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The Three Witches of Attitudes



Questions to Ponder

- How do we decide whether we like or dislike something?
- Do different people derive their attitudes in different ways?
- What does it mean to have a neutral attitude? Are there different types of neutral attitudes?
- What are the implications of liking and disliking something at the same time?
- Why do we hold attitudes?

Preview

Within this chapter we introduce our *three witches* of attitude – attitude content, structure, and function. We label these aspects as three witches because, in popular folklore, three witches work together to make powerful magic (see Haddock & Maio, 2004; Maio & Haddock, 2004). Similarly, our witches operate together to make the potent brew called “attitude.” A better understanding of the attitude concept comes from considering the links between attitude content, structure, and function.

The First Witch – Attitude Content

So far, we have seen that attitudes can be thought of as a global evaluation (e.g., like–dislike) of an object. This perspective has generated a number of conceptual models of the

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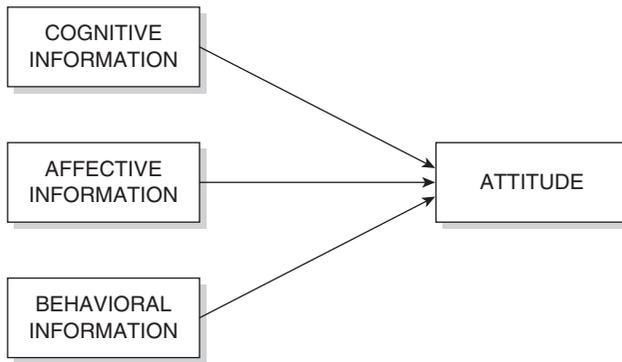


Figure 2.1 The Multicomponent Model of Attitude

attitude concept. The most influential model of attitude has been the *multicomponent model* (see Eagly & Chaiken, 1993; Zanna & Rempel, 1988). According to this perspective (see Figure 2.1), attitudes are summary evaluations of an object that have *Cognitive*, *Affective*, and *Behavioral* components. We like to think of these components as a taxi CAB that will get you where you want to go. A number of researchers have considered how the CAB components contribute to the formation and expression of attitudes.

Getting into the CAB

What do we mean when we say that attitudes have cognitive, affective, and behavioral components? The *cognitive* component of attitudes refers to the beliefs, thoughts, and attributes we associate with an object. In many cases, a person's attitude might be based primarily upon the positive and negative attributes they associate with an object. For example, when one author recently bought a new car, he devoted considerable attention to different vehicles' safety records, gas mileage, and repair costs. In this example, attitudes toward the different cars were formed through a methodical consideration of the positive and negative characteristics of each car. Similarly, an individual's favorable attitude toward a particular politician might be based on the belief that the politician is charismatic, intelligent, and has economic policies that promote social equality.

The *affective* component of attitudes refers to feelings or emotions linked to an attitude object. Affective responses influence attitudes in a number of ways. A primary way in which feelings shape attitudes is through feelings that are aroused in response to an attitude object. For instance, many people indicate that spiders make them feel scared. This negative affective response is likely to cause a negative attitude toward spiders.

The *behavioral* component of attitudes refers to past behaviors or experiences regarding an attitude object. For instance, people might guess that they must have a negative attitude toward factory farming, if they remember having signed a petition against the unethical treatment of animals. The idea that people might infer their attitudes from their previous actions was best articulated by Daryl Bem. According to

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Bem's (1972) self-perception theory, individuals do not always have access to their opinions about different objects (see also Nisbett & Wilson, 1977), and sometimes infer their attitudes by thinking about how they have behaved with respect to the attitude object in the past.

Are the CAB components really different?

Having read the previous section, you might be thinking "Hey, aren't these components pretty much the same thing?" You will be pleased to hear that attitude researchers have asked the same question and devoted a lot of energy to answering it. To cut a long story short – the components are different.

Perhaps the best evidence showing that the CAB components are not the same comes from research conducted by Steven Breckler (1984). In one experiment, Breckler had participants report their cognitive, affective, and behavioral responses about snakes. Whilst in the presence of a real snake, participants indicated whether (i) snakes are kind and cruel (cognition), (ii) snakes make them feel anxious and happy (affect), and (iii) they like to handle snakes (behavior). Breckler (1984) used the content of participants' responses to compute a score for each of the components. He found that these cognitive, affective, and behavioral scores were only moderately correlated with each other. Thus, these components were empirically distinct.

While Breckler (1984) provided strong evidence that the cognitive, affective, and behavioral components of attitude are not the same, this does not mean that they are completely independent of each other. For example, one of the authors is a big fan of the music of Bruce Springsteen. If you asked him for his thoughts about Bruce Springsteen's music, he would answer that the music has well-constructed lyrics that express the importance Springsteen places on equality and social justice. If you asked the author about the feelings he associates with the music, he would say that the music makes him feel happy. If you asked him about his past experiences with Bruce Springsteen's music, he would wax lyrically about the many times he has attended a Springsteen concert. Unsurprisingly, the positive cognitions, affects, and behaviors all contribute to the author's positive attitude toward Bruce Springsteen.

That said, it isn't always the case that the CAB components have the same evaluative implications. Instead of asking this author about his perceptions of Bruce Springsteen, ask him about blood donation. He would tell you that blood donation is a noble endeavor that helps others; implying that he has positive cognitions. However, if you asked him about his feelings about blood donation, he would admit that it makes him feel afraid. He would also recall the negative experience of having once been jabbed repeatedly by a sadistic nurse who was unable to locate a vein in his arm. Thus, his cognitive, affective, and behavioral responses about blood donation differ in valence. (If you're wondering, it turns out this author does not donate blood, though he thinks it is a great thing to do). Taken together, while the cognitive, affective, and behavioral components are (usually) consistent in their evaluative implications, they are not simply different ways of saying the same thing.

