



# The Need to Justify Our Actions

The Costs and Benefits of Dissonance Reduction



IT WAS SHOCKING NEWS: 39 PEOPLE WERE FOUND DEAD AT A LUXURY ESTATE IN RANCHO SANTA FE, CALIFORNIA, PARTICIPANTS IN A MASS SUICIDE. All were members of an obscure cult called Heaven's Gate. Each body was laid out neatly, feet clad in brand-new black Nikes, face covered with a purple shroud. The cult members died willingly and peacefully, leaving behind videotapes describing their reasons for suicide: They believed that the Hale-Bopp Comet, a recently discovered comet streaking across the night skies, was their ticket to a new life in paradise. They were convinced that in Hale-Bopp's wake was a gigantic spaceship whose mission was to carry them off to a new incarnation. To be picked up by the spaceship, they first needed to rid themselves of their current "containers." That is, they needed to leave their own bodies by ending their lives. Alas, no spaceship ever came.

Several weeks before the mass suicide, some members of the cult purchased an expensive, high-powered telescope. They wanted to get a clearer view of the comet and the spaceship that they believed was traveling behind it. A few days later, they returned the telescope and politely asked for their money back. When the store manager asked them if they had problems with the scope, they replied, "Well, gosh, we found the comet, but we can't find anything following it" (Ferris, 1997). Although the store manager tried to convince them that there was nothing wrong with the telescope and that nothing was following the comet, they remained unconvinced. Given their premise, their logic was impeccable: We know an alien spaceship is following behind the Hale-Bopp Comet. If an expensive telescope has failed to reveal that spaceship, then there is something wrong with the telescope.

Their thinking might strike you as strange, irrational, or stupid, but, generally speaking, the members of the Heaven's Gate cult were none of those things. Neighbors who knew them considered them pleasant, smart, and reasonable. What is the process by which intelligent, sane people can succumb to such fantastic thinking and self-destructive behavior? We will attempt to explain their actions at the end of this chapter. For now, we will simply state that their behavior is not unfathomable. It is simply an extreme example of a normal human tendency: the need to justify our actions and commitments.

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## The Theory of Cognitive Dissonance

During the past half-century, social psychologists have discovered that one of the most powerful determinants of human behavior stems from our need to preserve a stable, positive self-image (Aronson, 1969, 1998). Most people believe they are above average—more ethical and competent, better drivers, better leaders, better judges of character, and more attractive than the majority (Fine, 2008; Gilovich, 1991). But if most of us see ourselves as reasonable, moral, and smart, what happens when we are confronted with information implying that we have behaved in ways that are unreasonable, immoral, or stupid? That is the subject of this chapter.

### FOCUS QUESTIONS

- What is the theory of cognitive dissonance, and how do people avoid dissonance to maintain a stable, positive self-image?
- How is the justification of effort a product of cognitive dissonance, and what are some practical applications for reducing dissonance?
- How can people avoid the traps of self-justification and other dissonance-reducing behavior?



## Cognitive Dissonance

A drive or feeling of discomfort, originally defined as being caused by holding two or more inconsistent cognitions and subsequently defined as being caused by performing an action that is discrepant from one's customary, typically positive self-conception.

## Maintaining a Positive Self-Image

The feeling of discomfort caused by performing an action that is discrepant from one's self-concept is called **cognitive dissonance**. Leon Festinger (1957) was the first to investigate the precise workings of this phenomenon and elaborated his findings in what is arguably social psychology's most important and most provocative theory.

Cognitive dissonance always produces discomfort, and in response we try to reduce it. The process is similar to the effects of hunger and thirst: Discomfort motivates us to eat or drink. But unlike satisfying hunger or thirst by eating or drinking, the path to reducing dissonance is not always simple or obvious. In fact, it can lead to fascinating changes in the way we think about the world and the way we behave. How can we reduce dissonance? There are three basic ways (see Figure 6.1):

- By changing our behavior to bring it in line with the dissonant cognition.
- By attempting to justify our behavior through changing one of the dissonant cognitions.
- By attempting to justify our behavior by adding new cognitions.

To illustrate each of these, let's look at something that millions of people do several times a day: smoke cigarettes. If you are a smoker, you are likely to experience dissonance because you know that this behavior significantly increases the risks of lung cancer, emphysema, and earlier death. How can you reduce this dissonance? The most direct way is to change your behavior and give up smoking. Your behavior would then be consistent with your knowledge of the link between smoking and cancer. Although many people have succeeded in quitting, it's not easy; many have tried and failed. What do these people do? It would be wrong to assume that they simply swallow hard, light up, and prepare to die. They don't. Researchers studied the behavior and attitudes of heavy smokers who attended a smoking cessation clinic but then relapsed into heavy smoking again. What do you suppose the researchers discovered? Heavy smokers who

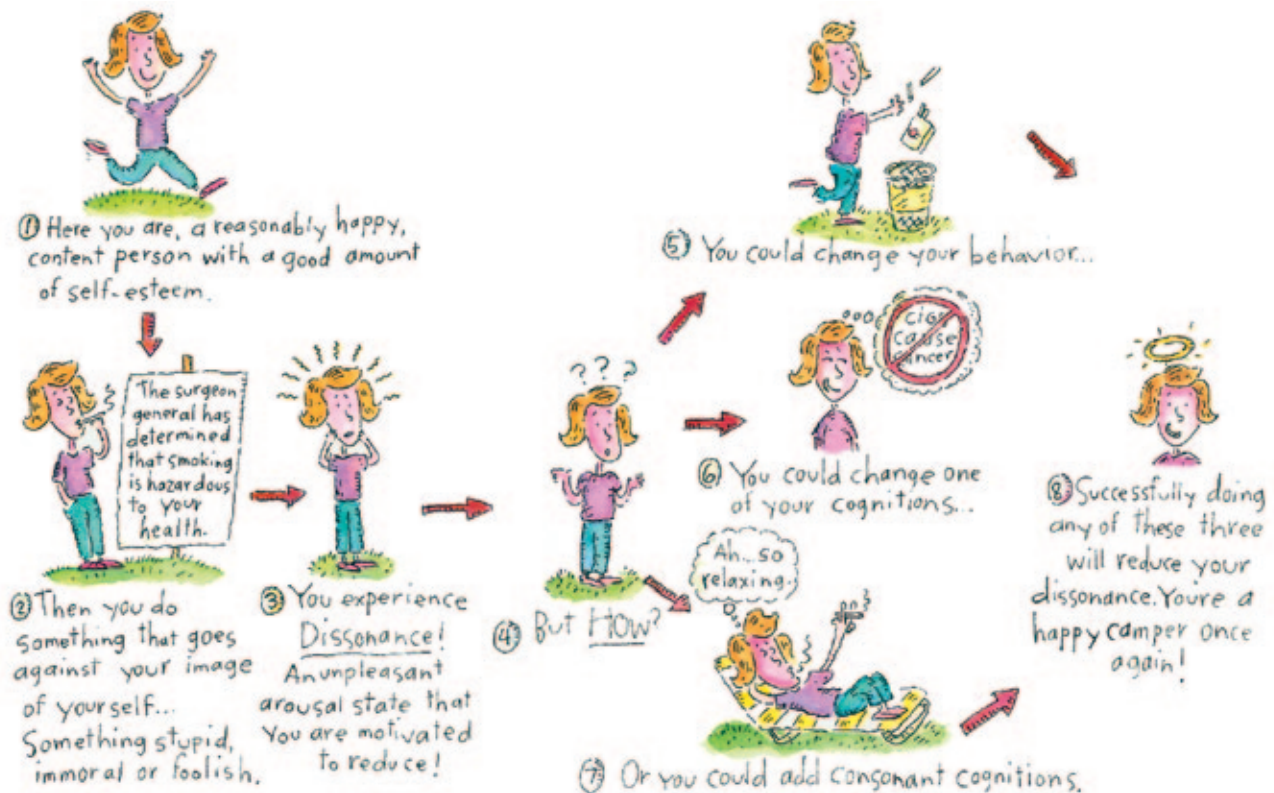


FIGURE 6.1

### How We Reduce Cognitive Dissonance

There are three basic ways of reducing dissonance: change your behavior, change your cognition, or add a new cognition.

tried to quit and failed managed to lower their perception of the dangers of smoking. In this way, they could continue to smoke without feeling terrible about it (Gibbons, Eggleston, & Benthin, 1997). A study of more than 360 adolescent smokers found the same thing: the greater their dependence on smoking and the greater the trouble they had quitting, the more justifications they came up with to keep smoking (Kleinjan, van den Eijnden, & Engels, 2009).

Smokers can come up with some pretty creative justifications. Some convince themselves that the data linking cigarette smoking to cancer are inconclusive. Or they say that smoking is worth the risk of cancer and emphysema because it is so enjoyable, and besides it relaxes them and reduces nervous tension and in this way actually improves their health. Some add a cognition that allows them to focus on the vivid exception: “Look at my grandfather. He’s 87 years old, and he’s been smoking a pack a day since he was 12. That proves it’s not always bad for you.” Another popular way of reducing dissonance through adding a new cognition is **self-affirmation**, in which a person focuses on one or more of his or her good qualities to lessen the dissonant sting caused by doing something foolish: “Yeah, I feel pretty stupid to still be smoking, but boy am I a good cook. In fact, let me tell you about this new recipe . . .” (Steele, 1988; McConnell & Brown, 2010).

These justifications may sound silly to the nonsmoker, but that is our point. As the smokers’ rationales show, people experiencing dissonance will often deny or distort reality to reduce it. People who don’t want to give up scientifically discredited ideas, refuse to practice safe sex, or receive bad news about their health can be equally “creative” in denying evidence and reducing their discomfort (Aronson, 1997; Croyle & Jemmott, 1990; Kassarian & Cohen, 1965; Leishman, 1988).

When you understand dissonance, you will see it in action all around you: in the politician who opposes prostitution but is caught with a high-priced call girl (“oh, a call girl isn’t *really* a prostitute”), in the people who predict the end of the world but who, fortunately, turn out to be wrong (“our prediction was accurate; we just used numbers from the wrong chapter of the Bible”). In one study, researchers wondered how gay men who were strongly identified with their Christian church dealt with anti-gay pronouncements from their ministers. One way to resolve dissonance would be to change their behavior—that is, to change their church or even leave their religion. But those who decide to stay in the church resolve dissonance by focusing on the shortcomings of the minister; for example, they say, “It’s not my religion that promotes this prejudice—it’s the bigotry of this particular preacher” (Pitt, 2010).

### Why We Overestimate the Pain of Disappointment

Imagine that you have just interviewed for the job of your dreams. You expect to be very disappointed if you don’t get the job. Then, to your utter amazement, you *don’t* get the job. How long do you think your disappointment will last? The answer is: It depends on how successfully you reduce the dissonance caused by not getting the job. When you first get the bad news, you will be disappointed; however, more than likely you will soon put a spin on it that makes you feel better. It was a dead-end job anyway. And that interviewer was a jerk.

Interestingly, people often do not anticipate how successfully they will reduce dissonance. When people think about how they will react to future negative events, they show an **impact bias**, whereby they overestimate the intensity and duration of their negative emotional reactions. For example, people overestimate how dreadful they will feel following a romantic breakup, loss of a job, or not getting into the dorm they wanted (Dunn, Wilson, & Gilbert, 2003; Gilbert et al., 1998; Mellers & McGraw, 2001; Wilson & Gilbert, 2005).

Given that people have successfully reduced dissonance in the past, why is it that they are not aware that they will do so in the future? The answer is that the process

### Self-Affirmation

In the context of dissonance theory, a way of reducing dissonance by reminding oneself of one or more of one’s positive attributes.

### Impact Bias

The tendency to overestimate the intensity and duration of one’s emotional reactions to future negative events.



