

CHAPTER 3

ATTITUDES

Contents

Attitude Formation

Mere Exposure
Associative Learning
Self-Perception
Functional Approach

Attitudes and Behaviour

Determinants of the Attitude-Behavior Relationship
The Theory of Planned Behavior
Reasoned Action versus Spontaneity

Attitude Change

Cognitive Dissonance
Persuasion
Dual Process Models of Persuasion
Factors Influencing What Route is Taken
Peripheral Cues

Attitudes

Should abortion be illegal? Should we cancel third world debt? How quickly should we reduce carbon emissions? Should there ever be a death penalty for any crime? Are you liberal or conservative? A soccer fan? A music lover? An optimist? The answers to all these questions depend upon psychological characteristics that define who we are: our attitudes. An **attitude** is a set of beliefs that we hold in relation to an attitude object, where an attitude object is a person, thing, event or issue. Attitudes can be positive or negative, or we can simply have opinions about issues without any strong emotional commitment. In this chapter we introduce what social psychologists have learned about attitudes: how they are formed, why we hold them, what implications they have for our behavior, and how they change.

ATTITUDE FORMATION

In this first section we discuss four distinct ways in which attitudes can form towards some issue, event, person or thing. These four ways in which attitudes can form are (in order of increasing psychological complexity) by mere exposure, by associative learning, by self-perception, and for functional reasons. Importantly, these four ways in which attitudes can be formed apply mostly when there is *no prior or existing attitude* or knowledge about the attitude object. Later in this chapter, when we discuss persuasion, we will consider how and why existing attitudes can change.

Mere Exposure

The **mere exposure effect** (Zajonc, 1968) is the tendency to develop more positive feelings towards objects and individuals the more we are exposed to them. No action or interaction with the object is required, and we do not need to possess or even develop any explicit beliefs about the object. Zajonc's classic experiment went like this. The cover story was that the study was an experiment to determine how people learn a foreign language. Ten Chinese-like characters appeared on a screen for 2 seconds each. These characters varied in terms of how many times they were presented. Some were presented just once, some were presented 10 times, some 25 times, etc. Following this, in phase 2 participants were told that the characters were adjectives and that the experimenter would like them to guess whether they were positive or negative in connotation. The adjectives were then presented one more time to the participants who rated the favorability of each one (i.e. whether they thought the symbol represented an adjective indicative of something positive or negative).

74 Essential Social Psychology

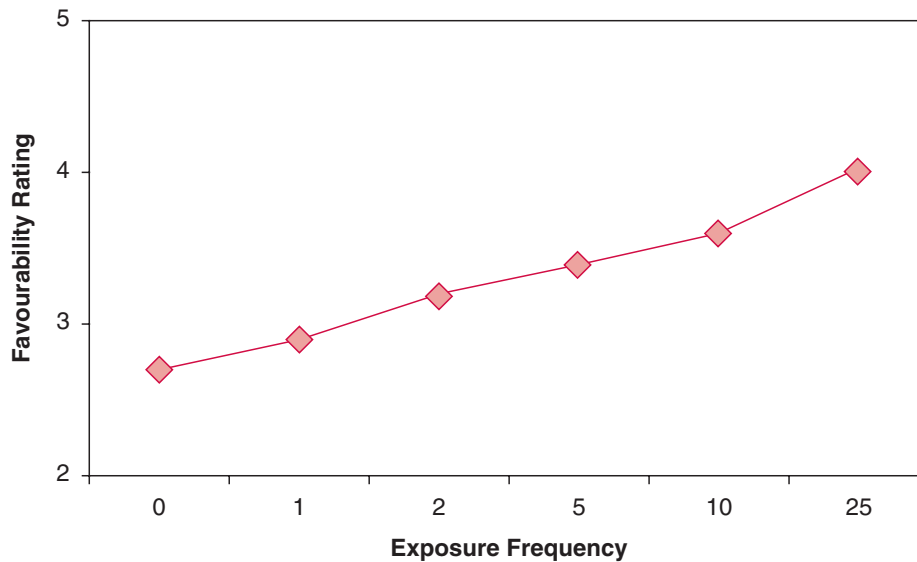


Figure 3.1 The relationship between exposure and liking. Data from Zajonc (1968)

Zajonc found a positive linear correlation between exposure frequency and liking (see Figure 3.1). In other words, the more the symbol had been presented to participants in phase 1, the more positive were their feelings towards it in phase 2. Controlling for all other variables (the symbols were completely new to participants), mere exposure had a significant impact on attitudes. The implications of this finding were considerable and wide-ranging. It suggested that familiarity does not, as the old adage says, breed contempt, nor does absence make the heart grow fonder. On the contrary – it appears that, quite simply, the more we see something, the more we like it.

There have been many replications of the mere exposure effect, and recent meta-analyses have confirmed that it is a very robust phenomenon. Some interesting studies subsequent to Zajonc's include one by Mita, Dermer, and Knight (1977). In their experiment, participants were shown two photographs of themselves (taken prior to the experiment). One was a normal photograph, but the other was the mirror image of this original image. In other words the first image was analogous to the perspective other people normally have of us (like we normally see in a photograph of ourselves) while the second was the perspective we are used to seeing (our mirror image, which we see every day). The prints were taken so that they would be effectively (at least on a conscious level) indistinguishable from each other. Participants were then asked to rate which of two prints they liked better. Mita et al. found that participants had a significant tendency to favor the mirror image print over the normal photo print (see Figure 3.2).

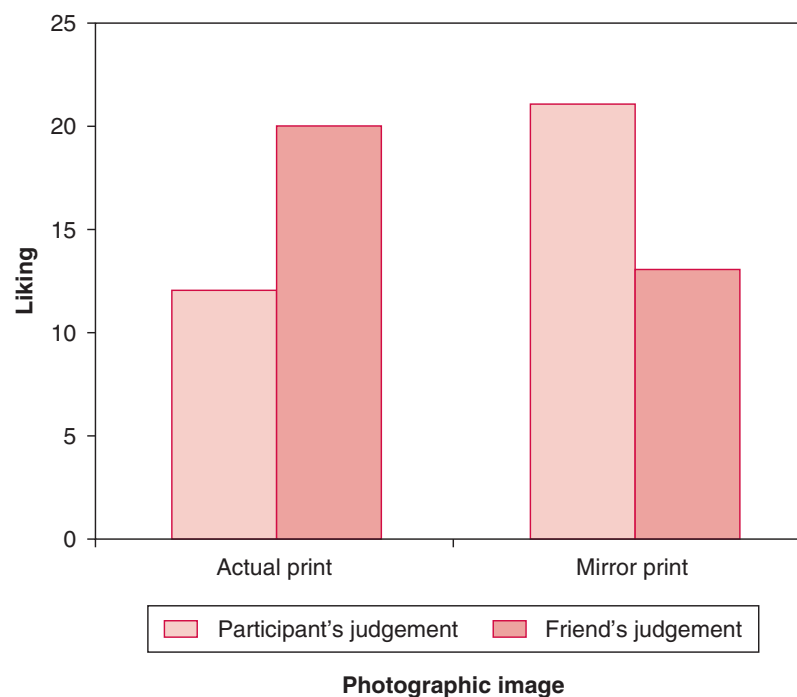


Figure 3.2 Preference for actual print and mirror image of own photographic image. Data from Mita, Dermer, and Knight (1977)

The findings observed by Mita et al. (1977) can be explained by the mere exposure effect. We prefer the mirror print because this is the view of ourselves we most often see. Supporting this idea, when friends of the original participants rated the same prints, they preferred the 'actual' photo view. In both cases, preference was higher for the perspective that was most commonly experienced by the person rating the photo. In other words, mere exposure to one view compared to another had a significant impact on likeability ratings. Mita et al.'s findings may finally help us to explain why we never like photos of ourselves!

There have been over 200 investigations of this 'mere exposure' effect, and reviews of the literature suggest that it is a highly pervasive and robust phenomenon (Bornstein, 1989). The effect is not limited to visual stimuli (as used in Zajonc's original demonstration), but has also been observed with auditory (Heingartner & Hall, 1974) and even food stimuli (Crandall, 1970), and it has been applied to varied domains (e.g. to advertising, Sawyer, 1981; to food preference, Pilner, 1982; and even liking for rock-and-roll music, see Text Box 3.1). In sum, the mere exposure effect appears to be an important way in which attitudes can form.

76 Essential Social Psychology

TEXT BOX 3.1

Rock ... and Rock around the Clock: Mere Exposure and Music Preference

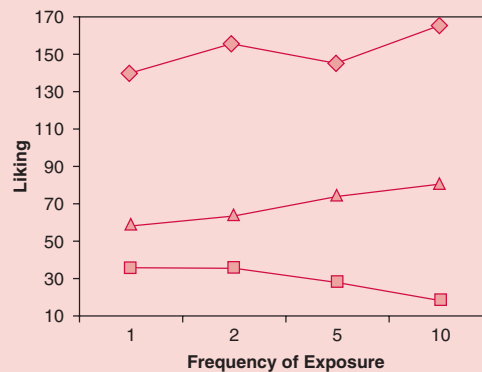
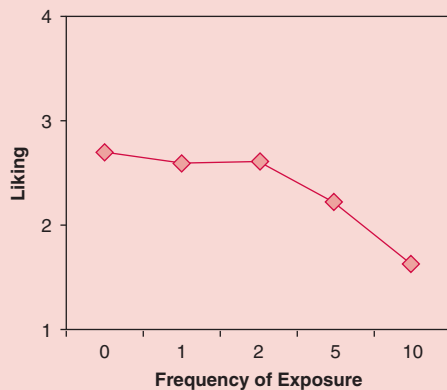
Brickman, Redfield, Harrison, and Crandall (1972) investigated whether repeated exposure to rock and roll music would lead to a more positive attitude towards that type of music.

