educator A. S. Neill put it, promising a reward for an activity is “tantamount to declaring that the activity is not worth doing for its own sake.”²⁶ Thus, a parent who says to a child, “If you finish your math homework, you may watch an hour of TV” is teaching the child to think of math as something that isn’t much fun.

Nearly a decade after Mark Lepper killed preschoolers’ interest in drawing with Magic Markers by giving them an award, he went back to the same school with a new plan. He noticed that children ordinar-

ily love to draw not only with felt-tip pens but also with pastel crayons. So he told half of them that in order to be able to draw with the pens they would first have to spend some time drawing with the crayons; the other half were told the reverse. When he returned two to three weeks later, he found, sure enough, that whichever activity had been the prerequisite for the other was now something the children were less interested in doing.²⁷ Other researchers, meanwhile, have found that the greater the incentive we are offered, the more negatively we will tend to view the activity for which we received it.²⁸

Even people can be devalued (as Kant realized) if human interaction is seen as a means to some other end. When children were invited to play with someone else in order that they might have access to one of that child's toys — or, in another study, when they were offered cookies for playing with a partner — they were less interested in future interactions with the other child. Similarly, college students, except those who were very shy, turned out to be less likely to continue talking with a stranger if they had been paid earlier for doing so.²⁹

The same means-ends explanation probably accounts for the results of the kefir experiment: the beverage was instantly devalued by being presented, in effect, as something you got rewarded for drinking. Another pair of researchers subsequently confirmed that children were less likely to choose a snack food that had earlier been presented as something they had to finish in order to eat something else — even though the two foods were viewed as equally appealing before the experiment. (Just giving the children one snack before the other didn't have this effect.)³⁰ In fact, a mischievous researcher might be tempted to test the limits of this mechanism by telling a toddler, "No Brussels sprouts for you, young man, until I see every bit of ice cream gone from that dish."*

Even if prerequisites do come to seem less attractive, does that mean that ends become more attractive? Behaviorists observe that any activity we particularly enjoy can be used as a reinforcer (to get us to do something else); is it also true that anything used as a reinforcer will

* Actually, one graduate student has conducted such a study, and the major result was amused disbelief from her subjects. Presumably these children, three to four years old, had already been introduced to the same foods under the usual contingency pattern — vegetables as prerequisite, dessert as reward — so they just giggled at the reversal.³¹ Ideally, the experiment would have to be conducted when these foods were first offered to them, assuming parents could bring it off with a straight face. Even then, it is likely that the inherent appeal of a sweet, fatty food like ice cream might override its status as a means to another end. (Likewise, nothing short of a miracle could make most people look forward to biting down on a Brussels sprout.)

become something we enjoy? When we hear “Do this and you’ll get that,” in other words, do we come to like the “that” more than we did before? This possibility, dubbed the “bonus effect,” has received only limited support. One team of researchers did find that an activity looked better to children who were allowed to engage in it as a reward than it did to their peers.³² When Lepper told children they had to draw with pens before they could draw with the crayons, however, interest in the pens went down but interest in the crayons didn’t go up. Likewise, the two-snack study didn’t find enhanced appeal for the reward snack — only diminished appeal for the prerequisite snack.

John Nicholls, who suggested that pizza-for-reading programs are likely to produce fat kids who don’t like to read, later joked that we might be more successful at getting children hooked on reading if we offered “a free book for every pizza they eat.” It’s a clever line, but is it a promising strategy? Can we turn the destructive effects of rewards to our advantage simply by turning the behavior or object we want to promote into the goody to be gained? Probably not. The reason is that there is a second explanation for the loss of interest: *rewards are usually experienced as controlling, and we tend to recoil from situations where our autonomy has been diminished*. Simply exchanging the means and ends doesn’t change this crucial feature of applied behaviorism and therefore will not mitigate its negative effect on intrinsic motivation.

For years Edward Deci, Richard Ryan, and others who have passed through the psychology department at the University of Rochester have been propounding and refining this explanation.³³ Its premise is that all of us have a basic desire to feel self-determining or, as Richard deCharms would have it, like an “origin” instead of a “pawn.” We need to maintain a measure of control over our own destiny, to have some choice about what happens to us.³⁴ When something interferes with this sense of self-determination — when, for example, we are simply told what we have to do (and how and when to do it), various undesirable consequences follow. Later I will describe how controlling environments affect children’s learning and behavior. For now, the point to be emphasized is that, all things being equal, we are less interested in doing things when we are made to feel like pawns. If we have very little discretion about what we do all day at work or school, there is a good chance we will spend the time wishing the weekend would arrive.

Deci, Ryan, and their colleagues argue that a reward for acting in a particular way does two things: it gives us information about what we

have done, and it controls (or attempts to control) our future behavior. The more vividly we experience the latter, the more likely that we will lose interest in whatever we are doing. If we are drawing a picture in the hope of getting a prize, or writing a report in order to receive a favorable recommendation, we come to feel that our work is not freely chosen and directed by us; rather, the reward is “pulling” our behavior from the outside. “Intrinsic motivation is the prototypical form of self-determination,”³⁵ while “rewards in general appear to have a controlling significance to some extent and thus in general run the risk of undermining intrinsic motivation.”³⁶

If the problem with rewards is due to the fact that they are controlling, then other things that limit our ability to be self-determining should have exactly the same effect on how we feel about a task.³⁷ Some evidence even suggests that the extent to which we experience an environment as controlling is a better predictor of reduced interest than whether we have been offered a reward.³⁸ In any case, there is no question that intrinsic motivation is often corroded by circumstances other than receiving rewards, such as when we are

- **Threatened.** Warnings about what will happen if we don’t do something well enough will make that activity a lot less appealing to us.³⁹ If there hasn’t been much research on this point, it is probably because hardly anyone doubts that it is true. (The surprising discovery, after all, is that carrots aren’t much better than sticks.)

- **Watched.** Studies with children as well as adults suggest that when we are carefully monitored as we work on a task, we tend to lose interest in it.⁴⁰ Later research indicates that this effect seems to occur only when the surveillance is perceived as controlling — for example, when we have reason to think that the observation is being conducted to check our performance or compliance with instructions (rather than, say, just out of curiosity).⁴¹ The implications are disturbing, given the increased use of surveillance, now aided by computers, in the modern workplace.*

- **Expecting to be evaluated.** Closely connected to surveillance is evaluation; the purpose of watching, after all, is usually to see how

*In fact, the disadvantages of this practice extend beyond its effects on motivation. Back in the 1950s, an experiment found that merely instructing subjects to keep a close watch over their “subordinates” led them to assume (without any evidence) that those whose performance they were monitoring did their jobs only because they were under surveillance — in other words, that they were not to be trusted and therefore needed to be closely watched. Like rewards, this way of controlling people tends to feed on itself and create its own demand.⁴²

good a job someone is doing. Letting people know their performance is going to be evaluated is sometimes said to provide “accountability” — a buzzword in both the public and private sectors — and to push people to do their best. (The strategy is particularly popular with those who assume motivation must come from outside the individual and that people always try to get away with doing as little as possible.) Once again, however, control backfires. When people think they will be evaluated, their intrinsic motivation suffers — even if no reward is offered for doing well, and even if the evaluation turns out to be positive.⁴³ Performance too declines, especially on tasks demanding creativity.⁴⁴ In fact, anytime we are encouraged to focus on how well we are doing at something (as opposed to concentrating on the process of actually doing it), it is less likely that we will like the activity and keep doing it when given a choice.⁴⁵ This simple, much-replicated finding has very significant implications for education, and I will return to it in chapter 8.

- **Forced to work under deadline.** Just as the performance of certain tasks can be artificially boosted (in the short run) by offering a reward, so the imposition of a deadline can sometimes light a fire under us, making it more likely that we will finish a job. Some people, for a variety of reasons, grow to depend on an externally imposed structure to the point that they wait until the last possible minute before starting a task. But how do deadlines affect long-term interest in — and, by extension, performance of — the task? I know of only two studies on this subject — both, by coincidence, conducted with male undergraduates; both found a reduction of interest as a result of imposed time pressures.⁴⁶

- **Ordered around.** When parents talk to their children in ways that seem controlling, or intended to pressure them to do specific things, the activities in which they are engaged come to seem less appealing to these children as a result.⁴⁷ When adults are assigned performance goals with respect to a reasonably interesting task, they are apt to become less interested in that task than those allowed to work at their own pace.⁴⁸

- **Competing against other people.** If we are concerned about intrinsic motivation, the only thing worse than scrutinizing people’s performance, evaluating it, and making them worry about deadlines is to cause a reward or punishment to hinge on the outcome. And the only thing worse than that is to set up the activity so that one person can be successful only when someone else is not. When rewards are made scarce artificially — when success is turned into winning, an

outcome available to only one person or team, by definition — the consequences include a drastic reduction in interest. That doesn't mean we necessarily stop engaging in the activity. We may continue because we know of no form of recreation except the kind that involves trying to defeat other people, because we are powerless to change the rules of the workplace or classroom, and so on. But typically we do so with less interest in the task itself. The dominant motivator is now the possibility of victory, or some other extrinsic factor: "one needs the reward of winning in order to persist." No wonder the data show "competitively contingent rewards . . . to be [the kind that is] most controlling (and thus most undermining of intrinsic motivation)," according to Deci and Ryan.⁴⁹

Each of these various forms of control is bad enough on its own; putting them together just accelerates the loss of self-determination. The use of surveillance *and* rewards (either a tangible incentive or praise that is presented in a controlling manner) is worse than either by itself.⁵⁰ Rewarding children for playing a game makes them less interested in it; telling them which game they must play reduces its appeal further.⁵¹ But rewards alone do plenty of damage, and they do it, in part, because of our reduced sense of autonomy.