Teenagers who smoke usually justify their actions with such cognitions as “Smoking is cool”; “I want to be like my friends”; “in movies, everyone smokes”; “I’m healthy; nothing is going to happen to me”; or “adults are always on my back about stuff I do.”

of *reducing dissonance is largely unconscious*. Indeed, dissonance reduction works better that way (Gilbert et al., 1998). It is not very effective to hear ourselves say, “I’ll try to make myself feel better by *convincing myself* that the person who just rejected me is an idiot.” It is more effective if we unconsciously transform our view of the interviewer; we feel better believing that anyone could see that he is an idiot (Bem & McConnell, 1970; Goethals & Reckman, 1973). Because the dissonance-reduction process is mostly unconscious, we do not anticipate that it will save us from future anguish.

**Self-Esteem and Dissonance** Who do you think feels the greatest dissonance after doing something cruel, foolish, or incompetent: a person with high self-esteem or low? The answer is the former; people with the highest self-esteem experience the most dissonance when they behave in ways that are contrary to their high opinion of themselves, and they will work harder to reduce it than will those with average levels of self-esteem. When people who have low self-esteem commit a stupid or immoral action, they do not feel as much dissonance, because the cognition “I have done an awful thing” is consonant with the cognition “I am a schlunk; I’m always doing awful things.”

In a classic experiment, researchers predicted that individuals who had been given a boost to their self-esteem would be less likely to cheat, if given the opportunity to do so, than individuals who had a lower opinion of themselves (Aronson & Mettee, 1968). After all, if you think of yourself as a decent person, cheating would be dissonant with that self-concept. However, people who have had a temporary blow to their self-esteem, and thus are feeling low and worthless, might be more likely to cheat at cards, kick their dog, or do any number of things consistent with having a low opinion of themselves.

In this experiment, the self-esteem of college students was temporarily modified by giving the subjects false information about their personalities. After taking a personality test, one-third of the students were given positive feedback; they were told that the test indicated that they were mature, interesting, deep, and so forth. Another third of the students were given negative feedback; they were told that the test revealed that they were relatively immature, uninteresting, shallow, and the like. The remaining one-third of the students were not given any information about the results of the test. Immediately afterward, the students were scheduled to participate in an experiment conducted by a different psychologist who had no apparent relation to the personality inventory. As part of this second experiment, the participants played a game of cards against some of their fellow students. They were allowed to bet money and keep whatever they won. In the course of the game, they were given a few opportunities to cheat and thereby win a sizable sum of cash. The findings confirmed the prediction of dissonance theory: The students who had gotten the positive feedback were *least* likely to take the opportunity to cheat; the students who had gotten the negative feedback were *most* likely to cheat; and the control group fell in between.

If high self-esteem can serve as a buffer against dishonest or self-defeating behavior because people strive to keep their self-concepts consonant with their actions, this research has wide-ranging applications. For example, many African American children believe that they “don’t have what it takes” to succeed academically, so they don’t work hard, so they don’t do as well as they might—all of this perfectly, if tragically, consonant. A team of social psychologists conducted a simple intervention, which they replicated three times with three different classrooms (Cohen et al., 2009). They bolstered African American children’s self-esteem by having them do structured, self-affirming writing assignments. The children had to focus their attention on their good qualities in areas outside of academics and their most important values (e.g., religion, music, or love for their family). This self-affirmation raised their general self-esteem, which in turn reduced their academic anxiety, resulting in better performance. The lowest-achieving black students benefitted the most, and the benefits persisted in a follow-up study two years later. Thus, changing the students’ negative self-perceptions had long-term benefits both on self-esteem and performance on objective exams.

Do these results sound too good to be true? They are not. Still, we must be cautious in generalizing from them. Bolstering self-esteem can’t be done in an artificial way. To be effective, this kind of intervention must be grounded in reality (Kernis, 2001). If a



person were to look in the mirror and say, “Boy, I sure am terrific,” it is unlikely to help much; the person has to focus on his or her actual strengths, positive values, and good qualities and then strive to make them consonant with his or her actions.

## Rational Behavior versus Rationalizing Behavior

Most people think of themselves as rational beings, and generally they are right: We are certainly capable of rational thought. But as we’ve seen, the need to maintain our self-esteem leads to thinking that is not always rational; rather, it is *rationalizing*. People who are in the midst of reducing dissonance are so involved with convincing themselves that they are right that they frequently end up behaving irrationally and maladaptively.

During the late 1950s, when segregation was still widespread, two social psychologists did a simple experiment in a southern town (Jones & Kohler, 1959). They selected people who were deeply committed to a position on the issue of racial segregation: some strongly supported segregation; others opposed it just as strongly. Next, the researchers presented these individuals with a series of arguments on both sides of the issue. Some of the arguments were plausible, and others were rather silly. The question was: Which of the arguments would people remember best?

If the participants were behaving in a purely rational way, we would expect them to remember the plausible arguments best and the implausible arguments least, regardless of how they felt about segregation. But what does dissonance theory predict? A silly argument that supports your own position arouses some dissonance because it raises doubts about the wisdom of that position or the intelligence of people who agree with it. Likewise, a sensible argument on the other side of the issue also arouses some dissonance because it raises the possibility that the other side might be smarter or more accurate than you had thought. Because these arguments arouse dissonance, we try not to think about them.

This is exactly what the researchers found. The participants remembered the plausible arguments agreeing with their own position *and* the *implausible* arguments agreeing with the *opposing* position. Subsequent research has yielded similar results on many issues, from whether or not the death penalty deters people from committing murder to the risks of contracting HIV through heterosexual contact (e.g., Biek, Wood, & Chaiken, 1996; Edwards & Smith, 1996; Hart et al., 2009).

In sum, we humans do not always process information in an unbiased way. Sometimes, of course, we pursue new information because we want to be accurate in our views or make the wisest decisions. But once we are committed to our views and beliefs, most of us distort new information in a way that confirms them (Hart et al., 2009; Ross, 2010).

## Decisions, Decisions, Decisions

Every time we make a decision, we experience dissonance. How come? Suppose you are about to buy a car, but you are torn between a van and a subcompact. You know that each has advantages and disadvantages: The van would be more convenient. You can sleep in it during long trips, and it has plenty of power, but it gets poor mileage and it’s hard to park. The subcompact is a lot less roomy, and you wonder about its safety: but it is less expensive to buy, it’s a lot zippier to drive, and it has a pretty good repair record. Before you decide, you will probably get as much information as you can. You go online and read what the experts say about each model’s safety, gas consumption, and reliability. You’ll talk with friends who own a van or a subcompact. You’ll probably visit automobile dealers to test-drive the vehicles to see how each one feels. All this predecision behavior is perfectly rational.



Once he is hooked on getting a truck, this young man will reason that “it certainly would be safer than a small car, and besides, the price of gasoline is bound to drop by the time I’m 40.”

### Postdecision Dissonance

Dissonance aroused after making a decision, typically reduced by enhancing the attractiveness of the chosen alternative and devaluing the rejected alternatives.

Let's assume you decide to buy the subcompact. We predict that your behavior will change in a specific way: You will begin to think more and more about the number of miles to the gallon as though it were the most important thing in the world. Simultaneously, you will almost certainly downplay the fact that you can't sleep in your subcompact. Who wants to sleep in their car on a long trip anyway? Similarly, you will barely remember that your new small car can put you at considerable risk of harm in a collision. How does this shift in thinking happen?

**Distorting Our Likes and Dislikes** In any decision, whether it is between two cars, two colleges, or two potential lovers, the chosen alternative is seldom entirely positive and the rejected alternative is seldom entirely negative. After the decision, your cognition that you are a smart person is dissonant with all the negative things about the car, college, or lover you chose; that cognition is also dissonant with all the *positive* aspects of the car, college, or lover you *rejected*. We call this **postdecision dissonance**. Cognitive dissonance theory predicts that to help yourself feel better about the decision, you will do some unconscious mental work to try to reduce the dissonance.

What kind of work? In a classic experiment, Jack Brehm (1956) posed as a representative of a consumer testing service and asked women to rate the attractiveness and desirability of several kinds of small appliances. Each woman was told that as a reward for having participated in the survey, she could have one of the appliances as a gift. She was given a choice between two of the products she had rated as being equally attractive. After she made her decision, each woman was asked to rerate all the products. After receiving the appliance of their choice, the women rated its attractiveness somewhat higher than they had the first time. Not only that, but they drastically lowered their rating of the appliance they might have chosen but decided to reject.

In other words, following a decision, to reduce dissonance we change the way we feel about the chosen and unchosen alternatives, cognitively spreading them apart in our own minds in order to make ourselves feel better about the choice we made.

**The Permanence of the Decision** The more important the decision, the greater the dissonance. Deciding which car to buy is clearly more important than deciding between a toaster and a coffeemaker; deciding which person to marry is clearly more important than deciding which car to buy. Decisions also vary in terms of how permanent they are—that is, how difficult they are to revoke. It is a lot easier to trade in your new car for another one than it is to get out of an unhappy marriage. The more permanent and less revocable the decision, the stronger is the need to reduce dissonance.

In a simple but clever experiment, social psychologists intercepted people at a racetrack who were on their way to place \$2 bets and asked them how certain they were that their horses would win (Knox & Inkster, 1968). The investigators also approached other bettors just as they were leaving the \$2 window, after having placed their bets, and asked them the same question. Almost invariably, people who had already placed their bets gave their horses a much better chance of winning than did those who had not yet placed their bets. Because only a few minutes separated one group from another, nothing real had occurred to increase the probability of winning; the only thing that had changed was the finality of the decision—and hence the dissonance it produced.

Moving from the racetrack to the Harvard campus, other investigators tested the irrevocability hypothesis in a photography class (Gilbert & Ebert, 2002). In their study, participants were recruited through an advertisement for students interested in learning photography while taking part in a psychology experiment. Students were informed that they would shoot some photographs and print two of them. They would rate the two photographs



All sales are final. When will this customer be happier with her new flatscreen TV: ten minutes before the purchase? Ten minutes after the purchase?

and then get to choose one to keep. The other would be kept for administrative reasons. The students were randomly assigned to one of two conditions. In Condition One, students were informed that they had the option of exchanging photographs within a five-day period; in Condition Two, students were told that their choice was final. The researchers found that *prior* to making the choice between the two photographs, the students liked them equally. The experimenters then contacted the students two, four, and nine days after they had made their choice to find out if those who had a choice to exchange photographs liked the one they chose more or less than did those in the no-choice (irrevocable) condition. And, indeed, the students who had the option of exchanging photographs liked the one they finally ended up with less than did those who made the final choice on the first day.

Interestingly, when students were asked to predict whether keeping their options open would make them more or less happy with their decision, they predicted that keeping their options open would make them happier. They were wrong. Because they underestimated the discomfort of dissonance, they failed to realize that the finality of the decision would make them happier.

**Creating the Illusion of Irrevocability** The irrevocability of a decision always increases dissonance and the motivation to reduce it. Because of this, unscrupulous salespeople have developed techniques for creating the illusion that irrevocability exists. One such technique is called **lowballing** (Cialdini, 2009; Cialdini et al., 1978; Weyant, 1996). Robert Cialdini, a distinguished social psychologist, temporarily joined the sales force of an automobile dealership to observe this technique closely. Here's how it works: You enter an automobile showroom intent on buying a particular car. Having already priced it at several dealerships, you know you can purchase it for about \$18,000. You are approached by a personable middle-aged man who tells you he can sell you one for \$17,679. Excited by the bargain, you agree to write out a check for the down payment so that he can take it to the manager as proof that you are a serious customer. Meanwhile, you imagine yourself driving home in your shiny new bargain. Ten minutes later the salesperson returns, looking forlorn. He tells you that in his zeal to give you a good deal, he miscalculated and the sales manager caught it. The price of the car comes to \$18,178. You are disappointed. Moreover, you are pretty sure you can get it a bit cheaper elsewhere. The decision to buy is not irrevocable. And yet in this situation far more people will go ahead with the deal than if the original asking price had been \$18,178, even though the reason for buying the car from this particular dealer—the bargain price—no longer exists (Cialdini, 2009; Cialdini et al., 1978).