METHOD

Undergraduate students listen to 90 second segments of five rock and roll songs from the B-sides of popular records from the 1960s. They either listened to each song 0, 1, 2, 5, or 10 times. Finally, participants listened to a 3–5 second segment from the chorus of each song and were asked to rate how much they liked the song.

RESULTS

Brickman and his colleagues expected to observe the mere exposure effect: a greater preference for the songs they had heard more frequently. However, what they actually found was a *decrease* in liking with increased exposure. This was particularly surprising given that prior to the study participants had reported that they liked rock and roll music. So why did increased exposure make attitudes less positive in this case?

**INTERPRETING THE FINDINGS**

The researchers noticed after the experiment that many of the participants indicated that although they usually liked rock and roll music, they did not like the antiquated style of music used in this experiment. The mere exposure effect assumes that stimuli are novel and neutral in connotation. If participants began with an initially *negative* attitude towards the music, however, repeated exposure may strengthen these negative affective reactions. To test this hypothesis, Brickman and colleagues conducted a further study in which participants were exposed to abstract paintings that

TEXT BOX 3.1 (CONTINUED)

they had previously rated very positively, very negatively, or neutrally. The figure below shows what they found.

As expected, people with an initially neutral impression of the paintings liked them more with repeated exposure, as did people with an initially positive impression of the paintings. However, participants with an initially negative attitude liked the paintings less with repeated exposure. This confirmed a boundary condition on the effectiveness of mere exposure for improving attitudes: the initial attitude must be neutral or positive. This is consistent with the idea that mere exposure is most applicable when little is initially known about the attitude object.

Associative Learning

There are two ways in which we can learn by association, either implicitly through classical conditioning, or explicitly through operant conditioning. **Classical conditioning** refers to a learning process that occurs when a neutral stimulus is paired with a stimulus that naturally evokes an emotional response (i.e. learning through implicit association; Pavlov, 1906). Consequently, the previously neutral stimulus, after enough pairings with the positive or negative object, will acquire a positivity or negativity of its own. The question is, does this effect occur with social groups?

In a classic study, Staats and Staats (1958) found just this. They paired the national social category label 'Dutch' with negative words and the national category label 'Swedish' with positive words; or they paired the 'Swedish' with negative words and 'Dutch' with positive words. They found that in the former case, the subsequent evaluation of Dutch people was more negative than the evaluation of Swedish people. However, when Dutch was paired with positive traits and Swedish with negative then the opposite occurred – the evaluation of Dutch was more positive. In other words, it appeared that the repeated association of Dutch with positive led to a more positive evaluation of this group – a case of associative learning.

This is a different effect from that observed in Zajonc's mere exposure study described above because it was not simply that exposure led to positive feelings about the attitude object: pairing with a positive or negative stimulus was required, and the nature of the pairing determined the subsequent attitude (i.e. the attitude could also become more *negative* when the category was paired with negative words). Also important to note was that the magnitude of the conditioned effect was not great (that is, the impact of pairing positive or negative words was quite small: attitudes only changed slightly in the direction of the paired stimulus). This suggests that while associative learning may represent one way in which our attitudes can form, it cannot be the whole answer.

Interestingly, a stronger effect is found when aversive stimuli are paired with *nonsense* words (Cacioppo, Marshall-Goodell, Tassinary, & Petty, 1992), rather than familiar words

78 Essential Social Psychology

like nationality labels. This suggests that associative learning may be a more powerful determinant of attitude formation when little *knowledge* is available about the attitude object (i.e. people are unfamiliar and have no preconceived attitudes towards nonsense words, but they presumably have some existing opinions about different national groups). This seems to make a lot of sense – if our mind is a ‘blank slate’ with respect to any particular issue, then we are going to be more influenced by exposure to attitude-relevant information. This could be one of the reasons why racial prejudice develops – there is a lack of knowledge about other groups because of low inter-racial contact, therefore encountering people expressing prejudiced views (i.e. using negative adjectives to describe the group) might lead to conditioned associations (see sections on implicit prejudice in Chapter 6). We will see how knowledge is also an important factor later on with respect to other processes associated with attitude formation.

The second way in which people can learn by association is **operant conditioning**. This is where behavior is strengthened following rewards and weakened following punishments (Skinner, 1938; Thorndike, 1911). It is different from classical conditioning in that the former occurs implicitly – no action is required on behalf of the participant for associations to form. In contrast operant conditioning is behavioral in nature: participants must carry out some action that is either rewarded or punished. For example, when learning a new skill, such as a sporting activity, we may be more likely to continue with it if our early attempts are met with praise, rather than negative reinforcements such as laughter and ridicule. We discuss how operant conditioning might offer an explanation for the link observed between childhood exposure to violence and later adult aggressive attitudes and behavior in Chapter 7.

Self-Perception

The idea behind **self-perception theory** (Bem, 1965) is that we form attitudes not due to exposure or associative learning, but from observations of our *own* behavior. According to Bem, attitudes are formed from observing our own behaviors (e.g. the opinions we openly express on particular issues) and then attributing them to either internal or external causes, with internal attributions (inference that the behavior is indicative of an attitude) more likely when the behavior was freely chosen. This is an attributional process exactly like that discussed in Chapter 2.

Importantly, inference of one’s attitudes from behavior is more likely to occur when someone has little or no existing knowledge about the issue at hand, or does not hold a strong prior attitude towards it (this is similarly the case with mere exposure and classical conditioning). A neat study that illustrated exactly the conditions under which behavior will be used to infer attitudes was carried out by Chaiken and Baldwin (1981). In this study participants were first pre-screened to assess their attitude towards pro-environment practices – whether the attitudes possessed by each participant were either strong and coherent or weak and inconsistent. This was to test the idea that self-perception of one’s attitudes from behaviors would only occur

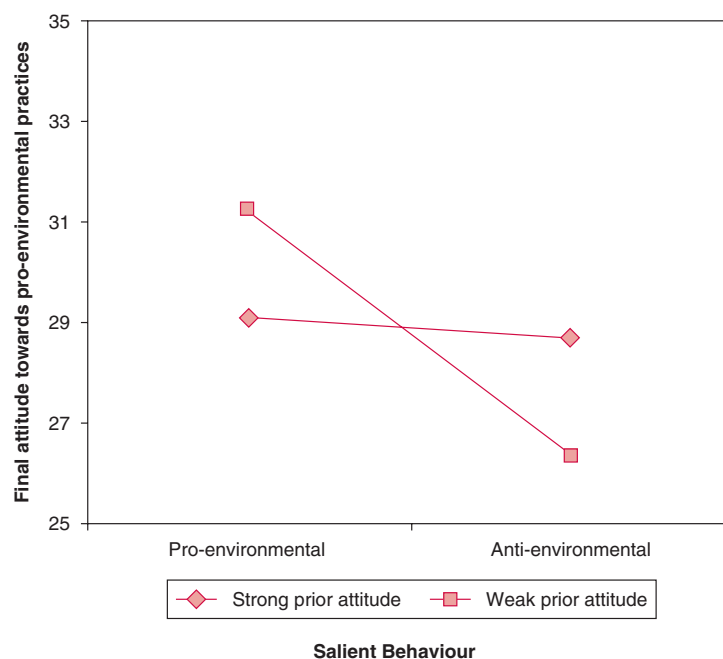


Figure 3.3 Self-perception processes for participants with weak or strong prior attitudes. Data from Chaiken and Baldwin (1981).

when people had little prior knowledge or opinions on the subject at hand. Participants were then allocated to one of two conditions. By asking questions relating to pro- or anti-environmental behaviors in specific ways, the experimenters were able to elicit answers from the participants that either emphasized the pro-environmental practices they engaged in (e.g., recycling) or the anti-environmental practices they engaged in (e.g. driving a car). After this, participants were asked to indicate their own attitude towards environmental practices. Chaiken and Baldwin's findings can be seen in Figure 3.3.

As you can see, consistent with self-perception theory participants who were induced into reporting behaviors they carried out that were pro-environmental in nature were more likely to subsequently rate themselves as having pro-environmental attitudes, while participants who were induced into reporting behaviors they carried out that were anti-environmental in nature were more likely to subsequently rate themselves as having anti-environmental attitudes ... but only when they had a weak prior attitude. When participants were identified from the pre-screening as having strong pro- or anti-environmental attitudes the experimental manipulation had no effect on their final reported attitude.

80 Essential Social Psychology



Figure 3.4 Illustration of the type of facial feedback manipulation used by Strack et al. (1988).

A specific example of self-perception of attitudes from behavior – facial feedback – was demonstrated by Strack, Martin, & Stepper (1988). In this experiment participants were asked to evaluate a series of humorous cartoon images (i.e. they were asked how funny they thought each was). Half of the participants were asked to do this while they were holding a pen in their teeth and half were asked to do this while holding a pen in their lips (an illustration of how this looks can be found in Figure 3.4).

The results were rather interesting – Strack et al. (1988) found that participants who were asked to form an attitude about how amusing the cartoons were when they were holding the pen in their teeth formed a more positive impression than participants who did the same while holding the pen in their lips. An explanation for this effect can be found in self-perception-theory. The idea is that people attend to their own behavior – even to their own facial expression – an idea referred to as the **facial feedback hypothesis**. Holding a pen in your teeth creates a facial expression that *feels* like you're smiling, whereas holding a pen in your lips creates a facial expression that *feels* like you're frowning. The results from this study seem to suggest that these facial 'behaviors', just like any other behavior, can inform subsequent attitudes. Participants who felt like they were smiling while forming an impression of the cartoon misattributed their facial expression as being indicative of their opinion towards it. People who felt like they were frowning did the same and formed a negative opinion (see Chapter 10 for how such misattributions can also lead to romantic attraction).