"But If We Just . . ."

In some situations, we may be inclined to explain the consequences of using rewards by noting that whatever has to be done to get them is seen as just a prerequisite; in other situations, we may notice that people lose interest by virtue of feeling controlled. In either case, the reduction in intrinsic motivation is the same, and this fact makes it difficult to rescue pop behaviorism. I want now to consider a variety of claims that are frequently offered in defense of the use of rewards — or proposed modifications of their use — and why they fail to get at the crux of the problem. (In Appendix C, I deal with other responses, made mostly by researchers sympathetic to behaviorism, to the arguments and evidence presented here.)

"Two kinds of motivation are better than one." Outside of psychology departments, very few people explicitly distinguish between intrinsic and extrinsic motivation. But some who do make use of these concepts apparently assume the two can simply be added together for best effect.⁵² Motivation comes in two flavors, these people seem to be

saying, and both together must be better than either one by itself. What research (and, if we are attentive to long-term consequences, experience) makes quite clear is that things don't always work this way in the real world. You can combine different forms of control to make people less motivated, but it's not so easy to combine intrinsic and extrinsic motivation to make them more motivated. Finding a task interesting, which is both critical to excellence and highly desirable in itself, is usually eroded by the addition of a reward.

"As long as you don't use rewards permanently, there's no problem." The idea that extrinsic motivators are harmless if used only temporarily is favored by some teachers: give a child a chocolate bar for mastering writing skills and then, once the inherent appeal of using the language has taken hold, gradually reduce the frequency or size of the bribe. This technique, a variant of the old "bait and switch" gambit used by salespeople, is enormously appealing because it seems to offer someone who is skeptical about extrinsics a way of using them with impunity. Unfortunately, the evidence on how interest is undermined raises serious doubts about the idea that we can, so to speak, have our candy and eat it, too.

What are the underlying premises of this strategy? First, it assumes that a little bit of something cannot possibly do any real damage. (In reality, just because this is true of *eating* candy doesn't mean it's true of using candy as a reward.) Second, the practice proceeds from a model of human behavior that assumes we can do something to an individual and then, once we have stopped doing it, be assured that there is no lasting effect — rather like moving a piece of furniture into someone's living room and then moving it out again without having changed the room itself. Richard deCharms realized that the truth is quite different: giving someone an extrinsic reason for behaving in a certain way "changes the whole event; it does not just add a reward."⁵³ The Gestalt has been shifted; the perception of the task and of one's motives may no longer be what they were.

More specifically, the belief that we can offer rewards to jump-start a behavior and then simply fade them out presumes, according to Barry Schwartz, that "the effects of rewards do not carry over beyond acquisition into later occurrences of the activity in question and do not transfer to related, but different activities." And, he continues (consistent with the evidence already reviewed here), "there is no reason to believe that there is anything self-contained about the effects of a reinforcement regimen."⁵⁴ This doesn't mean that once we have rewarded people we have no choice but to keep doing so until they

die. But we cannot simply provide rewards and expect to be able to withdraw them later without any complications.

“Rewarding people is not only inevitable but apparently desirable since people *want* the goodies we give them.” The trouble with this claim is that it confuses *what* we are offering people with *how* it is being offered. There is nothing objectionable about a teacher’s throwing a popcorn party for her class; the problem is making the party contingent on students’ behavior (“Do what I tell you and then you will get a treat”). To be sure, there is nothing wrong with offering a child acceptance and reassurance, but there is something very wrong with turning these into rewards that are provided only when the child acts in a certain way. There is no question that people want and need to be paid for the work they do; the danger comes from pushing money into people’s faces by promising more of it for better performance. In short, just because we are interested in an object that is being used as a reward doesn’t mean that the practice of using it as a reward is itself innocuous. In fact, *the more you want what has been dangled in front of you, the more you may come to dislike whatever you have to do to get it.*

In an earlier chapter I observed that the more we are rewarded, the more we may come to depend on rewards. Now, with the research of Deci and Lepper, with the kefir study and the logic of the old man’s plan, it becomes clearer how this vicious circle works. When we are repeatedly offered extrinsic motivators, we come to find the task or behavior for which we are rewarded less appealing in itself than we did before (or than other people do). Thereafter, our intrinsic motivation having shrunk, we are less likely to engage in the activity unless offered an inducement for doing so. After a while, we appear to be responsive to — indeed, to require — rewards. But it is the prior use of rewards that made us that way!

As rewards continue to co-opt intrinsic motivation and preclude intrinsic satisfaction, the extrinsic needs . . . become stronger in themselves. Thus, people develop stronger extrinsic needs as substitutes for more basic, unsatisfied needs. . . . They end up behaving as if they were addicted to extrinsic rewards.⁵⁵

The teacher shrugs and says, “Hey, if I don’t tell them this material will be on the test, they won’t bother to learn it.” The manager insists the job won’t be done right unless she offers a bonus. The parent is convinced it’s unrealistic to expect children to do what they’re “supposed to” in the absence of an incentive. But look again: these are not

arguments for pop behaviorism. They are signs that something is terribly wrong with how the classroom or workplace is arranged (or with what people are being asked to do). Given that rewards can undermine interest, the last thing we ought to be providing is more of the same. Promising a reward to someone who appears unmotivated — or demotivated — is like offering salt water to someone who is thirsty: it's not the solution; it's the problem.⁵⁶

"Let people reward themselves." Giving children a book for each pizza they eat prevents reading from being seen as just a means to an end; in fact the book becomes the end. But this strategy doesn't solve the other problem with rewards, because the children are still deprived of self-control. Exactly the reverse is true of another, more commonly suggested idea: telling someone to administer his own rewards. This may solve the second problem (by letting him make decisions that would normally be made by someone else) but not the first (because the desired behavior is still framed as a prerequisite for — an obstacle to — getting the goody).

For many behaviorists, of course, there is no question of restoring self-control because there is no such thing as self-control;⁵⁷ there is only self-administration of reinforcements. In practice, many behaviorists have tried to devise a way by which people can be made to do what the controller wants while letting them pop M&M's into their own mouths — that is, allowing them to choose how or when to reward themselves.⁵⁸ Notice, though, that the ultimate goal is still compliance, and the process is therefore no less likely to be experienced as controlling. The result: once again, less intrinsic motivation.

Maybe this is why one behaviorist's review of research on "self-administered contingencies" found only a "weak" improvement with respect to how long such behaviors lasted compared to rewards administered by someone else.⁵⁹ Even when the objective isn't necessarily to conform to another person's demands, "people can — and presumably do — pressure themselves in much the same way that they can be pressured by external events, and the results of controlling themselves in these ways are similar to the results of being externally controlled," as Deci and Ryan have observed.⁶⁰

Whatever the explanation, though — failing to change the means-end contingency, failing to change the goal of compliance, or failing to remove the unpleasant experience of pressure — two studies have found that just because we reward ourselves doesn't mean that our interest in the task stays high. Young children who were allowed to give themselves gold stars when they thought they had done a good

job solving a maze lost interest in the activity, exactly as those receiving rewards from an adult did.⁶¹ And college students who worked on a puzzle and then selected and read to themselves a statement reflecting the quality of their performance — a statement couched in controlling language (for example, “Good. I’m doing just as I should”) — lost interest in the task to the same extent as students who heard a similar evaluation from the experimenter.⁶²

If we are determined to use rewards, it does seem to make sense to let people have as much control as possible over what they will get and what they will have to do to get it. All things being equal, the more people retain a sense of autonomy, and the more they perceive the whole arrangement as fair, the less damage will be done. But behaviorism with a friendly face is still behaviorism, and many of its effects will be the same.

“The only problem is that we are offering incentives for the wrong behaviors. If we made rewards contingent on people’s doing exactly what needs to be done, the problem would disappear.” Two education researchers have stated (without any supporting data) that the “undesirable effects of rewards can be minimized by tying reward delivery to quality rather than mere quantity of performance.”⁶³ Any number of management consultants have made the same assertion,⁶⁴ as have behaviorists eager to defend Skinnerian practices from the charge that they undermine motivation.⁶⁵ It is true, of course, that if I promised you a reward for every picture you drew, you would very likely dash off an impressive number of poorly drawn sketches. But can I turn things around just by making the reward dependent on *good* work? True, your art might be better than it was when you were paid for sheer quantity. But will it improve compared to a situation without any extrinsic motivator at all?

Of the five reasons that account for how incentives impede performance — their hidden punitive side, their effect on relationships, their failure to uncover and deal with the source of the problem, their tendency to discourage risk-taking, and their long-term negative effect on intrinsic motivation — not one will disappear just because we change the criteria for getting the reward. The problem does not result from the *application* of reinforcements; it resides at the very core of extrinsic motivation.