There are at least three reasons why lowballing works. First, although the customer's decision to buy is reversible, a commitment of sorts does exist. Signing a check for a down payment creates the illusion of irrevocability, even though, if the car buyer thought about it, he or she would quickly realize that it is a nonbinding contract. In the world of high-pressure sales, however, even a temporary illusion can have real consequences. Second, the feeling of commitment triggered the anticipation of an exciting event: driving out with a new car. To have had the anticipated event thwarted (by not going ahead with the deal) would have been a big letdown. Third, although the final price is substantially higher than the customer thought it would be, it is probably only slightly higher than the price at another dealership. Under these circumstances, the

## Lowballing

An unscrupulous strategy whereby a salesperson induces a customer to agree to purchase a product at a low cost, subsequently claims it was an error, and then raises the price; frequently, the customer will agree to make the purchase at the inflated price.

## TRY IT!

### The Advantage of Finality

Ask five friends who are not in this psychology class the following question: Imagine you are shopping for a particular cell phone and you find it in two stores. The price for the phones is identical, but in Store A you have the option of exchanging

the phone within 30 days, while in Store B all sales are final. One week after your purchase, which situation will make you happier with the cell phone: Store A (with the option to return the phone) or Store B (purchase not revocable)?





After he cheats, this student will try to convince himself that everybody would cheat if they had the chance.

customer in effect says, “Oh, what the heck. I’m here, I’ve already filled out the forms, I’ve written out the check—why wait?” Thus, by using dissonance reduction and the illusion of irrevocability, high-pressure salespeople increase the probability that you will decide to buy their product at their price.

**The Decision to Behave Immorally** Of course, decisions about cars, appliances, racehorses, and even presidential candidates are the easy ones. Often, however, our choices involve moral and ethical issues. When is it OK to lie to a friend, and when is it not? When is an act stealing, and when is it just “what everyone does”? How people reduce dissonance following a difficult moral decision has implications for their self-esteem and for whether they behave more *or less* ethically in the future.

Take the issue of cheating on an exam. Suppose you are a college sophomore taking the final exam in organic chemistry. Ever since you can remember, you have wanted to be a surgeon, and you think that your admission to medical school will depend heavily on how well you do in this course. A key question involves some material you know fairly well, but because so much is riding on this exam, you feel acute anxiety and draw a blank. You glance at your neighbor’s paper and discover that she is just completing her answer to the crucial question. Your conscience tells you it’s wrong to cheat, and yet, if you don’t cheat, you are certain to get a poor grade. And if you get a poor grade, you are convinced that there goes medical school.

Regardless of whether you decide to cheat or not, the threat to your self-esteem arouses dissonance. If you cheat, your belief or cognition “I am a decent, moral person” is dissonant with your cognition “I have just committed an immoral act.” If you decide to resist temptation, your cognition “I want to become a surgeon” is dissonant with your cognition “I could have nailed a good grade and admission to medical school, but I chose not to. Wow, was I stupid!”

Suppose that after a difficult struggle, you decide to cheat. According to dissonance theory, it is likely that you would try to justify the action by finding a way to minimize its negative aspects. In this case, an efficient path to reducing dissonance would involve changing your attitude about cheating. You would adopt a more lenient attitude toward cheating, convincing yourself that it is a victimless crime that doesn’t hurt anybody, that everybody does it, and that, therefore it’s not really so bad.

Suppose, by contrast, after a difficult struggle, you decide not to cheat. How would you reduce your dissonance? Again, you could change your attitude about the morality of the act, but this time in the opposite direction. That is, to justify giving up a good grade, you convince yourself that cheating is a heinous sin, that it’s one of the lowest things a person can do, and that cheaters should be rooted out and severely punished.

**How Dissonance Affects Personal Values** What has happened is not merely a rationalization of your own behavior, but a change in your system of values. Thus, two people acting in two different ways could have started out with almost identical attitudes toward cheating. One came within an inch of cheating but decided to resist, while the other came within an inch of resisting but decided to cheat. After they had made their decisions, however, their attitudes toward cheating would diverge sharply as a consequence of their actions (see Figure 6.2 on next page).

These speculations were tested by Judson Mills (1958) in an experiment he performed in an elementary school. Mills first measured the attitudes of sixth graders toward cheating. He then had them participate in a competitive exam, with prizes awarded to the winners. The situation was arranged so that it was almost impossible to win without cheating. Mills made it easy for the children to cheat and created the illusion that they could not be detected. Under these conditions, as one might expect, some of the students cheated and others did not. The next day, the sixth graders were again asked to indicate how they felt about cheating. Sure enough, the children who

had cheated became more lenient toward cheating, and those who had resisted the temptation to cheat adopted a harsher attitude.

Our prediction is that as you read this, you are thinking about your own beliefs about cheating and how they might relate to your own behavior. Not long ago, a scandal broke out at a Florida business school. In one course, a professor discovered, more than half the students had cribbed from an exam stolen in advance. When interviewed, those who cheated said things like, “Hey, no big deal. Everyone does it.” Those who refrained from cheating said, “What the cheaters did was awful. They are lazy and unethical. And they are planning for careers in *business*?”

Take another look at Figure 6.2 and imagine yourself at the top of that pyramid, about to make any important decision, such as whether to stay with a current romantic partner or break up, use illegal drugs or not, choose this major or that one, get involved in politics or not. Keep in mind that once you make a decision, you are going to justify it to reduce dissonance, and that justification may later make it hard for you to change your mind . . . even when you should.

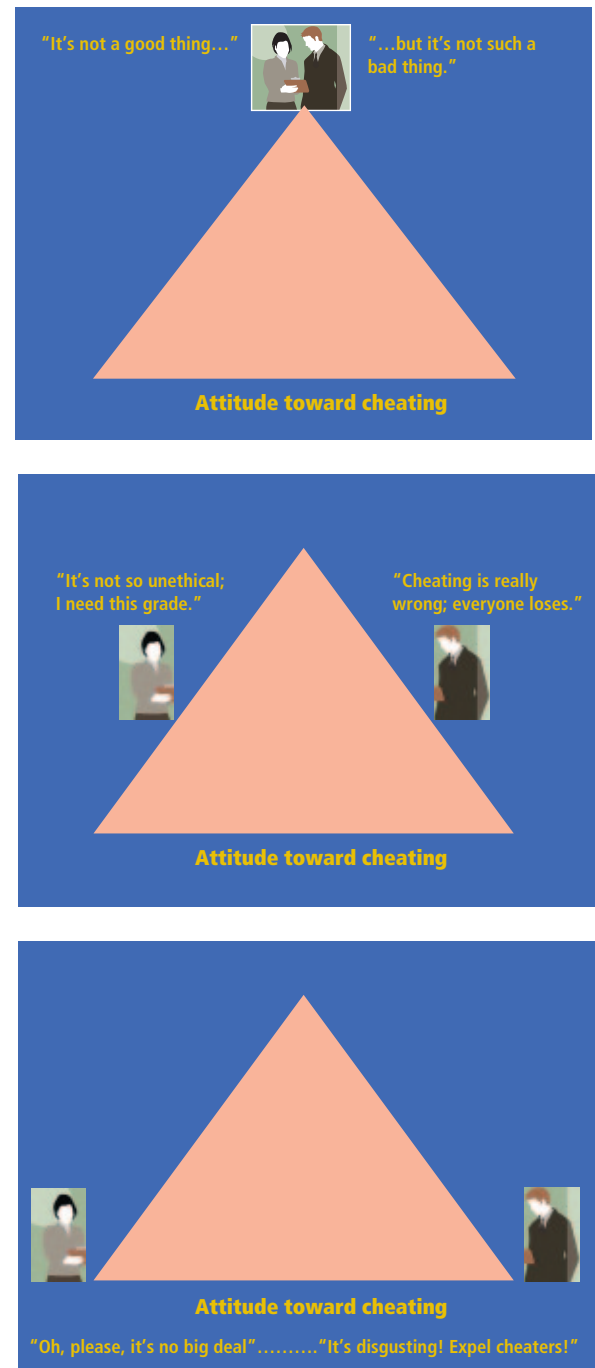
### Dissonance, Culture, and the Brain

Cognitive dissonance theory has been supported by thousands of studies, some in related areas such as cognition (biases in how the brain processes information), memory (how we shape our current memories to be consonant with our self-concepts), and attitudes (see Chapter 7). Investigators are learning what aspects of cognitive dissonance seem to be universal, hardwired in the brain, and which vary across cultures.

**Dissonance in the Brain** Experiments with monkeys and chimps support the notion that cognitive dissonance has some built-in, adaptive functions. Remember the study in which homemakers ranked appliances and then, after getting to keep an appliance of their choice, lowered their ranking of the previously attractive appliance they did not choose? When monkeys and chimps are placed in a similar situation, having to choose between different-colored M&Ms instead of kitchen appliances, they later reduced their preference for the color of M&Ms they had not chosen (Egan, Santos, & Bloom, 2007; see also West et al., 2010). Among primates, this research suggests, it has been of evolutionary benefit to stick with a decision once made.

Neuroscientists have tracked brain activity to discover what parts of the brain are active when a person is in a state of dissonance and motivated to do something to reduce it (Harmon-Jones, 2010). Using fMRI technology, they can monitor neural activity in specific areas while people are experiencing various kinds of dissonance: for example, while they are rating their preferences for things they had chosen and those they had rejected, while they are arguing that the uncomfortable scanner experience was actually quite pleasant, or while they are confronted with unwelcome information. The areas of the brain that are activated during dissonance include the striatum and other highly specific areas within the prefrontal cortex, the site prominently involved in planning and decision making (Izuma et al., 2010; Qin et al., 2011; van Veen et al., 2009).

In a study of people who were trying to process dissonant or consonant information about their preferred presidential candidate, Drew Westen and his colleagues (2006) found that the reasoning areas of the brain virtually shut down when a person is confronted with dissonant information and the emotion circuits of the brain light up happily when consonance is restored. As Westen put it, people twirl the “cognitive kaleidoscope” until the pieces fall into the pattern they want to see, and then the brain



**FIGURE 6.2**  
**The Cheating Pyramid**

Imagine two students taking an exam. Both are tempted to cheat. Initially, their attitudes toward cheating are almost identical, but then one impulsively cheats and the other does not. Their attitudes will then undergo predictable changes. (Created by Carol Tavris. Used by permission.)

### Justification of Effort

The tendency for individuals to increase their liking for something they have worked hard to attain.

repays them by activating circuits involved in pleasure. It seems that the feeling of cognitive dissonance can literally make your brain hurt!

**Dissonance across Cultures** We can find dissonance operating in almost every part of the world (e.g., Beauvois & Joule, 1996; Imada & Kitayama, 2010; Sakai, 1999), but it does not always take the same form, and the *content* of the cognitions that produce it may differ across cultures. In “collectivist” societies, where the needs of the group matter more than the needs of the individual, dissonance-reducing behavior might be less prevalent, at least on the surface (Triandis, 1995). In such cultures, we’d be more likely to find behavior aimed at maintaining group harmony and less likely to see people justifying their own personal misbehavior—but more likely to see people experiencing dissonance when their behavior shames or disappoints *others*.

Japanese social psychologist Haruki Sakai (1999), combining his interest in dissonance with his knowledge of Japanese community orientation, found that, in Japan, many people will vicariously experience dissonance on the part of someone they know and like. The observers’ attitudes change to conform to those of their dissonance-reducing friends. In two other experiments, the Japanese justified their choices when they felt others were observing them while they were making their decision, but not later; this pattern was reversed for Americans (Imada & Kitayama, 2010). The perceived privacy or public visibility of the choice being made interacts with culture to determine whether dissonance is aroused and the choice needs to be justified.

