

Chapter 3

ACTING AS WE FEEL

When and How Attitudes Guide Behavior

RUSSELL H. FAZIO
The Ohio State University

DAVID R. ROSKOS-EWOLDSSEN
University of Alabama

Consider each of the following statements. Do you believe the statement to be true or false?

1. College students who disapprove of cheating do not cheat on tests; it is only the students who view cheating as acceptable who do cheat.
2. When segregation was still legal, hotel and restaurant owners with racial stereotypes toward Chinese people would not serve them food or allow them to stay at their establishments.
3. How well people like their jobs is predictive of people's job attendance. Those who like their jobs are less likely to miss a day of work.
4. During the 1970s, people who felt that the energy crisis was a significant problem used less energy than did those who did not really believe that there was a crisis.
5. Regardless of whether an employer makes a snap judgment or deliberates extensively about a hiring decision, if the employer has a negative attitude toward working women, a female candidate will not be hired.

All of these commonsense statements assume that people's attitudes influence their actions and decisions. In fact, as we will see in this chapter, *none* of these five statements is correct. The basic finding of decades of research is that sometimes people act in accordance with their attitudes, and other times they act in ways that are quite inconsistent with their attitudes.

In this chapter, we address three fundamental questions regarding the attitude-behavior relation (Zanna & Fazio, 1982). First, *is* there a relation? That is, do attitudes influence behavior? Second, *when* is such a relation to be expected? In other words, what variables determine the degree to which attitudes might influence behavior? To the extent that attitudes do predict behavior, this question concerns the identification of other factors that play a role in this relationship.

Finally, *how* do attitudes guide behavior? By what psychological processes do attitudes exert these influences? If we are to understand the relation between attitudes and behavior, we need to develop models and theories of the psychological processes that link attitudes to behavior. Furthermore, understanding the psychological processes underlying the attitude–behavior relationship has many practical implications. For example, we can design better health campaigns to counter unhealthy behaviors if we understand how attitudes relate to behavior (Roskos-Ewoldsen, Yu, & Rhodes, 2004).

IS THERE A RELATION BETWEEN ATTITUDES AND BEHAVIOR?

For a number of decades, the field of social psychology has had reason to question the intuitively reasonable assumption that people act on the basis of their attitudes. During the early 1930s, LaPiere (1934) conducted what has become probably the most widely cited study of the attitude–behavior relation. While traveling across the western United States in the company of a Chinese couple, LaPiere stopped at more than 200 hotels and restaurants. The Chinese couple was refused service at only one establishment. Some 6 months later, LaPiere wrote to the proprietor of each of the hotels and restaurants and asked whether the establishment served Chinese guests. Surprisingly, 92% of those who responded indicated that they did not accommodate Chinese guests. Thus, there was a startling inconsistency between the attitude responses to LaPiere’s letter and the actual behavior toward the Chinese couple with whom LaPiere had traveled. A very similar study concerning an African American guest, instead of Chinese guests, also observed much discrepancy between people’s reports of their attitudes and their actual behavior (Kutner, Wilkins, & Yarrow, 1952).

Although these findings seem to indicate a lack of correspondence between attitudes and behavior, the relevance of these classic studies to the issue of attitude–behavior consistency has been questioned. For example, the point has been raised that the persons who waited on the Chinese guests in LaPiere’s (1934) study or the African American guest in Kutner and colleagues’ (1952) study might not have been the same persons who responded to the attitude question (Ajzen, Darroch, Fishbein, & Hornik, 1970; Dillehay, 1973). In addition, it can be argued that the specific individuals who were admitted to the establishments in these studies were not representative of what came to the proprietors’ minds when asked in an abstract mailing about admitting Chinese or African American individuals (Lord, Lepper, & Mackie, 1984). That is, the proprietors may have imagined slovenly unappealing persons when responding to the attitude question, in contrast to the pleasant appearance of the specific individuals who were admitted.¹

However, these studies are by no means the only ones to challenge the assumption that people typically behave consistently with their attitudes. For example, Corey (1937) examined the relationship between students’ attitudes toward cheating and their actual cheating behavior. The students took a series of true/false examinations, which they self-scored at a later class meeting. The students did not know, however, that the instructor had scored the exams during the interim period. Thus, the difference between the scores that students assigned to themselves and the scores that the instructor assigned served as the measure of students’ cheating behavior. The correlation between the students’ attitudes toward cheating and actual cheating was essentially zero. Attitudes toward cheating did not in the least bit

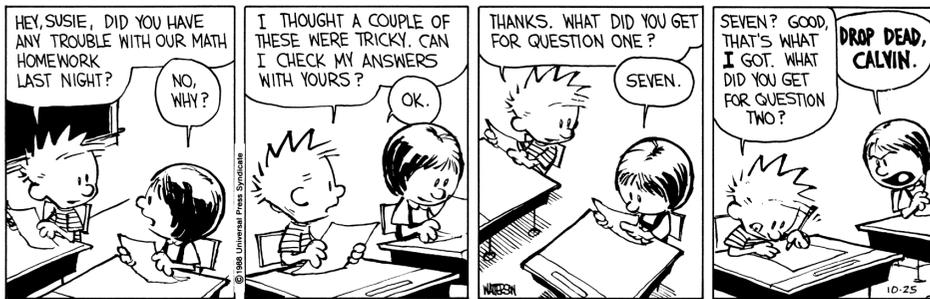


Figure 3.1 Positive Attitude Toward Cheating, or Cheating Motivated by Poor Performance?

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predict the actual cheating behavior. Instead, cheating was related to test performance; the more poorly students had done on the exam, the more likely students were to cheat in scoring the exam (as Calvin demonstrates in Figure 3.1).

Corey's (1937) findings are not unusual. Indeed, in a highly influential article, Wicker (1969) reviewed 31 investigations of the attitude–behavior relation and concluded,

Taken as a whole, these studies suggest that it is considerably more likely that attitudes will be unrelated or only slightly related to overt behaviors than that attitudes will be closely related to actions. . . . Correlation coefficients relating the two kinds of responses are rarely above .30 and often are near zero. (p. 65)

Wicker's review, along with others (e.g., Deutscher, 1973), led to considerable skepticism—sufficiently so that some suggested, “It may be desirable to abandon the attitude concept” (Wicker, 1971, p. 29).