There has been a debate among researchers for some years about the relative effects of making rewards contingent on performance rather than on simply doing the task — a dollar for every puzzle a subject solves correctly versus a fixed payment for taking part in the

study, for example. Some have argued that performance-contingent rewards (PCRs) ought to boost interest in a task since they offer evidence that a job has been done well, which makes the recipient feel competent, which is in turn highly motivating.⁶⁶

The best that proponents of this view can do, however, is to cite evidence with major qualifications attached. In some research, interest wasn't undermined by PCRs, but neither was it enhanced.⁶⁷ In two studies, the effect on interest was positive, but only for boys (in one case)⁶⁸ and only for low-achieving students (in the other).⁶⁹ Generally, for PCRs to have even a neutral effect it is necessary that people be led to believe they are successful so they feel competent.⁷⁰ But if competence is a key to intrinsic motivation, what happens to the motivation of all those who are working for a PCR and don't get it? Moreover, if informational feedback is desirable, it's easy to tell people how well they've done without turning this into an exercise in Skinnerian manipulation. (One study found that people who got PCRs became less interested in the task than those who just received feedback about their performance.)⁷¹

Even with these qualifications, the studies showing *any* advantage to basing a reward on the quality of performance are in the minority. From Deci's first experiment in 1971 to an experiment that a student of Lepper's conducted in 1992, the research literature indicates that this technique usually undermines intrinsic motivation.⁷² A study that is billed as the first to explicitly compare the effects of paying subjects just for taking part in an experiment with paying them on the basis of how good a job they did at a task found that their interest was significantly lower in the performance-contingent situation.⁷³ In short, PCRs are more destructive — or at best, no less destructive — than other rewards.

These results make perfect sense since, as Richard Ryan puts it, by making a goody contingent on performance, “not only do you control what I do but you control how well I have to do it before you reward me”⁷⁴ — a situation more destructive of autonomy (and therefore of motivation) than one where the reward is provided without reference to the quality of performance.* It also sets up a situation that virtually demands the use of other controlling strategies, such as surveillance and evaluation. In later chapters I will discuss the implications of this

*This helps to explain the destructive effects of competition, which is, of course, performance-contingent by definition.

research for the use of salary versus commissions, and for how we grade students.

“If we’re worried about reducing intrinsic motivation, then what’s the problem with giving people rewards for doing things they don’t find interesting?” It is true that rewards are most likely to kill interest where there is the most interest to *be* killed; if intrinsic motivation is already at rock bottom, it’s hard to lower it any further. It is also true that short-term interest in tedious (and extremely simple) tasks can sometimes be enhanced by offering a reward for working on them.⁷⁵ Finally, it is true that the most destructive way to use extrinsic motivators is to offer them for doing something that is potentially interesting in its own right.

(Perhaps a better way to put this last point is to say that it is most important to avoid rewarding people for engaging in an activity or behavior that we would *like* them to find intrinsically motivating. Thus, a regimen of positive reinforcement for potty-training a toddler is not likely to do lasting harm — putting aside for a moment the question of its manipulativeness and the issue of whether children should be induced to use the toilet before they are ready. Why? Because we are not terribly concerned to instill a lifelong love of defecation. But the use of rewards for reading, writing, drawing, acting responsibly and generously, and so on *is* cause for concern, not only because these things could be intrinsically motivating but because we want to encourage rather than extinguish that motivation. *Extrinsic motivators are most dangerous when offered for something we want children to want to do.*)

All of this is true. But does it amount to an invitation to reward people for doing things that are not very interesting? No. Here’s why:

1. If we are concerned about performance as well as interest, remember that a number of studies have shown that while extrinsic motivators nearly always reduce creativity, they sometimes cause people to do a poorer job at fairly routine (and presumably uninteresting) tasks, too, such as memorizing, distinguishing between similar drawings and patterns, and so on. Recall also that rewards are generally ineffective at leading to the long-term adoption of uninteresting behaviors, such as using seat belts. Even when our sole concern is getting people interested in a boring task, rewards cannot always be counted on to help. In one study, for example, “extrinsic rewards were no more effective in increasing the motivation of children whose initial level of interest was low than were simple requests to work on the tasks.”⁷⁶

But let's take the point one step further. It is often possible to devise creative, interesting ways of doing things that are of themselves quite dull. A friend of mine managed the mind-numbing memorization of anatomy required in medical school by inventing elaborate fables in which different parts and systems of the body played starring roles.⁷⁷ One psychologist has described creative ways to make mowing the lawn less boring.⁷⁸ Clerical tasks can seem less tedious if they are turned into a game — devising more efficient techniques, coming up with inventive ways of keeping track of what is still to be done, and so forth.

I do not mean to imply that everything we have to do can be made enthralling, or that people who work at menial jobs have only themselves to blame when they become bored. Some tasks *are* less interesting than others. Rather, the point is that whatever opportunities do exist for reconfiguring a dull task are put at risk when rewards are used. Extrinsic motivators have the capacity to reduce interest not only in the task itself but in the strategies we might use to brighten the task.

Incidentally, it is important to distinguish between tasks that are inherently uninteresting from those that certain individuals happen not to be interested in. Even if people who are bored by a task seem to respond to a reward,⁷⁹ it seems unwise to use artificial inducements to try to interest someone in an activity that other people already enjoy on its merits.* It would be far more productive to ask why he or she is bored. (Perhaps the task is simply too easy or too hard for her, in which case adjusting the level of challenge would seem to make more sense than offering a bribe.) It also undermines the possibility that she will find herself intrinsically motivated at some later point.

The suggestion has been [made] that extrinsic rewards may enhance the interest and thus the learning of a person with low initial interest in the problem or task at hand, even though their use with highly motivated individuals is unwarranted. This may be so; but if, as we suspect, these rewards create a context that elicits a different pattern of interaction with the task, they may be a poor way to “motivate” even uninterested children. If the offer of rewards produces . . . a more superficial interac-

*Ironically, some researchers have offered the opposite argument, attempting to justify the use of extrinsic motivators for tasks that people find highly motivating, or for people who are in general highly motivated. The argument is not that they are necessary in such cases but that interest levels may at some point be resistant to the effects of rewards.⁸⁰

tion of subject with task — then we may be loath to use them even to encourage uninterested children to “learn.”⁸¹

Look at it another way: someone who is obliged to work on something uninteresting may, in fact, experience precious little sense of self-determination.⁸² The last thing this person needs is to be controlled further, which is what rewards do.

2. In practice, the idea that we can surgically carve out what is boring in life and use extrinsic motivators here (and only here) is naive. First, when teaching or managing a group of people, it is no easy matter to individualize the use of rewards so that they are offered only to those who are yawning. (“Bill gets a bonus for finishing his report because his intrinsic motivation is low. You’re already interested in it, Hillary, so you get nothing.”)⁸³

Second, even if every individual had similar interests, a given topic will usually contain some elements that are much more interesting than others. Consider elementary school math. Memorizing the multiplication table is not a lot of fun, but exploring mathematical concepts is highly stimulating and very much like a game when presented by a talented teacher. How do we dangle A’s in front of children to learn the former and abruptly cease giving grades so as not to kill intrinsic motivation in the latter? The practical problem is compounded when enjoyable and monotonous components are contained within a single task, such as writing a report.

If, therefore, we assume it is acceptable to offer rewards when intrinsic motivation is low, we will end up giving them to some people who are already motivated, or for some activities that are already motivating. Decreased interest is the likely result. Getting people to finish boring tasks more quickly (by promising a reward) is simply not worth it if in the process we turn potentially interesting tasks into boring ones.

3. The practice of rewarding people conveniently spares us from asking hard questions about why we are asking people to do things that are devoid of interest in the first place. Let me immediately concede that there may be tedious jobs that must be done in order for a society, or even a household, to function. Likewise, there may be things we decide children ought to learn that hold little appeal for them at the time. But to acknowledge such necessity in the abstract is very different from assuming that *every* deadening job to which people are consigned every working day of their lives has to be done (or has to be organized as it is at present), or that *every* fill-in-the-blank or

learn-by-heart assignment must be given to students just because that was what we had to do when we were in school.

We need to ask, Which boring tasks really are indispensable? And why? Instead, we take on faith that some people will have to chop up an endless conveyor belt of chicken carcasses regardless of what it does to their health and sanity. We accept without question that children have to memorize the state capitals even though they could look up that information whenever they need it. Like any other tool for facilitating the completion of a questionable task, rewards offer a “how” answer to what is really a “why” question. “Reach for the reinforcements if people find a task uninteresting” is a slogan that perpetuates the status quo and allows us, as teachers and managers and citizens in a democracy, to continue taking certain things for granted.

4. Even when we have decided that a particular uninteresting task simply must be completed, artificial inducements are not our only option. There are other ways, less manipulative and more respectful, to encourage people to do things that they are unlikely to find intrinsically motivating. The rule of thumb for getting people to internalize a commitment to working at such tasks is to minimize the use of controlling strategies. Deci and his colleagues have proposed a three-pronged approach: First, imagine the way things look to the person doing the work and acknowledge candidly that it may not seem especially interesting. Second, offer a meaningful rationale for doing it anyway, pointing, perhaps, to the long-term benefits it offers or the way it contributes to some larger goal. Third, give the individual as much control as possible over how the work gets done.⁸⁴

The last of these suggestions brings us back full circle, since the deprivation of self-determination helps explain the damage that extrinsic motivators do. An affirmative emphasis on giving people choice will play a central role in the last three chapters of this book, which are concerned with laying out practical ways to achieve the advantages that cannot be realized through the use of behaviorist tactics.

“Some people are more extrinsically oriented than others. Why not give rewards to those who seem to want or need them?” At first glance, nothing could be more logical than matching a treatment to the personal predilection of the individual. This idea is particularly appealing to educators who support the recent emphasis on “learning styles,” which recognizes that students have distinctly different skills and ways of knowing. The premise is difficult to dispute but not always appreciated: where teaching is concerned, one size just does not fit all.