Although self-perception theory provides a neat explanation for Strack et al.'s (1988) findings, there is an alternative. Zajonc (1993) argued for a physiological explanation for the effect – the **vascular theory of emotion**. Zajonc argued that smiling (or any behavior that *feels* like smiling) causes the facial muscles to increase the flow of blood to the brain, which then creates a positive mood by lowering brain temperature. In contrast, frowning constricts facial muscles, lowering blood flow to the brain, and increasing brain temperature, causing a negative mood. Supporting this idea, Zajonc et al. (1989) found that making vowel sounds that mimicked frowning (e.g. 'u' or 'o') lowered forehead temperature and lowered mood, whereas vowel sounds that mimicked smiling (e.g. 'a' or 'e') decreased forehead temperature and elevated mood.

Functional Approach

The three ways in which attitudes can form discussed so far – exposure, learning and self-perception – all operate apparently outside of people's awareness. Typically people are not aware of mere exposure effects (indeed, these effects are stronger when people do not realise they have seen something many times; Bornstein, Leone, & Galley, 1987), nor conditioning, nor the fact that their behaviors can sometimes influence their attitudes. All of these theories argue that attitude formation is a passive process. In other words, it does not require any introspection, or conscious consideration of issues. Instead, attitudes are formed via observation or association. However, it seems self-evident that not all attitudes are formed outside of our awareness – sometimes we engage in deliberate thought about an issue with the aim of forming an opinion. This last way in which attitudes can form is psychologically the most complex, and we can draw the distinction here between naïve scientist and cognitive miser approaches (see Chapter 2). The previous three ways in which attitudes can form might be those that apply to the cognitive miser; but the naïve scientist thinks deliberately about things, processes information carefully, weighs it all up, and comes to a judgment. This is the type of process that goes on when attitudes are formed for *functional* reasons (see Figure 3.5).

According to the **functional approach** attitudes are sometimes formed based on the degree to which they satisfy different psychological needs, so this is an *active* rather than passive attitude theory. There are four basic psychological needs that adopting different attitudes can address: utilitarian, knowledge, ego-defensive and value-expression (Katz, 1960; Smith, 1956).

Utilitarian function

Attitudes are sometimes formed because they help us to gain approval from others. This function creates what can be referred to as **instrumental attitudes**. These attitudes help us get along and make our lives better. For example, it makes sense for us to develop a positive attitude towards our parents because in childhood we are completely dependent upon them. One can also make a link here with work on conformity (see Chapter 5) where it is

82 Essential Social Psychology

PSYCHOLOGICAL NEED	EXAMPLE
Utilitarian	Liking your psychology degree because it will help you get a job in the future
Knowledge	Liking your psychology degree because it provides you with useful information in dealing with people
Ego defensive	Liking your psychology degree because you really wanted to become a vet but weren't good enough
Value-expressive	Liking your psychology degree because it illustrates your commitment to helping people

Figure 3.5 Four psychological needs that can influence attitude formation

in our interests sometimes to go along with a majority, even though we may disagree with them; our **public attitude** may be different from our **privately held attitude** but this might serve to prevent us from being ridiculed and excluded from a group to which we belong (especially if we value that group membership, see Chapter 6).

Knowledge function

Holding particular attitudes can also help us to organize and predict our social worlds, providing a sense of meaning and coherence to our lives. This idea is very similar to that expressed in Chapter 2 (Heider, 1958). Attitudes can be thought of as cognitive schemes. Stereotypes, for instance, can be thought of as attitudes that define our expectations about different social groups. As we saw in Chapter 2, these types of attitudes are simplifying mechanisms (Fiske & Taylor, 1991) that help us to prescribe meaning and structure to our worlds (Turner et al., 1987).

Ego-defensive function

Attitudes formed to satisfy ego-defensive psychological needs help people protect themselves from acknowledging threatening self-truths, enabling them to maintain a positive view of themselves. For instance, we may develop an unfavorable attitude towards a co-worker who is enjoying more success than us. Such an attitude serves to protect us from acknowledging a potentially damaging social comparison; as 1980s indie-saviours *The Smiths* front-man Morrissey proclaimed, 'We hate it when our friends become successful!'

Value-expressive function

Finally, sometimes we may develop an attitude that expresses values that are important to us. For example, we may develop a taste for coffee that we know to have been grown under

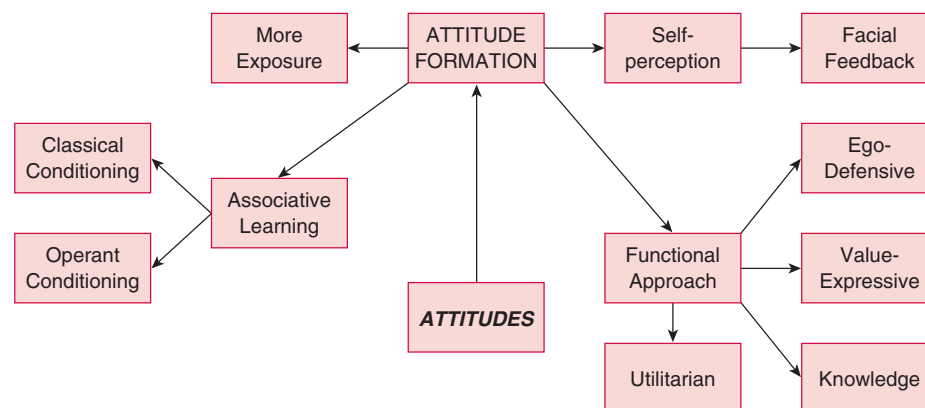


Figure 3.6 Memory Map

conditions that ensure fair treatment of Third World workers. We might therefore come to like the taste of this coffee due, in part, to the fact that liking it helps us to express more general beliefs and values that we hold.

Summary

In this first section we have discussed all the ways in which attitudes can be formed: via **exposure, learning, self-perception**, and because they fulfil certain **psychological needs**. We discussed how simply being exposed to something a number of times can lead to us developing a positive view of it. We also learnt how something that consistently elicits positive feelings can promote liking, while something that consistently elicits negative feelings can promote disliking. We saw how rewards such as praise can lead to liking whereas punishments can lead to disliking. Attitudes can also be inferred from observation of our own behaviors, even at the level of detecting our own facial expressions. Finally, attitudes can form because they serve important psychological functions like helping us to express values or ideals that are important to us.

So we know how attitudes are formed, but why is it important for us to know this anyway? Why are attitudes important? The simple answer is that if we want to understand how people behave, we need to know *why* they behave in such ways and, since attitudes form the core of our self-concepts, our beliefs about ourselves, about others, about politics, our jobs, our hobbies, and everything else that we do, it seems logical that they are what we need to look at if we are to predict behavior. If we can understand the attitudes people hold, and why they hold them, then we should be able to predict when people will help others, when they will be aggressive, when they will be prejudiced, when they will engage in healthy behaviors and when they will buy some products but not others. Attitudes are at the core of social psychology because they should be the one thing that enables us to

84 Essential Social Psychology

predict how others will behave. In the next section we examine the nature of the relationship between attitudes and behaviors and see that things are not quite as simple as we might imagine. There are a number of conditions that determine if, when and how the attitudes we hold will be reflected in our behavior.

ATTITUDES AND BEHAVIOR

One classic study sparked a debate over the nature of the relationship between attitudes and behavior. In 1934 sociologist Richard LaPierre traveled round the United States with a Chinese couple for three months. His aim was to examine intergroup attitudes, and to see whether those attitudes would predict behavior. Intuitively, we should indeed expect this to be the case – of course people’s attitudes should determine how they behave. If someone doesn’t like coffee, for example, then why on earth would they drink it? LaPierre’s findings, however, showed us that what seems intuitively to make sense does not always apply to human social perception.

LaPierre was specifically interested in racial prejudice. In the US in the 1930s there was widespread prejudice against Asians, and LaPierre wanted to understand the nature of this negative attitude and whether it predicted discrimination (see Chapter 6 for a discussion specifically relating to prejudiced attitudes and discriminatory behavior). In the first phase of the study LaPierre travelled around the US visiting restaurants and hotels to see how many would refuse to serve the Chinese couple (such blatant discrimination would not be unusual around this time).

Only 1 out of 250 hotels and restaurants refused to serve the Chinese couple – apparently showing low levels of discrimination (the negative behavior supposedly associated with prejudiced attitudes). This pattern of data, however, was inconsistent with widespread and frequent reports of racial prejudice that were apparent around this time. To assess these attitudes objectively, after the trip LaPierre sent a letter asking the same restaurant and hotel managers whether they would serve a Chinese couple in their establishment. Of the 128 replies 90 percent said they would *refuse* to serve Chinese people. It was therefore quite apparent from LaPierre’s findings that, contrary to common intuition, attitudes did not predict behavior at all.

Determinants of the Attitude-Behavior Relationship

Is it the case that our attitudes bear no relation at all to our behavior? This would perhaps be a little strange. Well, subsequent research has identified several reasons why LaPierre observed a discrepancy between expressed attitudes and observed behavior. We discuss each of these factors below.