Nonetheless, this skepticism does not appear to have been fully warranted. Although it cannot be denied that a large number of studies suggest that attitudes do not influence behavior, sometimes attitudes *do* predict behavior. For example, studies of voting behavior consistently have indicated a substantial relation between preelection attitudes and voting. Basically, people vote for the candidates they like. Kelley and Mirer (1974) analyzed data concerning the four presidential elections from 1952 to 1964 and found that voting behavior could be predicted accurately from preelection attitudes for 85% of the respondents.

Likewise, in a study on organ transplants, participants initially indicated their attitudes toward organ transplantation (Goodmonson & Glaudin, 1971). Later, the experimenters made a series of successively more difficult and more committing requests of the respondents, from requesting that they schedule an appointment to be interviewed about organ transplants, to requesting that they participate in the interview, to requesting that they actually sign a legal document providing posthumous organ donation. The number of behavioral steps that the participants took toward this final goal served as the index of behavior. The correlation between attitudes and behavior was .58. In a study of homeowners' actual energy consumption, a negligible correlation was found between the perceived severity of the energy crisis and energy use,

but a correlation of .65 was observed between energy use and homeowners' attitudes regarding the necessity of air-conditioning in maintaining their health and comfort (Seligman et al., 1979).

Even this brief sampling of positive findings indicates that attitude-behavior correlations can and sometimes do exceed the .30 ceiling claimed by Wicker (1969). Consideration of positive findings of this sort has led to a far more optimistic outlook about the usefulness of attitudes in predicting behavior (Calder & Ross, 1973; Fazio & Zanna, 1981; Schuman & Johnson, 1976; Zanna & Fazio, 1982). The blanket statement that attitudes have little to do with behavior is often contradicted by studies in the literature. Research has revealed everything from findings of no relation whatsoever (e.g., Corey's [1937] study of cheating behavior) to the nearly perfect relation observed in the context of voting behavior.

Thus, the answer to the question "Is there a relation between attitudes and behavior?" is a resounding "sometimes." Given the range of findings, it becomes apparent that the question of attitude-behavior consistency has to be approached differently:

Rather than asking whether attitudes relate to behavior, we have to ask, "Under what conditions do what kinds of attitudes of what kinds of individuals predict what kinds of behavior?" We need to treat the strength of the attitude-behavior relation as we would treat any other dependent variable and determine what factors affect it. (Fazio & Zanna, 1981, p. 165)

WHEN DO ATTITUDES GUIDE BEHAVIOR?

This question calls for identifying factors that determine whether the relation between attitudes and behavior will be relatively strong or weak. Such factors are typically referred to as *moderating variables* because they moderate the relation between attitudes and behavior. As was hinted earlier, moderators of the attitude-behavior relation include qualities of the behavior, qualities of the person, qualities of the situation in which the behavior is exhibited, and qualities of the attitude itself. We review briefly the evidence regarding each of these classes of potential moderating variables.

Qualities of the Behavior

The behaviors that a social psychologist might be interested in predicting from knowledge of a person's attitudes can range from the very specific (e.g., will the person attend church services this week?) to the very general (e.g., how many religious behaviors will the person perform over the next month?). In a highly influential analysis, Ajzen and Fishbein (1977) noted the importance of measuring attitudes and behavior at equivalent levels of specificity. A specific behavior is best predicted by an attitudinal question that is equivalently specific to the action in question, the target of the action, the context in which the action is performed, and the time of the action (e.g., "How do you feel about attending church this Sunday?"). In a study conducted prior to the mandated use of lead-free gasoline, the actual purchase of lead-free gas was better predicted by questions asking specifically about buying lead-free gas than by questions assessing more general attitudes toward ecology (Heberlein & Black, 1976).

In contrast, a general pattern of behavior is best predicted by a general attitude measure. In one study, participants' global attitude toward "being religious" was used to predict the

likelihood that they performed each of 100 specific religious behaviors (e.g., praying before or after meals, donating money to a religious institution) and a general measure of performing religious behaviors that was a composite measure of the 100 specific religious behaviors (Fishbein & Ajzen, 1974). The correlation between the general attitude toward religion and any specific *single* action was a mere .15 on average. In contrast, the correlation between attitude and the *general* behavior pattern (i.e., the number of religious actions performed) was .71. In their review of the literature, Ajzen and Fishbein (1977) noted that studies that employed attitude and behavior measures that were equally specific typically found higher attitude–behavior correlations than did studies in which one of the two measures was more specific than the other. Thus, the degree of match between the attitude and the behavior we wish to predict affects the strength of the attitude–behavior relation that will be observed.

Qualities of the Person

In addition, some kinds of people typically display greater attitude–behavior consistency than do others. In general, two classes of individuals have been considered: those who are aware of and guided by their internal feelings and those who tend to rely heavily on cues in the situation to decide how to behave. In general, people who are aware of their feelings display greater attitude–behavior consistency than do people who rely on situational cues.

Obviously, this is a very rough distinction. Any given behavior of an individual can be guided both by the individual’s internal feelings and by external cues. Yet a number of personality scales have been developed and used successfully to assess whether a given person *tends* to rely more heavily on one type of cue or the other. Although some important differences exist among the personality traits that have been explored as possible moderators of the attitude–behavior relation, each relates to this general distinction. *Level of moral reasoning* has been found to affect the relation between attitudes and behavior (Rholes & Bailey, 1983). More advanced moral reasoning is characterized by principled, morally responsible thought based on people’s own general principles of moral action. Lower levels of reasoning focus on the general positive or negative consequences of a particular action or on a feeling of being bound by social or legal rules. Individuals who depend on their own feelings and principles to make moral judgments act much more consistently with their attitudes toward moral issues than do people who rely on external standards to determine what is moral.

The personality dimension that has received the greatest attention in the context of the attitude–behavior issue is *self-monitoring* (Snyder, 1987). Individuals who score low on the self-monitoring scale claim to be guided by dispositions (i.e., their inner feelings). They agree with statements such as “My behavior is usually an expression of my true inner feelings, attitudes, and beliefs.” In contrast, individuals who score high on the self-monitoring scale view their behavior as stemming typically from a pragmatic concern with what is appropriate in each situation. They agree with statements such as “In different situations and with different people, I often act like very different persons.” Thus, these individuals are said to *monitor* the impression that they make on other people and adjust that impression to fit with others’ expectations. A number of studies have indicated that low self-monitors behave more consistently with their attitudes than do high self-monitors (Ajzen, Timko, & White, 1982; Snyder & Kendzierski, 1982; Snyder & Swann, 1976; Zanna, Olson, & Fazio, 1980). For example, in a study on the relation between attitudes toward affirmative action and judgments of liability in a simulated sex discrimination case, the correlation between participants’ attitudes and

their judgments of liability was .42 among low self-monitors. Among high self-monitors, the correlation was a negligible .03 (Snyder & Swann, 1976).

