

Among people with weak attitudes toward Greenpeace, how much they liked the organization did not predict their later behavior.

Fourth, the consistency between attitudes and behavior is affected by differences across people. For example, research on the personality factor called “self-monitoring” (which reflects differences across people in how they vary their behavior across social situations) has found that the relation between attitudes and behavior is stronger for low self-monitors than high self-monitors. Further, the likelihood of a person’s attitudes influencing their behavior is affected by their age. A number of studies have found that university students show lower attitude–behavior relations compared to adults. This difference is thought to occur because university students tend to have less-clear attitudes compared to older individuals.

How Do Attitudes Influence Behavior?

In addition to understanding *when* attitudes predict behavior, social psychologists have developed a number of models to explain *how* attitudes predict behavior. Two important models are the theory of planned behavior and the MODE model.

The Theory of Planned Behavior

The theory of planned behavior was developed by Icek Azjen. As its name suggests, the theory of planned behavior was developed to predict deliberative and thoughtful behavior. According to this model, the most immediate predictor (or determinant) of a person’s behavior is his or her *intention*. Put simply, if you intend to recycle glass bottles, you are likely to engage in this behavior. Within the theory of planned behavior, a person’s intentions are determined by three factors: attitudes, subjective norms, and perceived behavioral control. The *attitude* component refers to the individual’s attitude toward the behavior—whether the person thinks that performing the behavior is good or bad. If you think that recycling glass is good, you should have a positive intention to carry out this behavior. *Subjective norms* refer to people’s beliefs about how other people who are important to them view the relevant behavior. If your family and close friends believe that recycling glass is good, and you are motivated to comply with their expectations, you should have a positive intention to carry out this behavior.

Of course, people’s behavior is also influenced by whether they feel they can perform the behavior. For example, if an individual wanted to eat a healthier diet, a positive attitude and positive subjective norms are unlikely to produce the desired behavior change if the person is unable to restrain him- or herself from eating French fries and chocolates. As a result, the Theory of Planned Behavior includes the idea that behavior is affected by whether people believe that they can perform the relevant behavior. This is captured by the concept of *perceived behavioral control*.

The MODE Model

Not all behavior is planned and deliberative. Quite often we act spontaneously, without consciously thinking of what we intend to do. When our behavior is spontaneous, the theory of planned behavior may not reflect how we decide to act. To help understand how attitudes influence spontaneous behavior, Russell Fazio developed the MODE model of attitude–behavior relations. MODE refers to *Motivation and Opportunity as DEterminants* of behavior. The MODE model suggests that if people are motivated *and* have the opportunity, they can base their behavior on a planned and deliberative consideration of available information. However, when either the motivation or the opportunity to make a reasoned decision is low, only strong attitudes will predict behavior.

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See also Attitudes; Attitude Strength

Further Readings

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ATTITUDE CHANGE

Definition

Attitudes are general evaluations of objects, ideas, and people one encounters throughout one’s life (e.g., “capital punishment is bad”). Attitudes are important

because they can guide thought, behavior, and feelings. Attitude change occurs anytime an attitude is modified. Thus, change occurs when a person goes from being positive to negative, from slightly positive to very positive, or from having no attitude to having one. Because of the functional value of attitudes, the processes that change them have been a major focus throughout the history of social psychology.

Dual Process Approach

According to dual process models of attitude change, research on this topic can be organized according to two general types of processes: (1) those that occur when one puts forth relatively little cognitive effort, and (2) those that occur with relatively high cognitive effort. The amount of thought and effort used in any given situation is determined by many variables, all of which affect one's motivation or ability to think. Some examples include one's personal preference for engaging in complex thought, the personal relevance of the attitude object, and the amount of distraction present while attempting to think. Furthermore, both high- and low-effort processes can operate whether or not a persuasive message is presented.

Low-Effort Processes

When factors keep one's motivation and/or ability to think low (such as when the issue is not personally relevant or there are many distractions present), attitude change can be produced by a variety of low-effort processes. These include some largely automatic associative processes as well as simple inferential processes.

