Attitude Strength

Attitude strength describes the intensity of evaluations held toward people, issues, and objects. It possesses four defining features—persistence, resistance, influence on behavior, and influence on cognition (see Petty and Krosnick 1995)—as well as a variety of conditional features. The manner in which these features are measured varies by the nature and context of the evaluation.

Defining Features of Strong Attitudes

The first defining feature of strong attitudes is the extent to which they are persistent: Strong attitudes remain stable over long periods of time. For example, if a person holds a positive attitude toward a political candidate in February and continues to hold a positive attitude toward the candidate in November, the attitude has manifest persistence. The persistence of an attitude is relatively easy to measure. To do so, a researcher simply asks a participant to place themselves on a scale at two points in time. Attitude persistence is measured as the difference in scale points between the first and second time point. Attitudes that remained constant were persistent, while attitudes that changed were not persistent.

The second defining feature of strong attitudes is the extent to which they are resistant: Strong attitudes remain stable even in the face of a persuasive communication. For example, if an individual reads an editorial that is critical of the individual's preferred candidate but does not change the attitude as a result, the attitude is said to be resistant. Measurement of attitude resistance is conducted in much the same way as persistence. Participants are typically asked to report their attitudes toward a target. After reporting their attitudes, participants are presented with a message that in some way argues against their attitude. After
being presented with the counterattitudinal message, participants are asked to re-report their attitudes. Attitude change is calculated as the number of scale points the participant changed his or her attitude in the direction of the persuasive message. Large positive numbers indicate that the person was persuaded and as such the attitude was not resistant; numbers close to zero indicate that the participant did not change his or her attitude very much and as such the attitude was resistant. Sometimes, a person may actually change his or her attitude in the opposite direction of the persuasive message. In such cases, a person may show a negative score. Such negative numbers indicate a “polarizing” effect—the person became more entrenched in his or her original attitude after the attempt to persuade.

The third defining feature of strong attitudes is the extent to which they influence behavior: Strong attitudes lead us to act. For example, if an individual takes the time to vote for his or her preferred candidate, then the attitude has influenced the behavior. This feature is typically assessed through independent measures of the attitude and the behavior or behavioral intention. In a typical study, researchers will measure people’s attitudes and ask them how they think they would behave. For example, people could be asked what their opinion of oranges is and then how many oranges they purchase in a typical week. The correlation between the attitude and behavioral measures, then, is the measure of strength. However, people’s estimates of their behaviors may often not represent their true behaviors, either due to social-desirability issues or simple ignorance. It is for this reason that some researchers take the extra step of actually measuring a person’s true behavior (for example, counting the number of oranges in a person’s kitchen) in lieu of or in addition to asking people how they would or do behave. Regardless, the strength of the correlation between attitude and behavior or behavioral intention is the measure of interest. Strong attitudes typically manifest high attitude-behavior correlations, while weak attitudes manifest low attitude-behavior correlations.

Two important caveats must be addressed. First, in a typical research project designed to investigate the attitude-behavior correlation, researchers will independently measure the attitude and behavior or behavioral intention. Although a positive correlation between the two is often discussed in terms of the “attitude influencing the behavior,” the fact that the behavior may be influencing the attitude cannot be ruled out. Indeed, lines of research on cognitive-dissonance and self-perception theories have shown how behaviors can indeed influence attitudes. Therefore, although attitudes are thought of as being relatively enduring evaluations, positive correlations do not necessarily mean that the attitude is responsible for the behavior.

The second caveat is that researchers must take great care to measure precisely the attitude thought to be driving the behavior. For example, if the behavior being studied is volunteering for the local homeless shelter, it is important that participants be specifically asked their opinion about volunteering for the local homeless shelter. Efforts to measure attitudes such as, “What is your opinion toward homeless shelters?” or “What is your opinion toward volunteerism?” will likely yield lower attitude-behavior correlations.

The fourth defining feature of strong attitudes is the extent to which they influence cognitions: Strong attitudes impact our thought processes. For example,
if a person thinks a new acquaintance is intelligent simply because the new person shares the same attitude toward a political candidate, the attitude has influenced her cognitive processes. Because there are so many ways in which attitudes may influence cognitive processes, there is no standard technique for measuring this feature. Researchers have measured this feature by assessing the effects of attitudes on a wealth of cognitive processes, such as information processing, impression formation, and self-esteem.

Other Aspects of Attitude Strength

Attitude strength is more than the extent to which an attitude is persistent, resistant, and influential on behavior and cognition. There are a variety of features that correlate with attitude strength that, although not defining features of strong attitudes, still warrant much research. Some of these features are aspects of the attitude itself or its underlying structure, while others deal with perceptions of the attitude or manner in which the attitude was created or changed.