Nonetheless, some causes of dissonance are apparently international and intergenerational. In multicultural America, immigrant parents and their young-adult children often clash over cultural values: the children want to be like their peers, but their elders want them to be like them. This conflict often creates enormous dissonance in the children because they love their parents but do not embrace all of their values. In a longitudinal study of Vietnamese and Cambodian adolescents in the United States, those who were experiencing the most cognitive dissonance were most likely to get into trouble, do less well in school, and fight more with their parents (Choi, He, & Harachi, 2008).



The harsh training required to become a marine will increase the recruits’ feelings of cohesiveness and their pride in the corps.

## Self-Justification in Everyday Life

Suppose you put in a lot of effort to get into a particular club and it turns out to be a totally worthless organization, consisting of boring, pompous people doing trivial activities. You would feel pretty foolish, wouldn’t you? A sensible person doesn’t work hard to gain something worthless. Such a circumstance would produce significant dissonance; your cognition that you are a sensible, adept human being is dissonant with your cognition that you worked hard to get into a dismal group. How would you reduce this dissonance?

### The Justification of Effort

You might start by finding a way to convince yourself that the club and the people in it are nicer, more interesting, and more worthwhile than they appeared to be at first glance. How can one turn boring people into interesting people and a trivial club into a worthwhile one? Easy. Even the most boring people and trivial clubs have some redeeming qualities.

Activities and behaviors are open to a variety of interpretations; if we are motivated to see the best in people and things, we will tend to interpret these ambiguities in a positive way. We call this the **justification of effort**, the tendency for individuals to increase their liking for something they have worked hard to attain.



**TRY IT!****Justifying Actions**

Think about something that you have gone after in the past that required you to put in a lot of effort or that caused you considerable trouble. Perhaps you waited for several hours in a long line to get tickets to a concert; perhaps you sat in your car through an incredible traffic jam because it was the only way you could visit a close friend.

1. List the things you had to go through to attain your goal.

2. Do you think you tried to justify all that effort? Did you find yourself exaggerating the good things about the goal and minimizing any negative aspects of the goal? List some of the ways you might have exaggerated the value of the goal.
3. The next time you put in a lot of effort to reach a goal, you might want to monitor your actions and cognitions carefully to see if the goal was *really* worth it or whether there is any self-justification involved.

In a classic experiment, Elliot Aronson and Judson Mills (1959) explored the link between effort and dissonance reduction. In their experiment, college students volunteered to join a group that would be meeting regularly to discuss various aspects of the psychology of sex. To be admitted to the group, they volunteered to go through a screening procedure. For one-third of the participants, the procedure was demanding and unpleasant; for another third, it was only mildly unpleasant; and the final third was admitted to the group without any screening at all.

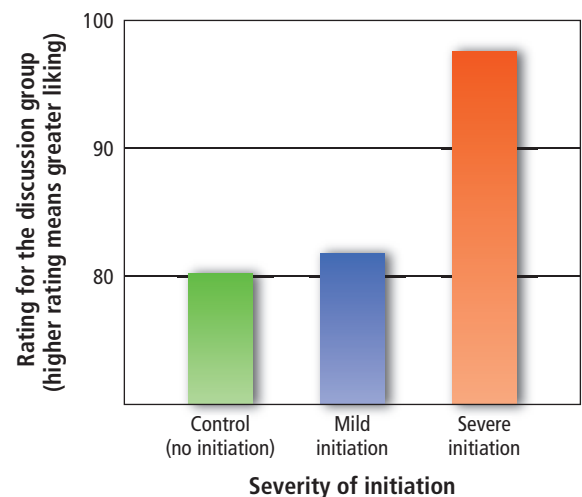
Each participant was then allowed to listen in on a discussion being conducted by the members of the group he or she would be joining. Although the participants were led to believe that the discussion was live, they were listening to a prerecorded tape. The taped discussion was designed to be as dull and bombastic as possible. After the discussion was over, each participant was asked to rate it in terms of how much he or she liked it, how interesting it was, how intelligent the participants were, and so forth.

As you can see in Figure 6.3, participants who expended little or no effort to get into the group did not enjoy the discussion much. They were able to see it for what it was—a dull and boring waste of time. Participants who went through a severe initiation, however, convinced themselves that the same discussion, though not as scintillating as they had hoped, was dotted with interesting and provocative tidbits and was therefore, in the main, a worthwhile experience. These findings have been replicated under a variety of circumstances: people justify the effort they have expended on everything from a worthless self-help program to a course of physical therapy (e.g., Coleman, 2010; Conway & Ross, 1984; Cooper, 1980; Gerard & Mathewson, 1966).

We are not suggesting that most people enjoy difficult, unpleasant experiences, nor that people enjoy things that are merely associated with unpleasant experiences. What we are asserting is that if a person agrees to go through a demanding or an unpleasant experience in order to attain some goal or object, that goal or object becomes more attractive. Thus, if you were walking to the discussion group and a passing car splashed mud all over you, you would not like that group any better. However, if you volunteered to jump into a mud puddle in order to be admitted to a group that turned out to be boring, you *would* like the group better. (See the Try It! above.)

### External versus Internal Justification

Suppose your friend Jen shows you her expensive new dress and asks your opinion. You think it is atrocious and are about to say so, advising her to exchange it before another human being sees her in it, when she tells you that she has already had it altered,



**FIGURE 6.3**

#### The Justification of Effort

The more effort we put into becoming members of a group, and the tougher the initiation, the more we will like the group we have just joined—even if it turns out to be a dud.

(Adapted from Aronson & Mills, 1959.)

which means that she cannot return it. What do you say? Chances are you go through something like the following thought process: “Jen seems so happy and excited about her new dress. She spent a lot of money for it, and she can’t take it back. If I say what I think, I’ll upset her.”

So you tell Jen that you like her dress. Do you experience much dissonance? We doubt it. Many thoughts are consonant with having told this lie, as outlined in your reasoning. In effect, your cognition that it is important not to embarrass or cause pain to people you like provides ample **external justification** for having told a harmless lie.

What happens, though, if you say something you don’t believe when there *isn’t* a good external justification for being insincere? What if your friend Jen is wealthy and can easily afford to absorb the cost of her ugly new dress? What if she sincerely wanted to know what you thought? Now the external justifications—the reasons for lying to Jen about the dress—are minimal. If you still withhold your true opinion, you will experience dissonance. When you can’t find external justification for your behavior, you will attempt to find **internal justification**; you will try to reduce dissonance by changing something about yourself, such as your attitude or behavior.

**Counterattitudinal Advocacy** How can you do this? You might begin by looking harder for positive things about the dress that you hadn’t noticed before. Within a short time, your attitude toward the dress will have moved in the direction of the statement you made. And that is how *saying becomes believing*. Its official term is **counterattitudinal advocacy**. It occurs when we claim to have an opinion or attitude that differs from our true beliefs. When we do this with little external justification—that is, without being motivated by something outside of ourselves—what we believe begins to conform more and more to the lie we told.

This proposition was first tested in a groundbreaking experiment by Leon Festinger and J. Merrill Carlsmith (1959). College students were induced to spend an hour performing a series of excruciatingly boring and repetitive tasks. The experimenter then told them that the purpose of the study was to determine whether or not people would perform better if they had been informed in advance that the tasks were interesting. They were each informed that they had been randomly assigned to the control condition—that is, they had not been told anything in advance. However, he explained, the next participant, a young woman who was just arriving in the anteroom, was going to be in the experimental condition. The researcher said that he needed to convince her that the task was going to be interesting and enjoyable. Because it was much more convincing if a fellow student rather than the experimenter delivered this message, would the participant do so? Thus, with his request, the experimenter induced the participants to lie about the task to another student.

Half of the students were offered \$20 for telling the lie (a large external justification), while the others were offered only \$1 for telling the lie (a small external justification). After the experiment was over, an interviewer asked the lie-tellers how much they had enjoyed the tasks they had performed earlier in the experiment. The results validated the hypothesis: The students who had been paid \$20 for lying—that is, for saying that the tasks had been enjoyable—rated the activities as the dull and boring experiences they were. But those who were paid only \$1 for saying the task was enjoyable rated the task as significantly more enjoyable. In other words, people who had received an abundance of external justification for lying told the lie but didn’t believe it, whereas those who told the lie without much external justification convinced themselves that what they said was closer to the truth.

Can you induce a person to change an attitude about things that matter? Let’s consider two issues that, for decades, have been of interest to students: the police and pot. Throughout American history, students have launched campus sit-ins and other demonstrations to protest segregation, sex discrimination, the Vietnam War, tuition increases, and, in 2011, Wall Street greed and lack of corporate accountability. Many of these protests were met with excessive force by the police, who used clubs, tear gas, and pepper spray on the students to disperse them. You can imagine how angry that action made the protesters and their supporters. Is it possible to change students’

### External Justification

A reason or an explanation for dissonant personal behavior that resides outside the individual (e.g., in order to receive a large reward or avoid a severe punishment).

### Internal Justification

The reduction of dissonance by changing something about oneself (e.g., one’s attitude or behavior).

### Counterattitudinal Advocacy

Stating an opinion or attitude that runs counter to one’s private belief or attitude.

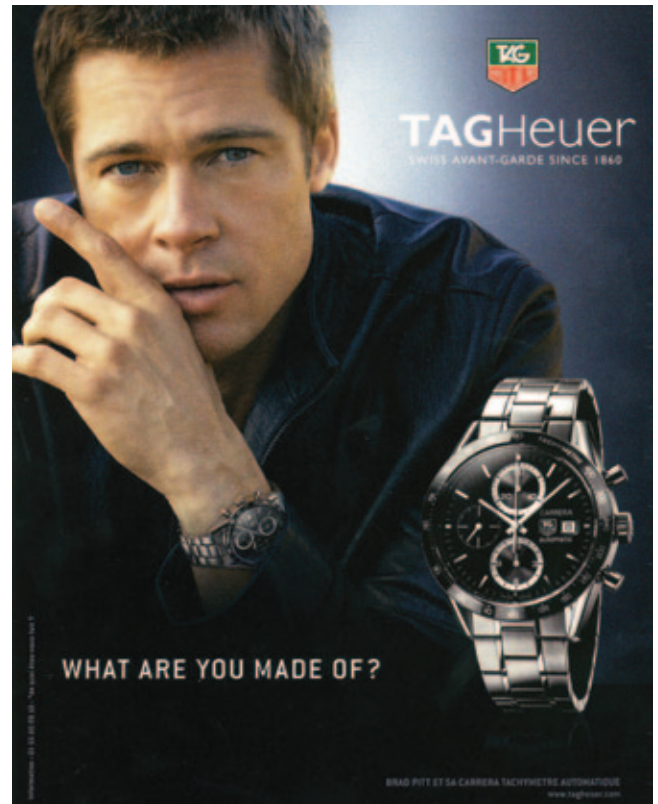
attitudes to make them more understanding and more supportive of the police? In a different domain, could you change the attitudes of those students who believe that marijuana is harmful and should be prohibited, persuading them to favor its use and legalization?

The answer, in both cases, is yes. And you can change these hot-button attitudes not by offering people large incentives to write a forceful essay supporting the police or the legalization of marijuana, but with small incentives. When Yale University students were offered a large cash reward for writing an essay supporting the excessive force used by the local police, they did not need to convince themselves that they believed what they had written; the external justification was enough. However, when they were induced to write a supportive essay for a small reward, they did, in fact, soften their attitudes toward the actions of the police (Cohen, 1962). Another study found the same pattern of results with students at the University of Texas who were opposed to the legalization of marijuana. When they were well paid for writing an essay favoring legalization, their real attitudes did not change. When they were given only a small fee, however, they needed to convince themselves that there was some truth in what they had written, and their attitudes became more prolegalization (Nel, Helmreich, & Aronson, 1969). In these studies, as in many others, the smaller the external incentive, the greater the attitude change.

