

Behaviour and Attitudes



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Does behaviour determine attitudes?

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Each year throughout the industrialized world, the tobacco industry kills some 2 million of its best customers (Peto et al., 1992). Given present trends, estimates a 1994 World Health Organization report, *half a billion* people alive today will be killed by tobacco. Although quick assisted suicide may be illegal, slow-motion suicide assisted by the tobacco industry is not.

People wonder: With the tobacco industry responsible for fatalities equal to 14 loaded and crashed jumbo jets a day (not including those in the expanding but hard to count developing world market), how do tobacco company executives live with themselves? At one of the world's two largest tobacco advertisers, upper-level executives—mostly intelligent, family-oriented, community-minded people—resent being called “mass murderers.” They were less than pleased when one government official (Koop, 1997) called them “a sleazy bunch of people who misled us, deceived us and lied to us for three decades.” Moreover, they defend smokers’ right to choose. “Is it an addiction issue?” asks one vice-president. “I don’t believe it. People do all sorts of things to express their individuality and to protest against society. And smoking is one of them, and not the worst” (Rosenblatt, 1994).

Social psychologists wonder: Do such statements reflect privately held attitudes? If this executive really thinks smoking is a comparatively healthy expression of individuality, how are such attitudes internalized? Or do his statements reflect social pressure to say things he doesn’t believe?

When people question someone’s attitude, they refer to beliefs and feelings related to a person or event and the resulting behaviour. Taken together, favourable or unfavourable evaluative reactions—whether exhibited in beliefs, feelings, or inclinations to act—define a

Attitudes and actions:
Many sports events, which glorify health and physical prowess, are sponsored by manufacturers of products like cigarettes, which are dangerous to health.



attitude
a favourable or unfavourable evaluative reaction toward something or someone, exhibited in one's beliefs, feelings, or intended behaviour

"The ancestor of every action is a thought."

Ralph Waldo Emerson,
Essays, First Series, 1841

person's **attitude** toward something (Olson & Zanna, 1993). Attitudes are an efficient way to size up the world. When we have to respond quickly to something, how we feel about it can guide how we react (Bassili & Roy, 1998; Breckler & Wiggins, 1989; Sanbonmatsu & Fazio, 1990). For example, a person who believes a particular ethnic group is lazy and aggressive may feel dislike for such people and therefore intend to act in a discriminatory manner. When assessing attitudes, we tap one of these three dimensions. You can remember them as the ABCs of attitudes: affect (feelings), behaviour (intention), and cognition (thoughts).

The study of attitudes is close to the heart of social psychology and historically was one of its first concerns. Researchers wondered: How much do our attitudes affect our actions?

Do attitudes determine behaviour?

To what extent, and under what conditions, do attitudes drive our outward actions? Why were social psychologists at first surprised by a seemingly small connection between attitudes and actions?

What is the relationship between what we *are* (on the inside) and what we *do* (on the outside)? Philosophers, theologians, and educators have long speculated about the connection between thought and action, character and conduct, private word and public deed. The prevailing assumption, which underlies most teaching, counselling, and child rearing, has been that our private beliefs and feelings determine our public behaviour. So if we want to alter the way people act, we need to change their hearts and minds.

Are we all hypocrites?

In the beginning, social psychologists agreed: To know people's attitudes is to predict their actions. But in 1964, Leon Festinger—judged by some to have been social psychology's most important contributor (Gerard, 1994)—concluded the evidence did *not* show that changing attitudes changes behaviour. Festinger believed the attitude-behaviour relation works the other way around, with our behaviour as the horse and our attitudes as the cart. As Robert Abelson (1972) put it, we are "very well trained and very good at finding reasons for what we do, but not very good at doing what we find reasons for."

A further blow to the supposed power of attitudes came in 1969, when social psychologist Allan Wicker reviewed several dozen research studies covering a wide variety of people, attitudes, and behaviours, and offered a shocking

THE STORY Behind the Research

I began studying attitudes while I was a graduate student working with Mark Zanna at the University of Waterloo. Initially, I was most interested in the consequences of attitudes, rather than attitude formation or change. For example, Mark and I investigated the effects of attitudes on behaviour (attitude–behaviour consistency) and memory (selective learning). I then became interested in self-perception processes—the tendency for people to make inferences about their attitudes from their behaviours. More recently, my research has turned to issues concerning the nature and origins of attitudes, such as the functions of attitudes, the effects of attitude accessibility,

the relation between attitudes and values, and the heritability of attitudes. I have been extremely fortunate to work with many outstanding graduate students at the University of Western Ontario, including Carolyn Hafer, Douglas Hazelwood, Gregory Maio, and Neal Roese, whose thinking has helped to shape my work.

James T. Olson
University of Western Ontario



conclusion: People's expressed attitudes hardly predicted their varying behaviours. Student attitudes toward cheating bore little relation to the likelihood of their actually cheating. Attitudes toward the church were only modestly linked with church attendance on any given Sunday. Self-described racial attitudes provided little clue to behaviours in actual situations.

An example of the disjuncture between attitudes and actions is what Daniel Batson and his colleagues (1997, 1999) call “moral hypocrisy” (appearing moral without being so). Their studies presented their university with an appealing task (where the participant could earn raffle tickets toward a \$30 prize) and a dull task with no positive consequences. The students had to assign themselves to one and a supposed second participant to the other. Only 1 in 20 believed that assigning the positive task to themselves was the most moral thing to do, yet 80 percent did so. In follow-up experiments on moral hypocrisy, participants were given coins they could flip privately if they wished. Even if they chose to flip, 90 percent assigned themselves to the positive task! Was this because they could specify the consequences of heads and tails after the coin toss? In yet another experiment, Batson put a sticker on each side of the coin, indicating what the flip outcome would signify. Still, 24 of 28 people who made the toss assigned themselves to the positive task. When morality and greed were put on a collision course, greed won.

If people don't play the same game that they talk, it's little wonder that attempts to change behaviour by changing attitudes often fail. Warnings about the dangers of smoking only minimally affect those who already smoke. Increasing public awareness of the desensitizing and brutalizing effects of a prolonged diet of television violence has stimulated many people to voice a desire for less violent programming—yet they still watch media murder as much as ever. Appeals for safe driving have had far less effect on accident rates than have lower speed limits, divided highways, and drunk driving penalties (Etzioni, 1972).

While Wicker and others were describing the weakness of attitudes, some personality psychologists found personality traits equally ineffective in predicting behaviour (Mischel, 1968). If we want to know how helpful people are going to be, we usually won't learn much by giving them tests of self-esteem, anxiety, or defensiveness. In a situation with clear-cut demands, we are better off knowing how most people react. Likewise, many critics of psychotherapy began to argue that talking therapies, such as psychoanalysis, seldom "cure" problems. Instead of analyzing personality defects, the critics said, the way to change an attitude was to change the problem *behaviour*.

"It may be desirable to abandon the attitude concept."

Allan Wicker, 1971

All in all, the developing picture of what controls behaviour emphasized external social influences and played down internal factors, such as attitudes and personality. The emerging image was of little billiard balls that have different stripes and colours, to be sure, but are all buffeted by outside forces. In short, the original thesis that attitudes determine actions was countered during the 1960s by the antithesis that attitudes determine virtually nothing.

Thesis. Antithesis. Is there a synthesis? The surprising finding that what people say often differs from what they *do* sent social psychologists scurrying to find out why. Surely, we reasoned, convictions and feelings *must* sometimes make a difference.

Indeed. In fact, what we are about to explain now seems so obvious that we wonder why most social psychologists (ourselves included) were not thinking this way before the early 1970s. We must remind ourselves that truth never seems obvious until it is known.

When do attitudes predict behaviour?

Our behaviour and our expressed attitudes differ because both are subject to other influences. One social psychologist counted 40 separate factors that complicate their relationship (Triandis, 1982; see also Kraus, 1995). If we could just neutralize the other influences on behaviour—make all other things equal—might attitudes accurately predict behaviours?

Minimizing social influences on expressed attitudes

Unlike a physician measuring heart rate, social psychologists never get a direct reading on attitudes. Rather, we measure *expressed* attitudes. Like other behaviours, expressions are subject to outside influences. This was vividly demonstrated when politicians once overwhelmingly passed a salary increase for themselves in an off-the-record vote, then moments later overwhelmingly defeated the same bill on a roll-call vote. Fear of criticism had distorted the true sentiment on the roll-call vote. We sometimes say what we think others want to hear.

Today's social psychologists have some clever means at their disposal for subtly assessing attitudes. One is to measure facial muscle responses to statements (Cacioppo & Petty, 1981). Do the facial muscles reveal a microsmile or a microfrown? Another, the "implicit association test," uses reaction times to measure how quickly people associate concepts (Greenwald et al., 2002, 2003). One can, for example, measure implicit racial attitudes by assessing whether people take longer to associate positive words with Black rather than with White faces.

Knowing that people don't wear their hearts on their sleeves, social psychologists have longed for a "pipeline to the heart." Edward Jones and Harold

Sigall (1971) therefore devised a **bogus pipeline** method that fools people into exposing their real attitudes. In one experiment, conducted with Richard Page, Sigall (1971) had students hold a locked wheel that, if unlocked, could turn a pointer to the left, indicating disagreement, or to the right, indicating agreement. When electrodes were attached to their arms, the fake machine supposedly measured tiny muscular responses said to gauge their tendency to turn the wheel left (disagree) or right (agree). To demonstrate this amazing new machine, the researcher asked the students some questions. After a few moments of impressive flashing lights and whirring sounds, a meter on the machine announced the student's attitude—which was nothing more than an attitude the student had earlier expressed as part of a now-forgotten survey. The procedure convinced everyone.

Once the students were convinced, the attitude meter was hidden and they were asked questions concerning their attitudes toward Blacks and requested to guess what the meter revealed. How do you suppose these White university students responded? Compared to other students who responded through a typical questionnaire, those responding by the bogus pipeline admitted more negative belief. Unlike those responding to the paper-and-pencil scale—who rated Blacks as being more sensitive than other people—those responding through the bogus pipeline reversed these judgments. It was as if they were thinking, “I’d better tell the truth or the experimenter will think I’m out of touch with myself.”

No wonder people who are first persuaded that lie detectors work may then admit the truth (in which case, the lie detector *has* worked!). They also suggest one reason for a weak attitude–behaviour link: Under everyday conditions, such as those faced by tobacco executives and politicians, people sometimes express attitudes they don’t privately hold.