To reiterate, both of these personality types vary on the extent to which the individual pays attention to or is influenced by his or her internal feelings. As one would expect, people who focus on themselves tend to act more consistently with their attitudes (e.g., people with high moral reasoning and/or low self-monitoring). On the other hand, people who are guided more by the environment or other external factors often do not act in a manner that is consistent with their attitudes (e.g., people with low moral reasoning and/or high self-monitoring).

Qualities of the Situation

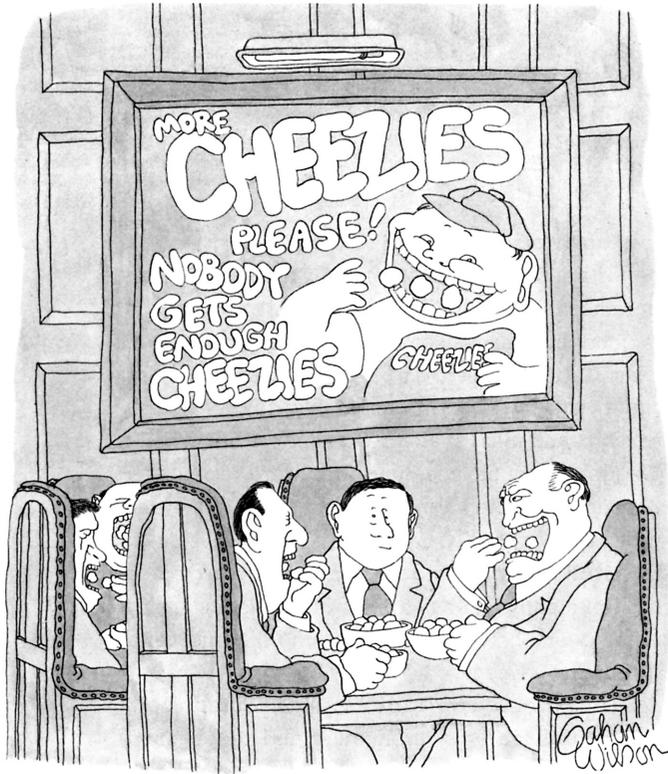
A number of situational variables also affect the strength of the attitude–behavior relation. These include normative factors and time pressure to reach a decision.

The Effect of Norms

Norms, or beliefs about how one should or is expected to behave in a given situation, can exert a powerful influence on behavior. Fishbein and Ajzen (1975) proposed a model that views norms as having a major influence on behavior (we review this model more fully in a later section). Much evidence has been found in support of this view (for a review, see Ajzen & Fishbein, 1980). People often behave as they believe others expect them to behave.

Norms can constrain an individual's behavior to the point where it is unlikely that the person will display behavior consistent with his or her attitudes (Figure 3.2). Indeed, a norm may be so strong and so universally held that virtually everyone in that situation behaves the same regardless of his or her attitude. For example, you might wish that someone were dead, but you would very rarely act on this attitude. Hence, attitude–behavior consistency is low. Consider also the relation between job satisfaction and work attendance. At first glance, one might expect people who like their jobs to be less likely to miss a day of work. Yet the normative pressure (in addition to the potential financial pressure) to attend work every day is strong. Thus, with the exception of days when they are ill, people generally go to work every day, even people who do not like their jobs. Indeed, studies of job satisfaction have found little relation between attitudes toward one's job and absenteeism (e.g., Vroom, 1962).

However, consider what might happen on a day when an unforeseen event does free individuals from their sense of obligation to attend work. A severe snowstorm strikes, making travel very difficult and also making it clear that not everyone will get to work that day. Precisely such a situation was studied in a company on the day following a major snowfall in Chicago (Smith, 1977). The attendance rate that day was approximately 70%, and work attitudes did predict attendance. Averaging across six different attitude measures, the correlation between work attitudes and attendance was .46. In contrast, a comparison sample from the same company's office in New York, where no snowstorm had occurred on this particular day, had an attendance rate of approximately 96% and revealed an average correlation between attitudes and behavior of only .08.



"Not eating your Cheezies, Miller?"

Figure 3.2 Strong Influence of Norms on Behavior Regardless of Attitudes

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Time Pressure

Individuals are more likely to base their decisions on their attitudes when they are under time pressure because their attitudes provide a heuristic for making quick decisions (for a review, see Jamieson & Zanna, 1989). It appears that time pressure pushes people away from a careful examination of the available information and toward a reliance on their preexisting attitudes. For example, in one study, participants were asked to consider job applications from both male and female job candidates (Bechtold, Naccarato, & Zanna, 1986). When there was no time pressure, and so participants could consider all of the details carefully, their personnel decisions were unrelated to their attitudes toward working women. That is, participants whose earlier reported attitudes indicated some prejudice against women were just as likely to recommend hiring a female candidate as were those who did not hold such prejudiced

attitudes. In striking contrast, when participants were under time pressure to make a hiring recommendation, an attitude–behavior relation was apparent. Participants who were prejudiced against women were less likely to recommend hiring a female candidate.

The latter study is an interesting one because it points out that, from a societal perspective, there are some instances when attitude–behavior consistency is not desirable. In this instance, acting in accordance with an attitude leads to discrimination against certain groups within our society (Amodio & Devine, chap. 11, this volume). Jamieson and Zanna (1985) also found that, in a simulated sex discrimination lawsuit and a simulated trial involving a mandatory death penalty, if the defendants were judged to be guilty, attitudes toward affirmative action were predictive of judgments in the sex discrimination lawsuit and attitudes toward capital punishment were predictive of judgments of guilt in the criminal trial—provided that participants were under time pressure to read the case material and reach a decision. Thus, in three situations where one would hope that individuals would consider the details of a case objectively and be free of the bias of their attitudes, participants were able to do so when they were allowed to examine the case material at their own pace. However, when they were under time pressure, participants were strongly biased by their existing attitudes.