Semantic differential measures of the CAB components

Another way of demonstrating the relative independence of the CAB components is to address how they can be measured. While attitude researchers have used a number of techniques to measure these components, this section describes some measures that are psychometrically sound and most popular among researchers.

The first type of measure we want to discuss is the semantic differential approach to the measuring of attitudinal components. We have already learned that researchers often use semantic differential scales such as positive–negative and good–bad to measure overall attitudes. This framework can also be used to measure the cognitive and affective components of attitude. Most often, researchers using semantic differential scales to assess cognition and affect have either developed “generic” semantic differential dimensions that can be used to assess cognitive or affective information toward different types of attitude objects, or have used the same semantic differential dimensions to assess both cognitive and affective responses toward a particular attitude object (and change the instructions so that they highlight either cognition or affect).

Regarding the generic approach, Crites, Fabrigar, and Petty (1994) developed semantic differential measures of the cognitive and affective components of attitude. Their measure of the cognitive component features the dimensions of useful–useless, wise–foolish, beneficial–harmful, valuable–worthless, perfect–imperfect, and wholesome–unhealthy, while the affective component features the dimensions of love–hateful, delighted–sad, happy–annoyed, calm–tense, excited–bored, relaxed–angry, acceptance–disgusted, and joy–sorrow. These measures have the advantage of being reliable and valid, and can be used across different attitude objects (see Crites et al., 1994). Similarly, for both components, the word pairs are more specific than the broad, evaluative semantic dimensions (good–bad, like–dislike) used to measure overall attitudes.

In contrast to the generic approach, Breckler and Wiggins (1989) used the *same* semantic differential scales to assess *both* cognition and affect for a particular object, but framed the scales differently. For instance, in assessing cognitive and affective reactions toward blood donation, Breckler and Wiggins (1989) measured cognitions by having participants respond to the stem “Blood donation is” on the dimensions bad–good, wise–foolish, useless–useful, and important–unimportant. Affective responses toward this object were assessed by having participants respond to the stem “Blood donation makes me feel” on the same semantic differential scales.

There are many benefits to the semantic differential approaches to measuring attitudinal components. First, they are simple to administer and complete. Second, when they use the same dimensions across different attitude objects (as in the method of Crites and colleagues), they can be used to compare the favorability of responses across attitude objects. That said, there are also some problems with this type of measure. Most importantly, the attentive reader will have noticed that the semantic differential measures mentioned only the cognitive and affective components. The diffuse nature of behavior has made it difficult for researchers to imagine valid semantic differential scales for this component.

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Open-ended measures of the CAB components

A second type of measure uses open-ended questions to measure all three attitudinal components. In this technique, participants are asked to write down the thoughts, feelings, and behavioral experiences they associate with an attitude object. An example of this type of measure is provided in Figure 2.2. Looking at these measures, you can see that the cognition measure asks participants to list the characteristics, attributes, and values they associate with the attitude object. The affect measure asks participants to list the feelings and emotions they associate with the attitude object. The behavior measure asks participants to list relevant past experiences they have had with the attitude object.

So if participants list their own cognitive, affective, and behavioral responses, how are scores derived for each component? Let's see how this is done by using the affect measure as an example. For this exercise, let's assume that the attitude object is the former American President George W. Bush. A participant might indicate that this person elicits two affective responses: "anger" and "disgust." Having listed the feelings they associate with the object, participants then rate how positive or negative each emotion is in relation to the attitude object. Our participant might indicate that anger gets a rating of -1, while disgust gets a score of -2. From these responses, we can compute a score that is the average of these valence ratings (in this case, -1.5).

The open-ended technique for measuring attitudinal components has been used in many types of studies (Bell, Esses, & Maio, 1996; Haddock, Zanna, & Esses, 1994a, 1994b; see Esses & Maio, 2002; Haddock & Zanna, 1998, for reviews). There are a number of advantages to this approach. First, this technique enabled researchers to devise a measure of the behavioral component, allowing for a more comprehensive test of the multicomponent model of attitude (see e.g., Haddock et al., 1994b). Second, respondents are asked to indicate the cognitive, affective, and behavioral responses that are the most personally salient and relevant, permitting them to be unrestrained from the dimensions provided by "close-ended" response formats.

While there are many positive aspects of open-ended measures of attitudinal components, this type of measure is not without its difficulties. For example, participants may find it hard to articulate the thoughts, feelings, and past experiences they associate with a particular attitude object, meaning that they might not provide any responses for one or more components. Similarly, these measures require more time and effort from participants. If researchers are interested in measuring cognitions, affective responses, and past behaviors for many attitude objects, it might not be feasible to use the open-ended approach.

Do the CAB components predict attitudes?

So far, we have shown that cognitive, affective, and behavioral information are three separable components of attitude. But how well do they actually predict a person's

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COGNITION (PART 1)

We are interested in the characteristics that people use in describing members of various social groups. Your task is to provide a description of typical members of the group. Your description should consist of a list of characteristics or, if necessary, short phrases which *you* would use to describe typical members of the group (e.g., "they are cheap", "they are intelligent"). Provide as many characteristics or short phrases as you think are necessary to convey your impression of the group and to describe them adequately. *Please be honest.* Your responses will be kept strictly confidential.

CANADIAN MEN ARE:

COGNITION (PART 2)

Please go back to each of the characteristics that you have provided. Decide for each characteristic whether it is favorable, unfavorable, or neutral, as you have used it to describe the group. Indicate the degree of favorability of each characteristic as follows:

- 1) If the characteristic is positive, write a (+) beside it. If it is very positive, write two pluses (++) beside it.
- 2) If the characteristic is neutral, write a zero (0) beside it.
- 3) If the characteristic is negative, write a minus (-) beside it. If it is very negative, write (--) beside it.

Give your immediate first impression. Don't spend too much time on any one characteristic.