Minimizing other influences on behaviour

On any occasion, it’s not only our inner attitudes that guide us but also the situation we face. As Chapters 5 to 8 will illustrate again and again, social influences can be enormous—enormous enough to induce people to violate their deepest convictions. Before Jesus’ crucifixion, his disciple Peter denied ever knowing him. Government aides may go along with actions they know are wrong. Prisoners of war may lie to placate their captors.

So, would *averaging* many occasions enable us to detect more clearly the impact of our attitudes? Predicting people’s behaviour is like predicting a baseball or cricket player’s hitting. The outcome of any particular time at bat is nearly impossible to predict, because it is affected not only by the batter but also by what the pitcher throws and by chance factors. When we aggregate many times at bat, we neutralize these complicating factors. Knowing the players, we can predict their approximate batting *averages*.

To use a research example, people’s general attitude toward religion poorly predicts whether they will go to worship next weekend (because the weather, the preacher, how one is feeling, and so forth also influence attendance). But religious attitudes predict quite well the total quantity of religious behaviours over time (Fishbein & Ajzen, 1974; Kahle & Berman, 1979). The findings define a *principle of aggregation*: The effects of an attitude on behaviour become more apparent when we look at a person’s aggregate or average behaviour rather than at isolated acts.

bogus pipeline

a procedure that fools people into disclosing their attitudes. Participants are first convinced that a machine can use their psychological responses to measure their private attitudes. Then they are asked to predict the machine’s reading, thus revealing their attitudes.

“Do I contradict myself? Very well then I contradict myself. (I am large, I contain multitudes.)”

Walt Whitman, *Song of Myself*, 1855

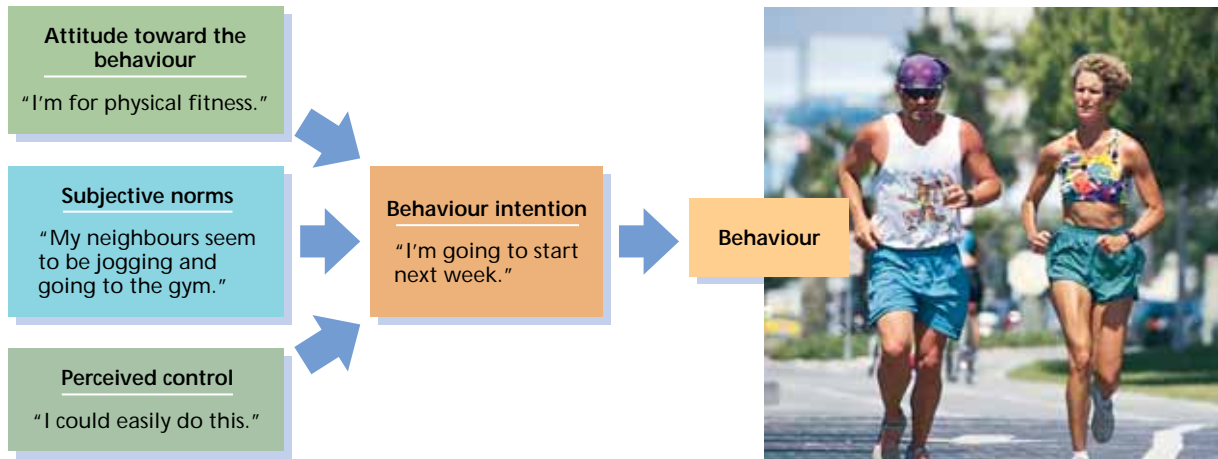


figure 4-1
The theory of planned behaviour.

Icek Ajzen, working with Martin Fishbein, has shown that one's (a) attitudes, (b) perceived social norms, and (c) feelings of control together determine one's intentions, which guide behaviour.

Compared to their general attitudes toward a healthy lifestyle, people's specific attitudes regarding jogging predict their jogging behaviour much better.

Examining attitudes specific to the behaviour

Other conditions further improve the predictive accuracy of attitudes. As Icek Ajzen and Martin Fishbein (1977; Ajzen, 1982) point out, when the measured attitude is general—say, an attitude toward Asians—and the behaviour is very specific—say, a decision whether to help a particular Asian couple—we should not expect a close correspondence between words and actions. Indeed, report Fishbein and Ajzen, in 26 out of 27 such research studies, attitudes did not predict behaviour. But attitudes *did* predict behaviour in all 26 studies they could find in which the measured attitude was directly pertinent to the situation. Thus, attitudes toward the general concept of “health fitness” poorly predict specific exercise and dietary practices. Whether people jog is more likely to depend on their opinions about the costs and benefits of *jogging* (Figure 4-1).

Further studies—more than 700 in all—confirmed that specific, relevant attitudes *do* predict behaviour (Bassili, 1995; Six & Eckes, 1996; Wallace et al., 2004). For example, attitudes toward condoms strongly predict condom use (Albarracín et al., 2001). And attitudes toward recycling (but not general attitudes toward environmental issues) predict participation in recycling (Oskamp, 1991). To change health habits through persuasion, we had best alter people's attitudes toward specific practices (Olson & Zanna, 1981; Ajzen & Timko, 1986; Courneya, 1995).

So far we have seen two conditions under which attitudes will predict behaviour: (1) When we minimize other influences on our attitude statements and our behaviour, and (2) when the attitude is specifically relevant to the observed behaviour. There is a third condition: An attitude predicts behaviour better when it is potent.

Making attitudes potent

When we act automatically our attitudes often lie dormant. We act out familiar scripts, without reflecting on what we're doing. We respond to people we meet in the hall with an automatic “Hi.” We answer the restaurant cashier's question, “How was your meal?” by saying, “Fine,” even if we found it tasteless. Such

mindless reaction is adaptive. It frees our minds to work on other things. As the philosopher Alfred North Whitehead argued, “Civilization advances by extending the number of operations which we can perform without thinking about them.” But when we are on automatic pilot, our attitudes are dormant.

Bringing attitudes to mind. In novel situations our behaviour is less automatic; lacking a script, we think before we act. If they are prompted to think about their attitudes before acting, will people be truer to themselves? Mark Snyder and William Swann (1976) wanted to find out. So two weeks after 120 of their students indicated their attitudes toward affirmative-action employment policies, Snyder and Swann invited them to act as jurors in a sex-discrimination court case. Only if they first induced the students to remember their attitudes—by giving them “a few minutes to organize your thoughts and views on the affirmative-action issue”—did attitudes predict verdicts. Similarly, people who take a few moments to review their past behaviour express attitudes that better predict their future behaviour (Zanna et al., 1981). Our attitudes guide our behaviour if we think about them.

Self-conscious people usually are in touch with their attitudes (Miller & Grush, 1986). This suggests another way to induce people to focus on their inner convictions: *Make* them self-conscious, perhaps by having them act in front of a mirror (Carver & Scheier, 1981). Maybe you can recall suddenly being acutely aware of yourself upon entering a room with a large mirror. Making people self-aware in this way promotes consistency between words and deeds (Gibbons, 1978; Froming et al., 1982).

Edward Diener and Mark Wallbom (1976) noted that nearly all university students say that cheating is morally wrong. But will they follow the advice of Shakespeare’s Polonius, “To thine own self be true”? Diener and Wallbom set students to work on an anagram-solving task (said to predict IQ) and told them to stop when a bell in the room sounded. Left alone, 71 percent cheated by working past the bell. Among students made self-aware—by working in front of a mirror while hearing their tape-recorded voices—only 7 percent cheated. It makes one wonder: Would eye-level mirrors in stores make people more conscious of their attitudes about stealing?

Remember Batson’s studies of moral hypocrisy described on p. 111? In a final experiment, Batson and his colleagues (1999) found that mirrors did bring behaviour into line with espoused moral attitudes. When people flipped a coin while facing a mirror, the coin flip became scrupulously fair. Exactly half of the self-conscious participants assigned the other person to the positive task.

The potency of attitudes forged through experience. Finally, we acquire attitudes in a manner that makes them sometimes potent, sometimes not. An extensive series of experiments by Russell Fazio and Mark Zanna (1981) shows that when attitudes arise from experience, they are far more likely to endure and to guide actions. They conducted one of their studies with the unwitting help of their university. A housing shortage forced the university to assign some first-year students to several weeks on cots in dormitory lounges while others basked in the relative luxury of permanent rooms.

When questioned by Dennis Regan and Fazio (1977), students in both groups had equally negative attitudes about the housing situation and how the administration was dealing with it. Given opportunities to act on their attitudes—to sign a petition and solicit other signatures, to join a committee to investigate the situation, to write a letter—only those whose attitudes grew from direct

“Thinking is easy, acting difficult, and to put one’s thoughts into action, the most difficult thing in the world.”

German poet Goethe, 1749–1832

“Without doubt it is a delightful harmony when doing and saying go together.”

Montaigne, *Essays*, 1588

experience with the temporary housing acted. Moreover, compared to attitudes formed passively, those forged in the fire of experience are more thoughtful, more certain, more stable, more resistant to attack, more accessible, and more emotionally charged (Millar & Millar, 1996; Sherman et al., 1983; Watts, 1967; Wu & Shaffer, 1987). And when the emotional and belief components of an attitude are consistent, the attitude moves behaviour—as strong attitudes do (Chaiken et al., 1995).

To summarize, our attitudes predict our actions if

- Other influences are minimized
- The attitude is specific to the action
- The attitude is potent—because something reminds us of it, or because we gained it in a manner that makes it strong

Do these conditions seem obvious? It may be tempting to think we “knew them all along.” But remember: They were not obvious to researchers in 1970. Nor were they obvious to German university students, when asked to guess the outcomes of published studies on attitude–behaviour consistency (Six & Krahe, 1984).

So it is now plain that, depending on the circumstances, the relationship between attitude statements and behaviour can range from no relationship to a strong one (Kraus, 1995). Yet we can breathe a sigh of relief that our attitudes are, after all, *one* determinant of our actions. To return to our philosophical question, there *is* a connection between what we are and what we do, even if that connection is looser than most of us would have guessed.

“It is easier to preach virtue than to practice it.”