Qualities of the Attitude

Some kinds of attitudes appear to be stronger than others (Petty & Krosnick, 1995). In this context, the word *stronger* is not used in the sense of the attitude being more extreme. Instead, stronger refers to the apparent influence that the attitude has on the individual's behavior. In fact, in all of the research that is summarized in this section, groups of participants with different degrees of attitude strength were compared, but the distributions of attitude scores (i.e., the extremity of attitudes) in the various groups were equivalent to one another.

The Role of Direct Experience

One attitudinal quality that has been investigated extensively is the *manner of attitude formation* (for a review, see Fazio & Zanna, 1981). On the one hand is attitude formation through direct behavioral experience with the attitude object, and on the other hand is attitude formation through indirect nonbehavioral experience with the attitude object. For example, a child may form an attitude toward a toy by playing with the toy (direct experience) or on the basis of a friend's or an advertisement's description of the toy (indirect experience).

Attitudes based on direct experience have been found to be more predictive of later behavior than attitudes based on indirect experience. This was first shown in a study that took advantage of an actual event at Cornell University (Regan & Fazio, 1977). Because of a campus housing shortage, many freshmen had spent the first few weeks of the academic year in temporary housing. Typically, these accommodations consisted of cots in the lounge of a dormitory. Those freshmen who were assigned to temporary quarters had much more direct experience with the housing crisis than did the freshmen who were immediately assigned to permanent housing. Those freshmen who were assigned to permanent quarters, on the other hand, had learned about (and formed their attitudes toward) the housing shortage only through engaging in discussions with others and reading the frequent articles on the subject in the campus newspaper. Thus, a naturally occurring event had created two groups that differed in their manner of attitude formation. The two groups were compared in terms of the extent to

which they displayed behavior that was consistent with their attitudes toward the housing crisis (e.g., agreeing to sign a petition calling on the university to alleviate the shortage, obtaining the signatures of other students, writing letters to the university housing office). Attitude-behavior consistency was much greater among those who had been assigned to temporary housing (the direct experience group) than among those who had been assigned to permanent housing (the indirect experience group). This was true even though the two groups, on the average, had equally negative attitudes toward the housing shortage.

To further establish the role of direct experience in the attitude-behavior relationship, an experiment was conducted where the manner of attitude formation was manipulated in the laboratory (Regan & Fazio, 1977). Participants were introduced to a set of five intellectual puzzles in one of two ways. Some participants were presented previously solved examples of each puzzle and listened to the experimenter describe the type of puzzle and the specific example and solution (indirect experience condition). The remaining participants were given an opportunity to actually work the same example puzzles, thereby forming their attitudes through direct behavioral experience. After attitudes toward each of the five types of puzzles were assessed, all individuals participated in a *free play* situation. That is, they were given numerous samples of each puzzle type and instructed to play with any that they so desired. On average, the relation between a given participant's attitude toward a puzzle and the amount of free play behavior with the puzzle was greater in the direct experience condition than in the indirect experience condition (see also Fazio & Zanna, 1978).

Attitude Accessibility

One thing that differentiates attitudes based on direct experience from those based on indirect experience is how *accessible* the attitudes are from memory. Accessibility in this sense refers to how easily attitudes come to mind. Some attitudes come to mind without any conscious effort on people's part. When people see a cockroach, the "Yuck!" response probably comes to mind immediately. This attitude would be highly accessible from memory. But sometimes people have to deliberate quite extensively about what their attitudes toward some object are. If you are asked which of several restaurants is the best Tibetan restaurant, you might have to think extensively about which one you like the best. This attitude would not be at all accessible from memory.

As these examples illustrate, one way in which to measure how accessible an attitude is from memory is by how long it takes people to answer whether they like or dislike something. Attitudes based on direct experience tend to be more accessible (e.g., can be expressed more quickly) from memory (Fazio, Chen, McDonel, & Sherman, 1982). Participants who had direct experience with puzzles were able to respond more quickly to inquiries about their attitudes toward the puzzles than were participants who had indirect experience. As will be discussed later, attitude accessibility plays a major role in the attitude-behavior relation.

Subsequent research on attitude accessibility has explored the functional value of such attitudes (for an extensive review, see Fazio, 2000). That is, what do accessible attitudes *do* for the individual? How do they help the individual to navigate the day-to-day world? Research has found that accessible attitudes ease decision making (Blascovich et al., 1993; Fazio, Blascovich, & Driscoll, 1992). Imagine what it would be like if every time you went into a Baskin-Robbins, you had to decide which flavor of ice cream you wanted by reviewing the entire list of offerings and considering the relative merits of each type of ice cream. You would

probably take a long time to make the decision, and the decision would probably be stressful (enhanced all the more by the stress you would feel from the people behind you in line impatiently waiting for you to make up your mind). However, if the fact that you really like two flavors—mint chocolate chip and pistachio almond—readily comes to mind, the decision becomes much easier (especially if you order a scoop of each flavor). As the research on attitudes and time pressure demonstrated, attitudes can serve as useful heuristics for decision making. Because accessible attitudes come to mind readily, they make the decision-making process that much easier.

Research has demonstrated that influence of accessible attitudes can have important effects on people's well-being. In a study of college freshmen, the accessibility of the freshman research participants' attitudes toward academically relevant issues (e.g., possible majors, specific courses, academic activities such as studying at the library and pulling an all-nighter) was measured during their first 2 weeks at the university. The participants also completed various inventories regarding their mental and physical health as well as a report of any stressors they were experiencing (Fazio & Powell, 1997). Two months later, participants completed these measures again. The findings of this study clearly illustrated the utility of accessible attitudes in handling the stress related to being a college freshman. For students starting their college careers in good health, having accessible attitudes toward the new experiences of college buffered them from the negative effects of stress. These students were less likely to experience negative effects of stress, such as physical illness and depression, if they had accessible attitudes toward the new experiences found at college. Among students who started college in relatively poor health, those with more accessible attitudes showed greater recovery over time. Thus, there was considerable value to students knowing their likes and dislikes regarding the many new issues that they were encountering as they adjusted to college life.