AFFECT (PART 1)

We are interested in examining how members of particular groups make you feel, that is the emotions you experience when you see, meet, or even think about typical members of a group. Your task is to provide a list of the feelings you experience (e.g. proud, angry, disgusted, happy) when you think about typical members of that group. Provide as many feelings or emotions as you believe are necessary to accurately convey your impression of the group and to describe them adequately. *Please be honest.* Your responses will be kept strictly confidential.

CANADIAN MEN MAKE ME FEEL:

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AFFECT (PART 2)

Please go back to each of the feelings or emotions that you have provided. Decide for each feeling or emotion whether it is favorable, unfavorable, or neutral, as you have experienced it in reference to the group. Indicate the degree of favorability of each feeling or emotion as follows:

- 1) If the emotion is positive, write a (+) beside it. If it is very positive, write two pluses (++) beside it.
- 2) If the emotion is neutral, write a zero (0) beside it.
- 3) If the emotion is negative, write a minus (-) beside it. If it is very negative, write two minuses (--) beside it.

Give your immediate first impression. Don't spend too much time on any one emotion.

BEHAVIOR (PART 1)

We are interested in the past experiences you have had with members of different social groups. Your task is to provide a list of recent experiences you have had with typical group members. Provide as many experiences as you believe are necessary. *Please be honest.* Your responses will be kept strictly confidential.

MY BEHAVIORS RELEVANT TO CANADIAN MEN ARE:

BEHAVIOR (PART 2)

Please go back to the behaviors that you have provided. Decide for each *behavior* whether it is positive, negative, or neutral, as you have experienced it. Indicate your rating of each behavior as follows:

- 1) If the behavior is positive, write a (+) beside it. If it is very positive, write two pluses (++) beside it.
- 2) If the behavior is neutral, write a zero (0) beside it.
- 3) If the behavior is negative, write a minus (-) beside it. If it is very negative, write two minuses (--) beside it.

Please give your first impression. Don't spend too much time on any one behavior.

Figure 2.2 Open-ended measures of attitudinal components

attitude? Numerous studies have addressed this important question. The primary idea behind this line of research is to examine the degree to which the favorability of people's cognitions, feelings, and behaviors are correlated with a person's overall attitude. In addition, the research tests whether each component explains the overall attitude

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in unique but complementary ways; in other words, does each component explain some part of the overall attitude that is not explained by the other components?

Before we introduce this research, we have to add an important caveat. For the most part, this research has concentrated on how cognitive and affective information predicts attitudes, in the absence of behavioral information. Why? As we just discussed, semantic differential measures of the components have been limited to assessments of the cognitive and affective components. Given the popularity of these measures, most studies have focused on these two components.

One of the first studies examining the relative importance of cognition and affect was reported by Robert Abelson, Donald Kinder, Mark Peters, and Susan Fiske (1982), who explored the role of thoughts and feelings in predicting attitudes toward American presidential candidates. In this study, survey respondents ascribed personality traits to the Democratic and Republican primary candidates in 1980 and reported their feelings about each candidate. The participants were also asked to indicate their attitude toward each candidate. Abelson and colleagues found that the favorability of affective responses associated with the presidential candidates correlated with individuals' overall evaluations, above and beyond the correlations with the favorability of their beliefs about the candidates (which were also uniquely predictive of attitudes). Subsequent research by Eagly, Mladinic, and Otto (1994), Haddock and Zanna (1997), and Lavine, Thomsen, Zanna, and Borgida (1998) has produced similar findings. Thus, both cognitive and affective information contribute to the prediction of political attitudes.

In the domain of intergroup attitudes, Vicki Esses, Geoff Haddock, and Mark Zanna (1993) conducted a series of studies assessing the relative importance of cognitive and affective information in prejudicial attitudes. This research employed open-ended measures of cognition and affect. Participants listed the beliefs and feelings they associated with various ethnic groups and rated the positivity and negativity of each belief or feeling. Correlations between participants' overall attitudes and the average ratings for the beliefs and for the feelings indicated that the cognitive and affective responses were both important for predicting prejudice. Further, the relative contribution of cognitive and affective responses depended on the target group under study. For instance, Esses et al. (1993) found that attitudes toward strongly disliked groups were best predicted by cognitive information, in the form of symbolic beliefs (i.e., beliefs that typical group members violate or promote the attainment of cherished values), whereas attitudes toward liked groups were best predicted by affective information (e.g., feelings or emotions elicited by members of the target group).

In the domains of gender attitudes and attitudes toward social policy issues, Eagly et al. (1994) discovered that the evaluative implications of both cognition and affect were positively and significantly correlated with the favorability of attitudes, and that the unique contribution of each class of information is to some degree a function of the attitude object under examination. Using open-ended elicitation measures similar to those used by Esses et al. (1993), Eagly and colleagues found that affect contributed significantly to the prediction of some attitudes, but beliefs were the most important predictor in most instances.

Steven Breckler and colleagues (e.g., Breckler, 1984; Breckler & Berman, 1991; Breckler & Wiggins, 1989, 1991) explored the role of cognition and affect in predicting attitudes

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toward a range of attitude objects. Using a number of different assessment strategies (e.g., equal appearing interval scales, semantic differential scales, and thought-listing procedures) and stimuli (e.g., legalized abortion, blood donation, and college comprehensive exams), they discovered that both cognitive and affective information predicted attitudes. Breckler and colleagues found that the relative importance of each class of information was, to some extent, a function of the stimulus object under examination. For instance, affect was found to best predict attitudes toward blood donation, whereas cognitive information was found to best predict attitudes toward abortion and comprehensive exams.

Moreover, consistent with the idea that the components share a synergistic relation, all of the studies described above found that the evaluative implications of cognitive and affective information are positively correlated. That is, maintaining positive beliefs about an attitude object is associated with positive affective responses about that object, whereas negative beliefs about an object are typically associated with unfavorable feelings. For this reason, it was important that the researchers conducted additional analyses that revealed reliable associations between each component and attitude even after the other type of information was held constant in a statistical analysis (multiple regression).