La Rochefoucauld,
Maxims, 1665

Summing up

How do our inner attitudes relate to our external actions? Social psychologists agree that attitudes and actions feed each other. Popular wisdom stresses the impact of attitudes on action. Surprisingly, attitudes—usually assessed as feelings toward some object or person—are often poor predictors of actions. Moreover, changing people’s attitudes typically fails to produce much change in their behaviour. These findings sent social psychologists scurrying to find out why we so often fail to play the game we talk. The answer: Our expressions

of attitudes and our behaviours are each subject to many influences.

Our attitudes *will* predict our behaviour (1) if these “other influences” are minimized, (2) if the attitude corresponds very closely to the predicted behaviour (as in voting studies), and (3) if the attitude is potent (because something reminds us of it, or because we acquired it by direct experience). Thus there *is* a connection between what we think and feel and what we do, but in many situations that connection is weaker than we think.

Does behaviour determine attitudes?

If social psychology has taught us anything during the last 25 years, it is that we are likely not only to think ourselves into a way of acting but also to act ourselves into a way of thinking. What lines of evidence support this assertion?

“Thought is the child of Action.”

Benjamin Disraeli,
Vivian Grey, 1826

Now we turn to the more startling idea that behaviour determines attitudes. It’s true that we sometimes stand up for what we believe, but it’s also true that we come to believe in what we stand up for. Social-psychological theories

inspired much of the research that underlies this conclusion. Instead of beginning with these theories, we think it more interesting to first present the wide-ranging evidence that behaviour affects attitudes. This way you can play theorist as you read. Speculate *why* actions affect attitudes, and then compare your ideas with the explanations proposed by social psychologists.

Consider the following incidents, each based on actual happenings:

- Sarah is hypnotized and told to take off her shoes when a book drops on the floor. Fifteen minutes later a book drops, and Sarah quietly slips out of her loafers. “Sarah,” asks the hypnotist, “why did you take off your shoes?” “Well . . . my feet are hot and tired,” Sarah replies. “It has been a long day.” The act produces the idea.
- George has electrodes temporarily implanted in the brain region that controls his head movements. When neurosurgeon José Delgado (1973) stimulates the electrode by remote control, George always turns his head. Unaware of the remote stimulation, he offers a reasonable explanation for it: “I’m looking for my slipper.” “I heard a noise.” “I’m restless.” “I was looking under the bed.”
- Carol’s severe seizures were relieved by surgically separating her two brain hemispheres. Now, in an experiment, psychologist Michael Gazzaniga (1985) flashes a picture of a nude woman to the left half of Carol’s field of vision and thus to her nonverbal right brain hemisphere. A sheepish smile spreads over her face, and she begins chuckling. Asked why, she invents—and apparently believes—a plausible explanation: “Oh—that funny machine.” Frank, another split-brain patient, has the word “smile” flashed to his nonverbal right hemisphere. He obliges and forces a smile. Asked why, he explains, “This experiment is very funny.”

The mental aftereffects of our behaviour indeed appear in a rich variety of social situations: *Our attitudes follow our behaviour*. The following examples will illustrate the power of self-persuasion.

Role playing

The word **role** is borrowed from the theatre and, as in the theatre, refers to *actions expected of those who occupy a particular social position*. When stepping into a new social role, we must perform its actions, even if we feel phony. But our unease seldom lasts.

Think of a time when you stepped into some new role—perhaps your first days on a job, or at university, or in a sorority or fraternity. That first week on campus, for example, you may have been supersensitive to your new social situation and tried valiantly to act appropriately and root out your high-school behaviour. At such times we feel self-conscious. We observe our new speech and actions because they aren’t natural to us. Then one day an amazing thing happens: We notice that our sorority enthusiasm or our pseudo-intellectual talk no longer feels forced. The role has begun to fit as comfortably as our old jeans and T-shirt.

In one study, university men volunteered to spend time in a simulated prison constructed in the psychology department by Philip Zimbardo (1971). Zimbardo, like so many others, wondered whether prison brutality is a product of evil prisoners and malicious guards or whether the institutional roles of guard and prisoner would embitter and harden even compassionate people. Do the people make the place violent? Or does the place make the people violent?

role

a set of norms that define how people in a given social position ought to behave

“No man, for any considerable period, can wear one face to himself and another to the multitude without finally getting bewildered as to which may be true.”

Nathaniel Hawthorne, 1850

After the degradation of Iraqi prisoners by some U.S. military personnel, Philip Zimbardo (2004a, b) noted “direct and sad parallels between similar behaviour of the ‘guards’ in the Stanford Prison Experiment.” Such behaviour, he contends, is attributable to a toxic situation that can make good people into perpetrators of evil. “It’s not that we put bad apples in a good barrel. We put good apples in a bad barrel. The barrel corrupts anything that it touches.”



By a flip of a coin, he designated some students as guards. He gave them uniforms, billy clubs, and whistles and instructed them to enforce the rules. The other half, the prisoners, were locked in cells and made to wear humiliating outfits. After a jovial first day of “playing” their roles, the guards and prisoners, and even the experimenters, got caught up in the situation. The guards began to disparage the prisoners, and some devised cruel and degrading routines. The prisoners broke down, rebelled, or became apathetic. There developed, reported

Zimbardo (1972), a “growing confusion between reality and illusion, between role-playing and self-identity. . . . This prison which we had created . . . was absorbing us as creatures of its own reality.” Observing the emerging social pathology, Zimbardo was forced to call off the planned two-week simulation after only six days.

Recently, images from the Abu Ghraib prison in Iraq bore an eerie similarity to the Stanford prison experiment. U.S. soldiers acting as prison guards engaged in brutal and demeaning treatment of their Iraqi prisoners. Most soldiers sat by and watched the atrocities occur without raising a warning or trying to stop them. This reaction too resembled the Stanford prison experiment. The role of prison guard brought out hostility in some, but an even more common



Guards and prisoners in a prison simulation quickly absorbed the roles they played.

result of the role seems to be that it prevents intervening even to help those who are clearly in need.

The deeper lesson of role-playing studies concerns how what is unreal (an artificial role) can evolve into what is real. In a new career, as teacher, soldier, or businessperson, we act a role that shapes our attitudes.

Gender roles

One prominent role given to us by our society is our gender. Early on we are socialized into gender roles. Gender socialization, it has been said, gives girls “roots” and boys “wings.” In Caldecott Award children’s books over the last half-century, girls have four times more often than boys been shown using household objects (such as broom, sewing needle, or pots and pans), and boys have five times more often than girls been shown using production objects (such as pitchfork, plow, or gun) (Crabb & Bielawski, 1994). The adult result: “Everywhere,” reports the United Nations (1991), women do most household work. And “everywhere, cooking and dishwashing are the least shared household chores.” Such behaviour expectations for males and females define **gender roles**.

In an experiment with undergraduate women, Mark Zanna and Susan Pack (1975) showed the impact of gender role expectations. The women answered a questionnaire on which they described themselves to a tall, unattached, senior man they expected to meet. Those led to believe his ideal woman was home-oriented and deferential to her husband presented themselves as more

“My whole personality changed during the time I was doing the part.”

Ian Charleson on his role as serene and devout Olympic hero Eric Liddell in *Chariots of Fire*

gender role

a set of behaviour expectations (norms) for males and females



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How are boys and girls socialized? Go to the *SocialSense* CD-ROM to view Alice Eagly on this topic.

Do you ever present one self to members of your own sex and a different self to members of the other sex?

THE STORY Behind the Research

When I began my career at Princeton in 1970, the first group of female undergraduates had just enrolled at this formerly all-male bastion. These pioneers were incredibly bright and very ambitious. Indeed, the majority intended to become doctors, lawyers, or professors! It was Susan Pack's intuition that, despite the great capabilities and high achievement motivation of her female peers, they still "acted dumb" when confronted with the typical attractive, though chauvinistic, Princeton male.

Susan's undergraduate honours thesis, designed to test this notion, demonstrated that Princeton females "acted dumb" or "acted

smart" depending, in part, on whether they believed an attractive Princeton male held chauvinistic or liberated attitudes about women. I wonder: Would these results hold today at Princeton? At other colleges? Would males, too, act to fulfill the gender stereotypes of attractive females?

Mark Zanna
University of Waterloo



Canadian husbands do 67 percent of the maintenance and repairs around the home, but only 27 percent of the meal preparation and cleanup, and only 23 percent of the housecleaning.

Statistics Canada, 1998

traditionally feminine than did women expecting to meet a man who liked strong, ambitious women. Moreover, given a problem-solving test, those expecting to meet the nonsexist man behaved more intelligently: They solved 18 percent more problems than those expecting to meet the man with the traditional views. This adapting of themselves to fit the man's image was much less pronounced if the man was less desirable—a short, already attached freshman. In a companion experiment by Dean Morier and Cara Seroy (1994), men similarly adapted their self-presentations to meet desirable women's gender role expectations. Clearly our gender roles can shape our actions.

Saying becomes believing

Role playing's effect is akin to the *saying-becomes-believing* effect. Consider, first, the human tendency to adapt what we say to please our listeners. People induced to give spoken or written witness to something about which they have real doubts will often feel bad about their deceit. Nevertheless, they begin to believe what they are saying—*provided* they weren't bribed or coerced into doing so. When there is no compelling external explanation for one's words, saying becomes believing (Klaas, 1978).

Tory Higgins and his colleagues (Higgins & Rholes, 1978; Higgins & McCann, 1984) illustrated how saying becomes believing. They had university students read a personality description of someone and then summarize it for someone else who was believed either to like or to dislike this person. The students wrote a more positive description when the recipient liked the person, and, having said positive things, then liked the person more themselves. Asked to recall what they had read, they remembered the description as being more positive than it was. In short, it seems that we are prone to adjust our messages to our listeners, and having done so, to believe the altered message.

FOCUS ON saying becomes believing

University of Oregon psychologist Ray Hyman (1981) described how acting the role of a palm reader convinced him that palmistry worked.