Specificity

In order for attitudes to predict behavior the two have to refer to the same level of specificity (Fishbein & Ajzen, 1975). In LaPierre’s study the behavior that was assessed was

specific (i.e. would you serve *this* Chinese couple), but the attitude subsequently assessed was broader (i.e. would you serve Chinese people *in general*). It might therefore not be surprising that such general attitudes are not linked to specific behaviors. Think about your attitude towards *psychology*: if you feel like you are good at psychology in general, does this mean you would predict a high mark in all of your psychology exams (e.g. social psychology, neuropsychology, vision)? It is more likely that you're better at some *specific* topic within psychology than others – for instance, you may be better at social psychology than visual perception, while still having a general opinion that you're good at psychology. Your general attitude concerning your ability at psychology would therefore not necessarily predict your performance in a specific aspect of psychology, such as visual perception.

We'll return to this issue later in the book when we discuss prejudice, and how people can develop positive attitudes towards a specific member of a racial group, but this does not necessarily lead to more general attitudes towards all members of that racial group (see Chapter 6). For now, however, it is just important to note that in order to observe a relationship between attitudes and behavior, then they both need to be assessed at the same level of specificity.

Time

Quite simply, the longer the time between attitude measurement and the measurement of behavior, the more likely it is that the attitude will change, and so the two will become mismatched. A study by Fishbein and Coombs (1974) is illustrative: they observed that the correlation between attitudes and voting behavior was stronger one week before voting in an election compared to one *month* before voting.

Self-Awareness

People can experience different kinds of self-awareness prior to carrying out a behavior, and this can impact on the strength of the relationship between attitudes and behavior (Echabe & Garate, 1994). Essentially, people who are **privately self-aware** behave in line with their own attitude whereas people who are **publicly self-aware** behave in line with the attitude they perceive the majority of other people to hold, especially when there is an audience physically present (see Chapter 1 for an in-depth discussion of self-awareness). You may, for example, privately hold the belief that people should not litter in public places. When you are on your own (and you are more privately self-aware) you might then act in line with this private attitude, making sure you make use of litter bins and do not throw litter on the ground. In other words, your private attitude will predict your behavior. You may, however, act differently when you are with a group of friends, especially if the norm of the group is that it is not cool to conform to societal norms, like ensuring you don't litter. Here, then, due to conformity pressure you might be more publicly self-aware and act in line with a public attitude (i.e. the group norm) and throw litter on the streets, counter to your private attitude. Later in this book we will see how people sometimes conform to the view of the majority of people present, even though they might not

86 Essential Social Psychology

privately agree with this view (see Chapter 5). But for now it is sufficient to know that attitude-behavior consistency is dependent upon social context: whether your private or public attitudes are more accessible.

Attitude Accessibility

Private or public self-awareness can be thought of as the extent to which either private or public attitudes are more or less **accessible**, a concept we first discussed in Chapter 2 on social cognition. If you recall, people's judgments and behaviors are influenced by the **availability heuristic**. According to this heuristic, the easier it is for something to come to mind, the more likely it is that it will affect our behavior (Fazio, 1995). This idea is closely linked to the concept of **automatic behavior** that we discussed in Chapter 2. As we saw, **priming** with a specific type of attitude – a stereotype – can exert a significant impact on people's behavior (for instance, people walk slower down a corridor when they have been primed with a stereotype of the elderly; Bargh et al., 1996). The accessibility of attitudes can be measured using response times to answering questions relating to the attitude object: the speed of these responses predicts later behavior (see Fazio and Williams, 1986, for an illustration again with respect to voting behavior).

Attitude Strength

Related to the concept of attitude accessibility is attitude strength. As you might expect, the stronger one's attitudes are, the more likely they are to have an influence on behavior. While one might expect strong attitudes to be also *accessible* (they will be the attitudes people more frequently bring to mind), this is not necessarily the case. Attitudes can be held either with strong conviction or be weakly held, irrespective of whether they can be brought easily to mind (that is to say, while related, attitude accessibility and attitude strength are independent concepts). For instance, a case on the news may suddenly bring issues of euthanasia to the fore, sparking public debates not only in the media but between groups of friends. Attitudes related to this issue have therefore become contextually accessible, but people can still vary in the extent to which they either have strong opinions on the subject or have little interest or particular opinion one way or another.

Three things can affect attitude strength and attitude-behavior consistency: information, personal involvement and direct experience with the attitude object. Possessing more **information** about an attitude object leads to greater attitude strength and behavioral consistency (Chaiken et al., 1995). The more **personally involved** someone is with a particular issue, the more likely it will be that they will act in line with their attitudes (Lieberman & Chaiken, 1996). Finally, people who have formed attitudes via **direct experience** are more likely to have a stronger attitude and show greater consistency with behavior.

Above we have discussed five factors that can all determine when and whether attitudes will predict behavior. However, as well as these factors that specifically affect whether *attitudes* affect behavior, it is important to acknowledge that there are other determinants of behavior, and that to fully understand when and why we behave in certain ways we need

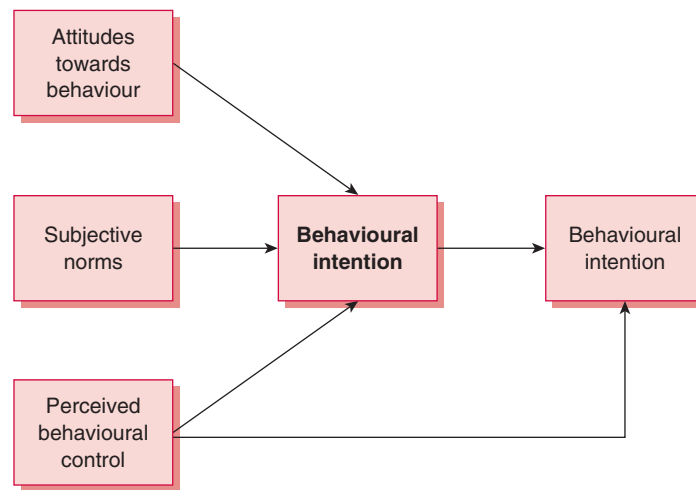


Figure 3.7 The Theory of Planned Behavior

to look at how attitudes affect behavior *in conjunction with* these other factors. We turn next to an integrative model for predicting behavior that does just this.

The Theory of Planned Behavior

Ajzen (1989; see also Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1974) addressed the issue of whether, when, and how attitudes, in conjunction with several other key determinants, predict behavior. The **theory of planned behavior** was developed to account for the processes by which people consciously decide to engage in specific actions. It states that behavioral intentions are the most proximal determinant of behavior, and that three factors converge to predict behavioral intentions (see Figure 3.7).

The first factor is attitudes. Attitudes are determined by one's beliefs about the consequences of performing the behavior and one's evaluation of the possible consequences of performing the behavior. The second factor is **subjective norms**. Subjective norms are determined by the perceived expectations of significant others and one's motivation to conform to these expectations. The third factor is **perceived control** which is determined by one's perception of how easy or difficult it is to perform the behavior. According to the model these three factors combine in an interactive (not additive) way to determine **behavioral intention**, which in turn determines behavior (although perceived behavioral control can also directly influence behavior). We need behavioral intention in the model because an important underlying component of the theory is that neither attitudes nor norms can on their own determine behavior. It is the *interaction* of these factors with perceived control

88 Essential Social Psychology

that predicts attitudes. Any link between these three factors and actual behavior would imply that the particular antecedent could exert some effect on behavior independent of the other factors, but this isn't the case. This is why both attitudes and norms only feed into behavioral intention, and only via this concept that takes account of the interaction between all three antecedents can we predict actual behavior. Perceived control is the only factor that can feed directly into actual behavior because although knowing how possible it is for you to perform a behavior or not affects intention, it could ultimately reduce the likelihood of actually performing a behavior, even if intention is strong.

To illustrate, imagine someone who wants to try to quit smoking. The attitude may be positive ("I want to stop smoking"); the subjective norms may also be positive ("my family wants me to stop smoking"), but perceived control may be low ("I'm addicted and don't know whether I can stop"). All three factors feed into behavioral intention, even perceived control, because the extent to which the person feels they can overcome their addiction and withdrawal effects will determine their *intention* to carry out the behavior (i.e. trying to quit). However, while there may be strong intention, ultimately the behavior may not be carried out because when the person comes to try to engage the behavior (stop smoking) they may find it too difficult because of low behavioral control (withdrawal effects) which feed directly into actual behavior. The effect of the three factors is not additive, because if one of the three components is strongly anti- the behavior (e.g. behavioral control: "I'm addicted"), intention will be low and the behavior will not be carried out. For a study showing how *group* norms (see also Chapters 1 and 6) rather than *subjective* norms predict behavioral intentions, see Text Box 3.2.

TEXT BOX 3.2

Group Norms and Behavioral Intentions

According to the theory of planned behavior, whether or not people perform a particular behavior is determined by their *intention* to perform that behavior which, in turn, is influenced by three independent components: attitudes towards the behavior, perceived behavioral control, and subjective norms. Terry, Hogg, and White (1999), however, suggested that in some cases subjective norms could be better conceptualized as *group* norms – the set of shared beliefs about how group members should think and behave. They investigated the possibility that when people define themselves in terms of a particular group membership – when they are high group *identifiers* – *group* norms may influence people's behavioral intentions.

METHOD

143 participants from households that had access to recycling bins were asked to report how likely it was that they would engage in household recycling during the following fortnight. Perceived *group norms* were measured by asking participants to report how many of their friends and peers

TEXT BOX 3.2 (CONTINUED)

they thought would engage in household recycling and how much they thought their friends and peers would approve of them engaging in household recycling. *Identification* with the group was measured by asking participants how much they identified with and fit in with their group of friends and peers.