A smaller number of studies have used measures of all three CAB components. One such study was conducted by Haddock and colleagues (1994b). In this study, the researchers were interested in assessing the content of Canadian university students' attitudes toward Native Canadians. Using open-ended measures of cognition, affect, and behavior, and a measure of overall attitudes, the researchers found that the quality of participants' past experiences with Native Canadians predicted attitudes independent of the favorability of participants' thoughts and feelings about the group.

The research we have described suggests that attitudes toward different objects are more or less likely to be based on different sources of information. Research has also addressed whether *people* differ in the degree to which their attitudes are derived from different sources of information. In one line of inquiry, Huskinson and Haddock (2004) tested whether people differ in the degree to which their attitudes are based on cognitive and affective information. In a series of studies, these researchers asked participants to report their attitudes, beliefs, and feelings toward a large number of attitude objects. Huskinson and Haddock (2004) found that people differ reliably in the extent to which they use the favorability of their beliefs and feelings to derive their overall attitudes. Some people based their attitudes predominantly on their affective responses, whereas others based their attitudes predominantly on their cognitive responses. Because of the synergistic relation between these components, these scientists also found that many people had attitudes that were based equally on cognition and affect. Importantly, these differences were found to have important implications for a number of outcomes, such as persuasion (see Research Highlight 2.1, this volume; Haddock & Huskinson, 2004).



Key points

- Attitudes have cognitive, affective, and behavioral components.
- The cognitive component refers to beliefs, thoughts, and attributes associated with an attitude object.
- The affective component refers to feelings or emotions associated with an attitude object.

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- The behavioral component refers to past behaviors with respect to an attitude object.
- These components have a “synergistic” relation. When an individual possesses positive beliefs about an attitude object, they typically have positive affective and behavioral associations with the object.
- Despite their synergism, the cognitive, affective, and behavioral components are quantitatively and qualitatively distinct. Further, people differ in the degree to which their attitudes are based on each of the CAB components.

Research Highlight 2.1

Attitude content

When we were kids in the 1970s, a series of famous television advertisements featured former professional athletes extolling the virtues of a particular brand of beer. While some of the athletes noted that the beer was *less filling* than other beers, others said that it *tasted great*. The first component of the message highlighted a positive attribute about the beverage (i.e., its low caloric intake), whereas the second component highlighted a positive affective response associated with the beverage (i.e., its taste). Which part of the message would you find more persuasive? Perhaps it depends on whether your attitudes tend to be based more upon the content of your beliefs or more upon the content of your feelings.

In one set of studies, Huskinson and Haddock (2004) considered the degree to which people differ in the extent to which their attitudes are derived from their cognitions or feelings. Using a strategy in which respondents completed measures of attitudes, beliefs, and feelings for a range of attitude objects, within-person correlations showed that indeed some people (let's call them *thinkers*) based their attitudes much more upon the favorability of their beliefs than the favorability of their feelings, while other people (let's call them *feelers*) based their attitudes much more upon the favorability of their feelings than the favorability of their beliefs. Huskinson and Haddock then explored whether these individual differences in attitude content would be related to how people responded to a persuasive appeal that was either cognitively-based or affectively-based.

In the study, thinkers and feelers were randomly assigned to receive one persuasive appeal about a new beverage. Some participants read an advertisement highlighting the positive qualities about the drink (for instance, that it contained pure fruit extracts). This appeal is cognition-based, as it emphasizes the positive attributes of the object. Other participants, instead of reading about the drink's properties, were given the opportunity to taste the beverage. This appeal is affect-based, because of the feelings resulting from tasting the pleasant drink. Later, participants were asked to indicate how much they liked the beverage. The results revealed that the two appeals had different effects on how much thinkers and feelers reported liking the beverage. Specifically, among participants who were presented with the cognition-based appeal, thinkers tended to have more positive attitudes about the drink than feelers. In contrast, among participants who were presented with the affect-based appeal, feelers had more positive attitudes about the drink than thinkers. Thus, this study shows how individual differences in attitude content influence how we react to different types of information.

The Second Witch – Attitude Structure

In addition to considering the content of attitudes, another important issue concerns how positive and negative evaluations are organized within and among the cognitive, affective, and behavioral components of attitudes. It is typically assumed that the existence of positive beliefs, feelings, and behaviors inhibits the occurrence of negative beliefs, feelings, and behaviors. For example, this assumption implies that an individual with positive beliefs, feelings, and behaviors about the New York Yankees baseball team is unlikely to have negative beliefs, feelings, and behaviors about this team. In other words, according to this *one-dimensional* perspective, the positive and negative elements are at opposite ends of a single dimension, and people tend to experience either end of the dimension or a location in between.

This one-dimensional view is opposed by a *two-dimensional* view. This view suggests that one dimension reflects whether the attitude has few or many positive elements, and the other dimension reflects whether the attitude has few or many negative elements (Cacioppo, Gardner, & Berntson, 1997). If this view is correct, then people can possess any combination of positivity or negativity in their attitudes. Some of these combinations fit the one-dimensional view: attitudes may consist of few positive and many negative elements, few negative and many positive elements, or few positive and few negative elements (i.e., a neutral position). Another combination is inconsistent with the one-dimensional view: attitudes might occasionally contain many positive *and* many negative elements, leading to *attitudinal ambivalence*. The two-dimensional perspective explicitly allows for this ambivalence to occur, whereas the one-dimensional perspective does not.

The one-dimensional and two-dimensional perspectives are presented in Figure 2.3. The top panel depicts the one-dimensional view of attitudes. In this panel, Person X, who is plotted on an axis depicting the one-dimensional view, would be slightly negative. The single axis does not permit one to mark Person X as being both negative and positive. The bottom panel of Figure 2.3 depicts the two-dimensional view of attitudes, with one axis (from middle to top) representing variability in negative evaluations and the other axis (from middle to right) depicting variability in positive evaluations. From this perspective, a person can possess high amounts of negativity and positivity toward an object. For example, Person Y in the figure could be considered highly ambivalent.