There is something fundamentally troubling, however, about stretching this approach until it includes the provision of extrinsic motivators. I'm not referring here to the practical problems of trying to individualize rewards in a work or school setting; let us set those aside for the sake of the argument. Two questions that are even more important need to be asked in weighing whether to reward people just because they seem predisposed to respond to rewards: Where did this disposition come from? And what are our long-term goals for people — particularly children — with respect to motivation?

All of us start out in life intensely fascinated by the world around us and inclined to explore it without any extrinsic inducement. It is not part of the human condition to be dependent on rewards; in fact, there is no reason to think that *anyone* is born with an extrinsic orientation. If such a "trait" exists, it is only in the weakest sense of this word. We are not talking about an innate characteristic, or even necessarily an enduring one,⁸⁵ but something that is learned and, presumably, can be unlearned. It is a function of the way we have been treated, the extent to which we have been trained to think that the reason to learn or work or live according to certain values is to get a reward or avoid a punishment.

Ryan and his colleagues put it this way: "Given particular outer conditions and approaches to education, an inner world will eventually emerge which conforms to and matches it."⁸⁶ If people's "extrinsic-ness" is really a result of internalizing the orientation of their environments, then it should vary depending on one's experience. This is exactly what we find: teachers who use controlling techniques such as extrinsic motivators tend to produce students who are more extrinsic, while those who emphasize students' autonomy produce students who are more intrinsic.⁸⁷

Most American schools marinate students in behaviorism, so the result, unsurprisingly, is that children's intrinsic motivation drains away. They typically become more and more extrinsically oriented as they get older and progress through elementary school.⁸⁸ For us to turn around and say of those students who are particularly dependent on extrinsic motivators that this is just their motivational orientation or "learning style" — something to which we must reconcile ourselves and to which we have to respond by providing more rewards — seems unsatisfying, to say the least.*

*The same is true regarding adult workers with an extrinsic orientation: there is evidence to suggest that this is simply a response to the deprivation of intrinsic satisfactions (see page 131).

The second question we should ask before dishing out more rewards for those who are lacking in intrinsic motivation concerns what we are hoping to achieve. Is our ultimate goal simply to effect a pleasing correspondence between the individual and the intervention? The result will be to ensure a continued lack of genuine interest in learning or acting responsibly, thus requiring an endless supply of extrinsic motivators. Two researchers have questioned the long-term benefits of relying on “educational practices matched to the particular motivational orientation of each student” since to do so

further reinforces and maintains this extrinsic orientation. . . . [If] external teacher control of the classroom is not the ultimate long range objective . . . the teacher must . . . move beyond relying on punishment and reward . . . to more autonomous classroom environments . . . [in order] to encourage development of an [intrinsic motivation] orientation in [extrinsically motivated] students.⁸⁹

If we see intrinsic motivation (and self-directed learning) as something worth promoting, then it will not do to say we should give rewards to those who seem to need them and leave it at that.

Minimizing the Damage

The point of the preceding section was that the detrimental effects of applied behaviorism, especially with respect to subsequent interest in the task for which people have been rewarded, are inherent in the very idea of “Do this and you’ll get that.” In Part Three I will talk about alternatives to extrinsic motivators in the context of the workplace, the classroom, and the family. But for people who must, or feel they must, continue to hand out rewards, it is possible to reduce the extent of the harm they do. Here are half a dozen practical suggestions for limiting the damage over the long haul:

- **Get rewards out of people’s faces.** If they must be given, at least reduce the salience of the rewards — that is, how conspicuous and relevant they are. Research suggests that the more prominent an extrinsic motivator is, the more intrinsic motivation is undermined.⁹⁰ Our challenge is to offer fewer of them, make each one smaller, give them out privately, and avoid making a big fuss over the whole process.
- **Offer rewards after the fact, as a surprise.** People who protest that their intent is not to control people but only to “recognize excel-

lence” (an idea taken up in the next chapter) or to show appreciation can demonstrate they mean what they say by taking care not to tell people in advance what they will get for doing something. Lepper and a colleague argue that the receipt of an unexpected reward “should not typically lead subjects to see their previous behavior as having been directed toward attainment of the reward,” which means that intrinsic motivation is less likely to decline.⁹¹ Indeed, most studies have found that being presented with an unexpected goody neither helped nor hurt.⁹² The problem, of course, is that if people receive a surprise reward this time, they may come to expect another one next time; then, whether they get one or not, their interest in the task may drop.

- **Never turn the quest for rewards into a contest.** Extrinsic motivators, as I have noted, become more destructive when the number of them is artificially limited — that is, when performance is measured in relative rather than absolute terms.⁹³ If bonuses are to be handed out at work, they should be available to anyone who meets a given standard instead of making each person an obstacle to the others’ success. Likewise, the tendency of some classroom teachers to grade on a curve is nothing short of immoral: it gratuitously limits the number of good grades just so the result will conform to an arbitrary, fixed distribution (few grades that are very bad, an equally small number that are very good, and a lot that are mediocre). This requires making meaningless distinctions between essentially comparable performances so that only a few students will receive a top mark. More important, it turns students into rivals, creating an atmosphere of hostility and sabotaging the possibility of cooperation that leads to higher-quality learning. Finally, in an organization or school that cares about excellence there is no place for awards assemblies or banquets. (These might be defined as public events that instantly transform most of the people present into losers.) Either people do not take them seriously, in which case there is no reason for them to exist, or people *do* take them seriously, meaning that watching someone else get an award is a powerful demotivator — in which case, again, there is no reason for them to exist.⁹⁴

- **Make rewards as similar as possible to the task.** So-called endogenous rewards reduce the gap between what people are doing and what they are getting for it.⁹⁵ If you feel compelled to give a child something for having read a book, give her another book.

- **Give people as much choice as possible about how rewards are used.** Although rewards are basically mechanisms for controlling

people, you can minimize the destructive consequences by including the potential recipients in the process of deciding what will be given out and how and to whom.⁵⁶ At the very least, they should play a major role in evaluating the quality of what they have done. Take care, though, that this process does not turn into such a major production that the rewards become more salient than they would otherwise be.

- **Try to immunize individuals against the motivation-killing effects of rewards.** It is possible that in some circumstances people's intrinsic motivation can be shored up so that they are more resistant to the harmful effects of rewards. Some laboratory experiments have countered these effects by convincing people that they find the task interesting,⁹⁷ reminding them that they used to be interested in it,⁹⁸ or training them to focus on what is intrinsically motivating about it.⁹⁹ The implication is that in certain cases the act of offering an extrinsic motivator will not lower an individual's intrinsic motivation. However, the risks involved are too great, the legacy of rewards too ominous, and the findings of this research too tentative (and laboratory-bound) to choose such a strategy over simply minimizing rewards when the latter is an option. When it is not, we might as well do what we can to help people shrug off the implicit message offered by extrinsic motivators.

All of the reasons that rewards fail to improve the quality of performance are also more than that: they are arguments against pop behaviorism in their own right. This is most decisively true in the case of the explanation discussed in this chapter. Doing something in order to receive an extrinsic motivator makes us less interested in what we are doing.

The more tasks that are undermined in this way, the more tragic this phenomenon becomes. If it were only changing inner tubes that became boring to a bicycle repairman, if it were only history class that seemed to a teenager to last forever, that would be one thing. But financial incentives for the worker and an emphasis on making the honor roll for the student may turn the bulk of what they do from Monday through Friday into one long, dreary prerequisite. Granted that some kinds of work (and school curricula) are tedious in their own right; rewards are hardly the only reason that people lose, or never develop, interest in what they are doing. But add up the impact of what has been described in this chapter and you are looking at an enormous sacrifice for the dubious short-term gains offered by behav-

iorism. When “Do this and you’ll get that” is the rule rather than the exception in our lives, we come to feel, in the words of one expert in motivation, “that psychic energy invested in new directions is wasted unless there is a good chance of reaping extrinsic rewards for it . . . [which means we] end up no longer enjoying life.”¹⁰⁰

And the psychological costs do not end there. Our sense of ourselves as basically competent and worthwhile, of being able to have an impact on the events that shape our lives — in short, our mental health — is in jeopardy when extrinsic motivation displaces intrinsic.¹⁰¹ Recent research corroborates this by indicating that extrinsically oriented people, presumably as a result of having been subjected to extrinsic environments, tend to be more depressed and to feel more helpless than intrinsically oriented people; when things aren’t going well, their reaction gets even worse. Helplessness is an understandable reaction, given that someone else is in a position to decide whether or not we get the reward for which we have been working.¹⁰²

It is not a pretty picture, but it is one whose forms and shadings we know very well. What we don’t always recognize is its connection to the Skinnerian landscape that surrounds us.

THE PRAISE PROBLEM

Children have an intrinsic desire to learn. Praise and manipulation can only serve to stifle that natural motivation and replace it with blind conformity, a mechanical work style, or open defiance toward authority.

— Randy Hitz and Amy Driscoll, 1988

IT IS ONE THING to consider abandoning the use of gold stars and candy bars. But *praise*? All of us hunger for approval; many of us wish we had gotten a lot more praise (and a lot less criticism) as children. When the experts tell us to get in the habit of finding something about people's behavior that we can support with positive comments, this strikes us intuitively as sound advice. So what could possibly be wrong with telling our children (or students or employees) that they've done a good job?