I started reading palms when I was in my teens as a way to supplement my income from doing magic and mental shows. When I started I did not believe in palmistry. But I knew that to “sell” it I had to act as if I did. After a few years I became a firm believer in palmistry. One day the late Stanley Jaks, who

was a professional mentalist and a man I respected, tactfully suggested that it would make an interesting experiment if I deliberately gave readings opposite to what the lines indicated. I tried this out with a few clients. To my surprise and horror my readings were just as successful as ever. Ever since then I have been interested in the powerful forces that convince us, [palm] reader and client alike, that something is so when it really isn't. (p. 86)

The foot-in-the-door phenomenon

Most of us can recall times when, after agreeing to help out with a project or an organization, we ended up more involved than we ever intended, vowing that in the future we would say no to such requests. How does this happen? Experiments suggest that if you want people to do a big favour for you, one technique is to get them to do a small favour first. In the best-known demonstration of this **foot-in-the-door** principle, researchers posing as safety-drive volunteers asked people to permit the installation of a huge, poorly lettered “Drive Carefully” sign in their front yards. Only 17 percent consented. Others were first approached with a small request: Would they display a 7.5-centimetre “Be a safe driver” window sign? Nearly all readily agreed. When approached two weeks later to allow the large, ugly sign in their front yards, 76 percent consented (Freedman & Fraser, 1966). One project helper who went from house to house later recalled that, not knowing who had been previously visited, “I was simply stunned at how easy it was to convince some people and how impossible to convince others” (Ornstein, 1991).

Other researchers have confirmed the foot-in-the-door phenomenon with altruistic behaviours.

- Patricia Pliner and her collaborators (1974) found 46 percent of Toronto suburbanites willing to give to the Cancer Society when approached directly. Others, asked a day ahead to wear a lapel pin publicizing the drive (which all agreed to do), were nearly twice as likely to donate.



foot-in-the-door phenomenon

the tendency for people who have first agreed to a small request to comply later with a larger request

“You will easily find folk to do favors if you cultivate those who have done them.”

Publilius Syrus, 42 B.C.

A foot in the door. To get people to donate blood or money, it often helps to first elicit a smaller commitment to the same cause.

- Anthony Greenwald and his co-researchers (1987) approached a sample of registered voters the day before an election and asked them a small question: “Do you expect that you will vote or not?” All said yes. Compared to other voters not asked their intentions, they were 41 percent more likely to vote.
- Angela Lipsitz and others (1989) report that ending blood-drive reminder calls with “We’ll count on seeing you then, OK? [pause for response]” increased the show-up rate from 62 to 81 percent.

Note that in these experiments the initial compliance—signing a petition, wearing a lapel pin, stating one’s intention—was voluntary. We will see again and again that when people commit themselves to public behaviours *and* perceive these acts to be their own doing, they come to believe more strongly in what they have done.

Robert Cialdini [chal-DEE-nee] and his collaborators (1978) demonstrated a variation of the foot-in-the-door phenomenon by experimenting with the **low-ball technique**, a tactic reportedly used by some car dealers. After the customer agrees to buy a new car because of its great price and begins completing the sales forms, the salesperson removes the price advantage by charging for options the customer thought were included or by checking with a boss who disallows the deal because, “We’d be losing money.” Folklore has it that more customers now stick with the higher-priced purchase than would have agreed to it at the outset.

Airlines and hotels have also used the tactic by attracting inquiries with great deals available on only a few seats or rooms, then hoping the customer will agree to a higher-priced option. Cialdini and his collaborators found that this technique indeed works. When they invited introductory psychology students to participate in an experiment at 7:00 A.M., only 24 percent showed up. But if the students first agreed to participate without knowing the time and only then were asked to participate at 7:00 A.M., 53 percent came.

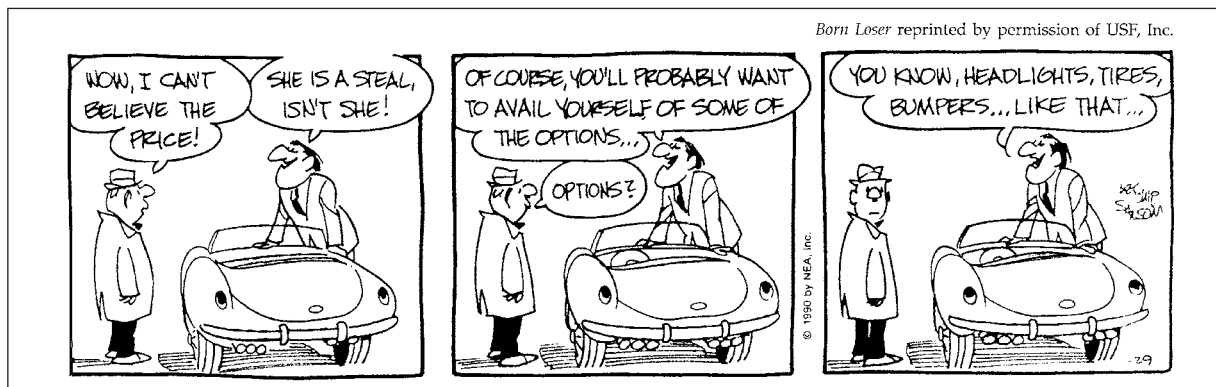
Marketing researchers and salespeople have found that the principle works even when we are aware of a profit motive (Cialdini, 1988). A harmless initial commitment—returning a card for more information and a gift, agreeing to listen

low-ball technique

a tactic for getting people to agree to something. People who agree to an initial request will often still comply when the requester ups the ante. People who receive only the costly request are less likely to comply with it.

The low-ball technique.

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THE STORY Behind the Research

All my life I've been a patsy. For as long as I can recall, I've been an easy mark for the pitches of peddlers, fundraisers, and operators of one sort or another. Being a sucker contributes to my interest in the study of compliance: Just what are the factors that cause one person to say yes to another person? To help answer this question, I conduct laboratory experiments. I also spent three years infiltrating the world of compliance professionals. By becoming a trainee in

various sales, fundraising, and advertising organizations, I discovered how they exploit the weapons of influence and how we can spot these weapons at work.

Robert B. Cialdini
Arizona State University



to an investment possibility—often moves us toward a larger commitment. Salespeople may exploit the power of small commitments when trying to bind people to purchase agreements. Many places now have laws that allow customers of door-to-door salespeople a few days to think over their purchases and cancel. To combat the effect of these laws, many companies use what the sales-training program of one encyclopedia company calls “a very important psychological aid in preventing customers from backing out of their contracts” (Cialdini, 1988, p. 78). They simply have the customer, rather than the salesperson, fill out the agreement. Having written it themselves, people usually live up to their commitment.

The foot-in-the-door phenomenon is well worth learning about. Someone trying to seduce us—financially, politically, or sexually—usually will try to create a momentum of compliance. Before agreeing to a small request, think about what may follow.

Evil acts and attitudes

The attitudes-follow-behaviour principle works with more immoral acts as well. Evil sometimes results from gradually escalating commitments. A trifling evil act can make a worse act easier. Evil acts gnaw at the actor's moral sensitivity. To paraphrase La Rochefoucauld's *Maxims* (1665), it is not as difficult to find a person who has never succumbed to a given temptation as to find a person who has succumbed only once.

For example, cruel acts corrode the consciences of those who perform them. Harming an innocent victim—by uttering hurtful comments or delivering electric shocks—typically leads aggressors to disparage their victims, thus helping them justify their behaviour (Berscheid et al., 1968; Davis & Jones, 1960; Glass, 1964). We tend not only to hurt those we dislike but to dislike those we hurt. In studies establishing this, people would justify an action especially when coaxed, not coerced, into it. When we voluntarily agree to do a deed, we take more responsibility for it.

The phenomenon appears in wartime, as soldiers denigrate their enemies with dehumanizing nicknames. It also appears in peacetime. A group that

“Our self-definitions are not constructed in our heads; they are forged by our deeds.”

Robert McAfee Brown,
*Creative Dislocation—
The Movement of Grace*,
1980

Mourners walk with the hearse carrying murder victim David Rosenzweig following his funeral service at Toronto in July 2002. Rosenzweig was the victim of an alleged hate crime. Acts like this can compound fear or even breed more prejudice.



holds another in slavery will likely come to perceive the slaves as having traits that justify their oppression. Actions and attitudes feed one another, sometimes to the point of moral numbness. The more one harms another and adjusts one's attitudes, the easier harm-doing becomes. Conscience mutates.

Good acts and attitudes

Evil acts shape the self, but, thankfully, so do moral acts. Character, it is said, is reflected in what we do when we think no one is looking. Researchers have tested character by giving children temptations when it seems no one is watching. Consider what happens when children resist the temptation. They internalize the conscientious act *if* the deterrent is strong enough to elicit the desired *behaviour* yet mild enough to leave them with a sense of *choice*. In a dramatic experiment, Jonathan Freedman (1965) introduced elementary school children to an enticing battery-controlled robot, instructing them not to play with it while he was out of the room. Freedman used a severe threat with half the children and a mild threat with the others. Both were sufficient to deter the children.

Several weeks later a different researcher, with no apparent relation to the earlier events, left each child to play in the same room with the same toys. Of the 18 children who had been given the severe threat, 14 now freely played with the robot; but two-thirds of those who had been given the mild deterrent still resisted playing with it. Having earlier made a conscious choice *not* to play with the toy, the mildly deterred children apparently internalized their decision. This new attitude controlled their subsequent action. Thus, moral action, especially when chosen rather than coerced, affects moral thinking.

If moral action feeds moral attitudes, can laws and rules that require moral conduct lead to genuine moral beliefs? Elliot Aronson (1992) has argued that such change is possible. His argument runs like this: If we wait for the heart to change—

through preaching and teaching—we will wait a long time. But if we legislate moral action, we can, under the right conditions, indirectly affect heartfelt attitudes.

The idea runs counter to the presumption that “you can’t legislate morality.” Yet attitude change has, in fact, followed changes in the laws. Consider some of the following:

- In the 1980s and 1990s many governments began requiring the use of seat belts by all people riding in automobiles. Initially, these laws were seen as burdensome and were opposed by many. But over time seat belt use has risen dramatically, and now most people in these jurisdictions favour mandatory seat belt laws.
- In 1954 the Supreme Court of the United States ruled that schools segregated by race were inherently unfair and that such schools were required to desegregate. Since that decision the percentage of Whites in the U.S. favouring integrated schools has more than doubled and now includes nearly everyone.
- In the 1970s many National Hockey League players did not wear helmets. Older players saw this as a measure of toughness. But in the 1980s, almost all bantam and junior hockey leagues required players to wear helmets. Now all players in the NHL wear helmets and see them as an important safety measure. Having grown up with helmets, they now believe they are useful.