Which perspective is superior? At first glance, the two-dimensional perspective seems as though it should be superior because it allows for the same patterns of positivity and negativity as the one-dimensional view, while also allowing for ambivalence. For instance, it is difficult to interpret the meaning of the neutral point in one-dimensional scales for assessing attitudes (Kaplan, 1972). Imagine that people were asked to report their attitude toward eating rhubarb (a tart vegetable) on a nine-point scale that ranged from “1 – extremely unfavorable” to “9 – extremely favorable” as the end points, with “5 – neither unfavorable nor favorable” in the middle. If someone indicated that his or her attitude was 5, it is half-way between the most extreme positive response option and the most extreme negative response option. People could choose this option because it is a compromise between many positive and negative elements of their attitude (e.g., they have many positive and negative thoughts, feelings, and behaviors regarding eating rhubarb) *or* because they have no positive or negative elements whatsoever (e.g., they have never eaten rhubarb).

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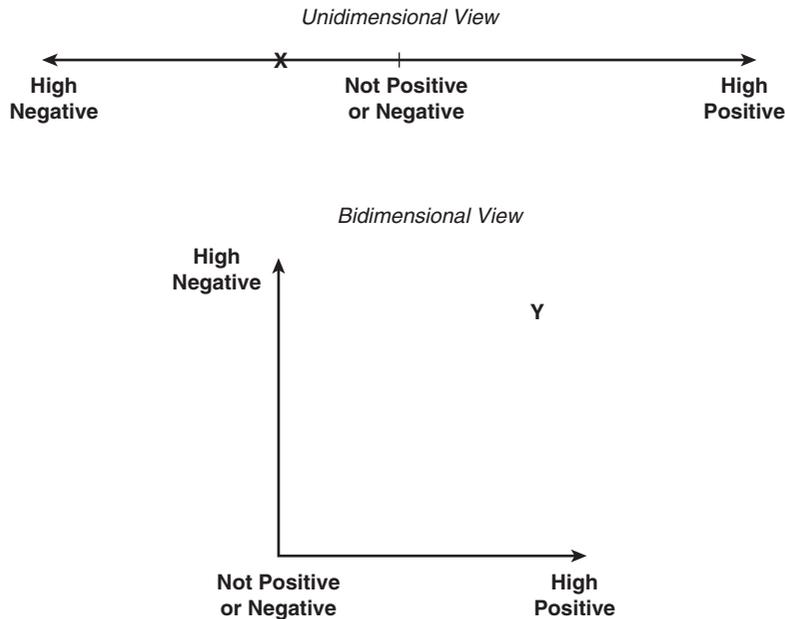


Figure 2.3 Unidimensional and bidimensional views of attitude structure

The failure to distinguish between these two reasons for the neutral selection is important, because measures that directly assess attitudinal ambivalence predict a variety of outcomes. The best known outcome is *response polarization* (Bell & Esses, 2002; MacDonald & Zanna, 1998). People who are highly ambivalent toward an object are more strongly influenced by features of their environment that make salient the object's positive or negative attributes. This causes them to behave more favorably toward the object when the positive elements are salient than when the negative elements are salient. In contrast, non-ambivalent people are less strongly influenced by the acute salience of the positive or negative attributes.

Research Highlight 2.2

Attitude structure

One reason for the emergence of attitudinal ambivalence as an important property of attitudes is its potential to explain why people sometimes react in polarized ways to controversial groups or issues. This notion was illustrated by Tara MacDonald and Mark Zanna (1998), who examined the consequences of students' ambivalence toward feminists. In an initial set of data, these investigators found that some

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students tended to both admire feminists *and* dislike them. This pattern can be labeled as cognitive-affective ambivalence, because it represents conflict between how the individuals think (e.g., admiring feminists for their perceived courage) and feel (e.g., disliking feminists because of their perceived stridency). MacDonald and Zanna's study examined an important potential consequence of this ambivalence: polarized evaluations of a feminist's suitability for employment. The researchers expected that ambivalent people would be more strongly influenced by an innocuous prior event, which was whether a prior candidate who was admirable but dislikeable succeeded or failed in an interview.

To test this hypothesis, participants first completed a measure assessing their ambivalence toward feminists. This questionnaire asked participants to rate the extent to which they admired feminists and liked them. Ambivalent and non-ambivalent participants were then informed in a subsequent experimental session that they were taking part in a study of how people make hiring decisions. They listened to a 10-minute audio recording of a job interview, which featured an admirable but dislikeable man who was to be successful (positive prime condition) or unsuccessful with his application (negative prime condition). Participants then completed questions about the candidate's admirable qualities (positive prime condition) or dislikeable qualities (negative prime condition). Finally, participants read and evaluated the applications of several women, including one who had completed a thesis and jobs that suggested a feminist political perspective. As part of this final task, participants rated the likelihood that they would hire each woman. The main dependent measure was the rated likelihood of hiring the feminist applicant.

The results of the study showed that participants who exhibited a high degree of ambivalence toward feminists reported stronger intentions to hire the feminist candidate after seeing the admirable but dislikeable male candidate succeed than after seeing him fail. In contrast, participants who exhibited a low degree of ambivalence toward feminists were not affected by the success or failure of the admirable but dislikeable male candidate. Thus, only the ambivalent participants' intentions were affected by the prime.

MacDonald and Zanna (1998) concluded that cognitive-affective ambivalence has important consequences. When people possess this ambivalence, making them mindful of either the cognitive (e.g., admiration) or affective (e.g., dislike) elements of their attitudes causes their behavior to reflect the salient elements. As a result, ambivalent people might appear to strongly favor a person who is a target of their ambivalence (e.g., a feminist) in some situations (e.g., after a positive event), but strongly disfavor the individual in other situations (e.g., after a negative event). Thus, behavior that may seem quizzical and contradictory on the surface may be explicable by considering the extent to which there is ambivalence in the underlying attitude.