In this chapter, building on what has gone before, I try to answer that question, arguing that we need to look carefully at why we praise, how we praise, and what effects praise has over time on those receiving it. I distinguish between various forms of positive feedback: on the one hand, straightforward information about how well someone has done at a task, or encouragement that leaves the recipient feeling a sense of self-determination; on the other hand, verbal rewards that feel controlling, make one dependent on someone else's approval, and in general prove to be no less destructive than other extrinsic motivators.

If by the word *praise* we mean only the latter form of feedback, then it would seem to follow that praising people is always problematic. If we prefer to define the word more broadly so that it takes in all forms of positive feedback, then we can safely say that only some versions of praise need to be avoided. Which definition we use doesn't matter. The critical points are that some approving comments are not only acceptable but positively desirable, and some are neither.

On its face, this thesis seems quite restrained — not to mention more moderate than what I have said about other sorts of rewards. But even such a qualified criticism may seem surprising in light of the widespread assumption that praise is always a good thing. Posters for one behavioristic classroom management system urge teachers to PRAISE EVERY CHILD EVERY DAY, and teachers are sometimes evaluated on the basis of how close they come to this standard. Most books on parenting offer no hint that positive comments could be anything but constructive.* Even some writers who warn about the overuse of tangible rewards imply that replacing them with praise will solve everything.

To try to make sense of the contrary claim that much praise, as distinct from welcome expressions of love and encouragement, is actually undesirable, we begin with a deceptively simple question: What is the purpose of praise? As with the use of rewards more generally, the real point often turns out to be a matter of benefiting the giver rather than the recipient. If we praise people, they are more likely to do what we want, which is not only advantageous to us in itself but also confers on us a sense of power. People whom we praise may come to like us better, too — another significant inducement. As one writer put it, “Often the change which praise asks one to make is not necessarily beneficial to the person being praised but will redound to the convenience, pleasure, or profit of the praiser.”¹ Clearly, it is worth reconsidering the use of praise if it turns out to be something we need to say more than something they need to hear.

But let us assume that our primary motive truly is to help the person we are praising. What, specifically, are we trying to do? Three goals are mentioned most frequently: enhancing performance (learning, achievement, and so forth), promoting appropriate behavior or positive values, and helping the individual to feel good about himself or herself. Over the long haul, praise, at least in the form it usually takes, fails to achieve any of these objectives and may even prove counter-productive.

*Much of the relevant research, which challenges this unconditional endorsement and raises serious doubts about the way most of us actually praise people, has focused on the school setting. That work, however, is generally applicable to the way we treat children at home, too. In fact, although I will not use many such examples, most of the key points are also relevant to what we say to other adults.

“Good Work!” vs. Good Work

Studies on the relationship between praise and achievement are remarkably scarce. Apparently, blind faith in the Skinnerian model has convinced most people that telling someone what a good job she is doing will cause her to learn or perform more effectively in the future. For all the exhortations to praise one’s employees that one finds in “how to manage” books, not a single study, to the best of my knowledge, has ever examined whether this practice really does improve performance on the job.

Two scholars, however, have reviewed the available research on classroom performance. One found that “praise does not correlate with student achievement gains,”² and the other concluded that “correlations between teachers’ rates of praise and students’ learning gains are not always positive, and even when correlations are positive, they are usually too low to be considered significant.”³

Two recent experiments underscore the point. In one, fifth and sixth graders in Israel were asked to work on a task requiring creativity. Those who were praised for their performance went on to do lower-quality work on a similar task as compared to subjects who received more neutral comments. What’s more, these children didn’t do as good a job as they themselves had done before being praised.⁴ In a series of studies with American college students, meanwhile, “praise consistently led to impairment in skilled performance. Indeed,” the researchers conclude, “these results suggest that an effective way to disrupt skilled performance is to compliment the performer immediately beforehand.”⁵

What’s going on here? Why should praise not only fail to boost achievement but actually drag it down? In addition to the explanations suggested in chapter 4, four reasons come to mind. First, when someone is praised for succeeding at tasks that aren’t terribly difficult, he may take this to mean he isn’t very smart: that must be why someone has to praise him. This inference leads to “low expectations of success at difficult tasks, which may in turn result in decreased persistence and performance intensity at these tasks.”^{6*}

*Praising people’s effort may signal that they have to try so hard because they aren’t very good at what they are doing. For this reason, some researchers suggest praising ability instead, which is supposed to enhance one’s feeling of competence. Unfortunately, encouraging people to attribute their success (or, by implication, their failure) to something that is outside their control, such as a fixed level of ability, may make matters

Second, telling someone how good she is can increase the pressure she feels to live up to the compliment. This pressure, in turn, can make her more self-conscious, a state that often interferes with performance. Sylvia Plath once commented that while she wanted her poetry to be accepted by others, the acceptance “ironically freezes me at my work.”⁸ The artist Andrew Wyeth observed that, on hearing expressions of approval for a painting in progress, “you become fearful you are going to lose it.”⁹ What is true for highly creative individuals surely applies to the rest of us. In fact, those of us without extraordinary talent may be even more susceptible to such praise-induced paralysis, particularly if the praise is explicitly tied to future performance — such comments as “Since you did so well on that, you should also be able to do well on this.”¹⁰

Third, while Skinner declared that praise “encourages us to take the risks that expand our lives,”¹¹ there is reason to think that exactly the opposite often occurs. One classic classroom study, by Mary Budd Rowe, found that elementary school students whose teachers frequently used praise showed less task persistence than their peers.¹² Why? Perhaps because praise sets up unrealistic expectations of continued success, which leads people to avoid difficult tasks in order not to risk the possibility of failure. If we steer clear of situations in which we might fail, we eliminate any chance of being criticized by the very person who just praised us. Praise encourages some children to become dependent on the evaluations offered by their teachers — a point to which I will return shortly — and “those who are unable to meet their teachers’ expectations . . . ultimately decide to give up trying.”¹³

Finally, praise, like other rewards, often undermines the intrinsic motivation that leads people to do their best. I say “often” because the laboratory research is not entirely consistent on this point. One of the reasons for this inconsistency may be the fact that different researchers mean different things by “praise” (or “verbal reward,” “social reward,” or “positive feedback”). Sometimes the comment offered to subjects is nothing more than an exclamation (“Good work!”), and sometimes it includes specific information about how well they did on the task. It may involve a comparison to their earlier performance, or to the performance of others, or neither. The comment may focus on

worse by discouraging them from taking responsibility for working to improve their performance. It may be most sensible to avoid casting praise as a comment on either effort or ability.⁷

the person or only on the work itself. It may refer to ability (“You’re very creative”) or to effort (“I can see you’re trying awfully hard”). These variations from one study to another could well be responsible for the different effects they have turned up.¹⁴ In fact, even subtle differences in inflection can impart an entirely different flavor to a compliment: “That’s very good” may be spoken with a pompous solemnity, with a note of surprise, accompanied by a slow, thoughtful nod, and so forth. Depending on the delivery, we might react with delight, indifference, or even irritation.

Whatever the reason, though, the research findings are not uniform. Before turning to the work that documents negative results, we should pause to consider the fact that a few studies have found that people seemed more interested in a task after being praised for what they were doing¹⁵ and still others have found that praise neither helped nor hurt.¹⁶

Those impressed by this positive or neutral research have argued that praise isn’t as bad as other extrinsic motivators for several reasons. First, it is less salient. Something you hear should have less of an impact than something physically handed to you, the latter serving as a lingering reminder that you got a goody for what you did and you may have done it for that very reason.¹⁷ Second, praise is thought to be less controlling. You may not come away feeling that someone is trying to manipulate your behavior if that person gives you a compliment rather than money or M&M’s.* Third, praise is less likely to be promised in advance. Rewards are most damaging when they are expected — that is, when “Do this and you’ll get that” is heard before we do something — whereas praise generally comes as a surprise, after the fact.¹⁸

The case that praise is less harmful than other rewards rests mostly on these three claims. But what if any or all of these distinctive features don’t apply? Surely praise can be plenty salient, making (and retaining) just as much of an impact as any tangible reward.¹⁹ It can also be heard as an attempt to manipulate our behavior, not just as feedback on our performance. And it can be something we anticipate receiving, especially if it’s been given to us in the past when we complied with someone’s wishes. Whenever praise is salient, controlling, or expected,

*It is worth noting, incidentally, that subjects in laboratory studies are praised by people they don’t know, which may not be experienced as controlling. This fact casts doubt on the assertion by some psychologists that praise is innocuous. In real life we may react quite differently to praise from our parents, teachers, and managers.

it should lower interest in what we are doing, just as other rewards do. We may persist with whatever we were working on in the hope of being complimented, but we would no longer be intrinsically motivated by the activity itself. (See Appendix B for more on this distinction.)

A good deal of research has found that intrinsic motivation does indeed decline as a result of praise. That's what happened in the Israeli study, which is probably why the children's creative performance declined as well. In the kefir experiment described in the previous chapter, children who were praised for drinking the beverage, like those who were rewarded with movie tickets, came to find it less appealing. Yet another study found that elementary school students who generally didn't see themselves as having much control over their own lives showed less interest in what they were doing after being told, "That's the best work you've done so far."²⁰

When researchers deliberately erase the factors that are said to make praise harmless, the negative effects are particularly visible. If undergraduates are led to *expect* a "social reward," their interest in a task declines.²¹ The same thing, according to three different studies, happens when children or adults are given positive feedback that sounds controlling (for example, "You're doing fine — as you should be doing").²²

Here, then, we have four accounts of how praise may impede performance: it signals low ability, makes people feel pressured, invites a low-risk strategy to avoid failure, and reduces interest in the task itself. Regardless of which of these seems to be operating, the evidence suggests that praise "interacts with other variables in a manner analogous to tangible rewards."²³ That means it is a poor bet for enhancing the quality of what people do.