Do laws always lead to the adoption of consistent attitudes? Almost certainly not. There are times when it is true that “you can’t legislate morality.” But research in social psychology confirms that under the right conditions people’s attitudes follow their behaviours even when these behaviours are required. For example, experiments demonstrate that positive behaviour toward someone fosters liking for that person.

Doing a favour for an experimenter or another subject, or tutoring a student, usually increases liking of the person helped (Blanchard & Cook, 1976). It is a lesson worth remembering: If you wish to love someone more, act as if you do.

Social movements

The effect of a society’s behaviour on its people’s attitudes suggests the possibility, and the danger, of employing the same idea for political socialization on a mass scale. For many Germans during the 1930s, participation in Nazi rallies, wearing uniforms, demonstrating, and especially the public greeting “Heil Hitler” established a profound inconsistency between behaviour and belief. Historian Richard Grunberger (1971) reports that for those who had their doubts about Hitler, “The ‘German greeting’ was a powerful conditioning device. Having once decided to intone it as an outward token of conformity, many experienced schizophrenic discomfort at the contradiction between their words and their feelings. Prevented from saying what they believed, they tried to establish their psychic equilibrium by consciously making themselves believe what they said” (p. 27).

The practice is not limited to totalitarian regimes. Political rituals—the daily flag salute by schoolchildren, singing the national anthem—use public conformity to build a private belief in patriotism. Steven Spencer was amazed at the strong sense of being a Canadian that his son developed in junior kindergarten.

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

Leo Tolstoy, *War and Peace*, 1867–1869



*Celebrating Canada Day:
Patriotic actions strengthen
patriotic attitudes.*

“One does what
one is; one becomes
what one does.”

Robert Musil, *Kleine
Prosa*, 1930

“You can use small
commitments to
manipulate a
person’s self-image;
you can use them to
turn citizens into
'public servants,'
prospects into
'customers,'
prisoners into
'collaborators.'”

Robert Cialdini,
Influence, 1988

Before school his son had virtually no identity as a Canadian, but after three weeks of singing *O Canada* on Mondays he was Canadian through and through. Observers noted how the civil rights marches of the 1960s strengthened the demonstrators’ commitments. Their actions expressed an idea whose time had come and drove that idea more deeply into their hearts. The 1980s move toward gender-inclusive language has similarly strengthened inclusive attitudes.

Many people assume that most social indoctrination comes through *brainwashing*, a term coined to describe what happened to prisoners of war (POWs) during the 1950s Korean war. Actually, the Chinese “thought-control” program, developed to re-educate the Chinese populace into communism, was not nearly as irresistible as this term suggests. But the results still were disconcerting. Hundreds of prisoners cooperated with their captors. Twenty-one chose to remain after being granted permission to return to the United States. And many of those who did return came home believing “although communism won’t work in America, I think it’s a good thing for Asia” (Segal, 1954).

Edgar Schein (1956) interviewed many of the POWs during their journey home and reported that the captors’ methods included a gradual escalation of demands. The Chinese always started with trivial requests and gradually worked up to more significant ones. “Thus after a prisoner had once been ‘trained’ to speak or write out trivia, statements on more important issues were demanded.” Moreover, they always expected active participation, be it just copying something or participating in group discussions, writing self-criticism, or uttering public confessions. Once a prisoner had spoken or written a statement, he felt an inner need to make his beliefs consistent with his acts. This often drove prisoners to persuade themselves of what they had done. The “start-small-and-build” tactic was an effective application of the foot-in-the-door technique, as it continues to be today in the socialization of terrorists and torturers (Chapter 6).

Let me ask you, before reading further, to play theorist. Ask yourself: Why in these studies and real-life examples did attitudes follow behaviour? Why might playing a role or making a speech influence how *you* feel about something?

The attitude–action relation also works in the reverse direction: We are likely not only to think ourselves into action but also to act ourselves into a way of thinking. When we act, we amplify the idea underlying what we have done, especially when we feel responsible for it.

Many streams of evidence converge on this principle. The actions prescribed by social roles mould the attitudes of the role players. Research

on the foot-in-the door phenomenon reveals that committing a small act later makes people more willing to do a larger one. Actions also affect our moral attitudes: That which we have done we tend to justify as right. Similarly, our racial and political behaviours help shape our social consciousness: We not only stand up for what we believe, we also believe in what we have stood up for.

Summing up

Why do actions affect attitudes?

What theories help explain the attitudes-follow-behaviour phenomenon? How does the contest between these competing ideas illustrate the process of scientific explanation?

We have seen that several streams of evidence merge to form a river: the effect of actions on attitudes. Do these observations contain any clues to *why* action affects attitude? Social psychology's detectives suspect three possible sources. *Self-presentation theory* assumes that for strategic reasons we express attitudes that make us *appear* consistent. *Cognitive dissonance theory* assumes that to reduce discomfort, we *justify* our actions to ourselves. *Self-perception theory* assumes that our actions are *self-revealing* (when uncertain about our feelings or beliefs, we look to our behaviour, much as anyone else would). Let's examine each.

Self-presentation: Impression management

The first explanation began as a simple idea, which you may recall from Chapter 2. Who among us does not care what people think? We spend countless dollars on clothes, diets, cosmetics, even plastic surgery—all because we worry about what others think of us. To make a good impression is often to gain social and material rewards, to feel better about ourselves, even to become more secure in our social identities (Leary, 1994).

Self-presentation theory assumes that our behaviour aims to create desired impressions.

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No one wants to look foolishly inconsistent. To avoid seeming so, we express attitudes that match our actions. To *appear* consistent, we may pretend attitudes we don't really believe in. Even if it means displaying a little insincerity or hypocrisy, it can pay to manage the impression one is making. Or so *self-presentation theory* suggests.

Does our eagerness to *appear* consistent explain why expressed attitudes shift toward consistency with behaviour? To some extent, yes—people exhibit a much smaller attitude change when a bogus pipeline inhibits trying to make a good impression (Paulhus, 1982; Tedeschi et al., 1987).

But there is more to the attitude changes we have reviewed than self-presentation, for people express their changed attitudes even to someone who doesn't know how they have behaved. Two other theories explain why people sometimes internalize their self-presentations as genuine attitude changes.

Self-justification: Cognitive dissonance

One theory is that our attitudes change because we are motivated to maintain consistency among our cognitions. This is the implication of Leon Festinger's (1957) **cognitive dissonance theory**. The theory is simple, but its range of application is enormous. It assumes *we feel tension ("dissonance") when two simultaneously accessible thoughts or beliefs ("cognitions") are psychologically inconsistent*—as when we decide to say or do something we have mixed feelings about. Festinger argued that to reduce this unpleasant arousal, we often adjust our thinking.

Dissonance theory pertains mostly to discrepancies between behaviour and attitudes. We are aware of both. Thus, if we sense some inconsistency, perhaps some hypocrisy, we feel pressure for change. That helps explain why, in a British survey, half of cigarette smokers therefore disagreed with the near-consensus among nonsmokers that smoking is "really as dangerous as people say" (Eiser et al., 1979) and why the perception of risk among those who have quit declines after relapsing (Gibbons et al., 1997).

So if we can persuade others to adopt a *new* attitude, their behaviour should change accordingly; that's common sense. Or if we can induce people to behave differently, their attitude should change (that's the self-persuasion effect we have been reviewing). But cognitive dissonance theory offers several surprising predictions. See if you can anticipate them.

cognitive dissonance

tension that arises when one is simultaneously aware of two inconsistent cognitions. For example, dissonance may occur when we realize that we have, with little justification, acted contrary to our attitudes or made a decision favouring one alternative despite reasons favouring another.

"A foolish consistency is the hobgoblin of little minds."

Ralph Waldo Emerson, "Self-Reliance," 1841

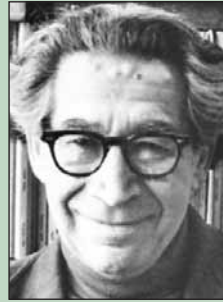
Insufficient justification

Imagine you are a subject in a famous experiment staged by the creative Festinger and his student, J. Merrill Carlsmith (1959). For an hour, you are required to perform dull tasks, such as turning wooden knobs again and again. After you finish, the experimenter (Carlsmith) explains that the study concerns how expectations affect performance. The next subject, waiting outside, must be led to expect an interesting experiment. The seemingly distraught experimenter, whom Festinger had spent hours coaching until he became extremely convincing, explains that the assistant who usually creates this expectation couldn't make this session. Wringing his hands, he pleads, "Could you fill in and do this?"

It's for science and you are being paid, so you agree to tell the next subject (who is actually the experimenter's real assistant) what a delightful experience you have just had. "Really?" responds the supposed subject. "A friend of mine was in this experiment a week ago, and she said it was boring." "Oh, no," you respond, "it's really very interesting. You get good exercise while turning some

THE STORY Behind the Research

Following a 1934 earthquake in India, there were rumours outside the disaster zone of worse disasters to follow. It occurred to me that these rumours might be “anxiety-justifying”—cognitions that would justify their lingering fears. From that germ of an idea, I developed my theory of dissonance reduction—making your view of the world fit with how you feel or what you’ve done.



Leon Festinger
1920–1989

knobs. I’m sure you’ll enjoy it.” Finally, someone else who is studying how people react to experiments has you complete a questionnaire that asks how much you actually enjoyed your knob-turning experience.