Types of ambivalence

Researchers interested in attitude ambivalence have described different types of ambivalence (see Conner & Armitage, 2009; van Harreveld, van der Pligt, & de Liver, 2009). *Potential ambivalence* is a state of conflict that exists when people simultaneously

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possess positive and negative evaluations of an attitudinal object. This conflict can be measured by asking people to indicate the positive and negative elements of their attitude, perhaps by asking them to list the beliefs, emotions, and behaviors that occur to them (as outlined above). Inspection of these elements might reveal many positive and negative beliefs (cognitive ambivalence), positive and negative feelings (affective ambivalence), or positive and negative behavioral experiences (behavioral ambivalence). There may also be asymmetry in the valence among beliefs, feelings, and behaviors that produce conflicting evaluations. For example, people might possess many negative beliefs and strong positive feelings about an object (e.g., chocolate cake). Researchers can calculate the amount of conflict between people's positive and negative evaluations of an attitude object, using one of several different formulae developed for the purpose (e.g., Priester & Petty, 1996; Thompson, Zanna, & Griffin, 1995).

An important reason for labeling this type of ambivalence as “potential” ambivalence is that the ambivalence may or may not be consciously perceived by the individual (see McGregor, Newby-Clark, & Zanna, 1999). In contrast, *felt ambivalence* is the actual feeling of tension that people experience when they consciously think about the attitude object. This type of ambivalence is assessed by asking people to rate the extent to which their feelings are conflicted, mixed, and indecisive (e.g., “How mixed is your opinion about chocolate cake?”; see Wegener, Downing, Krosnick, & Petty, 1995).

Numerous studies have examined the antecedents and consequences of potential and felt ambivalence (e.g., Holbrook & Krosnick, 2005; Priester & Petty, 2001; see Conner & Armitage, 2009, for an excellent review). To date, research has revealed that potential and felt ambivalence don't correlate highly, suggesting that they tend to measure somewhat different things (Priester & Petty, 1996; Riketta, 2004). Nonetheless, research has revealed that ambivalent and non-ambivalent attitudes influence how people process issue-relevant information and the degree to which attitudes predict behavior. With regard to the former issue, ambivalent attitudes tend to cause greater scrutiny of information that can help to resolve the ambivalence (Maio, Bell, & Esses, 1996; Clark, Wegener, & Fabrigar, 2008). With regard to the latter issue, research suggests that ambivalent attitudes are less likely to predict behavior than non-ambivalent attitudes (Conner & Armitage, 2009). A recent model suggests that these effects may occur because of ways in which ambivalence affects decision making processes (van Harreveld et al., 2009).



Key points

- An important issue related to attitudes concerns how positive and negative evaluations are organized within and among the components of attitude.
- The one-dimensional view postulates that the positive and negative elements are stored as opposite ends of a single dimension.
- The two-dimensional view postulates that positive and negative elements are stored along two separate dimensions.
- Feelings of ambivalence may only partly reflect the potential ambivalence in thoughts, feelings, and behaviors relevant to our attitude.

The Third Witch – Attitude Functions

Individuals hold attitudes for a variety of reasons. For example, the authors' affinity for the Toronto Maple Leafs hockey team might have developed from their relatives and friends supporting the team. In contrast, their attitude toward abortion might be based on the value they place on an individual's freedom of choice or the sanctity of life. As introduced in Chapter 1, attitude researchers have devoted considerable attention to understanding the needs or functions that are fulfilled by attitudes.

The most prominent models of attitude functions were developed almost 50 years ago (Katz, 1960; Smith et al., 1956). Smith et al. (1956) suggested that attitudes serve three primary functions: object-appraisal, social-adjustment, and externalization. *Object-appraisal* refers to the ability of attitudes to summarize the positive and negative attributes of objects in our social world. For example, attitudes can help people to approach things that are beneficial for them and avoid things that are harmful to them (Maio, Esses, Arnold, & Olson, 2004). *Social-adjustment* is fulfilled by attitudes that help us to identify with people whom we like and to dissociate from people whom we dislike. For example, individuals may buy a certain soft drink because this drink is endorsed by their favorite singer. *Externalization* is fulfilled by attitudes that defend the self against internal conflict. For example, bad golfers might develop an intense dislike for the game because their poor performance threatens their self-esteem.

In his own program of research, Daniel Katz (1960) proposed four attitude functions, some of which relate to those proposed by Smith et al. (1956): knowledge, utility, ego-defense, and value-expression. The *knowledge* function represents the ability of attitudes to organize information about attitude objects; while the *utilitarian* function exists in attitudes that maximize rewards and minimize punishments obtained from attitude objects. These functions are similar to Smith et al.'s (1956) object-appraisal function. Katz's *ego-defensive* function exists in attitudes that serve to protect an individual's self-esteem, and is similar to Smith et al.'s (1956) externalization function. Finally, Katz proposed that attitudes may serve a *value-expressive* function, such that an attitude may express an individual's self-concept and central values. For example, a person might cycle to work because she values health and wishes to preserve the environment.

Interest in the study of attitude functions has fluctuated wildly. In the decade following the taxonomies developed by Smith et al. (1956) and Katz (1960), there was considerable interest in understanding the reasons people hold particular attitudes and the implications of holding attitudes that fulfill different functions. Interest in the functional perspective then waned for a period of time, as researchers found it difficult to conduct experimental studies testing various aspects of functional theories.