Associative Processes

Classical Conditioning. One way to produce attitude change in the absence of effortful thought is to repeatedly associate an initially neutral attitude object with another stimulus that already possesses a positive or negative meaning. For example, imagine that every time you saw your uncle as a child he took you to the zoo. Assuming you enjoy going to the zoo, you will likely start to feel more positively toward your uncle. If, instead, every time you saw him he took you to the doctor to get your immunization shots, the opposite result is more likely. Although research on this process has demonstrated that it is most effective for previously neutral stimuli (such as novel words or

objects), significant attitude change has also been found for positive and negative attitude objects as well. One series of studies found that repeatedly pairing words related to the self (e.g., *I and me*) with positive stimuli caused significant increases in a later measure of participants' self-esteem. Thus, continually associating an attitude object or message with something you already like (e.g., an attractive source) can lead to positive attitudes.

Affective Priming. Another process that involves the association of two stimuli is called affective priming. In this process a positive or negative stimulus (e.g., words such as *love* or *murder*) is encountered just prior to a novel attitude object (rather than following it, as occurs in classical conditioning). When this happens, one's reaction to the positive or negative stimulus will come to color the evaluation of the new object, producing attitude change. Imagine, for instance, that you are at an unfamiliar restaurant and are about to try a totally new dish. If this meal is brought to you by a very attractive waiter or waitress, your positive reaction toward this server is likely to influence your initial attitude toward the food. Although this attitude may change as you interact with the attitude object (i.e., when you eat the food), the initial positive evaluation will make it more likely that your final attitude is also positive.

Mere Exposure. In both of the processes discussed so far, an attitude is altered by the attitude object's association with a positive or negative stimulus. In contrast, research on the mere exposure effect has found that repeated exposure to an object in the absence of association can also change attitudes. Quite simply, this process requires only that one is repeatedly exposed to an attitude object. When this occurs, the attitude toward the object becomes more positive; possibly due to the fact that the object has actually become associated with the absence of anything negative. The strongest mere exposure effects occur when the repeated attitude object is low in meaning (e.g., novel) or is presented outside of conscious awareness. One intriguing implication of this phenomenon is that mere exposure might help to account for the preference a newborn infant shows for his or her mother's voice. As the child develops in the womb, one stimulus that is repeated every day is the mother's voice. Thus, mere exposure to this stimulus should cause the child's attitude toward the voice (and subsequently its source) to become positive, enhancing the mother-child bond.

Inferential Processes

Balance. One simple inferential process of attitude change involves cognitive balance. Stated simply, balance is achieved when people agree with those they like and disagree with those they dislike. When this is not the case, one experiences a state of unease, and attitudes are likely to shift to bring the system into balance. For instance, suppose you discover that you and your worst enemy both love the same band. When this occurs, you are likely to experience an uncomfortable state of imbalance, and to rectify this inconsistency, one of your attitudes will likely change. Thus, upon learning the information, you may come to find your previous enemy much less distasteful or, alternatively, feel less positively toward the band.

Attribution. At its most general level, attribution concerns the inferences that people make about themselves and others after witnessing a behavior and the situation in which it occurred. Although this topic is highly studied in and of itself, its research has also outlined a number of processes that can create low-effort attitude change. One attributional process, which occurs when people are not well attuned to their own beliefs, is self-perception. In this process, people infer their own attitudes from their behaviors, just as they would for someone else. Thus, people can infer that if they are eating a peach or watching a pro-peach advertisement, they must like peaches, even if they hadn't considered this possibility before. When this inference is made, it produces attitude change, making their attitude toward peaches more positive.

In a related phenomenon, called the overjustification effect, people come to infer that they dislike a previously enjoyed activity when they are provided with overly sufficient rewards for engaging in it. Research has demonstrated this effect by providing children with candy or other rewards for engaging in an activity they had previously performed merely for its own sake (e.g., coloring). When this happens, the children infer that they were performing the activity for the reward, not for its mere enjoyment, and their attitude toward engaging in the behavior becomes less positive.