Now for the prediction: Under which condition are you most likely to believe your little lie and say the experiment was indeed interesting? When paid \$1 for doing so, as some of the subjects were? Or when paid a then-generous \$20, as others were? Contrary to the common notion that big rewards produce big effects, Festinger and Carlsmith made an outrageous prediction: Those paid just \$1 (hardly sufficient justification for a lie) would be most likely to adjust their attitudes to their actions. Having **insufficient justification** for their action, they would experience more discomfort (dissonance) and thus be more motivated to believe in what they had done. Those paid \$20 had sufficient justification for what they did and hence should have experienced less dissonance. As Figure 4–2 shows, the results fit this intriguing prediction.*

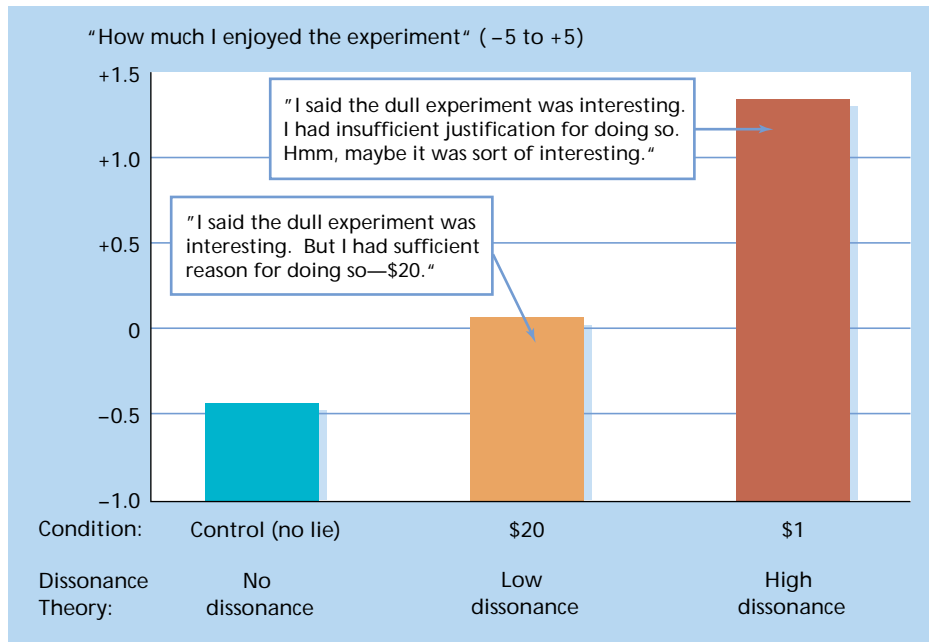
In dozens of later experiments, the attitudes-follow-behaviour effect was strongest when people felt some *choice* and when their action had foreseeable *consequences*. One experiment had people read disparaging lawyer jokes into a recorder (for example, “How can you tell when a lawyer is lying? His lips are moving”). The reading produced more negative attitudes toward lawyers when it was a chosen rather than coerced activity (Hobden & Olson, 1994). Other experiments have engaged people to write an essay for a measly \$1.50 or so. When the essay argues something they don’t believe in—say, a tuition increase—the underpaid writers begin to feel somewhat greater sympathy with the policy. Advocating a policy favourable to another race may improve your attitudes not only toward the policy but toward the race. This is especially so if something makes you face the inconsistency or if you think important people will actually read an essay with your name on it (Leippe & Eisenstadt, 1994; Leippe & Elkin, 1987). Feeling responsible for statements you have made, you will now believe them more strongly. Pretense becomes reality.

insufficient justification effect
reduction of dissonance by internally justifying one’s behaviour when external justification is “insufficient”

*There is a seldom-reported final aspect of this 1950s experiment. Imagine yourself finally back with the experimenter, who is truthfully explaining the whole study. Not only do you learn that you’ve been duped, but the experimenter asks for the \$20 back. Do you comply? Festinger and Carlsmith note that all their student subjects willingly reached into their pockets and gave back the money. This is a foretaste of some quite amazing observations on compliance and conformity discussed in Chapter 6. As we will see, when the social situation makes clear demands, people usually respond accordingly.

figure 4–2**Insufficient justification.**

Dissonance theory predicts that when our actions are not fully explained by external rewards or coercion, we will experience dissonance, which we can reduce by believing what we have done. (Data from Festinger & Carlsmith, 1959)



Earlier we noted how the insufficient justification principle works with punishments. Children were more likely to internalize a request not to play with an attractive toy if given a mild threat that insufficiently justified their compliance. When a parent says, "Clean up your room, Johnny, or I'll knock your block off," Johnny won't need to internally justify cleaning his room. The severe threat is justification enough.

Note that cognitive dissonance theory focuses on what *induces* a desired action, rather than the relative effectiveness of rewards and punishments administered *after* the act. It aims to have Johnny say, "I am cleaning up my room because I want a clean room," rather than, "I am cleaning up my room because my parents will kill me if I don't." The principle: We accept responsibility for our behaviour if we have chosen it without obvious pressure and incentives.

These implications of dissonance theory have led some to view it as an integration of humanistic and scientific perspectives. Authoritarian management will be effective, the theory predicts, only when the authority is present—because people are unlikely to internalize forced behaviour. Bree, a formerly enslaved talking horse in C. S. Lewis's *The Horse and His Boy* (1974), observes that "One of the worst results of being a slave and being forced to do things is that when there is no one to force you any more you find you have almost lost the power of forcing yourself" (p. 193). Dissonance theory insists that encouragement and inducement should be enough to elicit the desired action. But it suggests that managers, teachers, and parents should use only enough incentive to elicit the desired behaviour.

Dissonance after decisions

The emphasis on perceived choice and responsibility implies that *decisions* produce dissonance. When faced with an important decision—what university to attend, whom to date, which job to accept—we are sometimes torn between two

equally attractive alternatives. Perhaps you can recall a time when, having committed yourself, you become painfully aware of dissonant cognitions—the desirable features of what you had rejected and the undesirable features of what you had chosen. If you decided to live on campus, you may have realized you were forgoing the spaciousness and freedom of an apartment in favour of cramped, noisy dorm quarters. If you elected to live off campus, you may have realized that your decision meant physical separation from campus and friends and having to cook for yourself.



Dissonance theory suggests that parents should aim to elicit desired behaviour noncoercively, thus motivating children to internalize the appropriate attitudes.

After making important decisions, we usually reduce dissonance by upgrading the chosen alternative and downgrading the unchosen option. In the first published dissonance experiment (1956), Jack Brehm had women rate eight products, such as a toaster, a radio, and a hair dryer. Brehm then showed the women two objects they had rated closely and told them they could have whichever they chose. Later, when rerating the eight objects, the women increased their evaluations of the item they had chosen and decreased their evaluations of the rejected item. It seems that after we have made our choice, the grass does *not* then grow greener on the other side of the fence.

With simple decisions, this deciding-becomes-believing effect can occur very quickly. Robert Knox and James Inkster (1968) found that bettors at a Vancouver racetrack who had just put down their money on a horse felt

“Every time you make a choice you are turning the central part of you, the part of you that chooses, into something a little different from what it was before.”

C. S. Lewis, *Mere Christianity*, 1943



Big decisions can produce big dissonance when one later ponders the negative aspects of what is chosen and the positive aspects of what is not chosen.

more optimistic about their bet than did those who were about to bet. In the few moments that intervened between standing in line and walking away from the betting window, nothing had changed—except the decisive action and the person’s feelings about it. Contestants in carnival games of chance feel more confident of winning right after agreeing to play than right before. And voters indicate more esteem and confidence in a candidate just after voting than just before (Younger et al., 1977).

These experiments and examples suggest that, once made, decisions grow their own self-justifying legs of support. Often, these new legs are strong enough that when one leg is pulled away—perhaps the original one—the decision does not collapse. Alison decides to take a trip home if it can be done for an airfare under \$400. It can, so she makes her reservation and begins to think of additional reasons why she is glad she is going. When she goes to buy the tickets, however, she learns there has been a fare increase to \$475. No matter, she is now determined to go. As when being low-balled by a car dealer, it never occurs to people, reports Robert Cialdini (1984, p. 103), “that those additional reasons might never have existed had the choice not been made in the first place.”

Self-perception

Although dissonance theory has inspired much research, an even simpler theory explains its phenomena. Consider how we make inferences about other people’s attitudes. We see how a person acts in a particular situation, and then we attribute the behaviour either to the person’s traits and attitudes or to environmental forces. If we see parents coercing their little Susie into saying, “I’m sorry,” we attribute Susie’s reluctant behaviour to the situation, not to her personal regret. If we see Susie apologizing with no apparent inducement, we attribute the apology to Susie herself.

figure 4–3
Attitudes follow behaviour.

Why do actions affect attitudes?





Self-perception theory (proposed by Daryl Bem, 1972) assumes that we make similar inferences when we observe our own behaviour. When our attitudes are weak or ambiguous, we are in the position of someone observing us from the outside. We discern people's attitudes by looking closely at their actions when they are free to act as they please. We similarly discern our own attitudes. Hearing yourself talk informs you of your attitudes; seeing your actions provides clues to how strong your beliefs are. This is especially so when you can't easily attribute your behaviour to external constraints. The acts we freely commit are self-revealing (Figure 4-3).

William James proposed a similar explanation for emotion a century ago. We infer our emotions, he suggested, by observing our bodies and our behaviours. A stimulus such as a growling bear confronts a woman in the forest. She tenses, her heartbeat increases, adrenalin flows, and she runs away. Observing all this, she then experiences fear. Before big lectures one of the authors often wakes before dawn and is unable to get back to sleep. Noting his wakefulness, he concludes that he must be anxious.

Expressions and attitude

You may be skeptical of the self-perception effect. We were when we first heard it. Experiments on the effects of facial expressions, however, suggest a way for you to experience it. When James Laird (1974, 1984; Duclos et al., 1989) induced university students to frown while attaching electrodes to their faces—"contract these muscles," "pull your brows together"—they reported feeling angry. It's more fun to try out Laird's other finding: Those induced to make a smiling face felt happier and found cartoons more humorous.

We have all experienced this phenomenon. We're feeling crabby, but then the phone rings or someone comes to the door and elicits from us warm, polite behaviour. "How's everything?" "Just fine, thanks. How are things with you?" "Oh, not bad. . . ." If our feelings are not intense, this warm behaviour may change our whole attitude. It's tough to smile and feel grouchy. When Miss Universe parades her smile, she may, after all, be helping herself feel happy. As Rodgers and Hammerstein reminded us, when we are afraid it may help to "whistle a happy tune." Going through the motions can trigger the emotions.

According to German psychologist Fritz Strack and colleagues (1988), people find cartoons funnier while holding a pen with their teeth using a smiling muscle) than while holding it with their lips (using muscles incompatible with smiling).

self-perception theory

the theory that when unsure of our attitudes, we infer them much as would someone observing us—by looking at our behaviour and the circumstances under which it occurs

"Self-knowledge is best learned, not by contemplation, but action."

Goethe, 1749–1832

"I can watch myself and my actions, just like an outsider."

Anne Frank, *The Diary of a Young Girl*, 1947



What is the effect of facial expressions? Go to the *SocialSense* CD-ROM to view a video clip on motivation and the emotional language of the face.