Hooked on Praise

We praise people, especially children, not only to get them to do good work but also to help them develop good values and healthy self-esteem. Here too, though, we must be careful. Parents must offer love and support as well as guidance and instruction, and in the following section I will elaborate on the ideas of informational feedback and encouragement, which contribute to these goals. But words of praise that take the form of verbal rewards generally do more harm than

good, particularly when they are doled out as part of a deliberate strategy to reinforce certain ways of behaving.

“Giving praise for prosocial behavior” — that is, for caring, sharing, and helping — “is one of the most common ways parents try to encourage altruism in their children,” psychologist Joan Grusec and a colleague observed recently.²⁴ Since the promotion of good values is the subject of chapters 9 and 12, I will confine myself here to pointing out that, for this purpose, praise again seems to be plagued by exactly the same problems we find with other rewards. Assuming that a child desires the parent’s (or teacher’s) approval, a supportive comment may alter behavior for a while. But it probably will not create a personal *commitment* to the value in question; in fact, it might actually reduce the likelihood that good behavior will continue when there is no longer anyone around to praise it. In a study of young children published in 1991, Grusec found that those who were frequently praised by their mothers for displays of generosity tended to be slightly *less* generous on an everyday basis than other children.²⁵

Praise is no more effective at building a healthy self-concept. We do not become confident about our abilities (or convinced we are basically good people) just because someone else says nice things to us. One key question is whether the acknowledgment we receive helps us to feel as if we are responsible for — that is, the cause of — these admirable attributes. Rewards, including comments that sound like verbal rewards, lead us to feel just the opposite: our behavior seems to be a response to these controlling devices. Thus, the effect of praise may once again be counterproductive rather than merely ineffective.

Some people react quite negatively to positive reinforcement, either becoming openly defiant or withdrawing in a show of passive resistance. Are these acts of sheer perversity? Not at all. They are reactions to a very basic but rarely noticed fact: *the most notable aspect of a positive judgment is not that it is positive but that it is a judgment.* Older children and adults may hear praise as condescending, as a reminder of (or an attempt to bolster) the greater power of the person giving it. Suppose you are having a discussion about politics with some friends and one of them nods gravely after you say something and proclaims, “That is a very good point.” Depending on a variety of factors, your reaction might well be intense annoyance rather than pleasure: “Who the hell is he to judge the value of my comment?”

“It is interesting to note here that when the work of a high-status person is praised by a low-status person, this is often seen as presumptuous or even insulting,” one writer points out.²⁶ Precisely because praise usually implies a difference in position, it can produce resis-

tance. Interestingly, some of the very people who recoil from the prospect of judging people or being judged — who speak the phrase “value judgment” as if it were an epithet — are enthusiastic proponents of praise. What they fail to see is that telling someone her work is good is every bit as much a value judgment as saying it is bad. Eventually the person being judged will catch on to what is happening.

Apart from the implied power imbalance, the recipients of praise may not be happy because they realize that the person offering a positive judgment could just as well be making a negative one: “Today she praises me, but will she start criticizing me tomorrow?”* Just as every carrot contains a stick, so every verbal reward contains within it the seed of a verbal punishment. The child may reason (even if not explicitly), “Better to repudiate the whole business so as to deprive her of the power to do me harm.”²⁷

Yet a third possibility is that praise may clash with what the recipient already thinks about himself.

The person compares what he “knows” about his abilities and accomplishments with what he is being told about them. . . . In searching the evidence bearing on general praise, the person is more likely to encounter instances that are inconsistent with the evaluation contained in the praise. He must then either begin explaining such instances away or qualify the praise, perhaps rejecting it altogether . . . [perhaps inclining toward] active self-criticism or conscious attempts to sabotage performance.²⁸

On the surface, a negative reaction to a positive comment seems bewildering. But this sort of sabotage makes perfect sense in light of the gap between what one is told and what one believes to be true. Another writer offers a concrete example:

Suppose the teacher says, “What a good boy you are, Jack! You returned the book without my asking you.” Does returning the book make Jack a good boy? Of course not! Jack knows this and may think the teacher is not too swift, and then try to show [her] that he can be a “bad” boy and still return books.²⁹

As a general rule, we should expect more resistance when the praise is extravagant and very general (“What a good boy you are” rather than “That was nice how you shared your sandwich with Barbara”) and

*That this is more than a reflection of suspiciousness or insecurity seems clear from the evidence that the same people who praise are indeed likely to criticize or act in a controlling manner (see page 51).

also when it clashes with the person's existing beliefs. The more self-doubt, the more difficult to reconcile the compliment with what one thinks about oneself.

Of course, only some children react to praise in this way. Others respond more cooperatively, more submissively, more "appropriately." We tell them how good they are and they light up, eager to please, and try to please us some more. These are the children we should really worry about.

The desire for approval is very nearly universal in young children. This fact is worth emphasizing in itself, especially by way of response to the assumption that reckless or inappropriate behavior must reflect malign motives. If we recognize that the simple absence of skills may explain what is going on — that children, so far from trying to make our lives miserable, basically yearn for our acceptance — we can avoid setting up the sort of self-fulfilling prophecy that comes from assuming they are up to no good. But at the same time this desire to please must be treated with caution. We have an enormous responsibility not to exploit it for our own ends.

Praise, at least as commonly practiced, is a way of using and perpetuating children's dependence on us. It gets them to conform to our wishes irrespective of what those wishes are. It sustains a dependence on *our* evaluations, *our* decisions about what is good and bad, rather than helping them begin to form their own judgments. It leads them to measure their worth in terms of what will lead us to smile and offer the positive words they crave. Rudolf Dreikurs saw this back in the 1950s: praise, he said, can "lead to a dependency on approval. Overdone, it promotes insecurity as the child becomes frightened at the prospect of not being able to live up to expectations."³⁰

Not long ago, a teacher in Massachusetts listened to a critical presentation about praise and shook her head skeptically. Maybe some children can do without it, she said, but what about those whose self-esteem is in the basement? She went on to describe two students in her class who were continually insecure and seemed to need reassurance about everything. How could she be expected to withhold praise from them?

What had not occurred to this caring teacher was the possibility that her praise might be making these children *more* insecure. Every time she told them, "Good job! You really helped me out today!" the desire to please her grew. They were no closer to achieving the security that comes from confidence in their own decisions about how to act, or to developing a set of standards by which to judge their own

behavior. Their eyes were on her and their mood soared or plummeted depending on whether she had reacted with sufficient enthusiasm to whatever they had done.

Mary Budd Rowe's study, the one that found less task persistence by children whose teachers praised them heavily, also discovered that these students seemed more tentative in their responses, more apt to answer in a questioning tone of voice. They were less likely to take the initiative to share their ideas with other students. And praise was one factor contributing to a tendency to back off from an idea they had proposed as soon as an adult disagreed with them.³¹

Praising children for the work they do may discourage self-directed learning, since it is our verbal rewards, and not love of what they are doing, that drive them. Praising children for the way they behave, meanwhile, gives them no reason to continue acting responsibly when no one is likely to say nice things to them after they do so, and it gives them neither the skills nor the inclination to make their own decisions about what constitutes responsible behavior.*

But let us return to the fact that not all children react the same way to praise. While utterances that are unmistakably manipulative lead predictably to certain reactions, positive feedback of a more ambiguous sort — the kind that could be perceived either as useful information about one's performance or as an attempt to control — will probably be interpreted differently depending on who hears it. At least two studies have found that "identical statements made by the same teacher under the same circumstances produce different results for different students."³² This is an ideal illustration of the futility of searching for laws of learning or behavior that apply to all children (much less all organisms): people's various experiences and ways of making sense of the world transform the meaning and consequences of what they hear.

The likelihood that someone will respond positively to praise³³ — or for that matter, that he will be a frequent recipient of praise³⁴ — may vary according to a child's background and personality. The best single

*Some children will internalize that voice of adult approval so that it continues to govern their behavior when there is no authority figure in sight. This is sometimes regarded as evidence of successful socialization. But, as Deci, Ryan, and others have pointed out, some kinds of internal control raise troubling questions. If any internalization occurs as the result of controlling children's behavior with praise and other rewards, it is merely likely to replace an external sense of compulsion with an internal sense of compulsion. There is a world of difference between this and the experience of making one's own decisions and judgments. I will have more to say about this later.

predictor of response is gender: in general, praise is more likely to have undesirable consequences for females than for males. Two studies with college students found that women (but not men) who were praised for their work became less interested in it than those who weren't praised.³⁵ Deci speculated that this effect was due to the fact that women are more likely than men to view positive feedback as controlling, rather than just providing information about how they did. A later experiment with children supported this hypothesis,³⁶ while other research suggested that "girls were less able to attribute actions internally and perceive themselves as altruistic" precisely because adults are "more likely to praise girls for this type of behavior."³⁷

Encouraging Words

In case any reader might be wondering whether these findings mean that we are supposed to scowl at kids all day, let me be very clear about what does and does not follow. My reading of the evidence is that it does not require us to stop smiling. It does not suggest that we ought to hold ourselves back from expressing enthusiasm about what other people have done. It does not imply that we should refrain from making positive comments. Apart from the fact that few of us are about to take such drastic steps regardless of what the data show, my point is that there is no reason we should.