Experiments on counterattitudinal advocacy have been applied to a wide range of real-world problems, from reducing prejudice to reducing the risk of eating disorders. In the former, white college students were asked to write a counterattitudinal essay publicly endorsing a controversial proposal at their university to double the amount of funds available for academic scholarships for African American students. Because the total amount of funds was limited, this meant cutting by half the amount of scholarship funds available to white students. As you might imagine, this was a highly dissonant situation. How might the students reduce dissonance? As they came up with more and more reasons in writing their essays, they ended up convincing themselves that they believed in that policy. And not only did they believe in it, but their general attitude toward African Americans became more favorable (Leippe & Eisenstadt, 1994, 1998). Later experiments with diverse groups have gotten the same results, including a decrease in white prejudice toward Asian students (Son Hing, Li, & Zanna, 2002) and, in Germany, German prejudice toward Turks (Heitland & Bohner, 2010).

Counterattitudinal advocacy has also been effective in dealing with a far different problem: eating disorders (such as bulimia) and dissatisfaction with one's body. In American society, where super-thin is considered beautiful, many women are dissatisfied with the size and shape of their own bodies, and the internalization of the media's "thin ideal" leads not only to unhappiness but also to constant dieting and eating disorders.

For more than a decade, a team of researchers has been applying cognitive dissonance to counteract these self-destructive feelings and behaviors. In a series of experiments, high school and college women with body-image concerns were assigned to either dissonance or control conditions. Women in the dissonance condition had to compose their own arguments against the "thin is beautiful" image they had bought into, by writing an essay describing the emotional and physical costs of pursuing an unrealistic ideal body and by acting out that argument to discourage other women from pursuing the thin ideal. Participants in the dissonance condition showed significant increases in their satisfaction with their bodies, as well as a decrease in chronic dieting, and were happier and less anxious than women in the control conditions. Moreover, their risk of developing bulimia was greatly reduced (McMillan, Stice, & Rohde, 2011;



Celebrities are paid huge amounts of money to endorse products. Do you think that Brad Pitt believes the message he is delivering about this expensive watch? Is the justification for his endorsement internal or external?





Parents can intervene to stop one sibling from tormenting another right at the moment of the incident, but what might they do to make it less likely to happen in the future?

Stice et al., 2006). Follow-up studies using variations of this method have found that its benefits are long lasting and that it is as effective for Latina and Asian/Hawaiian/Pacific Island women as for white and African American women (Rodriguez et al., 2008; Stice et al., 2008).

### Punishment and Self-Persuasion

All societies run, in part, on punishment or the threat of punishment. You know, while cruising down the highway at 80 miles an hour, that if a cop spots you, you will pay a substantial fine, and if you get caught often, you will lose your license. So we learn to obey the speed limit when patrol cars are in the vicinity. By the same token, schoolchildren know that if they cheat on an exam and get caught, they could be humiliated by the teacher and punished. So they learn not to cheat while the teacher is in the room, watching them. But does harsh punishment teach adults to want to obey the speed limit? Does it teach children to value honest behavior? We don't think so. All it teaches is to try to avoid getting caught.

Let's look at bullying. It is extremely difficult to persuade children that it's not right or enjoyable to beat up other children (Olweus, 2002). But, theoretically, it is conceivable that under certain conditions they will persuade *themselves* that such behavior is unenjoyable. Imagine that you are the parent of a six-year-old boy who often beats up his four-year-old brother. You've tried to reason with your older son, to no avail. In an attempt to make him a nicer person (and to preserve the health and welfare of his little brother), you begin to punish him for his aggressiveness. As a parent, you can use a range of punishments, from the mild (a stern look) to the severe (spanking, forcing the child to stand in the corner for two hours, depriving him of TV privileges for a month). The more severe the threat, the higher the likelihood the youngster will cease and desist—while you are watching him. But he may hit his brother again as soon as you are out of sight. In short, just as most drivers learn to watch for the highway patrol while speeding, your six-year-old still enjoys bullying his little brother; he has merely learned not to do it while you are around to punish him.

Suppose that you threaten him with a mild punishment. In either case—under threat of severe punishment or of mild punishment—the child experiences dissonance. He is aware that he is not beating up his little brother, and he is also aware that he would like to beat him up. When he has the urge to hit his brother and doesn't, he implicitly asks himself, "How come I'm not beating up my little brother?" Under severe threat, he has a convincing answer in the form of a sufficient external justification: "I'm not beating him up because, if I do, my parents are going to punish me." This serves to reduce the dissonance.

The child in the mild threat situation experiences dissonance too. But when he asks himself, "How come I'm not beating up my little brother?" he doesn't have a convincing answer, because the threat is so mild that it does not provide a superabundance of justification. This is called **insufficient punishment**. The child is refraining from doing something he wants to do, and while he does have some justification for not doing it, he lacks complete justification. In this situation, he continues to experience dissonance; therefore, the child must find another way to justify the fact that he is not aggressing against his kid brother. The less severe you make the threat, the less external justification there is; the less external justification, the higher the need for internal justification. The child can reduce his dissonance by convincing himself that he doesn't want to beat up his brother. In time, he can go further in his quest for internal justification and decide that beating up little kids is not fun.

To find out if this is in fact what happens, Elliot Aronson and J. Merrill Carlsmith (1963) devised an experiment with preschoolers. They couldn't very well have young children hitting each other for the sake of science, so they decided to change another

### Insufficient Punishment

The dissonance aroused when individuals lack sufficient external justification for having resisted a desired activity or object, usually resulting in individuals devaluing the forbidden activity or object.

behavior that was important to the children: their desire to play with some appealing toys. The experimenter first asked each child to rate the attractiveness of several toys. He then pointed to a toy that the child considered among the most attractive and told the child that he or she was not allowed to play with it. Half of the children were threatened with mild punishment if they disobeyed; the other half were threatened with severe punishment. The experimenter left the room for a few minutes, giving the children the time and opportunity to play with the other toys and to resist the temptation to play with the forbidden toy. None of the children played with the forbidden toy.

Next, the experimenter returned and asked each child to rate how much he or she liked each of the toys. Initially, everyone had wanted to play with the forbidden toy, but during the temptation period, when they had the chance, not one child played with it. Obviously, the children were experiencing dissonance. How did they respond to this uncomfortable feeling? The children who had received a severe threat had ample justification for their restraint. They knew why they hadn't played with the toy, and therefore they had no reason to change their attitude about it. These children continued to rate the forbidden toy as highly desirable; indeed, some even found it more desirable than they had before the threat.

But what about the others? Without much external justification for avoiding the toy—they had little to fear if they played with it—the children in the mild threat condition needed an *internal* justification to reduce their dissonance. Before long, they persuaded themselves that the reason they hadn't played with the toy was that they didn't like it. They rated the forbidden toy as less attractive than they had when the experiment began.

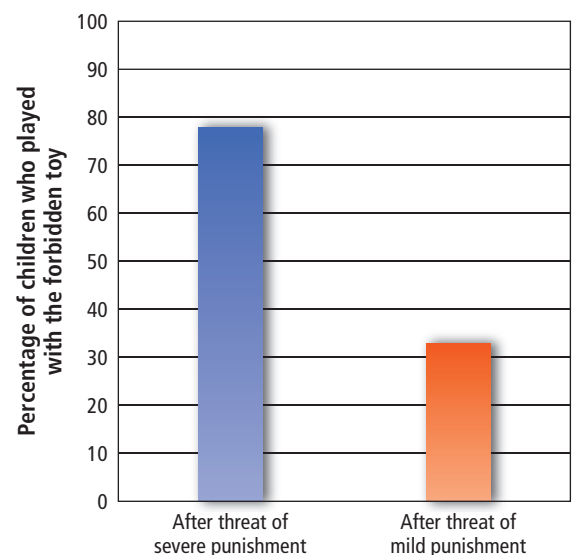
**The Lasting Effects of Self-Persuasion** The forbidden-toy study was a good example of how self-justification leads to **self-persuasion** in the behavior of very young children. The children who were tempted to play with the forbidden toy but resisted came to believe that the toy wasn't so wonderful after all: they *persuaded themselves* of this belief to justify the fact that by obeying the adults, they had given up something they wanted. Self-persuasion is more permanent than direct attempts at persuasion precisely because, with self-persuasion, the persuasion takes place internally and not because of external coaxing, threats, or pressure.

Moreover, the effects of self-persuasion in young children can be lasting. In a replication of the forbidden-toy experiment, the overwhelming majority of the children who had been mildly threatened for playing with a terrific toy decided, on their own, not to play with it, even when given the chance several *weeks* later; the majority of the children who had been severely threatened played with the forbidden toy as soon as they could (Freedman, 1965). (See Figure 6.4.) Remember these findings when you become a parent! Parents who use punishment to encourage their children to adopt desirable values should keep the punishment mild—barely enough to produce a change in behavior—and the values will follow.

**Not Just Tangible Rewards or Punishments** As we have seen, a sizable reward or a severe punishment provides strong external justification for an action. So if you want a person to do something or not to do something only once, the best strategy would be to promise a large reward or threaten a severe punishment. But if you want a person to become committed to an attitude or to a behavior, the *smaller* the reward or punishment that will lead to momentary compliance, the *greater* will be the eventual change in attitude and therefore the more permanent the effect. Large rewards and severe punishments, because they are strong external justifications, encourage compliance but prevent real attitude change (see Figure 6.5).

## Self-Persuasion

A long-lasting form of attitude change that results from attempts at self-justification.

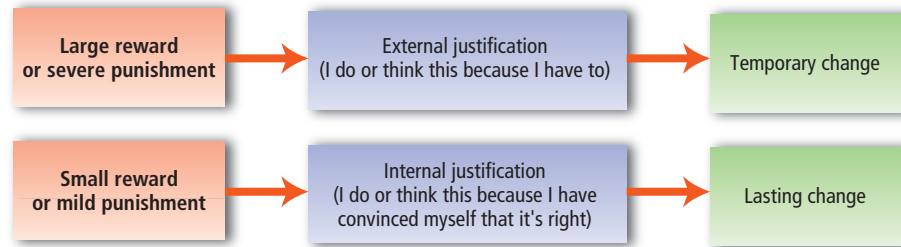


**FIGURE 6.4**

### The Forbidden Toy Experiment

Children who had received a threat of mild punishment were far less likely to play with a forbidden toy (orange bar) than children who had received a threat of severe punishment (blue bar). Those given a mild threat had to provide their own justification by devaluing the attractiveness of the toy ("I didn't want to play with it anyhow"). The resulting self-persuasion lasted for weeks.

(Adapted from Freedman, 1965.)

**FIGURE 6.5****External versus Internal Justification**

As this graphic summarizes, insufficient punishment or reward leads to self-justification, which in turn leads to self-persuasion and lasting change. Larger rewards or punishments may produce temporary compliance, which rarely lasts.

This phenomenon is not limited to tangible rewards and punishments; justifications can also come in more subtle packages. Take friendship. We like our friends, we trust our friends, we do favors for our friends. Suppose you are at a party at the home of a close friend. Your friend is passing around a strange-looking appetizer. “What is it?” you ask. “Oh, it’s a fried grasshopper; I’d love you to try it.” She’s a good friend and you don’t want to embarrass her in front of the others, so you pick one up and eat it. How much do you think you will like this new snack food?

Now suppose you are a guest at the home of a person you don’t know well, and he hands you, as an appetizer, a fried grasshopper and tells you that he’d really like you to try it. You comply. Now the crucial question: In which of these two situations will you like the taste of the grasshopper better? Common sense might suggest that the grasshopper would taste better when recommended by a friend. But think about it for a moment; which condition involves less external justification? Common sense notwithstanding, dissonance theory makes the opposite prediction. In the first case, when you ask yourself, “How come I ate that disgusting insect?” you have ample justification: you ate it because your good friend asked you to. In the second case, you don’t have this kind of outside justification, so you must create it. Namely, you must convince yourself that you *liked* the grasshopper.