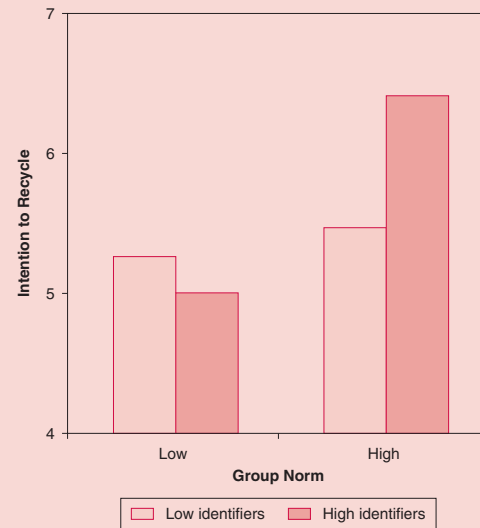
RESULTS

The graph shows what Terry and her colleagues found. Participants who strongly identified with their peer group had stronger behavioral intentions if they believed their group had strong norms concerning recycling.

In contrast, participants who did not strongly identify with their peer group were not influenced by the perceived strength of group norms.

INTERPRETING THE FINDINGS

According to the social identity approach, when people categorize themselves as members of a social group they become depersonalized, seeing themselves in terms of the shared features that define that group membership rather than as a unique individual. When this is the case, people think and behave in line with the norms of that group. Adopting the group norm on an issue is beneficial for group members as it provides an attitude with subjective validity. This is because it is based on a group consensus. In line with social identity theory, only individuals for whom group membership was important (i.e. those who highly identified with the group) were influenced by group norms in forming behavioral intentions.



Reasoned Action versus Spontaneity

While the theory of planned behavior accounts well for thought-out rational decision-making, it appears less useful in predicting spontaneous, unintentional and habitual types of behavior. This is linked to the idea of attitude accessibility that we discussed earlier in this chapter, and more generally to the notion that there are many social behaviors that we carry out that are automatic, not open to conscious control (see Chapter 2), and which certainly do not entail much deliberative thought. For instance, most people now habitually wear seat belts but they do not engage in a long internal dialogue or debate with themselves as to whether it is a good or bad thing to do. In many ways we can therefore think of the

90 Essential Social Psychology

theory of planned behavior as a model of behavioral prediction for the *naïve scientist*, with spontaneous behaviors carried out due to habit or “gut feeling” more associated with the *cognitive miser* (see Chapter 2). We will return shortly to the idea of dual processing in discussing attitude change.

Summary

In this section we have looked at whether, when and how attitudes predict behavior. From early studies like that of LaPierre it was apparent that there is not a clear link between the attitudes and opinions that people hold and the way they behave. Subsequent research has identified five key factors that determine whether attitudes will correlate with behaviors: **specificity, time, self-awareness, attitude accessibility** and **attitude strength**. However, attitudes do not predict behavior on their own, and for a complete understanding of how they impact on behavior we need to see how they interact with other antecedents. The **theory of planned behavior** specifies three factors that interact to determine **behavioral intention**, which in turn determines behavior: **attitudes, subjective norms** and **perceived behavioral control**. This theory accounts well for reasoned, rational, logical decision making (and is a good example of how people can be naïve scientists), but it does not account well for **habitual** or **spontaneous behaviors**. The latter are accounted for much better by cognitive miser explanations, such as the way accessibility affects the attitude-behavior relationship.

So far in this chapter we have examined how attitudes are formed, and when and how they determine behavior. We therefore have an emerging picture of how people’s thoughts, opinions and judgments determine how they behave, and thus determine the shape of our social worlds. But, once formed, do attitudes stay the same? Of course, we know they don’t – we change many of our own opinions over time. Since attitudes appear to be so crucial for determining behavior, it is not enough to know how they are formed; we also need to know how they change. This is the focus of the final section of this chapter.

ATTITUDE CHANGE

In this section we will examine what factors cause attitudes to change. Later on we will consider persuasion, attempts from others to change how we perceive particular issues, whether in terms of the political party we vote for, or the coffee brand we buy. First, however, we will look at attitude change resulting from people’s own introspection and analysis: a process called *cognitive dissonance*.

Cognitive Dissonance

When we discussed attitude formation, one of the ways in which attitudes could form was from observations of our own behavior. Bem’s (1965) *self-perception theory* argues that

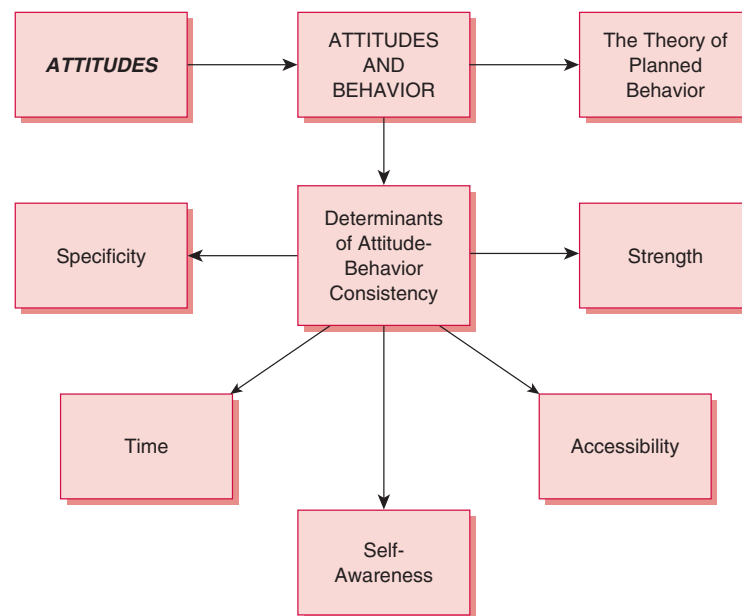


Figure 3.8 Memory Map

when we have no (or a very weak) prior existing attitude on a particular issue we can infer our attitudes from observing our own behaviors. Thus, while there is much work that focuses on whether attitudes predict behavior, in some cases the causal direction is reversed and attitudes can be created from observations of our own behavior. When we discussed self-perception theory we noted that this process of attributing attitudes to oneself from observations of our behaviors is likely only when there is initially a very weak attitude relating to the particular attitude object. Well, while this may be true with respect to the attributional processes that underlie self-perception theory, under some conditions even existing attitudes can change as a result of observations of our own behavior. This is particular likely when the behavior concerned is clearly *counter* to an existing belief.

Cognitive dissonance theory (Festinger, 1957) argues that behaving in a way that contradicts existing attitudes creates a feeling of discomfort. Put another way, people feel bad when they perform an action that is inconsistent with their attitudes. For example, an animal lover may feel upset if they accidentally run over a hedgehog; a pro-environmentalist may feel bad if they drink a little too much and throw their chips on the ground at the end of a night out.

Despite its name, at the heart of this theory is the motivation to avoid the types of dissonance or discrepancy described above. According to Festinger, when people carry out an action that is incongruous to their attitudes, this knowledge creates an internal imbalance, or dissonance. A little like Heider's (1958) argument that people prefer consistency and

92 Essential Social Psychology

stability (see Chapter 2), Festinger suggested that people will be motivated to try to resolve this dissonance. People will look for ways to try to explain it and, if none are apparent, they will resort to the only means left to them to resolve the discrepancy: they will change their attitude so that it matches the behavior they have performed. Like self-perception theory, cognitive dissonance theory predicts that behaviors cause attitudes rather than the other way around, but unlike self-perception theory, a weak prior attitude is not a prerequisite for the effect. In fact, dissonance will not occur unless there is a prior attitude that is fairly strong; otherwise there will be no discrepancy, and no strong feelings of discomfort.

In a clever experiment, Festinger and Carlsmith (1959) demonstrated the conditions under which cognitive dissonance will change attitudes. In this experiment participants had to complete two boring tasks – emptying and re-filling a tray with spools and then repeatedly turning 48 wooden pegs on a board. Following the hour-long task the experimenter explained that the study was really about the effects of prior knowledge on perceptions of a task. Participants were told that they had been allocated to the control condition, where participants are told nothing at all prior to the start of the task. However, they were also told that in a different condition, participants were being told that the task was very enjoyable.

After this, the experimenter said that their assistant could not help them with the next participant, who will be put into the ‘favorable’ condition, so would they mind helping out? The participant was required to tell the next participant they had just taken part in the experiment, and that it was fun and enjoyable; in other words, a lie. This was the crucial part of the experiment; the participants were asked to behave in a way that was counter to their attitudes (i.e. to tell someone that the task is enjoyable, when in fact it is clearly boring).

Three manipulations took place at this stage in the experiment. Some of the participants were asked to lie about the task being enjoyable but were offered different amounts of money for doing so. Some were offered \$1 while others were offered \$20. Some other participants were not instructed to lie and were offered no money; they simply completed the boring task. After having completed the task, or after having completed the task and having told the next participant that the task is enjoyable, all participants were asked to give their true attitude regarding how fun and interesting they really found the task to be. These final ratings of task favorability can be found in Figure 3.9.

As you can see, the results significantly varied as a function of lie-instruction and payment. First of all, participants in the control condition rated the task least favorably. This is unsurprising given the nature of the task, and confirms that it really was boring. What is interesting is what happened when people were asked to lie to the next participant and say that the task really was quite fun. Participants who received \$1 to lie to the next participant subsequently rated the task as being significantly more enjoyable than participants in the control condition, while participants who received \$20 did not; in fact this latter group of participants did not rate the task as any more enjoyable than participants in the control condition. Why should Festinger and Carlsmith have observed this pattern of attitude change?