Other research on attitude accessibility suggests that at least part of the benefits of accessible attitudes may arise due to their influence on how people attend to and process information in their day-to-day environment. For example, accessible attitudes influence what information people attend to in their surroundings (Roskos-Ewoldsen & Fazio, 1992). Consequently, people are more likely to notice and pay attention to elements of their environment that are attitudinally important to them. Likewise, accessible attitudes influence how people categorize and interpret information. One characteristic of social situations is that most stimuli are open to a multitude of classifications. When interacting with a person, do you pay attention to that person's race, gender, age, physical characteristics, and so forth? Indeed, the accessibility of your attitudes toward the various possible categorizations of an object influences how the object is categorized (Smith, Fazio, & Cejka, 1996). The late Mother Teresa could be categorized as a humanitarian or a Catholic. The accessibility of participants' attitudes toward the categories of humanitarian and Catholic influenced how they categorized Mother Teresa. If research participants had more accessible attitudes toward Catholicism, she was more likely to be categorized as a Catholic. Likewise, research has demonstrated that as the accessibility of participants' attitudes toward race increased, the more likely they were to categorize novel people in terms of race (Fazio & Dunton, 1997).

Discussing the functional value of accessible attitudes implies that accessible attitudes perform a number of useful functions for people, and indeed they do. However, there is a dark side to accessible attitudes as well. Accessible attitudes may be extremely difficult to change, with the upshot that people may be rather close-minded concerning topics toward which they have accessible attitudes. Because of the influences of accessible attitudes on what is attended

to and how that information is categorized, accessible attitudes create a dynamic with the environment such that the accessible attitudes naturally reinforce their accessibility (Roskos-Ewoldsen, 1997). In addition, people actually display some difficulty in detecting changes in objects toward which they have accessible attitudes (Fazio, Ledbetter, & Towles-Schwen, 2000). In a series of three experiments, participants were shown photographs of various people. Some participants were induced to rehearse their attitudes toward the photos and, hence, developed accessible attitudes. Those in a control condition saw the photos just as many times but performed an attitude-irrelevant task whereby they were asked to estimate the target person's height. During a second phase of the experiments, the participants judged whether each of a series of photos was the same as or different from the pictures they had seen earlier. Some of these photos had been morphed to various degrees with a picture of a different second person. When participants had rehearsed and developed accessible attitudes toward the persons in the original photograph, more change in the photo was necessary for them to detect that the photo was different. The accessible attitudes apparently "blinded" the participants, detracting from their ability to detect small changes.

Summary

The findings we have reviewed in this section make it abundantly clear that attitudes do sometimes relate to behavior. Extreme pessimism regarding the value of attitudes as predictors of behavior is unwarranted. Furthermore, we now have a lengthy catalog of situational, personality, attitudinal, and behavioral qualities that appear to determine the strength of the attitude-behavior relation.

What is missing, however, is any sense of *why* these various factors exert their influence. Why do only certain kinds of attitudes or certain kinds of situations promote attitude-behavior consistency? These concerns raise a very basic question regarding the attitude-behavior relation: How do attitudes guide behavior? That is, by what processes do attitudes influence behavior?

If we had an understanding of such processes, it would be far easier to understand why only certain kinds of attitudes or certain kinds of individuals in certain kinds of situations seem to guide behavior. It is to this point that we now turn.

HOW DO ATTITUDES GUIDE BEHAVIOR?

Two different mechanisms by which attitudes can influence behavior are discussed in this section. The major distinction between the two mechanisms centers on the extent to which the behavior is thoughtfully planned in advance of its actual performance as opposed to being a spontaneous reaction to a person's perception of the immediate situation. That is, the individual may reflect and deliberate about a behavioral plan and may decide how he or she intends to behave. In so doing, the person may consciously consider the implications of his or her attitude. For example, when buying a car or deciding which college to attend, a person will extensively deliberate about the decision and consider all of the advantages and disadvantages before making a behavioral decision. Alternatively, the individual might not actively reflect on his or her attitude, but that attitude may influence how the person interprets the event that is occurring and, in that way, may affect the behavior. When choosing between a pistachio ice cream cone and a chocolate one, a person will rarely analyze the positive and

negative features of each flavor. Instead, the individual's attitudes toward the different flavors determine which flavor looks better at that moment in time. The former type of process is the essence of Ajzen and Fishbein's (1980) *theory of reasoned action*. The latter is depicted in Fazio's (1986) *model of the attitude-to-behavior process*.

Ajzen and Fishbein's Theory of Reasoned Action

As implied by its name, the theory of reasoned action assumes that people deliberate about the wisdom of a given course of action:

We argue that people consider the implications of their actions before they decide to engage or not engage in a given behavior. For this reason, we refer to our approach as a "theory of reasoned action." . . . We make the assumption that most actions of social relevance are under volitional control and, consistent with this assumption, our theory views a person's intention to perform (or to not perform) a behavior as the immediate determinant of action. (Ajzen & Fishbein, 1980, p. 5)

According to this theory, then, an individual's behavioral intention is the single best predictor of his or her eventual behavior. The theory goes on to specify the factors that an individual considers in forming a behavioral intention. The person considers, weighs, and combines (a) his or her attitude toward the behavior in question and (b) subjective norms regarding the behavior (Figure 3.3). The second component, subjective norms, involves *both* the person's beliefs about what important others think he or she should do *and* the person's motivation to comply with the wishes of these others. In deciding whether to attend college, an individual may consider what his or her friends and parents think about attending college *as well as* how important it is to comply with the wishes of his or her friends and parents.

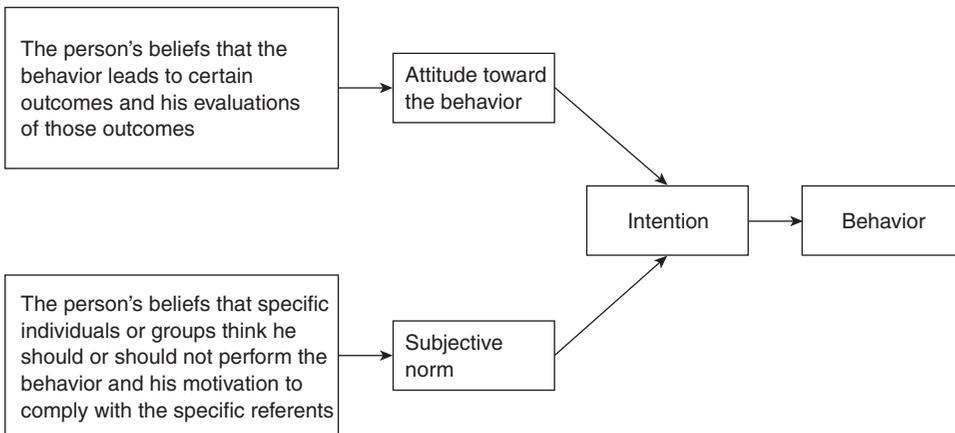


Figure 3.3 Schematic Diagram of Ajzen and Fishbein's Theory of Reasoned Action

SOURCE: From Ajzen, I., & Fishbein, M., *Understanding Attitudes and Predicting Social Behavior*. Copyright © 1980. Reprinted with permission of Prentice-Hall.