“The free expression by outward signs of emotion intensifies it. On the other hand, the repression as far as possible, of all outward signs softens our emotions.”

Charles Darwin, *The Expression of the Emotions in Man and Animals*, 1897

This assumes you are not in Bulgaria—where an abrupt vertical head nod signifies not yes, but “no.”

Even your gait can affect how you feel. When you get up from reading this chapter, walk for a minute taking short, shuffling steps, with eyes downcast. It’s a great way to feel depressed. “Sit all day in a moping posture, sigh, and reply to everything with a dismal voice, and your melancholy lingers,” noted William James (1890, p. 463). Want to feel better? Walk for a minute taking long strides with your arms swinging and your eyes straight ahead. Can you, like the participants in an experiment by Sara Snodgrass (1986), feel the difference?

If our expressions influence our feelings, then would imitating others’ expressions help us know what they are feeling? An experiment by Katherine Burns Vaughan and John Lanzetta (1981) suggests it would. They asked students to observe someone receiving electric shock. They told some of the observers to make a pained expression whenever the shock came on. If, as Freud and others supposed, expressing an emotion allows us to discharge it, then the pained expression should be inwardly calming (Cacioppo et al., 1991). Actually, compared to other students who did not act out the expressions, these grimacing students perspired *more* and had a faster heart rate whenever they saw the person shocked. Acting out the person’s emotion apparently enabled the observers to feel more empathy. The implication: To sense how other people are feeling, let your own face mirror their expressions.

Actually, you hardly need try. Observing others’ faces, postures, and voices, we naturally and unconsciously mimic their moment-to-moment reactions (Hatfield et al., 1992). We synchronize our movements, postures, and tones of voice with theirs. Doing so helps us tune in to what they’re feeling. It also makes for “emotional contagion,” helping explain why it’s fun to be around happy people and depressing to be around depressed people (see Module A).

Our facial expressions also influence our attitudes. In a clever experiment, Gary Wells and Richard Petty (1980) had University of Alberta students “test headphone sets” by making either vertical or horizontal head movements while listening to a radio editorial. Who most agreed with the editorial? Those who had been nodding their heads up and down. Why? Wells and Petty surmised that positive thoughts are compatible with vertical nodding and incompatible with horizontal motion. Try it yourself when listening to someone: Do you feel more agreeable when nodding rather than shaking your head?

In an even zanier experiment, John Cacioppo and his colleagues (1993) had people rate Chinese characters when pressing their arms upward (as when lifting food) or downward (as when pushing something or someone away). Which flex condition do you suppose triggered the most positive ratings? It was the upward flex. (Try it out: Do you get a more positive feeling while lifting a table edge with upturned hands rather than pressing down? Might this motion-affects-emotion phenomenon predispose people to feel better at parties while holding food or drink?) In a follow-up experiment, Roland Neumann and Fritz Strack (2000) had University of Wurzburg students see how fast they could recognize words as positive or negative. Each student reacted to the words by pressing a left or right key (using two fingers of one hand). Meanwhile, the other hand was either pressing up (the approach muscles) or down and away. Can you guess the result? The students more speedily classified the positive words if their other hand was activating the positive, approach muscular response.



Overjustification and intrinsic motivations

Recall the insufficient justification effect—the *smallest* incentive that will get people to do something is usually the most effective in getting them to like the activity and keep on doing it. Cognitive dissonance theory offers one explanation for this: When external inducements are insufficient to justify our behaviour, we reduce dissonance by justifying the behaviour internally.

Self-perception theory offers another explanation: People explain their behaviour by noting the conditions under which it occurs. Imagine hearing someone proclaim the wisdom of a tuition increase after being paid \$20 to do so. Surely the statement would seem less sincere than if you thought the person was expressing those opinions for no pay. Perhaps we make similar inferences when observing ourselves.

Self-perception theory goes even a step further. Contrary to the notion that rewards always increase motivation, it suggests that unnecessary rewards sometimes have a hidden cost. Rewarding people for doing what they already enjoy may lead them to attribute their doing it to the reward, thus undermining their self-perception that they do it because they like it. Experiments by Edward Deci and Richard Ryan (1991, 1997), by Mark Lepper and David Greene (1979), and by Ann Boggiano and her colleagues (1985, 1987) confirm this **overjustification effect**. Pay people for playing with puzzles, and they will later play with the puzzles less than those who play without being paid; promise children a reward for doing what they intrinsically enjoy (for example, playing with magic markers) and you will turn their play into work (Figure 4-4).

A folk tale illustrates the overjustification effect. An old man lived alone on a street where boys played noisily every afternoon. The din annoyed him, so one day he called the boys to his door. He told them he loved the cheerful sound of children's voices and promised them each 50 cents if they would return the next day. Next afternoon the youngsters raced back and played more lustily than ever. The old man paid them and promised another reward the next day. Again they returned, whooping it up, and the man again paid them; this time 25 cents. The following day they got only 15 cents, and the man explained that his meagre resources were being exhausted. "Please, though, would you come to play for 10 cents tomorrow?" The disappointed boys told the man they would not be back. It wasn't worth the effort, they said, to play all afternoon at his house for only 10 cents.

As self-perception theory implies, an *unanticipated* reward does *not* diminish intrinsic interest, because people can still attribute their action to their own

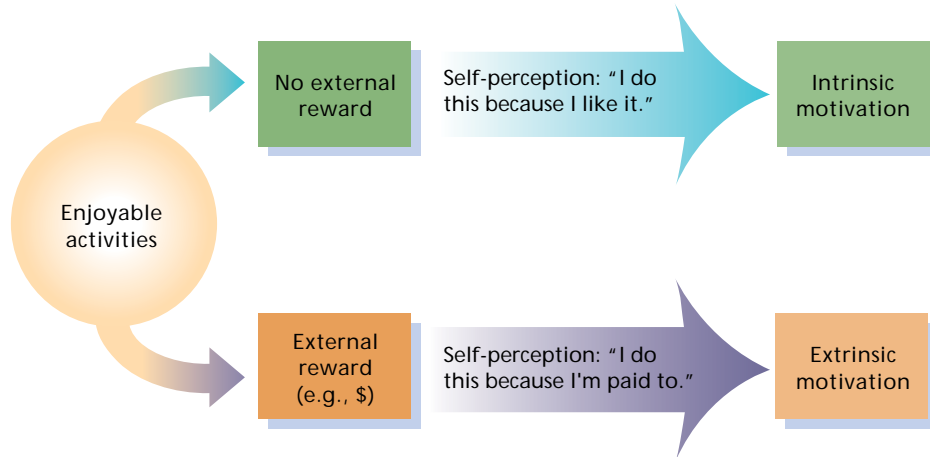
Natural mimicry and emotional contagion. People in sync, like these volunteers videotaped during a study by Frank Bernieri and colleagues (1994), feel more rapport with each other.

overjustification effect

the result of bribing people to do what they already like doing; they may then see their action as externally controlled rather than intrinsically appealing

figure 4-4**Intrinsic and extrinsic motivation.**

When people do something they enjoy, without reward or coercion, they attribute their behaviour to their love of the activity. External rewards undermine intrinsic motivation by leading people to attribute their behaviour to the incentive.



motivation (Bradley & Mannell, 1984; Tang & Hall, 1994). (It's like the heroine who, having fallen in love with the woodcutter, now learns that he's really a prince.) And if compliments for a good job make us feel more competent and successful, this can actually *increase* our intrinsic motivation. When rightly administered, rewards may also boost creativity (Eisenberger & Armeli, 1997; Eisenberger & Cameron, 1996).

The overjustification effect occurs when someone offers an unnecessary reward beforehand in an obvious effort to control behaviour. What matters is what a reward implies: Rewards and praise that inform people of their achievements (that make them feel, "I'm very good at this") boost intrinsic motivation. Rewards that seek to control people and lead them to believe it was the reward that caused their effort ("I did it for the money") diminish the intrinsic appeal of an enjoyable task (Freedman et al., 1992; Rosenfeld et al., 1980; Sansone, 1986).

How then can we cultivate people's enjoyment of tasks that are not intrinsically appealing? Young Maria may find her first piano lessons frustrating. Tommy may not have an intrinsic love of fifth-grade science. Sandra may not look forward to making those first sales calls. In such cases, the parent, teacher, or manager should probably use some incentives to coax the desired behaviour (Boggiano & Ruble, 1985; Workman & Williams, 1980). After the person complies, suggest an intrinsic reason for doing so: "I knew you'd share your toys because you're a generous person" (Cialdini et al., 1992).

If we provide students with *just enough* justification to perform a learning task and use rewards and labels to help them feel competent, we may enhance their enjoyment and their eagerness to pursue the subject on their own. When there is too much justification—as happens in classrooms where teachers dictate behaviour and use rewards to control the children—child-driven learning may diminish (Deci & Ryan, 1985, 1991). One of the authors' sons eagerly consumed six or eight library books a week—until his library started a reading club that promised a party to those who read 10 books in three months. Three weeks later he began checking out only one or two books during his weekly visit. Why? "Because you only need to read 10 books, you know."

Comparing the theories

We have seen one explanation of why our actions *seem* to affect our attitudes (self-presentation theory). And we have seen two explanations of why our actions *genuinely* affect our attitudes: (1) The dissonance-theory assumption that we justify our behaviour to reduce our internal discomfort, and (2) the self-perception theory assumption that we observe our behaviour and make reasonable inferences about our attitudes, as we do when observing other people.

The last two explanations seem to contradict one another. Which is right? It's difficult to find a definitive test. In most instances they make the same predictions, and we can bend each theory to accommodate most of the findings we have considered (Greenwald, 1975). Daryl Bem (1972), the self-perception theorist, even suggested it boils down to a matter of loyalties and esthetics. This illustrates the subjectivity of scientific theorizing (see Chapter 1). Neither dissonance theory nor self-perception theory has been handed to us by nature. Both are products of human imagination—creative attempts to simplify and explain what we've observed.

It is not unusual in science to find that a principle, such as “attitudes follow behaviour,” is predictable from more than one theory. Physicist Richard Feynman (1967) marvelled that “one of the amazing characteristics of nature” is the “wide range of beautiful ways” in which we can describe it: “I do not understand the reason why it is that the correct laws of physics seem to be expressible in such a tremendous variety of ways” (pp. 53–55). Like different roads leading to the same place, different sets of assumptions can lead to the same principle. If anything, this *strengthens* our confidence in the principle. It becomes credible not only because of the data supporting it but also because it rests on more than one theoretical pillar.