It is important to note that the pattern of findings observed is counter to what would have been predicted from *operant conditioning* theory. If we recall from earlier in this chapter, people can develop favorable attitudes towards some behavior because they are consistently rewarded for carrying it out (e.g. developing a love of mathematics after having been

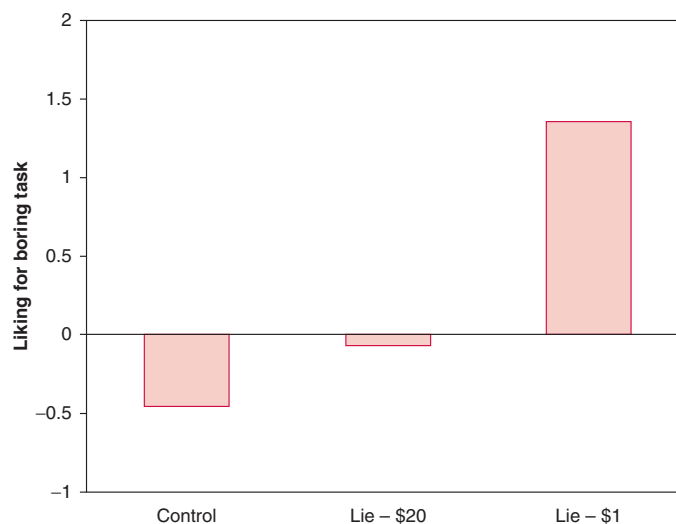


Figure 3.9 The effects of cognitive dissonance on attitude change. Data from Festinger and Carlsmith (1959)

praised for it many times at school). According to these principles, the people in this experiment who would be most likely to develop a favorable attitude towards the task would be those rewarded for saying it was enjoyable (and the greater the reward, the stronger the positive feelings that develop). Participants who received \$20 for saying that the task was enjoyable should have had that attitude reinforced, and so should have developed the most positive attitude towards the task. This, however, was the opposite of what happened: it was the group of participants who received only \$1 who, at the end, reported most favorable attitudes. The pattern *can* be explained by cognitive dissonance theory.

According to Festinger and Carlsmith (1959) the awareness of having carried out a behavior that is inconsistent with one's attitudes causes an uncomfortable internal state which people are motivated to resolve. If possible, people will use any number of cognitions to explain and thus resolve the discrepancy, but if no other explanation is available, participant will have no choice but to change their attitude so that it fits in with the behavior they have performed. In the above experiment, \$1 and \$20 represent different levels of justification for carrying out the behavior. In the \$20 condition, Festinger and Carlsmith argued that participants had sufficient justification to explain away the fact that they had lied to the next participant. The addition of this third cognition resolves the discrepancy between an existing attitude and the awareness that a behavior has been carried out that contradicts that attitude. In contrast, participants who only received \$1 following the experiment may have begun to ask themselves why exactly they had lied to the next participant (and therefore condemning them to one hour of tedium) – \$1 is insufficient justification for having carried out a behavior inconsistent with their attitude, so the only

94 Essential Social Psychology

recourse left for these participants is to change their actual attitude to resolve the discrepancy. This appears to be what happened; participants in the \$1 condition were those who reported feeling most positive towards the task they had carried out.

Factors Affecting Dissonance

There are three key factors that determine whether cognitive dissonance occurs when people carry out a behavior that is inconsistent with their attitudes, and hence whether attitude change occurs: *justification*, *choice*, and *investment*.

The first refers to whether people feel they have **justification** for having behaved in a way that is counter to their attitudes. As we saw in Festinger and Carlsmith's (1959) experiment, when people have a reason for explaining why they have behaved in a certain way, counter to their attitudes, they can explain this behavior away and their attitude can remain unchanged. **Freedom of choice** is a second important factor. If we are forced to do something this is an explanation for why we did it in contravention of our attitudes, so again no dissonance should occur. Finally, **investment** is the third factor. The more invested someone is in their point of view, the more important it is for their self-concept, and so the *stronger* will be any effects of dissonance. In sum, when there is no justification, we freely choose a behavior, and the relevant attitude is one that is important to us, cognitive dissonance is likely to occur, and we are more likely to change our attitudes to fit in with our behaviors.

Dissonance or Self-perception

We noted earlier how both cognitive dissonance and self-perception theories argue that attitudes are inferred from behaviors. But which of these accounts is correct? It is likely that both are, but apply in different situations. Aronson (1969) argues that cognitive dissonance will occur when discrepancies are clear and distinct, the attitude in question is important for the self-concept, and when it is not possible to explain away the discrepancy (i.e. the conditions outlined in the previous section). When discrepancies are mild, and/or the attitude is not particularly important to someone, then self-perception processes are likely to operate. This is, of course, consistent with our previous discussion of how self-perception theory is most likely to operate when people do not have strong existing attitudes (which presumably co-varies with attitudes being less important to the self-concept, and reduces the extent to which any discrepancy is sharp and distinct).

Persuasion

While cognitive dissonance is attitude change via an *internal* discrepancy, **persuasion** refers to attitude change via an *external* message. How do people think about, and incorporate, information they receive that is counter to their current point of view? What

determines whether they are persuaded by arguments or not? This is a question of obvious relevance to our understanding of how people think, feel, and behave. Do TV adverts work? When do people change their brand of toothpaste? What changes people's vote in political election campaigns? What makes people decide to adopt a healthier diet? How people react to messages intended to make them change their mind is the focus of this final section.

Dual Process Models of Persuasion

Understanding how people react to persuasive messages takes us back to thinking about *naïve scientists* and *cognitive misers*, the **dual route models** of social information processing that we discussed in Chapter 2. It is a dual route approach that has proved most successful in explaining how, when and why people are or are not persuaded by others. Two models characterize this approach, the **elaboration-likelihood model** (Petty & Cacioppo, 1986) and the **heuristic-systematic model** (Chaiken, 1980). Although slightly different in emphasis both argue that there are two ways that a persuasive message can cause attitude change, each differing in the amount of cognitive effort or elaboration they require: the central (systematic) route and the peripheral (heuristic) route (see Figure 3.10).

The **central route** is taken when people are motivated and able to think carefully about the content of a message (referred to as high elaboration conditions). Here people are influenced by the strength and quality of the arguments. In contrast, the **peripheral route** is taken when people are unwilling or unable to analyse message content. Here people pay attention to cues that are irrelevant to the content or quality of the communication (referred to as low elaboration conditions), such as the attractiveness of the communicator or the amount of information presented. It is important to note that attitudes can change via both routes, but that the resulting attitudes may be qualitatively different as a result. Attitudes formed via the peripheral route do not require comprehension of the message, are weaker, less resistant to counter argument, and less predictive of behavior than central route attitudes (Petty, Haugtvedt, & Smith, 1995). The two routes capture the definition of the dual process approach to social information processing that we discussed in Chapter 2 and, as such, which route is taken is a function of contextual factors which we discuss next.

Factors Influencing What Route is Taken

As well as the general conditions for heuristic use that we described in Chapter 2 (i.e. cognitive overload, little information about the issue, low self-relevance, time pressure), there are a number of factors that specifically affect which route might be taken when people process persuasive messages. Here we outline five of them: speed of speech, mood, involvement, individual differences, and humor.

Rapid speech makes it hard to process the content of a persuasive message, so people abandon the central route in favor of the peripheral route, relying on just the *number of arguments* as a heuristic for deciding whether to accept to message.

96 Essential Social Psychology

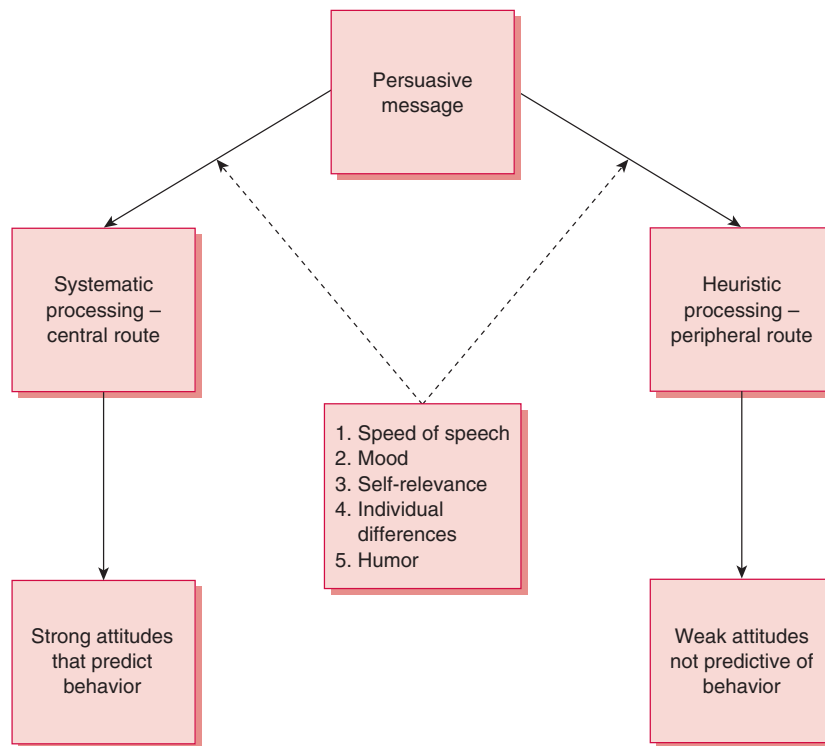


Figure 3.10 Systematic versus heuristic processing of attitude-relevant persuasive messages

Mood can also have an impact on what route is taken. In general, happy people use the peripheral route, while unhappy people tend to use the central route. The explanation for this is that negative moods can signal that something is “wrong”, which triggers an increase in attention to identify the problem (Bohner, Crow, Erb, & Schwartz, 1992). The implication is that happy people are therefore more susceptible to weak cues like source attractiveness.