The first component, the attitude component, refers specifically to the behavioral choice under consideration (e.g., *buying* a 50-inch plasma high-definition television), not the general attitude toward the object (e.g., a 50-inch plasma high-definition television). The reason why the model differentiates between attitudes toward behavior and attitudes toward the object is that a person may have a positive attitude toward a 50-inch plasma high-definition television but not toward *buying* it due to the costs involved in such a behavior (e.g., increased credit payments, finding a place to put it). According to the theory, the individual constructs this attitude toward the behavior by a careful analysis of available information. The attitude is a function of the person's beliefs concerning the likely outcomes to result from performing the behavior and the person's positive or negative feelings about those outcomes.

As an example, consider a young couple who are deciding whether to have a baby. According to the theory of reasoned action, the couple would consider the outcomes that are likely to occur if they were to have a baby (e.g., having to nurture the baby, having less time to engage in leisure activities, playing with the baby, facing strain on the family budget) and their evaluations of these outcomes. From this information, they would construct an attitude toward having a baby. The couple would also consider how people who are important to them (i.e., family and friends) would feel about their having a child. Are their family and friends pressuring the couple to have a child? Would such significant others be supportive? The more positively the couple view the prospect of having a baby and the more support they perceive from others for their doing so, the more likely the couple will arrive at the intention to have a child.

In a study of family planning, Davidson and Jaccard (1979) found among a sample of women a strong correlation between behavioral intentions to have children and their actual childbearing over the next 2 years. Furthermore, the women's behavioral intentions were highly related to measures of the attitudinal and normative components specified by the theory. This investigation, along with a number of other studies reviewed by Ajzen and Fishbein (1980), provides impressive support for the theory of reasoned action.

Fazio's Attitude-to-Behavior Process Model

The theory of reasoned action assumes that attitudes guide behavior through conscious consideration of and deliberation about a person's attitude and its implications for a given course of action. In contrast, the process model proposed by Fazio and colleagues (Fazio, 1986; Fazio, Powell, & Herr, 1983) suggests that attitudes can guide a person's behavior even when the person does not actively reflect and deliberate about the attitude. When someone sees a cockroach, he or she probably does not consider the beliefs about how unsanitary cockroaches are, nor is the person likely to reason about what other people think of smashing the cockroach. If people did engage in such extensive thinking, the cockroach would disappear before anyone had a chance to decide how to react. Instead, in very basic terms, the process model argues that the individual's attitude toward cockroaches would define this situation as an unpleasant one and that the person would act on this feeling or impulse.

According to the process model, the precursor of behavior is an individual's definition of the event that is occurring. That is, the individual's interpretation of what is happening is assumed to determine how he or she responds. Classic research concerning bystander intervention provides a useful illustration of this principle (Latane & Darley, 1970). In one experiment, participants were led into a room and asked to fill out a questionnaire while the

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experimenter waited outside the room. A short time later, smoke-like vapors started to enter the room through a vent in the wall. Some participants perceived the vapors as harmless, whereas others interpreted them as actual smoke from a fire. Defining the event as a fire was found to be a critical step if an individual was to react to the emergency situation by notifying the experimenter. In this “smoke-filled room” experiment, people who failed to define the smoke-like vapors as an indication of a fire were unlikely to report the incident, even though the vapors eventually became so dense that individuals had difficulty in reading their questionnaires. Thus, how people perceive a situation has a profound impact on their behavior. The same set of people can be taken to the same physical setting, and they may respond very differently.

Within the process model, this *definition of the event* consists of two components: an individual’s perceptions of the attitude object in the immediate situation and the individual’s *definition of the situation*. Definition of the situation refers to the storehouse of knowledge that the individual possesses concerning behaviors that are to be expected and that are appropriate in the particular situation. For example, when smoke enters a room due to a fire, the norm is that people should report the fire. It is in this way that norms can influence behavior.

Perceptions of the attitude object in the immediate situation also influence people’s definition of an event and provide the means for a potential impact of attitudes. A vast literature indicates that attitudes can guide how and what people perceive (for a review, see Fazio, 1986). In the words of Smith, Bruner, and White (1956), an attitude provides “a ready aid in ‘sizing up’ objects and events in the environment” (p. 41) (Figure 3.4).

Earlier we discussed the notion that attitudes can vary in how accessible they are from memory. The idea that attitudes vary in their accessibility from memory is an integral aspect of the process by which attitudes can influence what a person perceives. The Fazio process model views an attitude as an association in memory between the attitude object and a person’s evaluation of the object. The strength of this association can vary and determines the accessibility of the attitude from memory. To illustrate, consider an example outside the context of attitudes—the association between *bacon* and *eggs*. If someone mentions bacon to you, you probably cannot help but think of eggs because the two are so strongly associated. On the other hand, if someone says “sidewalk,” you are much less likely to think of eggs despite the old saying that sometimes it is

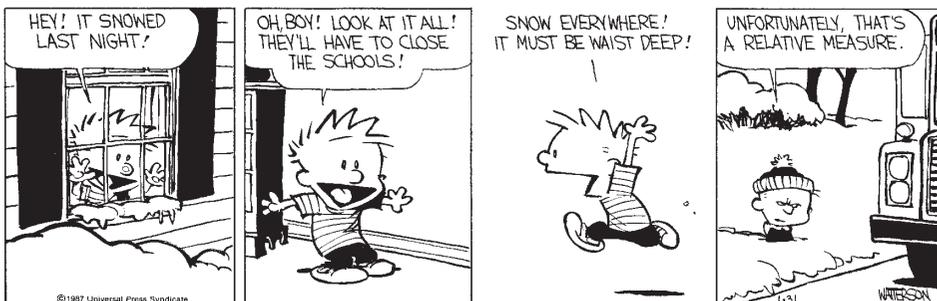


Figure 3.4 Illustration of How Attitudes Guide Our Perceptions and Judgments

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so hot you can fry an egg on the sidewalk. The bacon–eggs association is much stronger in memory than is the sidewalk–eggs association. Likewise, the strength of the association between an attitude object and a person’s evaluation of the object can vary. As discussed earlier, the association (e.g., between cockroach and “Yuck!”) can be so strong that the evaluation comes to mind immediately and spontaneously when a person encounters the attitude object.