A new generation of research has provided fresh new insights into the functional perspective. For example, Gregory Herek (e.g., Herek, 1986, 2000) suggested a distinction between evaluative functions, which pertain to the ability of attitudes to summarize information about the attitude object itself, and expressive functions, which are fulfilled upon the expression of an attitude. Herek (1987) also developed a measure

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assessing the degree to which an attitude fulfills different functions. His Attitudes Functions Inventory (AFI) is a self-report measure asking participants to rate the extent to which their attitude reflects various concerns. This approach provides a simple method for determining the primary function of an individual's attitude toward a particular object (see also Prentice, 1987).

At around the same time as the development of Herek's AFI measure, Sharon Shavitt (e.g., Shavitt, 1990; Shavitt & Nelson, 2000) considered whether different attitude objects are likely to fulfill a particular function. For example, Shavitt (1990) tested whether consumer products such as coffee, air conditioners, watches, and sunglasses serve a single purpose or have multiple functions. Shavitt found that, across individuals, coffee and air conditioners tended to serve a utilitarian function (as indicated by researchers' coding of participants' thoughts about these items) and that people's attitudes toward particular brands of these products were most likely to be changed by utilitarian arguments (for example, the quality of a product). In contrast, Shavitt found that objects such as watches and sunglasses could fill different functions. One person might wear a particular brand of sunglasses because of the quality of the brand (for example, they are effective in blocking UV rays), whereas another person might wear that same brand because of the social prestige associated with the brand name. This research has been instrumental in linking theories of attitude function to consumer behavior.

Research Highlight 2.3

Attitude functions

Back in our university student days, one of us had two very good friends who had extremely different personalities. One of the friends was very adept at changing his personality to fit the social environment in which he found himself. If the situation suggested that he needed to behave one way, he could act that way; if the situation suggested that he needed to behave the opposite way, he could do that as well. In contrast, the other friend did not show this behavioral variability. He tended not to mold his personality depending upon the situation, instead he always showed others his "true self."

Mark Snyder (1974, 1986) developed the personality construct of self-monitoring in order to describe how people differ in the degree to which they change their behavior to suit the situation. Snyder described high self-monitors as the type of people who are adept at changing their behavior across situations, while low self-monitors tend to present themselves in the same way across situations. Snyder and his colleagues (e.g., Snyder & DeBono, 1985) linked these individual differences in self-monitoring to the functions that are likely to be fulfilled by the attitudes of high and low self-monitors. In particular, these scientists argued that high self-monitors, given their propensity to change their personality when interacting with

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different people, might be likely to hold attitudes that fulfill a social-adjustive function. In contrast, they argued that low self-monitors, given their propensity to always “be themselves,” might be more likely to hold attitudes that fulfill a value-expressive function.

In a creative set of studies, Mark Snyder and Ken DeBono (1985) tested whether individual differences in attitude function (operationalized on the basis of being high or low in self-monitoring) would influence how people responded to different types of persuasive appeals. In one experiment, Snyder and DeBono (1985, Study 3) randomly assigned high and low self-monitors to receive one of two appeals about a new brand of shampoo. One of the appeals focused on the *image* associated with the shampoo (e.g., that the product was above average in “how good it makes your hair look”). The other appeal focused on the *quality* of the shampoo (e.g., that the product was above average in “how clean it gets your hair”).

Snyder and DeBono (1985, Study 3) tested whether people who tend to hold social-adjustive attitudes (that is, high self-monitors) would be more persuaded by the image appeal than the quality appeal, whereas people who tend to hold value-expressive attitudes (that is, low self-monitors) would be more persuaded by the quality appeal than the image appeal. These predictions were strongly supported by the results, which found that an individual’s willingness to try the shampoo depended upon whether the appeal “matched” their self-monitoring status. This study and others (see DeBono, 1987; Prentice, 1987) demonstrate the importance of knowing the needs fulfilled by a person’s attitude.

In recent years, research on attitude functions has focused on particular functions served by attitudes. For instance, there is evidence indicating that the object-appraisal function is highly important, because attitudes can simplify interaction with the environment. The importance of this function was highlighted by Russell Fazio and colleagues, who found that highly accessible attitudes (which people recall quickly) increase the ease with which people make attitude-relevant judgments and decrease physiological arousal during these judgments (see Fazio, 1995, 2000). These findings support the conclusion that the object-appraisal function is more strongly served by attitudes that are spontaneously activated from memory than by attitudes that are not spontaneously activated (see Maio & Olson, 2000a, 2000c).

Despite the recent advances in research on attitude function, key problems still limit progress in understanding attitude functions (Maio & Olson, 2000b, 2000c). One problem is the limitations in the current approaches to measuring the attitude functions. For instance, Herek’s AFI relies on people’s ability to know the functions of their own attitudes, but evidence indicates that people are sometimes poor at knowing the basis for their attitudes (Nisbett & Wilson, 1977). This problem is particularly evident for so-called ego-defensive attitudes, which help to defend the ego precisely because the person is *unaware* that the attitude is defending the self-concept. (As soon as you know that the attitude is merely helping you to feel better about yourself, it may no longer

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help to make you feel better about yourself.) A second problem is ambiguity in the distinctions between different attitude functions. For instance, a person's attitude toward partying the night before an exam might reflect the extent to which he or she values "achievement" and, therefore, be value-expressive. At the same time, the person's value of achievement itself reflects a utilitarian concern. So is the attitude value-expressive or utilitarian? A different type of taxonomy may be needed to address such issues (Maio & Olson, 2000a).



Key points

- Individuals hold attitudes for a variety of reasons.
- Among the functions, the object-appraisal function is especially important as it suggests that attitudes serve as energy-saving devices that make judgments easier and faster to perform.
- Research on attitude functions requires further improvement in the methods used to assess them.

Making a Better Brew: Linking Attitude Content, Structure, and Function

There are inexorable links among our witches of attitude content, attitude structure, and attitude function. For example, synergy among the CAB components should cause an individual to have a unidimensional rather than bidimensional attitude. If an individual has positive cognitions, affective responses, and past experiences with an attitude object, they should also have a unidimensional positive attitude about the object. In this case, synergistic content influences the structure of the attitude.