Dissonance as arousal

Can we say that one of our theories is better? On one key point, strong support has emerged for dissonance theory. Recall that dissonance is, by definition, *an aroused state of uncomfortable tension*. To reduce this tension, we supposedly change our attitudes. Self-perception theory says nothing about tension being aroused when our actions and attitudes are not in harmony. It assumes merely that when our attitudes are weak to begin with, we will use our behaviour and its circumstances as a clue to those attitudes (like the person who said, “How do I know how I feel until I hear what I say?”).

Are conditions that supposedly produce dissonance (for example, making decisions or acting contrary to one's attitudes) actually uncomfortably arousing? Clearly yes, considering the classic study by the University of Waterloo's Mark Zanna and Princeton University's Joel Cooper (1974). They had students write an essay banning all speakers on campus, a view with which all the students disagreed. Half the students were told that they had no choice but to write the essay, while the other half were given the illusion that they chose to write the essay. Thus far, the study is just a replication of many previous dissonance studies, but Zanna and Cooper added a simple manipulation that helped establish arousal as central to the experience of dissonance. They had all the students take a pill (actually filled with powdered milk) at the beginning of the experiment. One-third of the students were told that the pill would make them feel aroused, one-third were told that it would make them feel relaxed, and one-third were given no information about the effects of the pill. Zanna and Cooper



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reasoned that if students thought the pill would make them feel aroused, when they experienced the arousal from the cognitive dissonance they were feeling they would blame the arousal on the pill and would not change their attitude. As you can see in Figure 4–5 the results of the experiment supported this reasoning. When students thought the pill would be arousing, students who had high and low choice to write the essay did not differ in their attitudes. When they were given no information about the pill students showed the typical dissonance pattern of attitude change—students who were given the illusion of choice to write the essay changed their attitudes more than students who were given no choice to write it. Finally, the students who were told the pill would be relaxing showed an especially large amount of attitude change. These results demonstrate that feeling aroused is a central part of the experience of cognitive dissonance and that people must attribute this arousal to their own actions before they engage in self-justifying attitude change.

There is a reason why “volunteering” to say or do undesirable things is arousing, suggests Claude Steele (1988). Such acts are embarrassing. They make us feel foolish. They threaten our sense of personal competence and goodness. Justifying our actions and decisions is therefore self-affirming; it maintains our sense of integrity and self-worth.

So what do you suppose happens if, after committing a self-contradictory act, we offer people some other way to reaffirm their sense of self-worth, such as by doing a good deed? In several experiments Steele found that, with their self-concepts secure, people (especially those who came to the experiments with strong self-concepts) felt much less need to justify their acts (Steele, Spencer & Lynch, 1993). People with secure and stable high self-esteem also engage in less self-justification (Holland et al., 2002; Jordan, Spencer, Zanna, & Correl, 2003).

So dissonance conditions do indeed arouse tension, especially when they threaten positive feelings of self-worth. (In the study of relapsed smokers, it was those with high self-esteem who especially downplayed the risks.) But is this arousal necessary for the attitudes-follow-behaviour effect? Steele and his colleagues (1981) believe the answer is yes. When drinking alcohol reduces

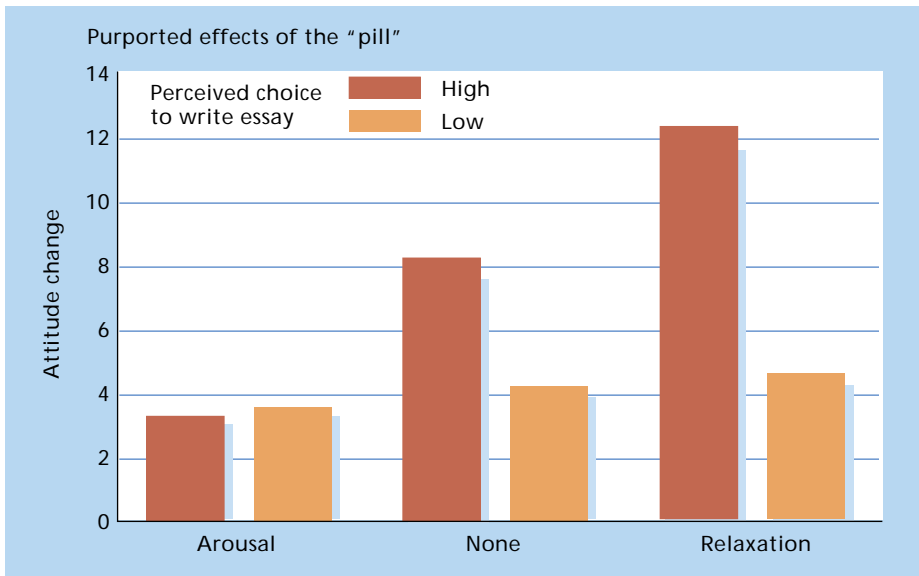


figure 4-5

Dissonance and the pill.

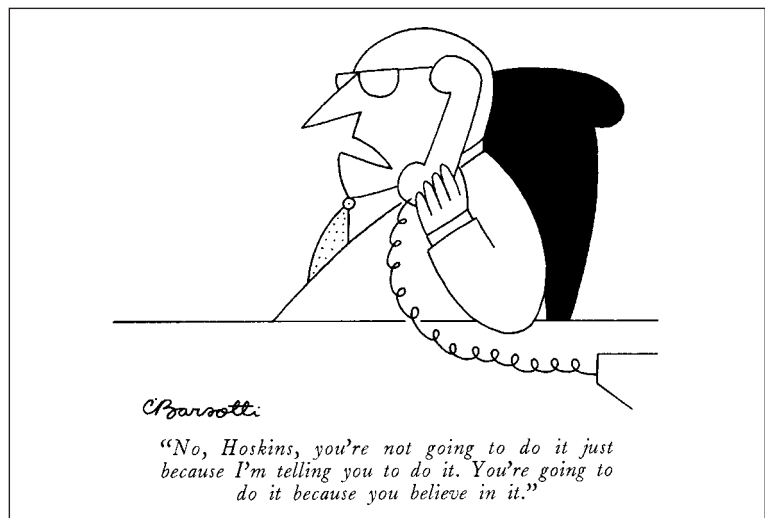
When people attributed their arousal to a pill they had taken, they did not change their attitudes, demonstrating the role of dissonance in attitude change. (Data from Zanna & Cooper, 1974)

dissonance-produced arousal, the attitudes-follow-behaviour effect disappears. In one of their experiments, they induced students to write an essay favouring a big tuition increase. The students reduced their resulting dissonance by softening their antituition attitudes—*unless* after writing the unpleasant essay they drank alcohol, supposedly as part of a beer- or vodka-tasting experiment.

Nearly five decades after Festinger first proposed his theory, social psychologists continue to study and debate alternative views of what causes dissonance. Some say Festinger was right to think that merely behaving *inconsistently* with one's attitudes—say, writing privately that one liked a foul-tasting drink and being simultaneously aware of the inconsistency—is enough to provoke some attitude change (Harmon-Jones et al., 1996; Johnson et al., 1995; McGregor et al., 1998). In fact, in studies with people suffering amnesia—and thus with an inability to explicitly remember their behaviour—attitudes still changed following behaviour (Lieberman et al., 2001). (This startling result suggests that there's more to the effect than conscious self-justification. Unconscious processing also seems to be at work.) Others argue that the crucial inconsistency is between one's behaviour and one's self-concept (Prislin & Pool, 1996; Stone et al., 1999). Although the dust has not settled, this much is clear, say Richard Petty, Duane Wegener, and Leandre Fabrigar (1997): "Dissonance theory has captivated the imagination of social psychologists as virtually no other, and it has continued to generate interesting new research."

People rarely internalize coerced behaviour.

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Self-perceiving when not self-contradicting

Dissonance procedures are uncomfortably arousing, which leads to self-persuasion after acting contrary to one's attitudes. But dissonance theory cannot explain all the findings. When people argue a position that is in line with their opinion, although a step or two beyond it, procedures that usually eliminate arousal do not eliminate attitude change (Fazio et al., 1977, 1979). Dissonance theory also does not explain the overjustification effect, since being paid to do what you like to do should not arouse great tension. And what about situations where the action does not contradict any attitude—when, for example, people are induced to smile or grimace. Here, too, there should be no dissonance. For these cases, self-perception theory has a ready explanation.

In short, it appears that dissonance theory successfully explains what happens when we act contrary to clearly defined attitudes: We feel tension, so we adjust our attitudes to reduce it. Dissonance theory, then, explains attitude *change*. In situations where our attitudes are not well formed, self-perception theory explains attitude *formation*. As we act and reflect, we develop a more readily accessible attitude to guide our future behaviour (Fazio, 1987; Roese & Olson, 1994).

Summing up

Three competing theories explain *why* our actions affect our attitude reports. *Self-presentation theory* assumes that people, especially those who self-monitor their behaviour hoping to create a good impression, will adapt their attitude reports to *appear* consistent with their actions. The available evidence confirms that people do adjust their attitude statements out of concern for what other people will think. But it also shows that some genuine attitude change occurs.

Two theories propose that our actions trigger genuine attitude change. *Dissonance theory* explains this attitude change by assuming that we feel tension after acting contrary to our attitudes or making a difficult decision. To reduce this arousal, we internally justify our behaviour. Dis-

sonance theory further proposes that the less external justification we have for an undesirable action, the more we feel responsible for it, and thus the more dissonance arises and the more attitudes change.

Self-perception theory assumes that when our attitudes are weak, we simply observe our behaviour and its circumstances and infer our attitudes. One interesting implication of self-perception theory is the “overjustification effect”: Rewarding people to do what they like doing anyway can turn their pleasure into drudgery (if the reward leads them to attribute their behaviour to the reward). Evidence supports predictions from both theories, suggesting that each describes what happens under certain conditions.



Making the Social Connection

As part of a discussion of attitudes and behaviour, this chapter recounts Philip Zimbardo's classic Stanford Prison Experiment. In Chapter 8 we will meet Zimbardo again, through his work on lost self-consciousness in crowd situations. Go to the *SocialSense* CD-ROM to view Zimbardo explaining his famous prison experiment.