Heuristics. One final process through which low-effort attitude change can occur is through the use of heuristics, or simple decision rules based on prior experiences or observations. Although there are countless

heuristics, some examples are “experts are usually correct” and “bigger is better.” When motivation and ability to think are low, people can use simple rules like these to form evaluations. For instance, in deciding what new music is good, someone might simply walk over to the bestseller section at the local music store and survey the current top selections. By basing their opinions on the rule that “the majority is usually right,” they establish positive attitudes toward those artists they discover in this section and avoid more effortful (and costly) processes such as critically listening to each performer's music. Or, instead of thinking carefully about all of the arguments in a persuasive message about a new pain reliever, a person might simply count the arguments and reason, “the more arguments, the better.”

High-Effort Processes

There are also attitude change processes that require a greater use of mental resources. When a person is motivated and able to invest high effort in making a judgment about an issue or object, attitude change can occur due to characteristics of his or her thoughts (e.g., whether the thoughts are favorable or unfavorable), his or her estimation that good or bad outcomes will be tied to the attitude object, or the person's realization that he or she holds conflicting beliefs about a set of attitude objects.

Cognitive Responses. When people's attitudes change through the use of high cognitive effort, some of the most important aspects to consider are their actual thoughts (cognitive responses) toward the attitude object and any persuasive message that is received on the topic. Although there are a number of different aspects to consider, three components of thought have proven especially important in producing change. The first, and most obvious, is whether thoughts about the attitude object or message are largely favorable or unfavorable. By examining the ratio of positive to negative thoughts, the likely amount of attitude change produced can be approximated. If there is a greater proportion of favorable than unfavorable thoughts, your attitude will change in a positive direction. The opposite is true if there is a greater proportion of negative thoughts. A second important dimension concerns how much thinking is done. For example, the more positive thoughts one has about an attitude object, the more favorable the attitudes will be. The third, and final, aspect of thought

is related to confidence. When thinking about an attitude object or persuasive message, people will have varying confidence in each of their discrete thoughts. To the extent that they are highly confident in a thought, it will have a great impact on their final attitude. Those thoughts that are associated with low confidence, however, will play a relatively minor role in any attitude change. Many things can affect one's confidence in a thought, such as how easily it comes to mind.

Although these three factors are easy to imagine operating in traditional persuasion settings (e.g., when you view an advertisement for some commercial product), they also influence attitude change in the absence of any persuasive message. One way in which this occurs is when people role play, or imagine what someone else would think about an issue. Imagine, for instance, that you enjoy smoking cigarettes. Now, generate as many reasons as you can to stop smoking. Because of the cognitive responses you've created by engaging in this process, you may change your own attitudes toward smoking. As you can probably guess, the more thought and effort you put into the role play, the more likely it is that attitude change will occur. If you did put a great deal of effort into the exercise, then you've probably created a number of negative thoughts about smoking tobacco. In this case, you might expect that your attitude has become more negative toward smoking. This may or may not be true, however, depending on the confidence you have in the thoughts that were produced. If you generated a large number of antismoking thoughts but had low confidence in the validity of each one, then they would have very little impact on your attitude, especially if they were countered by some very positive thoughts that were held with high confidence.

Expectancy-Value Processes. According to the reasoned action theory, attitudes are created through an individual's assessment of how likely it is that a given attitude object will be associated with positive (or negative) consequences or values. The more likely it is that an attitude object (e.g., a car) is associated with a positive consequence (being able to travel to work) or value (staying safe), the more positive the attitude will be. Although some researchers have argued that all attitudes are determined in this manner, it is most likely that this process only occurs when people put sufficient effort into considering all of the possible consequences and values that may be tied to a given attitude object. Interestingly, when people engage in this process of effortful consideration of an object or message, they

may actually change their own attitude. If, for instance, you recently purchased a sport utility vehicle merely for the image it provides, your attitude toward it may become more negative if you are prompted to consider all of the consequences (e.g., very expensive fuel bills) and values (e.g., promoting U.S. independence from foreign oil supplies) that are associated with it.