The link between attitude content and attitude function is also important. Consider attitudes toward a car that are based on a need to conserve fuel. These attitudes should be based on beliefs about the extent to which the car obtains good fuel economy. Similarly, if attitudes toward a style of clothing fulfill a psychological need to enhance social relations, then these attitudes should be based on beliefs about the extent to which the style is preferred among one's friends. In both cases, attitudes that serve different functions often differ in the content of the beliefs that support them (see Maio & Haddock, 2004).

Finally, there are strong links between the structure and function witches. For instance, Maio and colleagues (e.g., Maio et al., 2004; Maio & Haddock, 2004) have argued that the same attitude functions may operate at both the unidimensional and bidimensional structural levels, but to varying degrees. For instance, the object-appraisal function should be served more strongly by unidimensional attitudes than by bidimensional attitudes, because the bidimensional attitudes evoke more decision conflict. In addition, it is possible that social norms make it occasionally desirable to have

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high ambivalence in an attitude, such as when an issue is controversial. In this situation, people who appear ambivalent may give the impression of being fair and knowledgeable. These individuals may also be inoffensive to others because they “agree” with everyone to some extent.

How stable and strong are attitudes?

An important question that is relevant to the content, structure, and function of attitudes is the extent to which attitudes are stable over time. This question is relevant to efforts quantifying the strength of an attitude. As mentioned at the beginning of the book, people feel more strongly about some topics than about others. For many years, the topic of *attitude strength* has interested attitude researchers. During this time, the strength of an attitude has been conceptualized in many different ways. For example, individuals can be asked how *certain* they are of their attitude, as well as how *important* their attitude is to them personally (see Haddock, Rothman, Reber, & Schwarz, 1999; Wegener, Downing et al., 1995). These types of ratings are related, but different (Visser, Bizer, & Krosnick, 2006). This difference is relevant to our description of attitude content because certainty may draw on the amount of cognitive content supporting an attitude, while importance might draw on the amount of emotional content supporting an attitude. Similarly, some attitudes can be retrieved from memory more quickly than others; such easily retrievable attitudes are referred to as being highly *accessible* (Fazio, 1995). Recall the evidence that accessible attitudes serve a stronger utilitarian/object-appraisal function (Fazio, 2000). In addition, high accessibility may also reflect a unipolar attitude structure (Mellema & Bassili, 1995; Pomerantz, Chaiken, & Tordesillas, 1995).

Strong attitudes differ from weak attitudes in a number of ways. Jon Krosnick and Richard Petty (1995) argue that there are four key manifestations of strong attitudes. First, strong attitudes are *more persistent*. That is, they are more temporally stable over the passage of time (Visser & Krosnick, 1998). Second, strong attitudes are *more resistant to change*. When faced with a persuasive appeal, strong attitudes are less likely to change than weak attitudes (Petty, Haugtvedt, & Smith, 1995). Third, strong attitudes are *more likely to influence information processing*. Research has revealed that people devote greater attention to information that is relevant to strong versus weak attitudes (Houston & Fazio, 1989). Finally, strong attitudes are *more likely to guide behavior*. Put simply, we are more likely to act upon strong versus weak attitudes (Holland, Verplanken, & van Knippenberg, 2002).

This discussion of attitude strength is relevant for understanding a debate that has occurred among some attitude researchers. Through the years, a number of scholars have deliberated about the degree to which attitudes are best considered as evaluative representations of an attitude object that are *stored* in memory versus *temporary* evaluations. In its strong form, the first position implies that attitudes are stable across time and context – a popular analogy being that we have a file drawer of attitudes in our brain (see Eagly & Chaiken 2007; Fazio, 2007, Petty, Briñol, & DeMarree, 2007). In contrast, the strong form of the latter position implies that

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attitudes are simply constructed on the spot (see Schwarz, 2007). Proponents of both perspectives can generate research supporting their position. Our own view on this debate is that the answer depends on attitude strength. Strong attitudes should be more stable and enduring, but weak attitudes should be more malleable and likely to be constructed on the spot.



Key points

- Attitude content, attitude structure, and attitude function are inexorably linked.
- Attitudes vary in the degree to which they are persistent over time, resistant to change, influential in guiding information processing, and influential in predicting behavior.

What we have learned

- It is useful to consider attitude content, structure, and function as the “three witches” of attitudes.
- Attitudes have cognitive, affective, and behavioral (CAB) components. Although these components are related, they are empirically distinct.
- The one-dimensional view of attitude structure postulates that the positive and negative elements are stored as opposite ends of a single dimension, whereas the two-dimensional view of attitude structure postulates that positive and negative elements are stored along two separate dimensions.
- Individuals hold attitudes for a variety of reasons. The object appraisal function is especially important; it suggests that attitudes serve as energy-saving devices that make judgments easier and faster to perform.
- Attitude content, attitude structure, and attitude function are inexorably linked. Indeed, they can be considered to be analogous to three witches who make a better brew together than alone.
- The three witches are relevant to attitude strength. Strong attitudes are more influential than weak attitudes.

What do you think?

- We have seen that attitudes are based on cognitive, affective, and behavioral information. Further, we have described research demonstrating that people differ in the degree to which their attitudes are based on cognitive and affective information. Do you think people are aware of whether they might have a preference for cognitive or affective information?
- The two-dimensional structure perspective suggests that positive and negative elements of attitudes are stored along two separate dimensions (one for positive elements, a second for negative elements). This perspective notes that people sometimes possess ambivalent attitudes – opinions with many positive and many negative elements. Do you think attitude ambivalence is a good thing or a bad thing?
- Attitudes can serve a number of different functions. Do you think people really know the primary functions of their attitudes? What does this suggest for how attitude functions can be measured?



Further Reading

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