On the other hand, I think we *are* obliged to think very carefully about the potential pitfalls of verbal rewards and how we can avoid them. This statement (and the arguments leading up to it) can be terrifically unsettling in itself. People sometimes react with nervous laughter, declaring, somewhat facetiously, that if they take all this seriously they will become paralyzed with fear: "What if I accidentally say the wrong thing and praise someone?" But it is important that this concern, which is a perfectly understandable reaction to being asked to question an automatic behavior, not be used as an excuse to continue doing something that doesn't make sense.

The problem with our praise is not, as some people seem to think, just that we overdo it. The problem is with the nature of the praise, with what we say and how. The solution I propose consists of keeping in mind two general principles that might be thought of as the standards against which all praise should be measured. The first principle is *self-determination*. With every comment we make — and specifically, every compliment we give — we need to ask whether we are

helping that individual to feel a sense of control over his life. Are we encouraging him to make his own judgments about what constitutes a good performance (or a desirable action)? Are we contributing to, or at least preserving, his ability to choose what kind of person to be? Or are we attempting to manipulate his behavior by getting him to think about whether he has met our criteria? The other principle is *intrinsic motivation*. Are our comments creating the conditions for the person we are praising to become more deeply involved in what she is doing? Or are they turning the task into something she does to win our approval?

To determine the likely effect of praise with respect to these two guidelines, we need to examine, first, our own motives. Are we trying to control someone's behavior for our own convenience, or saying nice things just to have something to say, or hoping to get that person to like us more? Second, we need to think about how our comments sound to the individual who hears them. Our intent, for example, may be to offer useful feedback about the quality of someone's work, but he may interpret what we say as limiting his autonomy. (We can simply ask older children or adults how they perceive what we have said; people of any age can be observed for signs of resistance, dependency, or reduced interest.) Finally, we ought to attend to the objective characteristics of what we say and how we say it.

I want to offer some specific suggestions for how we might praise, but it's useful to remember first of all that giving feedback does not require us to offer praise at all. To put it another way, those of us who are disinclined to give verbal rewards are not obliged to stay silent. There is another alternative, at least in some circumstances, which is simply to provide information about how well someone has done. In the course of an intricate analysis of how teachers praise students, education researcher Jere Brophy says this:

It is essential that students get feedback about their academic progress and classroom conduct, but this does not require the more intensive and evaluative reactions implied by "praise." Indeed, I see no strict *necessity* for any praise . . . at all. Students do not actually need praise in order to master the curriculum, to acquire acceptable student role behaviors, or even to develop healthy self-concepts.³⁸

In fact, to the extent that praise *can* have a positive effect in the classroom or workplace, it may well be because of the information it provides (regarding one's success at performing the task) rather than the expression of approval. Some research on this question³⁹ — al-

though not all of it⁴⁰ — has found that adults and children alike become more interested in what they are doing when they get straightforward feedback about how they are doing it.

Interpreting this finding, however, is somewhat complicated by the fact that the feedback offered by these researchers is almost always positive. If you perk up at the news that you've done well at something, it is probably due to the feeling of competence you derive from this information. In real life, of course, you often *don't* succeed, and there is reason to think that feedback about how you failed won't do much in itself to boost your intrinsic motivation.⁴¹ The challenge for teachers and managers, in fact, is to avoid destroying people's motivation while letting them know they haven't done well — that is, to provide negative feedback in a way that doesn't kill interest. (One way to do this is to describe the failure "in terms of a problem to be solved" and to involve the person performing the task in figuring out ways to improve.)⁴²

There's another problem with choosing to provide informational feedback rather than praise: the two can't always be separated. Even when we decide someone has done well and tell him so, it's not easy to strip that information of emotional weight: just as someone informed that he has done poorly may feel criticized, someone told he has done well may interpret this as a verbal reward, which is also undesirable. The trick is to help people regard feedback as information they can use. Someone who tends to be intrinsically motivated as a rule is more likely to see things that way.⁴³ Likewise, as I will argue later, we can help free students from the reward-and-punishment frame of reference by de-emphasizing the performance aspect of learning.

In all situations, though, I believe there are things we can do to blunt the damaging impact of praise. Here are four practical suggestions.

1. **Don't praise people, only what people do.** It's less likely that there will be a gap between what someone hears and what he thinks about himself if we don't make sweeping comments about what he is like as a person. "Too much global positive evaluation . . . trains children to think globally, to make their selves the issue in whatever they do, and thus to be prone to both grandiosity and self-contempt," as one child psychiatrist sees it.⁴⁴ Saying something about what the person has done (or is doing) makes more sense: "That's a really nice story" is better than "You're such a good writer."

2. **Make praise as specific as possible.** Not only should we focus on the act or product, but we should do so by calling attention to the specific aspects that strike us as especially innovative or otherwise

worthy of notice. This “enables its recipient to judge for himself whether the evaluator’s standards are appropriate,”⁴⁵ and it pulls him into the task itself rather than fixing his attention on the fact of our approval.⁴⁶ Even better than “That’s a really nice story” is “That’s neat at the end when you leave the main character a little confused about what happened to him.”*

3. Avoid phony praise. A parent or teacher who is genuinely delighted by — or appreciative of — something a child has done should feel free to let that excitement show. Praise becomes objectionable when it is clearly not a spontaneous expression but a deliberate strategy, a gimmick that seems to have been picked up from a book or seminar. When we are instructed to “catch people doing something right” and praise them for it, or even to practice praising other people, we are being schooled in a technique. The result is unavoidably contrived.

One symptom of phony praise is a squeaky, saccharine voice that slides up and down the scale and bears little resemblance to the way we converse with our friends. Another is a pause before praising that suggests we have first decided to hand out a verbal reward and are now trying to find someone to whom it can be presented — or even worse, we are trying to control the behavior of a group of children by creating some suspense about who will be made the object of the praise. “I like the waaaaaaay [the syllable is drawn out while the teacher looks around the room and the children scramble to be the chosen one while she settles on the winner] . . . Stewart! is sitting so nice and quiet and ready to work.”

A four-year-old can usually tell the difference between a genuine expression of pleasure and phony praise, between a sincere smile and one that is manufactured and timed for best effect. He is more likely to be warmed by the real thing — a fact that perplexes behaviorists since, in their parlance, it is precisely that which is not intended to reinforce that is most reinforcing. On the other hand, just because praise is genuine and spontaneous does not mean that it is guaranteed to be beneficial: the very fact that it means more to a child suggests

*Specificity is also useful for preserving interest (and self-respect) when giving criticism. Hearing about particular mistakes one has made is much less threatening than seeing an F, receiving a poor overall performance rating, or hearing a general dismissal of one’s work. Feedback that pinpoints the source of the problem and offers suggestions for improvement is likely to minimize the dangers inherent in criticism. (Notice that pointing the way toward improvement is very different from future-oriented comments such as “You can do better,” which are likely to be viewed as controlling and to create pressure.)

that it may be even more effective at creating a dependence on the praise giver. Fortunately, when our responses are genuine, the child will at least sense that our motive is not to control.

4. Avoid praise that sets up a competition. It is never a good idea to praise someone by comparing her to someone else. Phrases like “You’re the best in the class” (or for adults, “. . . in this department”) ought to be struck from our vocabulary. The research is quite clear that such comments undermine intrinsic motivation,⁴⁷ but their most pernicious effects are subtler: they encourage a view of others as rivals rather than as potential collaborators. What’s more, they lead people to see their own worth in terms of whether they have beaten everyone else — a recipe for perpetual insecurity.⁴⁸

Competition is also fostered by giving praise publicly. For example, the elementary school teacher who announces in front of the class “I like the way Stewart is sitting so nice and quiet and ready to work” has set up a contest for Nicest, Quietest Student, and everyone other than Stewart has just lost. This sort of praise is objectionable for three other reasons as well. First, it does Stewart no favors; his standing with his peers is unlikely to improve as a result of having been identified as Nicest and Quietest. Second, the most important word in that sentence is *I*; Stewart is not helped to reflect on the value of being nice or quiet but only to figure out how to please the teacher.⁴⁹ Last, the interaction is fundamentally fraudulent because the teacher, while pretending to address Stewart, is actually *using* Stewart to manipulate the behavior of others in the room. Making an example of someone is a troubling practice regardless of whether we do so with punishments or rewards, and public praise is really not much of an improvement over public criticism. This is why I join with a number of other educators in urging that positive comments be offered in private.⁵⁰

I do so despite the fact that public praise, sometimes involving elaborate competitive ceremonies and awards, is often justified on the grounds that we are “recognizing excellence.” Few of us stop to ask what that phrase really means and what our motives really are. *Why* is it important that excellence be recognized?

- If the idea is to let someone know that she has done good work (which presumes that she is unaware of this fact), such feedback can be offered without the trappings of behaviorism.

- If the idea is to convince the person being recognized to keep up the good work, we need to ask, first, whether this is really necessary (did he get this far out of a quest for recognition?), and second, whether offering a reward might actually undermine his motivation for all the reasons reviewed in previous chapters.

- If the idea is that other people will be motivated by watching one of their peers get rewarded, there is ample evidence that extrinsic motivators are more likely to demotivate and that losing in a competition (which is what selective “recognition” often feels like) is even worse.

- If the idea is to clarify and communicate to a wider audience what excellence consists of, this can be done without a lot of hoopla. Moreover, it ought to be done in a format that is more like a conversation than an announcement.