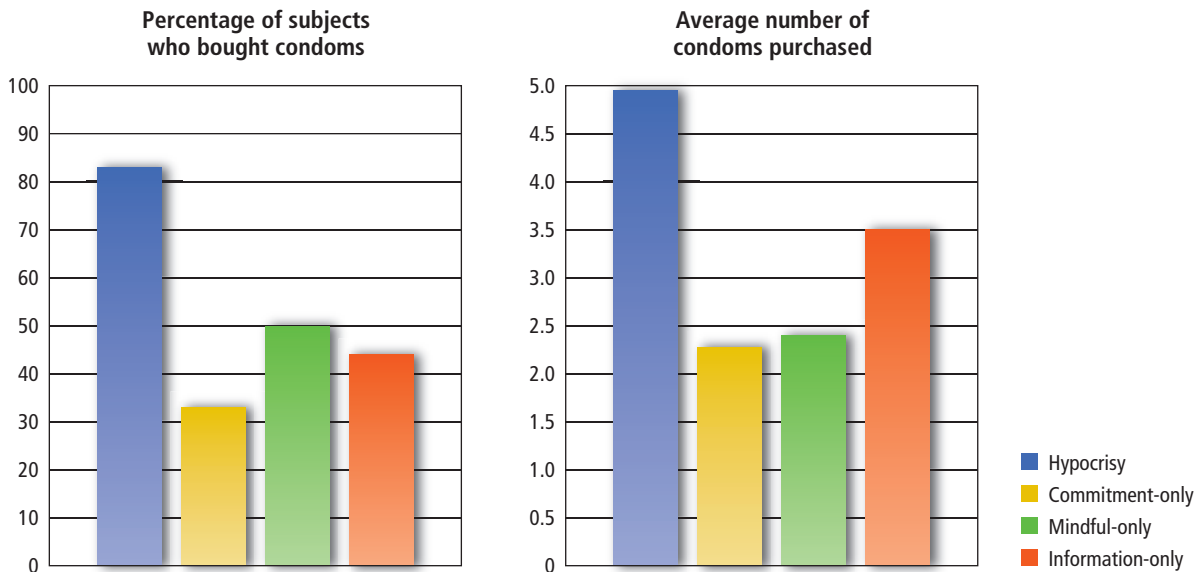
Although this may seem a rather bizarre example of dissonance-reducing behavior, it’s not as far-fetched as you might think. Indeed, in one experiment, army reservists were asked to eat fried grasshoppers as part of a research project on survival foods (Zimbardo et al., 1965). Reservists who ate grasshoppers at the request of a stern, unpleasant officer increased their liking for grasshoppers far more than those who ate grasshoppers at the request of a well-liked, pleasant officer. Those who complied with the unfriendly officer’s request had little external justification for their actions. As a result, they adopted positive attitudes toward eating grasshoppers to justify their otherwise strange and dissonance-arousing behavior.

## The Hypocrisy Paradigm

People often behave in ways that run counter to their own beliefs and their best interests. For example, although college students know that AIDS and other sexually transmitted diseases (STDs) are serious problems, only a small percentage use condoms. Not a surprise; condoms are inconvenient and unromantic, and they remind people of disease—the last thing they want to be thinking about in the heat of passion. No wonder that sexual behavior is often accompanied by denial: “Sure, STDs are a problem, but not for *me*.”

How do you break through this wall of denial? In the 1990s, Elliot Aronson and his students set out to tackle this problem (Aronson, Fried, & Stone, 1991; Cooper, 2010; Stone et al., 1994). They asked two groups of college students to compose a speech



**FIGURE 6.6****The Hypocrisy Paradigm**

People who are made mindful of their hypocrisy (blue bars)—in this study, being made aware of the discrepancy between knowing that condoms prevent AIDS and other STDs but not using condoms themselves—begin to practice what they preach. Here, more of them bought condoms, buying more condoms than did students in other conditions—those who were simply given information about the dangers of AIDS, or who promised to buy them, or who were made aware that they weren't using them.

(Adapted from Stone et al., 1994.)

describing the dangers of AIDS and advocating the use of condoms every time a person has sex. In one group, the students merely composed the arguments. In the second group, after composing their arguments, they were to recite them in front of a video camera and were told that an audience of high school students would watch the resulting tape. In addition, half of the students in each group were made mindful of their own failure to use condoms by making a list of the circumstances in which they had found it particularly difficult, awkward, or impossible to use them.

The participants in one group experienced the highest dissonance: those who made a video for high school students after the experimenter got them to think about their own failure to use condoms. Why? They were made aware of their own hypocrisy; they had to deal with the fact that they were preaching behavior that they themselves were not practicing. To remove the hypocrisy and maintain their self-esteem, they would need to start practicing what they were preaching. And that is exactly what the researchers found. When they gave each student the chance to buy condoms cheaply, the students in the hypocrisy condition were far more likely to buy condoms than students in any of the other conditions (see Figure 6.6). Moreover, when the researchers phoned the students several months after the experiment, they found that the effects held. People in the hypocrisy condition—the students who would have felt the most cognitive dissonance—reported far higher use of condoms than did those in the control conditions.

Using a similar research design of **hypocrisy induction**, researchers instructed undergraduate smokers to create an antismoking video that allegedly would be used to encourage high school students to quit smoking (Peterson, Haynes, & Olson, 2008). Again, the actors felt dissonance because their own behavior (smoking) contradicted the antismoking position they advocated on the video. This method of causing them to face their hypocrisy increased the participants' stated intention to quit smoking.

**Hypocrisy Induction**

The arousal of dissonance by having individuals make statements that run counter to their behaviors and then reminding them of the inconsistency between what they advocated and their behavior. The purpose is to lead individuals to more responsible behavior.

## CONNECTIONS

### How Inducing Hypocrisy Can Reduce Road Rage

Road rage—drivers acting out their anger at other drivers who dare to get in their way, cut them off, tailgate, or pass them on the right side—is responsible for thousands of traffic accidents and fatalities. Seiji Takaku (2006) decided to apply the hypocrisy-induction paradigm to this problem. An angry driver is thinking: “Look at that SOB who just cut me off! Selfish, rotten bastard! I’ll show him!” Takaku wondered whether making that driver aware that he too can be a “selfish, rotten bastard” who does exactly the same thing—making the driver aware of his hypocrisy in condemning another driver’s actions but not his own identical behavior—would reduce the temptation to fly off the handle. In one experiment, he used video to simulate a highway situation in which a driver is cut off by another driver, a common incident that frequently leads to anger. In the experimental condition, the participants themselves first accidentally cut off another driver, thus being reminded of the fact that cutting people off is not an indication of a flawed personality, but rather the type of mistake that we are all capable of making. Takaku found that when people are reminded of their own fallibility, they are quicker to go from anger to forgiveness than if this reminder is not induced. The reminder reduces their perceived need to retaliate.

You might keep Takaku’s method in mind the next time you find yourself fuming in traffic. And, by the way, that anger you feel at *other* cell phone users who drive while talking . . . ?

### Justifying Good Deeds and Harmful Acts

When we like people, we show it by treating them well. When we dislike people, we also often show it, perhaps by going out of our way to snub them. But it can also work the other way around: our own behavior toward a person affects whether we like or dislike that individual. Whenever we act either kindly or cruelly toward another person, self-justification sees to it that we never quite feel the same way about that person again. (See Try It!)

**The Ben Franklin Effect: Justifying Acts of Kindness** What happens when you do a favor for someone? In particular, what happens when you are subtly induced to do a favor for a person you don’t much like; will you like the person more—or less? Dissonance theory predicts that you will like the person more after doing the favor. Can you say why?

This phenomenon has been a part of folk wisdom for a long time. Benjamin Franklin confessed to having used it as a political

*We do not love people so much for the good they have done us as for the good we have done them.*

—LEO TOLSTOY, 1869

## TRY IT!

### The Internal Consequences of Doing Good

When you walk down a city street and view people sitting on the sidewalk, panhandling, or pushing their possessions around in a shopping cart, how do you feel about them? Think about it for a few moments, and write down a list of your feelings. If you are like most college students, your list will reflect some mixed feelings. That is, you probably feel some compassion but also think these people are a

nuisance, that if they tried harder, they could get their lives together. The next time you see a person panhandling or digging through the trash looking for food, take the initiative and give him or her a dollar. Say something friendly; wish them well. Note your feelings. Is there a change in how you perceive the person? Analyze any changes you notice in terms of cognitive dissonance theory.

strategy. While serving in the Pennsylvania state legislature, Franklin was disturbed by the political opposition and animosity of a fellow legislator. So he set out to win him over. He didn't do it by "paying any servile respect to him," Franklin wrote, but rather by inducing his opponent to do him a favor—namely, lending him a rare book he was eager to read. Franklin returned the book promptly with a warm thank-you letter. "When we next met in the House," Franklin said, "he spoke to me (which he had never done before), and with great civility; and he ever after manifested a readiness to serve me on all occasions, so that we became great friends and our friendship continued to his death. This is another instance of the truth of an old maxim I had learned, which says, 'He that has once done you a kindness will be more ready to do you another than he whom you yourself have obliged'" (Franklin, 1868/1900, pp. 216–217).

Benjamin Franklin was clearly pleased with the success of his blatantly manipulative strategy. But as scientists, we should not be convinced by his anecdote. We have no way to know whether Franklin's success was due to this particular gambit or to his all-around charm. That is why it is important to design and conduct an experiment that controls for such things as charm. Such an experiment was finally done—240 years later (Jecker & Landy, 1969). Students participated in an intellectual contest that enabled them to win a substantial sum of money. Afterwards, the experimenter approached one-third of them, explaining that he was using his own funds for the experiment and was running short, which meant he might be forced to close down the experiment prematurely. He asked, "As a special favor to me, would you mind returning the money you won?" The same request was made to a different group of subjects, not by the experimenter but by the departmental secretary, who asked them if they would return the money as a special favor to the (impersonal) psychology department's research fund, which was running low. The remaining participants were not asked to return their winnings at all. Finally, all of the participants were asked to fill out a questionnaire that included an opportunity to rate the experimenter. Participants who had been cajoled into doing a special favor for him found him the most attractive; they convinced themselves that he was a wonderful, deserving fellow. The others thought he was a pretty nice guy but not anywhere near as wonderful as did the people who had been asked to do him a favor (see Figure 6.7).

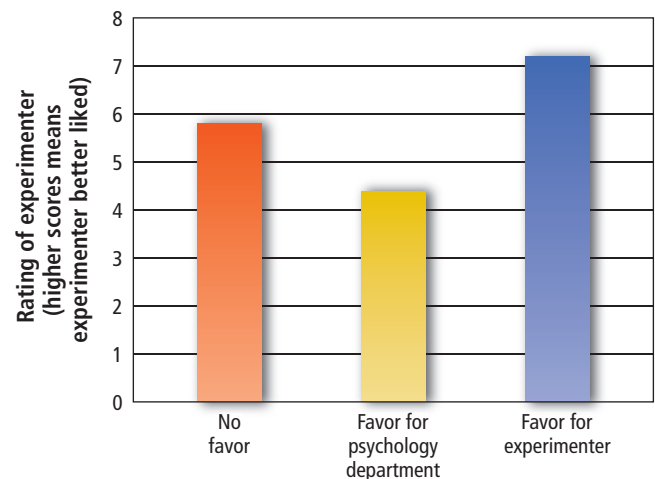
Think back to the experiment in which white students developed more favorable attitudes toward African Americans after having said publicly that they favored preferential treatment for black students. Can you see how the "Ben Franklin effect" might apply here, how this act of helping might have contributed to their change in attitudes?

Suppose you find yourself in a situation where you have an opportunity to lend a helping hand to an acquaintance, but because you are in a hurry or because it is inconvenient, you decline to help. How do you think this act of omission might affect your feelings for this person? As you might expect, in an experiment that investigated this precise situation, people justified their unwillingness to help by lowering their opinion of the acquaintance's qualities (Williamson et al., 1996). Not helping was simply an act of omission. But what if you harmed another person; what then might happen to your feelings?