The process model maintains that the attitude must be activated from memory if the attitude is to exert any influence over a person’s behavior. If activated, the attitude acts as a filter through which the object is viewed at that moment in time. As a result, immediate perceptions of the attitude object will be consistent with the attitude. In contrast, if the attitude is not activated, the immediate perceptions will be based on momentarily noticeable features of the attitude object that might not be consistent with the attitude. For example, when noticing a grocery item toward which you do not have an accessible attitude, features such as the type of wrapping, the position of the item on the shelf, and whether the item is on sale are likely to influence your immediate perception of the item.

According to the process model, then, the initiation of the attitude-to-behavior process depends on whether the attitude is activated from memory. There are a number of ways in which attitudes can be activated from memory. Such activation can occur as a result of situational cues (Snyder & Kendzierski, 1982). When we are told to vote our feelings, our attitudes are likely to be activated from memory. However, attitude activation also can occur without the benefit of prompting from a situational cue if the attitude is sufficiently accessible from memory. As we discussed earlier, attitudes involving strong object–evaluation associations (e.g., cockroach and “Yuck!”) are highly accessible from memory and can be activated from memory automatically or effortlessly merely on seeing the attitude object. It is such attitudes that are capable of initiating the attitude–behavior process, even without prompting from any situational cue. Once activated from memory, the attitude can influence a person’s perceptions of the object in the immediate situation, his or her definition of the event, and (ultimately) his or her behavior (Figure 3.5).²

The model predicts that attitude accessibility will determine the relation between attitudes and perceptions or judgments of an object. The relation is expected to be stronger if the attitude is accessible from memory than if it is not. The model makes a similar prediction

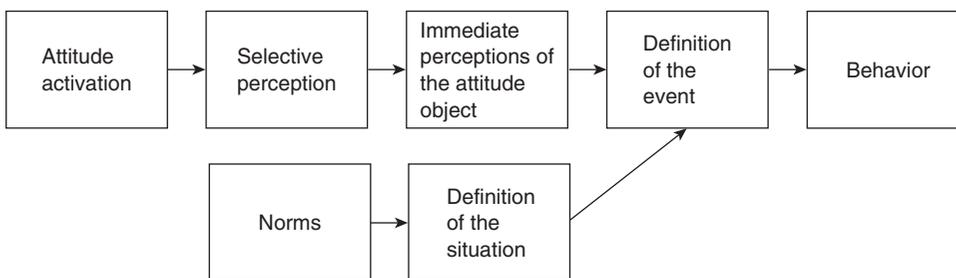


Figure 3.5 Schematic Diagram of Fazio’s Attitude-to-Behavior Process Model

SOURCE: From Fazio, R., “How do attitudes guide behavior?” in *The Handbook of Motivation and Cognition: Foundations of Social Behavior*, edited by Sorrentino, R. M., & Higgins, E. T. Copyright © 1986. Reprinted with permission of Guilford Press.

regarding the attitude-behavior relation. Both of these hypotheses have been supported in research (for a full review of this research, see Fazio, 1995). In a study of the relation between attitudes toward former President Ronald Reagan and judgments of the performance of candidates in the televised debates during the 1984 election campaign, the attitudes of a sample of townspeople were assessed along with the accessibility of those attitudes as indicated by how long people took to respond to an attitude question (Fazio & Williams, 1986). Following the debates, the respondents were mailed postcards requesting them to indicate which candidate had performed better in the debates. As one would expect, these judgments were biased by people's attitudes. The more positive the attitude toward Reagan, the more likely the person was to judge Reagan and the Republican vice presidential candidate, George Bush, to have performed better than their opponents. More important, as predicted by the model, this bias conferred by one's attitude was stronger among respondents whose attitudes toward Reagan were relatively more accessible from memory than among those with less accessible attitudes.

This same study also found evidence of the predicted impact of attitude accessibility on the attitude-behavior relation. After the election, the respondents were telephoned and asked how they had voted. The relation between attitudes toward Reagan (as measured during mid-summer) and voting was much higher among individuals with accessible attitudes than among those with less accessible attitudes.

More evidence of the influence of attitude accessibility on behavior is provided in a study where college students' attitudes and the accessibility of the attitude toward a variety of products were measured (Fazio, Powell, & Williams, 1989). As a token of appreciation for having participated in the study, at the end of the study the students were shown 10 products and allowed to select 5 of them to take home. The available products included items such as Snickers and Mounds candy bars, Sun-Maid raisins, Planters peanuts, and V8 juice. The products that the students selected served as the behavior measure. As predicted by the process model, the relation between a student's attitude toward a given product and whether the student chose the given product was found to increase as the accessibility of the attitude increased. For example, a student who reported liking Planters peanuts but who took a relatively long time to report that attitude was less likely to choose Planters as his or her free gift than was another student who reported liking Planters peanuts equally well but reported that attitude faster.

According to the process model, then, whether an attitude directs behavior will depend on whether it is activated from memory and the extent to which it colors individuals' definition of the event. Through such a process, attitudes can serve as remarkably functional tools for individuals. Attitudes that are accessible from memory can guide individuals' behavior in a satisfying direction without the individuals having to engage in conscious deliberative reasoning. In this way, they can simplify day-to-day life.

The MODE Model: An Integration

Two different processes by which attitudes can guide behavior have been discussed. One process clearly focuses on deliberate, planned, and reasoned action in which an attitude exerts an impact on behavior because an individual reflects on the attitude. The other process concerns an influence of attitude that need not stem from reflection but instead can stem from the attitude's influence on the person's perception of objects and situations that, in turn, affects

his or her behavior. Clearly, not all social behavior is deliberate and reasoned. Just as clearly, not all behavior is an impulsive reaction to a person's definition of the event.