The extent to which the issue is **important to the self** has an impact on which route is taken. If the outcome of the argument or the issue at hand directly affects, and has important implications for, the self then it is more likely that the perceiver will pay more attention and the central route will be taken. Martin and Hewstone (2003) carried out a study which investigated how issue importance to the self, combined with whether the message comes from a numerical minority or majority, has an impact on whether the central or peripheral route is taken. This study is described in Text Box 3.3.

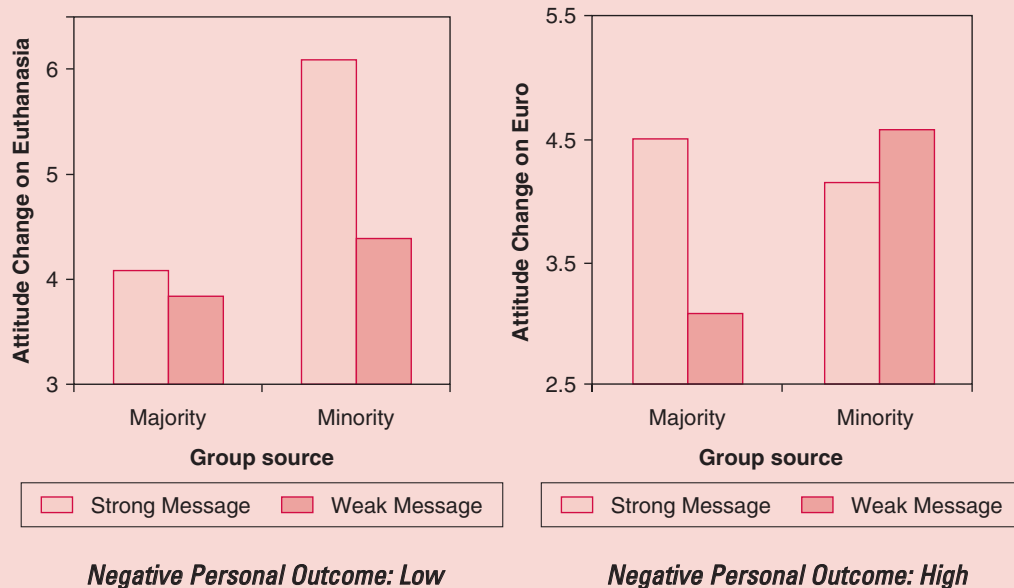
TEXT BOX 3.3

Minorities and Majorities Change Attitudes in Different Ways

A persuasive message may have different effects depending on whether it comes from a numerical minority or majority source. Martin and Hewstone (2003) were interested in whether the source of a message influences how carefully it is processed. They also considered whether the type of processing that occurs was affected by whether or not the message argues for a negative personal outcome for the participant.

METHOD

Participants who were in favor of voluntary euthanasia and against the introduction of a single currency in Europe (the Euro) read a counter-attitudinal argument which pilot studies showed was high in personal interest and would have a very negative personal outcome for them (pro-Euro) or an argument which was of moderate personal interest and would have less of a negative personal outcome for them (anti-voluntary Euthanasia). Participants either received the message from a minority source ("18% of students at your college think this") or from a majority source ("82% of students at your college think this"). Participants in each condition also read either strong evidence-based messages on the topic or weak messages on the topic.



(Continued)

TEXT BOX 3.3 (CONTINUED)

RESULTS

When the message did *not* have a very negative personal outcome for participants (anti-euthanasia), people receiving information from a *minority* source were more persuaded by *strong* messages than by weak messages, whereas people receiving information from a majority source were equally influenced by strong and weak messages. In contrast, when the message concerned was perceived as having a *very negative* personal outcome for participants (pro-Euro), people receiving information from a *majority* source were more persuaded by *strong* messages than by weak messages, whereas people receiving information from a minority source were equally persuaded by strong and weak messages.

INTERPRETING THE FINDINGS

When the message did not have a negative personal outcome, participants who received their message from a minority source were only influenced by high quality messages, indicating that they took the central route to persuasion. In contrast, participants who received their message from a majority source were equally influenced by strong and weak messages, indicating that they disregarded message content and took the peripheral route to persuasion. According to conversion theory (Moscovici, 1980), when an argument is made by the majority, people focus on their relationship with the source of the message rather than the content of the message, because they feel social pressure to conform to the majority viewpoint. In contrast, when an argument is made by the minority, people are more likely to focus on the message content to try to understand why the minority is taking this divergent standpoint. This leads to more central processing.

When the message had a negative personal outcome for participants, however, the opposite pattern emerged; only a message from a majority source led to central processing. Martin and Hewstone argued that when a majority endorses a position which is against their self-interests, it leads to curiosity and therefore a closer examination of the message. In contrast, when a minority source argues for a negative personal outcome it is ignored to protect one's self-interests.

In line with conversion theory, thus, a majority source is likely to lead to *heuristic* processing whereas a minority source is more likely to lead to *systematic* processing.

There are also **individual differences** that make some people more likely than others to take one route over another. **Need for cognition** (Haugtvedt & Petty, 1992) is the degree to which someone is oriented to engaging in effortful thought. People who are higher in need for cognition are therefore more likely to take the central route while people who are lower in need for cognition are more likely to take the peripheral route. Similar effects have been found using related tendencies, such as **need for closure** (Kruglanski et al., 1993) and **need to evaluate** (Jarvis & Petty, 1995). Differences in **self-monitoring** (Snyder & DeBono, 1985) can also have an impact. This is the degree to which someone

is concerned with what other people think of them. People who are higher in self-monitoring will be more likely to take the central route while people who are lower in self-monitoring will be more likely to take the peripheral route.

Finally the use of **humor** can influence which route is taken. Relevant humor leads to the central route being taken while irrelevant humor leads to the peripheral route being taken (Smith, Haugtvedt, & Petty, 1994).

Peripheral Cues

Once a route is taken, it may prove persuasive or not depending upon the characteristics of the context. If the central route is taken the key determinant of persuasion will be the argument quality (is it convincing or not). If the peripheral route is taken, then several characteristics of the message source will be critical. First, peripheral route processing is more likely to lead to attitude change if the source has **physical attractiveness**. Chaiken (1979), for instance, found that experimenters trying to persuade undergraduates to sign a petition to stop the university serving meat were more successful if they were attractive than if they were unattractive. Second, as we will see when we discuss affiliation and attraction in Chapter 9, **similarity to self** is an important determinant of attraction. Similarity in terms of shared attitudes, appearance, or social categories can all enhance the persuasiveness of a message (Simons et al., 1970). Finally, **source credibility** is a key peripheral cue that increases the likelihood of attitude change. A source is perceived as credible if they are seen to be an expert, unbiased, and trustworthy. In the 1950s Hovland and Weiss (1951) found that US college students who read an article arguing that nuclear submarines were safe were more persuaded when the author was *Robert Oppenheimer* (the scientist who was in charge of developing the atomic bomb) compared to when the same article was attributed to the Soviet news agency, *Pravda*. This study was carried out during the Cold War, so these two sources represented clear differences in credibility. What is interesting is that differences in persuasion caused by differences in credibility tend to diminish over time, something called the “sleeper effect”. Four weeks after the initial test phase in Hovland and Weiss’s experiment, participants’ attitudes towards nuclear submarines were again tested. The change can be seen in Figure 3.11.

As you can see the effects of source credibility had disappeared when the participants were re-tested four weeks after receiving the persuasive message. The implication is that even non-credible people can persuade us ... over time. The explanation for this effect is something called **source memory**. The idea is that we do not only encode information about the argument, but also about who is the source of the argument (hence the initial impact of source variables like attractiveness, and here, credibility). Over time, however, source memory decays and so any influence of source credibility – whether facilitating or inhibitory – is diminished. This explains the increase in low credibility source persuasion as well as the decrease in high credibility persuasion. Further supporting this idea, Kelman and Hovlan (1953) replicated the original experiment but reminded participants of the source before their attitudes were reassessed. This eliminated the sleeper effect.

100 Essential Social Psychology

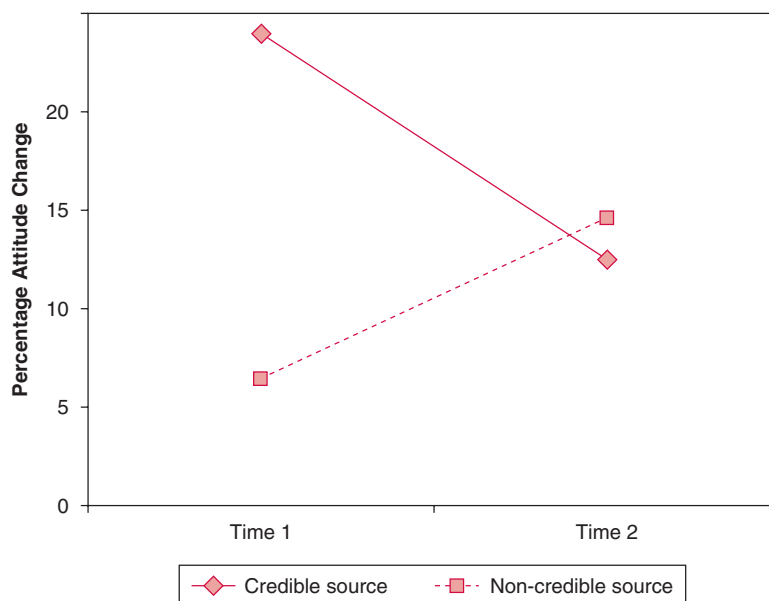


Figure 3.11 The sleeper effect. Data from Hovland and Weiss (1951)

Summary

In this section we have looked at attitude change. Attitudes can change via **self-perception** if the attitude is initially very weak, or it is less important for our self-concept, or via **cognitive dissonance** processes when we have a clear opinion of the issue at hand or it is important to us. While self-perception and dissonance-reduction lead to attitude change from internal processes, there can also be external pressures to change our attitudes, such as from the media, advertising, political parties, etc. We can process **persuasive messages** in either of two ways: **systematically** via the **central route**, or **heuristically** via the **peripheral route**. A number of factors influence which route is taken: **speed of speech, mood, self-relevance, individual differences** in processing tendencies and **humor**. If the peripheral route is taken then surface characteristics like **attractiveness, similarity** and perceived **credibility** will determine whether attitude change occurs.