**Dehumanizing the Enemy: Justifying Cruelty** A sad, though universal, phenomenon is that all cultures are inclined to dehumanize their enemies by calling them cruel names and regarding them as "vermin," "animals," "brutes," and other nonhuman creatures. During World War II, Americans called the Germans and Japanese "krauts" and "Japs," respectively, and portrayed them in propaganda



Without realizing it, Ben Franklin may have been the first dissonance theorist.



The recipient of the favor

FIGURE 6.7

#### The Justification of Kindness

If we have done someone a personal favor (blue bar), we are likely to feel more positively toward that person than if we don't do the favor (orange bar) or do the favor because of an impersonal request (yellow bar).

(Adapted from Jecker & Landy, 1969.)





The American guards at Iraq's Abu Ghraib prison treated their prisoners with a casual brutality that scandalized the world. What does dissonance theory predict about the consequences for the guards of dehumanizing the enemy?

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*There's nothing people can't contrive to praise or condemn and find justification for doing so.*

—MOLIÈRE, *THE MISANTHROPE*

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posters as monsters; the Nazis portrayed the Jews as rats; during the Vietnam War, American soldiers referred to the Vietnamese as “gooks”; after the wars in Iraq and Afghanistan began, some Americans began referring to the enemy as “ragheads” because of the turbans or other headdresses that many Arabs and Muslims wear. The use of such language is a way of reducing dissonance: “I am a good person, but we are fighting and killing these other people; therefore, they must deserve whatever they get, because they aren’t fully human like us.”

Of course, many people have always held negative and prejudiced attitudes toward certain groups, and calling them names might make it easier for them to treat them brutally. To be certain that self-justification can *follow* acts of cruelty rather than only cause them, it is essential for the social psychologist to temporarily step back from the helter-skelter of the real world and test the proposition in the more controlled setting of the experimental laboratory.

A soldier who kills or injures fully armed enemy troops in the heat of battle is unlikely to experience much dissonance. When engaged in combat with an enemy soldier, it is a “you or me” situation; if the soldier had not killed the enemy, the enemy might have killed him. So even though wounding or killing another person is rarely taken lightly, it is not nearly so heavy a burden, and the dissonance not nearly as great, as it would be if the victim were an unarmed civilian, a child, or an old person.

These speculations are supported by the results of an experiment in which volunteers had to administer a supposedly painful electric shock to a fellow student (Berscheid, Boye, & Walster, 1968). As one might expect, these students disparaged their victim as a result of having administered the shock. But half of the students were told that there would be a turnabout: the other student would be given the opportunity to retaliate against them at a later time. Those who were led to believe that their victim would be able to retaliate later did not derogate the victim. Because the victim was going to be able to even the score, there was little dissonance, and therefore the harm-doers had no need to belittle their victim in order to convince themselves that he or she deserved it. The results of these laboratory experiments suggest that, during a war, military personnel are more likely to demean civilian victims (because these individuals can’t retaliate) than military victims.

Ideally, if we want to measure attitude change as a result of dissonant cognitions, we should know what the attitudes were before the dissonance-arousing behavior occurred. Two experimenters came up with a way to do this. They asked students, one at a time, to watch a young man (a confederate of the experimenters) being interviewed and then, on the basis of this observation, provide him with an analysis of his shortcomings as a human being (Davis & Jones, 1960). After saying things they knew were certain to hurt him—telling him they thought he was shallow, untrustworthy, and boring—they convinced themselves that he deserved to be insulted this way; why, he really *was* shallow and boring. Their opinion of him had become much more negative than it was prior to saying the hurtful things to him.

A more dramatic experiment on the justification-of-cruelty effect was done to examine the relationship between torture and blame. Suppose you read that a suspect in a particularly terrible crime has been tortured in an attempt to get him to reveal information. He insists he is innocent, but his interrogators simply increase the pain they are inflicting on him. Do you sympathize with the interrogator and blame the suspect for not confessing, or do you sympathize with the suffering suspect? Dissonance theory predicts that people who are *closest* to the situation—for example, being a prison staffer having to observe the torture—would reduce dissonance by seeing

the victim as more likely to be guilty and therefore deserving of the pain inflicted on him. But those who are more distant from the situation—listening to the interrogation on the radio—would be more inclined to see the victim as innocent. And that is just what the experimenters found (Gray & Wegner, 2010). The closer people are to committing acts of cruelty, the greater their need to reduce the dissonance between “I am a good, kind person” and “I am causing another human being to suffer.” The easiest route is to blame the victim: he is guilty, he started this, it’s all his fault, he’s not one of us anyway.

Think of the chilling implications of this research: namely, that people do not perform acts of cruelty and come out unscathed. Success at dehumanizing the victim virtually guarantees a continuation or even an escalation of the cruelty: it sets up an endless chain of violence, followed by self-justification (in the form of dehumanizing and blaming the victim), followed by still more violence and dehumanization. In this manner, unbelievable acts of human cruelty can escalate, such as the Nazi “Final Solution” that led to the murder of six million European Jews. Unfortunately, atrocities are not a thing of the past but are as recent as today’s news.

## Some Final Thoughts on Dissonance: Learning from Our Mistakes

At the beginning of this chapter, we raised a vital question regarding the followers of Heaven’s Gate (as we did in Chapter 1 about the followers of the Reverend Jim Jones): How could intelligent people allow themselves to be led into what the overwhelming majority of us see as senseless behavior resulting in mass suicide? Of course, many factors were operating, including the charismatic power of each of the leaders, the existence of social support for the views of the group from other members, and the relative isolation of each group from dissenting views, producing a closed system—a little like living in a roomful of mirrors.

Yet, in addition to these factors, one of the single most powerful forces was the existence of a high degree of cognitive dissonance within the minds of the participants. After reading this chapter, you now realize that when individuals make an important decision and invest heavily in that decision (in terms of time, effort, sacrifice, and commitment), the result is a strong need to justify those actions and that investment. The more they give up and the harder they work, the greater will be the need to convince themselves that their views are correct. The members of the Heaven’s Gate cult made monumental sacrifices for their beliefs: they abandoned their friends and families, left their professions, relinquished their money and possessions, moved to another part of the world, and worked hard and long for the particular cause they believed in—all increasing their commitment to the belief.

By understanding cognitive dissonance, therefore, you can understand why the Heaven’s Gate people, having bought a telescope that failed to reveal a spaceship that wasn’t there, concluded that the telescope was faulty. To have believed otherwise would have created too much dissonance to bear. That they went on to abandon their “containers,” believing that they were moving on to a higher incarnation, is not unfathomable. It is simply an extreme manifestation of a process that we have seen in operation over and over again throughout this chapter.

Perhaps you are thinking, “Well, but they were a strange, isolated cult.” But, as we have seen, dissonance reduction affects everyone. Much of the time, dissonance-reducing behavior can be useful because it allows us to maintain self-esteem. Yet if we were to spend all our time and energy defending our egos, we would never learn from our mistakes, bad decisions, and incorrect beliefs. Instead, we would ignore them, justify them, or, worse still, attempt to turn them into virtues. We would get stuck within

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*Both salvation and punishment for man lie in the fact that, if he lives wrongly, he can begot himself so as not to see the misery of his position.*

—LEO TOLSTOY



These athletes blew a big lead and lost the game. Will they make excuses, or will they learn from their mistakes?

the confines of our narrow minds and fail to grow or change. And, in extreme cases, we might end up justifying our own smaller Heaven's Gates—mistakes that can harm ourselves and others.

It's bad enough when ordinary people get caught up in the self-justifying cycle, but when a political leader does so, the consequences can be devastating for the nation and the world (Tavris & Aronson, 2007). In 2003, President George W. Bush wanted to believe that Iraqi leader Saddam Hussein possessed weapons of mass destruction (WMD), nuclear and biochemical weapons that posed a threat to America and Europe. He needed this belief to be true to justify his decision to launch a preemptive war, although Iraq posed no immediate threat to the United States and none of its citizens had been involved in the attacks of 9/11. According to White House insider Scott McClellan (2009), this need led the president and his advisers to interpret CIA reports as definitive proof of Iraq's weapons of mass destruction, even though the

reports were ambiguous and were contradicted by other evidence (Stewart, 2011; Wilson, 2005).

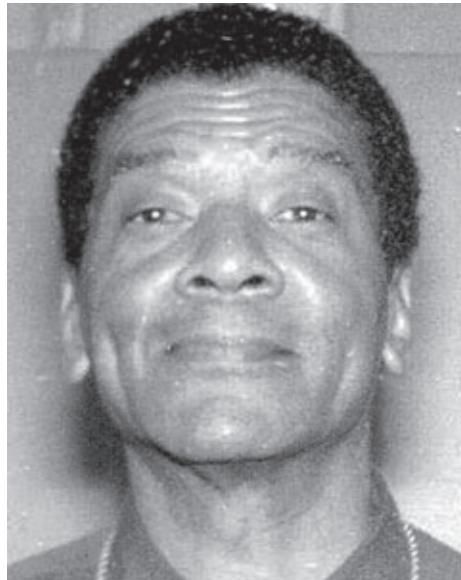
After the invasion of Iraq, administration officials, when asked "Where are the WMD?," said that Iraq is a big country and that Saddam Hussein had them well hidden, but they were sure they would be found. As the months dragged on and still no WMD were discovered, the administration officials had to admit that there were none. Now what? How did President Bush and his staff reduce dissonance between "We believed there were WMD that justified this war" and "We were wrong"? By adding new cognitions to justify the war: Now they said that the U.S. mission was to liberate the nation from a cruel dictator and give the Iraqi people the blessings of democratic institutions. Even if things are not going well now, they said, history will vindicate us in 10 or 20 or 50 years. To an observer, these justifications are inadequate; after all, there are many brutal dictators in the world, and no one can foresee the long-term results of any war begun for a short-term purpose. But to President Bush and his advisers, the justifications seemed reasonable (Bush, 2010).

Of course we cannot be certain what was going on in President Bush's mind, but some five decades of research on cognitive dissonance suggests that the president and his advisers may not have been intentionally deceiving the American people; it is more likely that, like the members of Heaven's Gate, they were deceiving themselves, blinding themselves to the possibility of being wrong. Needless to say, Mr. Bush was not the only leader to engage in this kind of self-justifying behavior. The memoirs of some of our most beleaguered former presidents, Democrat and Republican alike, are full of the kinds of self-serving, self-justifying statements that can best be summarized as "If I had it all to do over again, I would not change much. Actually, I wouldn't change anything except how my opponents treated me unfairly" (Johnson, 1991; Nixon, 1990).

Few of us will ever wield the power of a world leader or end our lives in a cult waiting for a spaceship to transport us to another planet. But, on a smaller scale, in our zeal to protect our self-concept, we often make foolish mistakes and compound that failure by blinding ourselves to the possibility of learning from them. Is there hope? We think so. Although the process of self-justification is unconscious, once we know that we are prone to justify our actions, we can begin to monitor our thinking and, in effect, "catch ourselves in the act." If we can learn to examine our behavior critically and dispassionately, we stand a chance of breaking out of the cycle of action followed by self-justification followed by more committed action.

Admittedly, acknowledging our mistakes and taking responsibility for them is easier said than done. Imagine that you are a prosecutor who has worked hard for many years to put "bad guys" in prison. You're the good guy. How will you respond





The members of the Heaven's Gate cult were just plain folks of all races, backgrounds, and walks of life. Yet almost all of them eventually committed suicide because of their commitment to the cult and its beliefs, an extreme result of the mechanism of cognitive dissonance that all of us experience.

to the dissonant information that DNA testing suggests that a few of those bad guys you put away might be innocent? Will you welcome this evidence with an open mind, because you would like justice to be done, or will you reject it, because it might show that you were wrong? Unfortunately—but not surprisingly for those who understand dissonance theory—many prosecutors in America make the latter choice: they resist and block the efforts by convicted prisoners to reopen their cases and get DNA tests (Tavris & Aronson, 2007). Their dissonance-reducing reasoning is something like this: “Well, even if he wasn’t guilty of *this* crime, he was surely guilty of something else; after all, he’s a bad guy.”