Given that both processes occur, under what conditions is each process likely to operate? The MODE (Motivation and Opportunity and DEterminants) model integrates these two process models within a single framework. In brief, we would argue that which process occurs depends on both motivation and opportunity (Fazio, 1990; Fazio & Towles-Schwen, 1999). The deliberate process proposed by the theory of reasoned action obviously requires extensive cognitive work. As a result, it seems reasonable to propose that some motivation is necessary to induce individuals to engage in this effortful reasoning process. Such motivation is likely to exist when an individual's behavioral decision will have important consequences. When the cost of making a bad decision is perceived to be high, the individual will be motivated to engage in careful reasoning (Kruglanski & Freund, 1983). Without such inducement, the individuals might see little cost to permitting behavior to flow spontaneously from his or her interpretation of the event. Of course, the motivation to engage in effortful reasoning is not sufficient in and of itself. The opportunity to do so also must exist. Situations that require the individual to make a behavioral response quickly can deny him or her the chance to engage in much reasoning. Thus, the MODE model maintains that the process depicted by the theory of reasoned action is more likely to occur when the situation both motivates the individual to consider his or her action carefully and allows the individual the opportunity to do so. Without such motivation or opportunity, the more spontaneous process proposed by Fazio (1986) may be more likely.

In a test of the MODE model, Sanbonmatsu and Fazio (1990) gave participants information about two different department stores. The description of the stores was constructed such that one of the stores (Smith's) was clearly better overall than the other store (Brown's). However, Brown's was described by statements indicating that it had the better camera department. In the critical task, participants were asked to judge which store they would visit to purchase a camera. The aim of the experiment was to discern the conditions under which participants would undertake the effort to search their memories for the detailed information they had received about the two stores' respective camera departments as opposed to simply relying on their sense of which store was generally better. Participants' motivation to make a correct decision was manipulated by telling some of them that they would have to justify their decision to a group of undergraduate students and the experimenter (high motivation). The remaining participants were simply asked to choose which store they would visit to buy the camera (low motivation). In addition, some participants were forced to make the decision quickly (high time pressure), whereas other participants could make the decision at their own pace (low time pressure).

According to the MODE model, when participants are highly motivated and have the opportunity to carefully deliberate, they should consider the information they had received extensively while making a choice. In this instance, participants should choose Brown's over Smith's, despite the fact that Smith's is the better overall store, because Brown's has the better camera department. However, when participants are not motivated and/or do not have the opportunity to deliberate, they should make the decision based on their global attitude rather than considering the specific information they had received about the two stores' camera departments. In these instances, the participants should choose Smith's because they have a more positive attitude toward it.

The results were consistent with the MODE model's predictions. When participants were motivated and had the opportunity to make a choice, they chose Brown's because it had the better

camera department. Only when both motivation and opportunity were high did participants engage in the effort necessary to retrieve specific details from memory. When participants were either less motivated or under time pressure, they decided on the basis of their overall attitude and chose Smith's.

The research on the MODE model demonstrates that when people are making spontaneous decisions, accessible attitudes will be more predictive of their behavior. However, when people are making deliberate decisions, accessible attitudes will not necessarily be as predictive of their behavior. Interestingly, recent research has demonstrated that accessible attitudes can also influence whether people make more deliberate decisions as outlined by the theory of reasoned action. The attitude-as-information hypothesis proposes that accessible attitudes can act as cues that something important is in the environment (Roskos-Ewoldsen, Bischell, & Hoffman, 2002). The basic idea is that the attitudinal reaction that people experience when an accessible attitude is activated signals that something of importance is happening. This cue will motivate people to more carefully deliberate on the available information in the environment (Fabrigar, Priester, Petty, & Wegener, 1998).

By cuing the importance, accessible attitudes also may motivate people to engage in the type of thoughtful processes outlined by the theory of reasoned action. For example, in a recent experiment, women were presented with messages concerning breast cancer and breast self-exams (Roskos-Ewoldsen, Yu, & Rhodes, 2004). Half of the messages stressed the dangers of breast cancer (high fear), and the other half downplayed the risks of breast cancer (low fear). In addition, half of the messages stressed the effectiveness of breast self-exams for the early detection and treatment of breast cancer (high efficacy), and the other half focused on the limits of breast self-exams (low efficacy). A short time after hearing the messages, the accessibility of the women's attitudes to breast cancer and breast self-exams was measured, as were their intentions to perform breast self-exams in the future. Women who heard the high efficacy messages, regardless of the level of fear, developed more accessible attitudes toward breast self-exams. In addition, as the accessibility of the women's attitudes toward breast self-exams increased, their intention to perform breast self-exams in the future increased. Of course, behavioral intentions are a key part of the theory of reasoned action, and this finding suggests that the accessible attitudes toward breast self-exams motivated these women to carefully deliberate about the self-exams and come to a deliberate decision to perform them in the future.

CONCLUSIONS

The pessimism concerning the relationship between attitudes and behavior during the 1970s was clearly unwarranted. Attitudes can predict behavior. As we have seen in this chapter, a number of factors influence when attitudes predict behavior, including characteristics of the behavior, the attitudes, the situation, and the person. More important, psychological models of the attitude-behavior relationship have been developed, including the theory of reasoned action (Fishbein & Ajzen, 1975) and Fazio's (1986) process model. More recently, the MODE model (Fazio, 1990) has sought to combine the theory of reasoned action and the process model within a single framework. The refinements of the MODE model demonstrate how far our understanding of the attitude-behavior relationship has come since LaPiere's (1934) classic research. The MODE model also demonstrates the complexities of understanding *when* and *how* attitudes will predict behavior.

NOTES

1. LaPiere's (1934) study plays another important role in history besides serving as a classic example of the failure of attitudes to predict behaviors. The U.S. Supreme Court relied in part on LaPiere's and subsequent research in the landmark *Brown v. Board of Education* decision that ended segregation in education in the United States. LaPiere's study focused on how people acted when, in this case, Chinese individuals integrated a segregated establishment. No violence was aimed at LaPiere and the Chinese couple who were traveling with him when the establishments had been segregated against Chinese. Other studies also found that people did not react violently when blacks integrated segregated stores. These studies were used to demonstrate to the Supreme Court that ending segregation would not necessarily result in violence (Jackson, 2001).

2. Research findings concerning attitude accessibility have led to two conclusions regarding its determinants and assessment. First, the accessibility of an attitude and the likelihood that the attitude will be activated from memory on mere observation of the attitude object depends on the strength of the object–evaluation association (Fazio, Chen, McDonel, & Sherman, 1982; Fazio, Powell, & Herr, 1983; Fazio, Sanbonmatsu, Powell, & Kardes, 1986). Second, the strength of the object–evaluation association can be reasonably estimated by measuring how quickly an individual can respond to an inquiry about his or her attitude toward the object (Fazio, 1993; Fazio et al., 1986). Relatively fast responses indicate strong associations and relatively high accessibility from memory.

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