Dissonance Processes. According to cognitive dissonance theory, people are motivated to hold consistent attitudes. Because of this motivation for consistency, people experience unpleasant physiological arousal (an increase in heart rate, sweaty palms, etc.) when they willingly engage in a behavior that is counter to their beliefs or are made aware that they possess two or more conflicting attitudes. This experience then motivates them to change their attitudes so that the unpleasant feelings can be eliminated. When people make a choice from among alternatives, dissonance processes will often produce attitude change. Research has shown that once people make a choice, attitudes toward each of the potential choices will change such that the chosen alternative will be viewed more positively and the nonchosen alternative(s) will be viewed more negatively than prior to the choice. This reduces the aversive dissonance experience that would have occurred if they still felt very positively toward an unselected option. If you've ever bought a product that turned out to have flaws, then you've probably experienced dissonance. When a situation like this occurs, your behavior (purchasing the product) is not consistent with your beliefs about the product (it is flawed), and this causes dissonance. To resolve this dissonance, you must change either your attitude toward the product (and decide that it is actually good) or your behavior (return it to the store).

Attitude Strength

One of the most important characteristics of an attitude is its strength. Attitude strength is associated with an attitude's persistence, resistance to change, and ability to predict behavior. The stronger an attitude, the more it exhibits these characteristics. As you might expect, attitudes produced by high-effort cognitive processes are stronger than those produced by low-effort processes. Because they are the result of greater cognitive effort, these attitudes are often based on more consistent information, are supported by a more developed knowledge structure (e.g., related beliefs and values), and are held with greater certainty than are attitudes

produced by a low-effort process. If, for instance, your recent car purchase was based on months of research and test-drives, then you are likely to have a whole host of information that supports your positive attitude toward the vehicle. This associated information will then serve to buoy the attitude, allowing it to persist over the life of the vehicle and resist change (e.g., following negative experiences like breakdowns). If your attitude was instead based on a low-effort process (e.g., a heuristic rule, “if it looks good, it is good”), then this attitude may be easily changed when you experience negative events and become motivated to think critically about the attitude object.

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See also Attribution Theory; Balance Theory; Cognitive Dissonance Theory; Elaboration Likelihood Model; Inference; Need for Cognition; Overjustification Effect; Priming; Reasoned Action Theory; Self-Perception Theory

Further Readings

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ATTITUDE FORMATION

Definition

An attitude is a general and lasting positive or negative opinion or feeling about some person, object, or issue. We form attitudes through either direct experience or the persuasion of others or the media. Attitudes have three foundations: affect or emotion, behavior, and cognitions. In addition, evidence suggests that attitudes may develop out of psychological needs (motivational foundations), social interactions (social foundations), and genetics (biological foundations), although this last notion is new and controversial.

Emotional Foundations

A key part of an attitude is the affect or emotion associated with the attitude. At a very basic level, we know

whether we like or dislike something or find an idea pleasant or unpleasant. For instance, we may say that we know something “in our heart” or have a “gut feeling.” In such cases our attitudes have been formed through our emotions rather than through logic or thinking. This can happen through (a) sensory reactions, (b) values, (c) operant/instrumental conditioning, (d) classical conditioning, (e) semantic generalization, (f) evaluative conditioning, or (g) mere exposure.

Sensory Reactions

Any direct experience with an object through seeing, hearing, smelling, tasting, or touching will lead to an immediate evaluative reaction. We are experts at knowing whether we find a certain sensory experience pleasant or unpleasant. For example, immediately upon tasting a new type of candy bar, you know whether you like it or not. This also applies to aesthetic experiences, such as admiring the color or composition of an artwork. We form attitudes about objects immediately upon experiencing them.

Values

Some attitudes come from our larger belief system. We may come to hold certain attitudes because they validate our basic values. Many attitudes come from religious or moral beliefs. For example, for many people their attitudes about abortion, birth control, same-sex marriage, and the death penalty follow from their moral or religious beliefs and are highly emotional issues for them.

Operant Conditioning

Operant or *instrumental conditioning* is when an attitude forms because it has been reinforced through reward or a pleasant experience or discouraged through punishment or an unpleasant experience. For example, a parent might praise a teenager for helping out at an after-school program with little kids. As a result, the teen may develop a positive attitude toward volunteer work. Similarly, many people find that broccoli has a terrible taste, and so they dislike broccoli because of its punishing flavor.

Classical Conditioning

Classical or *Pavlovian conditioning* happens when a new stimulus comes to elicit an emotional reaction