SUMMARY

In this chapter we have explored what social psychologists have learned about attitudes and attitude change. We first discussed how attitudes were formed. There are four ways:

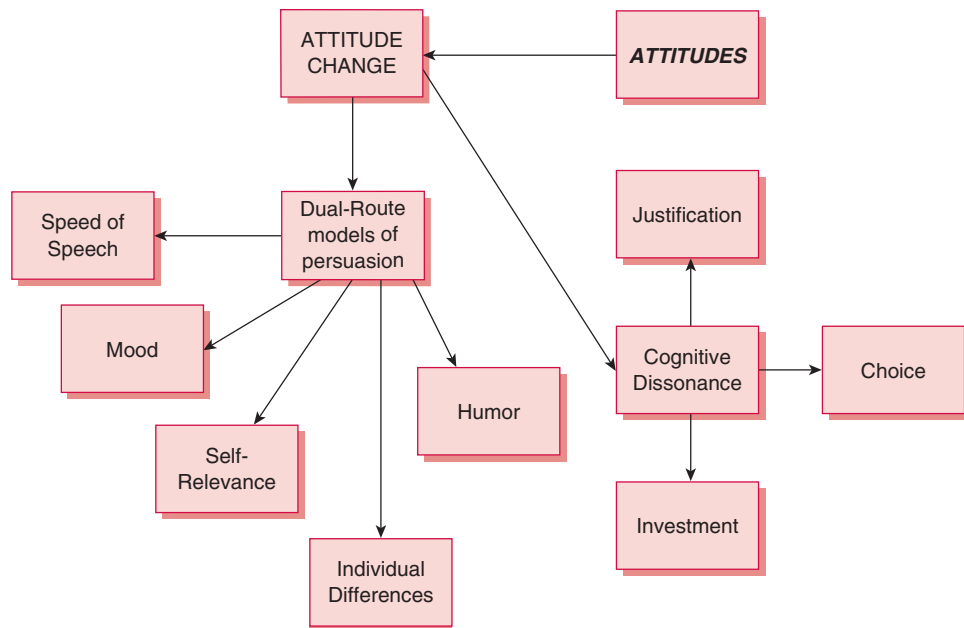


Figure 3.12 Memory Map

mere exposure, associative learning, self-perception and the **functional** approach. Merely being exposed to something many times can increase liking of it. Consistent pairings of something with pleasant or unpleasant stimuli can lead to an association being developed. Sometimes we can infer our attitudes from observing our own behaviors, and sometimes we adopt particular attitudes because they help us address important psychological needs.

We then examined the link between attitudes and behavior. There are five factors that determine when attitudes will be correlated with behavior: **specificity, time, self-awareness, accessibility** and **strength**. Attitudes and behavior will be correlated when they are measured at the same level of specificity, when they are measured close together in time, when the attitude and behavior are both measured privately or with an audience respectively, when attitudes are more easily brought to mind, and when attitudes are held with more conviction. We also saw here that in order to most accurately predict behavior we need to consider other determinants that combined interactively to form a **behavioral intention**, which then predicts actual behavior. **Attitudes, subjective norms** and **perceived behavioral control** all need to be taken into account to predict behavioral intention.

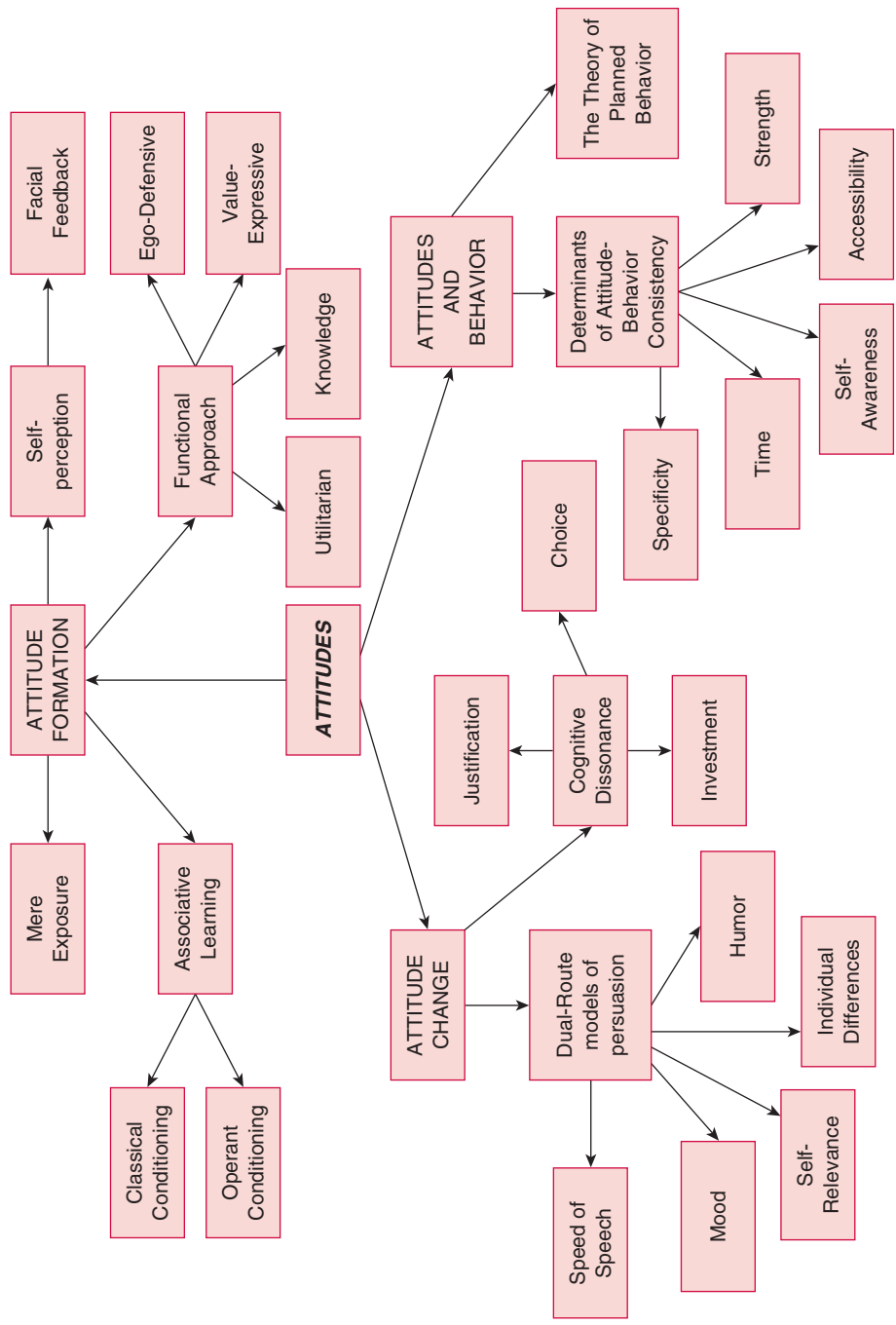


Figure 3.13 Memory Map

Finally, we looked at how attitudes can change. Attitudes can sometimes change from observations of our own behaviors. This can be via **self-perception** if the attitude is initially very weak, or it is less important for our self-concepts, or it can be via **cognitive dissonance** processes when we have a clear opinion of the issue at hand or it is important to us. Cognitive dissonance describes the discrepancy that we feel when we have acted in a way that is clearly counter to our attitudes and we have no way of justifying why we did so. This is an unpleasant state and we will be motivated to resolve it – if there is no way to explain our behavior the only option left is to change our attitude to be in line with the behavior and therefore resolve the discrepancy.

Aside from attitudes resulting from internal conflict, which characterizes self-perception and dissonance theories, often we are faced with external pressures to change our attitudes, such as from the media, advertising, political parties, etc. We can process **persuasive messages** in either of two ways: **systematically**, as naïve scientists, via the **central route**, or **heuristically**, as cognitive misers, via the **peripheral route**. Apart from more general tendencies that determine use of heuristic over systematic processing strategies discussed in Chapter 2, which route is taken is influenced by **speed of speech, mood, self-relevance, individual differences** in processing tendencies and **humor**.

Suggested Further Readings

- Eagly, A.H. & Chaiken, S. (1993). *The psychology of attitudes*. Fort Worth: Harcourt, Brace, Jovanovich.
- Fishbein, M. & Ajzen, I. (1974). Attitudes towards objects as predictors of single and multiple behavioral criteria. *Psychological Review*, 81, 59–75.
- Petty, R.E. & Cacioppo, J.T. (1986). *Communication and persuasion: Central and peripheral routes to attitude change*. New York: Springer.

Key Questions

- Compare and contrast the different ways in which attitudes can form.
- Do attitudes predict behavior?
- When and how do attitudes change?