But at least one prosecutor chose to resolve that dissonance in a more courageous way. Thomas Vanes had routinely sought the death penalty or extreme prison sentences for defendants convicted of horrible crimes. One man, Larry Mayes, served more than 20 years for rape before DNA testing cleared him of the crime. “When [Mayes] requested a DNA retest on that rape kit,” he wrote, “I assisted in tracking down the old evidence, convinced that the current tests would put to rest his long-standing claim of innocence. But he was right, and I was wrong. Hard facts trumped

opinion and belief, as they should. It was a sobering lesson, and none of the easy-to-reach rationalizations (just doing my job, it was the jurors who convicted him, the appellate courts had upheld the conviction) completely lessen the sense of responsibility—moral, if not legal—that comes with the conviction of an innocent man” (quoted in Tavris & Aronson, 2007, p. 157).

Throughout our lives, all of us, in our roles as family members, workers, professionals, and citizens, will be confronted with evidence that we were wrong about something important to us—something we did or something we believed. Will you step off the pyramid in the direction of justifying that mistake . . . or will you strive to correct it?

## Use It!

You have a friend who drives after binge drinking. You keep telling him that it is dangerous to do it. He says he can handle it. How could you get him to change his behavior?

*Hint:* Think about the research on getting students to practice safe sex (use condoms); think about the hypocrisy paradigm.

## Summary

**What is theory of cognitive dissonance, and how do people avoid dissonance to maintain a stable, positive self-image?**

- **The Theory of Cognitive Dissonance** Most people need to see themselves as intelligent, sensible, and decent folks who behave with integrity. This chapter is about the behavior changes and cognitive distortions that occur when we are faced with evidence that we have done something that is not intelligent, sensible, or decent—the mental effort we expend to maintain that positive self-image.
- **Maintaining a positive self-image** According to **cognitive dissonance theory**, people experience discomfort (dissonance) when they behave in ways that are inconsistent with their conception of themselves (self-image). To reduce the dissonance, people either (1) change their behavior to bring it in line with their cognitions about themselves, (2) justify their behavior by changing one of their cognitions, or (3) attempt to justify their behavior by inventing new cognitions. One common kind of new cognition is *self-affirmation*, focusing on a positive quality to offset feelings of having acted foolishly. When people’s self-esteem is temporarily enhanced, they are less likely to cheat or commit other unethical acts, and more likely to work hard to improve their grades, so as to keep their behavior consonant with their self-concept. But people are not good at anticipating how they will cope with future negative events; they show an **impact bias**, overestimating how

bad they will feel, because they don’t realize that they will be able to reduce dissonance.

- **Rational behavior versus rationalizing behavior** Humans often process information in a biased way, one that fits our preconceived notions. The explanation for this is that information or ideas that disagree with our views arouse dissonance. And we humans avoid dissonance even at the expense of rational behavior.
- **Decisions, decisions, decisions** Decisions arouse dissonance because they require choosing one thing and not the other. The thought that we may have made the wrong choice causes discomfort—**postdecision dissonance**—because it would threaten our self-image as one who makes good decisions. After the choice is final, the mind diminishes the discomfort through solidifying the case for the item chosen or the course of action taken. That is how dissonance reduction can change a person’s values and morality: once an unethical act is committed, the person experiencing dissonance justifies it, thereby increasing the likelihood of committing it again.
- **Dissonance, culture, and the brain** Dissonance seems to be hardwired in the brain; different parts of the brain are activated when people are in a state of mental conflict or have made a choice. Because postdecision dissonance has been observed in monkeys but not other species, many researchers believe it must have an evolutionarily adaptive purpose in primates. However, although cognitive

dissonance seems to be universal, occurring in non-Western cultures as well as Western ones, the content of what creates dissonant cognitions and the process and intensity of dissonance reduction do vary across cultures, reflecting the difference in cultural norms.

### How is the justification of effort a product of cognitive dissonance, and what are some practical applications for reducing dissonance?

■ **Self-Justification in Everyday Life** Researchers have studied the forms of dissonance reduction and their application in many spheres of life.

- **The justification of effort** People tend to increase their liking for something they have worked hard to attain, even if the thing they have attained is not something they would otherwise like. This explains the intense loyalty that initiated recruits feel for their fraternities and military institutions after undergoing hazing.
- **External versus internal justification** When we perform an action because of the ample external reward to do it, then the action has little or no effect on our attitudes or beliefs. However, if the reward is not big enough to justify the action, we find ourselves experiencing cognitive dissonance because there is little **external justification** for what we did. This activates an **internal justification** process to justify the action to ourselves. The internal process of self-justification has a much more powerful effect on an individual's long-term values and behaviors than does a situation where the external justifications are evident. When people publicly advocate something that is counter to what they believe or how they behave, called **counterattitudinal advocacy**, they will feel dissonance. Counterattitudinal advocacy has been used to change people's attitudes in many ways, from their prejudices to self-defeating beliefs and harmful practices such as bulimia.
- **Punishment and self-persuasion** Another way of getting people to change is not by administering severe punishment, but **insufficient or mild punishment**, as the forbidden-toy experiment demonstrated. The less severe the threat or the smaller the reward, the less external justification the person has for compliance, and thus the greater the need for internal justification. The resulting **self-persuasion** becomes internalized

and lasts longer than temporary obedience to avoid a punishment.

- **The hypocrisy paradigm** Inducing **hypocrisy**—making people face the difference between what they say and what they do—is one way to use the human tendency to reduce dissonance to foster socially beneficial behaviors. In the case of an AIDS-prevention experiment, participants videotaped speeches about the importance of using condoms and they were made aware of their own failure to use them. To reduce dissonance, they changed their behavior—they purchased condoms.
- **Justifying good deeds and harmful acts** A clever application of cognitive dissonance theory is to get someone to like you by having them do you a favor. The reason this works is that the person needs to internally justify the fact that they did something nice for you. The converse is true as well. If you harm another person, to reduce the threat to your self-image that could come from doing a bad deed, you will tend to justify what you did by denigrating your victim: the person deserved it, or he or she is not “one of us” anyway. In extreme cases such as conflict and war, many people will embrace the cognition that the victim or enemy deserved everything they got because they are less than human.

### How can people avoid the traps of self-justification and other dissonance-reducing behavior?

- **Some Final Thoughts on Dissonance: Learning from Our Mistakes** Much of the behavior described in this chapter may seem startling: people coming to dislike others more after doing them harm, people liking others more after doing them a favor, people believing a lie they've told only if there is little or no reward for telling it. These behaviors would be difficult for us to understand if it weren't for the insights provided by the theory of cognitive dissonance. There are times when dissonance reduction is counterproductive because it solidifies negative values and behaviors, and this applies to everyone from members of small cults to national leaders. Although the process of reducing dissonance is unconscious, it is possible to intervene in the process. Knowing that humans are dissonance-reducing animals can make us more aware of the process. The next time we feel the discomfort of having acted counter to our values, we can consciously pause the self-justification process to reflect on our action.

## Chapter 6 Test

1. Based on the “Ben Franklin effect,” you are most likely to increase your liking for Tony when
  - a. Tony lends you \$10.
  - b. you lend Tony \$10.
  - c. Tony returns the \$10 you loaned him.
  - d. Tony finds \$10.
2. After spending two years fixing up an old house themselves, which involved many hours of tedious work, Abby and Brian are even more convinced that they made the right choice of house. According to the dissonance theory, this is an example of



- a. counterattitudinal advocacy.
  - b. insufficient punishment.
  - c. the Ben Franklin effect.
  - d. justifying their effort.
3. Your friend Amy asks you what you think of the shoes she just bought. Privately, you think they are the ugliest shoes you have ever seen, but you tell her you love them. In the past, Amy has always valued your honest opinion and doesn't care that much about the shoes, which were inexpensive. Because the external justification for your fib was \_\_\_\_\_, you will probably \_\_\_\_\_.
    - a. high, decide you like the shoes
    - b. high, maintain your view that the shoes are ugly
    - c. low, decide you like the shoes
    - d. low, maintain your view that the shoes are ugly
  4. Meghan has been accepted to two top graduate schools. According to cognitive dissonance theory, under which of the following conditions will she experience the most dissonance?
    - a. When she is thinking about the pros and cons of both programs before making up her mind.
    - b. When she is pretty sure which program she wants to attend but has not yet notified the school of her decision.
    - c. Right after she decides which program to attend and notifies the school of her decision.
    - d. Meghan will experience an equal amount of dissonance in each of the above three circumstances.
  5. You are required to sell \$30 souvenir books for a club fund-raiser. How could you use the technique of lowballing to improve your sales?
    - a. Start by offering the books at \$70 each and pretend to bargain with customers, making \$30 your "final offer."
    - b. Start by selling the books at \$25, but once the customer has retrieved his or her checkbook, tell him or her you made a mistake and the books are actually \$5 more expensive than you thought.
    - c. Offer the customers additional incentives to buy the book, such as free cookies with every purchase.
    - d. Start by selling the books at \$40, but tell the customer he or she will get \$10 back in the mail in three weeks.
  6. Suppose you are babysitting for two boys, brothers who are ages six and three. The older child often beats up his younger brother. What would be the most effective way to make him stop?
    - a. Threaten the older child with mild punishment, like sitting in time-out for five minutes, and hope that he obeys.
    - b. Threaten the older child with mild punishment, like sitting in time-out for five minutes, and don't worry about whether he obeys.
    - c. Threaten the older child with harsh punishment, like spanking him.
    - d. Talk to the younger child about ways he can defend himself.
  7. Which of the following techniques relating to *post-decision dissonance* could a clothing store use to increase customer satisfaction?
    - a. Cut all prices in half.
    - b. Ask customers to make a radio ad saying how great the store is.
    - c. Charge a membership fee to shop at the store.
    - d. Make all sales final.
  8. A school principal who wants to reduce vandalism has several students who are notorious for graffiti give a speech to the entire school about the negative aspects of damaging school property. Which of the following should the principal do to make it most likely that these students will stop vandalizing the school, according to research using the hypocrisy paradigm?
    - a. He should have every student deliver a speech, not just those who have already committed vandalism.
    - b. He should have them deliver speeches about the positive aspects of vandalism as well as the negative aspects.
    - c. After they make the speech, he should ask them to remember times they have committed vandalism.
    - d. Right after students deliver the speech, he should ask them to volunteer to help clean up the school parking lot.

9. Imagine that before a test, the professor told Jake that if he is caught cheating, he will be expelled. Imagine that the professor told Amanda that if caught cheating, her only punishment will be to write a short paper about why cheating is wrong. If both students don't cheat, what would dissonance theory predict?
  - a. Amanda will feel more honest than Jake will.
  - b. Jake will feel more honest than Amanda will.
  - c. Amanda and Jake will feel equally honest.
  - d. Neither Jake nor Amanda will feel honest, because they were both threatened.
10. Bess undergoes treatment for drug addiction. According to cognitive dissonance theory, after she leaves the clinic, Bess is most likely to stay off drugs if the treatment at the clinic was
  - a. involuntary (she was ordered to undergo treatment) and a difficult ordeal.
  - b. involuntary (she was ordered to undergo treatment) and an easy experience.
  - c. voluntary (she chose to undergo treatment) and an easy experience.
  - d. voluntary (she chose to undergo treatment) and a difficult ordeal.

**Answer Key**

1-b 2-d 3-c 4-c 5-b 6-a 7-d 8-c 9-a 10-d

## MyPsychLab