- If the idea is simply that it would be nice to show someone who did a good job that this has been noticed, there is no need to do so in a way that may stir up others’ resentment and possibly even embarrass the person being publicly praised. Private comments, offered so as to promote self-determination and intrinsic motivation, are enough to let people know their work is appreciated. There is no reason to offer these comments from a stage or to weight them down with trophies or certificates.

Consider a situation where a large number of people attending a school, working in an organization, or participating in an event are grateful to someone who has worked hard for the benefit of everyone. If thanking that person in public does not seem particularly objectionable, this may be partly because the process of doing so is democratic. By contrast, in the typical ceremony for “recognizing excellence,” the people in charge have unilaterally selected, at their own discretion and based on their own criteria, some people to recognize over, and in front of, others. It is their power to do so that is ultimately being recognized.

Rather than talking about how we can minimize the potential disadvantages of praise, Rudolf Dreikurs and his followers prefer to talk about responding to children in ways that “encourage” them.⁵¹ Some of the suggestions for putting that approach into practice, as well as the reasons for doing so, overlap with what I have been talking about. Of course, whether we prefer to cast the issue as a contrast between bad praise and good praise or between praise and encouragement doesn’t matter nearly as much as the substance of our responses.

What the Dreikursians contribute to this discussion is the critical point that *evaluative comments are often entirely unnecessary*.^{*} We

^{*}In this connection, it is worth pointing out that praise appears to be entirely absent in some cultures — a fact that would seem to belie the assumption that the process of socialization requires that children receive selective verbal reinforcement.⁵²

can be less judgmental and controlling — and in the long run, more effective at promoting self-determination and intrinsic motivation — by simply acknowledging what a child has done. Just pointing out an aspect of a child's essay or drawing that seems interesting (without saying that it's nice or that you liked it) will likely be sufficient to encourage her efforts.

I recently heard a third-grade student read an original story to her classmates. When she was finished, her teacher said, "You worked hard on that ending. You wrote that part three times." Presumably, the teacher had offered some feedback earlier on what worked and what did not work in the story in order to help the student improve (and encourage her to think critically about what constitutes improvement in story-writing). Now that she was done, it was sufficient to show that her efforts had been noticed and appreciated; the superlatives followed by exclamation points that we tend to lavish on children seemed to the teacher altogether unnecessary. (Notice, incidentally, that when the child turned in a paper that was unsatisfactory, she was given the opportunity to rewrite it rather than being penalized with a bad grade. The emphasis in this classroom was on improvement and learning rather than evaluation.)

Suppose that a young child finishes a drawing and shows it to you. I have said that it is better to focus on the art than on the artist, and better yet to be specific in our comments about the art. But whenever those comments amount to praise in the traditional sense, we run the risk of tilting a child toward the goal of eliciting our approval instead of his own, and making him more intent on the verbal reward than on the process of playing with color and design. These are risks we can minimize by offering observations and questions about what he has done ("Are these mountains over here near the water? Boy, this one is huge, isn't it? How come you decided to draw them in green? . . . What are you planning to draw next?")

Why do most of us respond instead with a barrage of compliments? First, because no thought is necessary to offer them; praise is cheap and easy. By contrast, it takes skill and care and attention to encourage people in such a way that they remain interested in what they are doing and don't feel controlled. (It is always easier to do things *to* people, or to take over and do things *for* them, than it is to work *with* them to help them make their own decisions.)

Second, it feels good to have someone, even someone very short, in the position of looking to us (figuratively and sometimes literally) for our approval. This motive does not play a part in everyone's praise, of

course, but we might consider carefully whether it is just a coincidence that what we say has the effect of ensuring that others keep needing to hear what we think.

Third, many of us fear that there is something sterile and chilly about giving comments without compliments. It may feel at first as if we are withholding praise and therefore being stingy with our approval. What matters, though, is whether our responses are offered in such a way as to communicate warmth and concern. If so, children will be encouraged rather than frustrated by what we say. If not, then praise, too, no matter how lavish, is unlikely to be helpful.

These arguments often provoke resistance because they seem to challenge a widespread conviction that all children — indeed, all people — would be better off with more kind words. But when we contemplate the reality of emotionally impoverished families, or the effect of unrelenting criticism, let us keep in mind that the problem in such households is not too little praise. It is too little encouragement and support. To question the use of verbal rewards is not to favor verbal punishment or indifference. On the contrary, children ought to know they are so deeply cared about that their parents and teachers are willing to put their long-term interests ahead of the short-term compliance that extrinsic motivators can secure.

A teacher in Missouri wondered aloud not long ago how she could bring herself to stop praising her students since many of them came from desperate circumstances, from loveless, brutal homes. They *need* my support and approval, she exclaimed. And so they do. But they need it without strings attached; they require unconditional love. By contrast, praise, like all rewards, is conditional. (Only if you do this will you get that — “that” referring here to expressions of delight and support.) Moreover, children in distress need to feel not only loved but potent, capable of making choices and having some say about what happens to them. What they do not need is to be controlled, even by honeyed phrases.

Precisely because it is something that takes thought and effort, responding with encouragement rather than praise requires practice and cannot be taught in five easy lessons. We will need to make sure that this approach, like most suggestions for dealing with children, is not implemented mechanically, with the result that it comes to seem an affectation. We will need to keep in mind the age and capacities of the child to whom we are speaking. (With adults, even a response intended to encourage rather than judge may seem condescending.)

And we will need to be prepared for the fact that we may lapse back into praise sometimes; it is not an easy habit to break.

The Fear of Spoiling

I have not been reticent about criticizing rewards in general or praise in particular. But there is one complaint that I have not offered, and to avoid any misunderstanding, I want now to distance myself from it explicitly. This is the view that leads people to say we should stop rewarding children so often because we're spoiling them, and that kids today expect a goody, or at least a compliment, for everything they do.

The popularity of this criticism seems to have grown in recent years to the point that, while negative comments about rewards are not offered very frequently, the majority of those that are made tend to take this line. Thus, articles urge parents and teachers to "praise conservatively"⁵³ or "concentrate on giving truly deserved rewards"⁵⁴ or use "Tough Praise" predicated on "honest, diligent work," lest children be the recipients of "praise that comes too easily."⁵⁵ A cover story in *Newsweek* in early 1992 took aim at educational programs designed to enhance children's self-esteem, snickering at the use of gold stars and stickers and at adults who give "praise for walking across the room without falling over."⁵⁶

Let us explore the sensibility reflected in this criticism. To begin with, it suggests that the problem with rewards is limited to how easily we give them; the title of a representative article written from this perspective complains that "Giveaways Have Gone Too Far!"⁵⁷ This seems to me a superficial analysis because it ignores what is at the heart of the trouble — the idea of extrinsic motivation.

More important, though, those who complain that we are spoiling children with rewards often betray a deeper reason for their discomfort: they seem to think that kids should just do what we want them to do because we tell them to do it. It would not surprise me to learn that many of these critics are equally unhappy with the idea that we ought to explain to children the reason for our requests. Anything other than automatic, unquestioning compliance is annoying to some people. There is no attention given to *what* we are asking children to do, whether the request is reasonable or the school assignment is worth doing. They should simply do what is expected of them without requiring encouragement or justification.

I object not only to this demand for obedience but also to the tendency to focus on how easy kids have it today. The real problem is not that children expect to be praised for everything they do; it is that adults are tempted to take shortcuts, to manipulate their behavior with the use of rewards instead of explaining, helping them to develop needed skills, fostering a commitment to good values, and bringing them in on the process of deciding how to learn and behave.

Traditionalists who ridicule attempts to boost self-esteem like to say that people feel good about themselves as a result of what they have achieved; they don't achieve because they feel good about themselves. There may well be some truth to this. At any rate, it is a hypothesis worth considering.* But lurking beneath the assault on such programs is a more visceral objection that might be identified as a fear that somebody is going to get a "psychological free lunch" and be pleased with himself without *earning* that right. (One imagines that last phrase being barked out while a fist is slammed on the table for emphasis.) If I am right about the ideology that is at work here, it is a difficult one to defend. Conservative economic principles are out of place when we are talking about what children need and deserve. What they need, as I have said, is unconditional approval and acceptance — the very opposite of verbal rewards, and especially of Tough Praise. What they deserve, I believe, is what they need.

Others couch the objection in more pragmatic terms. Children will become fat and lazy — they will stop doing schoolwork or acting responsibly — unless they have to jump through hoops to get adults' approval. This position is based on assumptions about learning and "human nature" that simply do not stand up under close scrutiny and which I have begun to address in talking about equity theory (chapter 2) and the futility of making rewards contingent on quality (chapter 5). Let me just say here that selective reinforcement and indiscriminate reinforcement are two versions of the same thing, two manifestations of the same theory of motivation. The trouble with rewards is not that

*Of course, both may be true: achievement fortifies self-esteem, and confidence in oneself also facilitates achievement. In any case, the fact that students need to achieve something of which they can be proud is not, as is often assumed, an invitation to go "back to basics" — that is, to a traditional curriculum emphasizing memorization and recitation. We ignore at our peril (and more important, our children's peril) the question of whether the material they are asked to learn is engaging and relevant to their life experience. What sort of achievement leads children to feel good about themselves is very much an open question.

we hand them out too easily; it is that they are controlling, ultimately ineffective, and likely to undermine intrinsic interest. That means they will be counterproductive even when — maybe especially when — they are most clearly contingent on what precedes them. Giving rewards less frequently or more stringently will not solve the underlying problem, because the problem is behaviorism itself.