Extremity. Some attitudes are intensely positive or negative, while others are only moderately so. For example, a person may greatly dislike one public official but only mildly dislike another. Since attitudes are conceptualized as lying on a continuum anchored with extreme liking on one end and extreme disliking on the other, attitudes that lie near the endpoints are considered to be more extreme than are attitudes that lie near the midpoint. The extremity of attitudes is typically measured by asking people to indicate where their attitude stands on a standard continuum. Extremity is measured as the distance between the participant's attitude and the midpoint such that higher numbers indicate greater extremity. On a 7-point scale, for example, extremity scores could range from zero (if the midpoint is indicated) to 3 (if either endpoint is indicated).

Accessibility. Some attitudes can be brought from memory and reported very quickly; others take more time. Attitude accessibility refers to this difference in time. For example, asking college students for their opinions on textbook prices will likely elicit quick responses. Other attitudes, however, take longer to bring from memory. For example, most college students would require more time to report attitudes toward the income tax rates. Accessible attitudes are those that can be brought from memory and reported quickly.

Attitude accessibility is typically measured through the use of a computer. In such a study, participants report their opinions toward a variety of issues by pressing keys marked, for example, “positive” and “negative,” or “good” and “bad.” For each trial, the computer records the amount of time that passes between the time that the attitude object is presented on the screen and the time that the participant presses either key. This amount of time—the “response latency”—is the measure of attitude accessibility, with shorter times indicating more-accessible attitudes. Recently, some researchers have adopted this technique to telephone surveys. In such studies, a computer and/or the interviewer records the latency between the time the question is asked and the participant's voice response. Because distributions of response latencies are often highly skewed, some researchers use the reciprocal of these latency values in their research. Using such reciprocal values serves to minimize the effect of outlying response times.

Ambivalence. Although attitudes are conceptualized as lying on a simple positive-to-negative continuum, research has indicated that attitudes are created
from positive and negative bases that can be independent of each other. Consider a hypothetical person's attitude toward Bill Clinton. This person's attitude is based on some favorable reactions to Clinton: she liked how Clinton handled the economy and how he supported peace initiatives. The person's attitude is also based upon some unfavorable reactions: she disliked his marital infidelity and the evasive answers that he gave while under oath. As such, this person has both positive and negative bases that create her overall attitude toward Clinton.

When a person holds primarily negative or primarily positive reactions to an attitude object, the attitude is said to be low in ambivalence. However, like the hypothetical example, when a person has lots of both positive and negative reactions to the object, the attitude is said to be ambivalent. Ambivalent attitudes are conceptualized as being weaker than are less-ambivalent attitudes.

Ambivalence can be measured in two ways. One way is simply to ask participants the extent to which they feel conflicted about an attitude object. People who report they feel a great deal of conflict are thought to hold more ambivalent attitudes than are people who report low levels of conflict. Another way is to ask participants how many positive thoughts and negative thoughts they have about an object. People who indicate having primarily positive or primarily negative reactions are thought to be low in ambivalence, while people who indicate the presence of both positive and negative reactions are thought to be high in ambivalence.

**Knowledge.** Some attitudes are based on a great deal of knowledge, while other attitudes are based on practically no knowledge at all. For example, negative attitudes toward cold, snowy winters are likely based upon more knowledge for a native Canadian than for a native Bahamian. Knowledge is typically measured in one of two ways. Some researchers measure knowledge simply by asking people to report how knowledgeable they are on the attitude object. Other researchers, operating under the assumption that people may not be able to accurately report how knowledgeable they are on an issue, ask people to list the information that they have about an object. People who can list more information about an object are inferred to be more knowledgeable than are people who cannot.

**Certainty.** There are many evaluations in which we hold much confidence. There are other attitudes, however, in which we hold less confidence. Attitude certainty refers to this distinction. For example, a person may be very confident in the fact that one candidate is a bad person but not very confident in the fact that another candidate is a good person. Researchers have tapped this construct by asking people "how certain" they are, "how sure" they are, and "how confident" they are about their attitudes.

**Importance.** Whereas some of the attitudes we hold are highly significant in our lives, others are less so. For example, most politically involved people would likely perceive their attitudes toward George W. Bush as being more important than their attitudes toward actor George Clooney. Researchers typically measure attitude importance by asking people "how personally important" an object is to the participant or how much they "personally care" about the object. The "personally" qualifier is used because people sometimes think that what is important to them personally may not be as important to society as a whole, or vice versa. For example, a coin collector might find his attitude toward the U.S.
Mint to be very important personally, yet understand that attitudes toward the mint are not likely important to the population in general. Thus, to gauge attitude importance, researchers typically include the *personally* qualifier.

**Elaboration.** Some attitudes are created from much thinking, while some attitudes are created from processes that involve very little thought. Consider two people who both created positive attitudes toward a Senatorial candidate from viewing a televised speech. The first person passively watched the speech, not thinking much about or scrutinizing the speech carefully. This first person has created a positive attitude toward the candidate, but primarily because the candidate seemed stately and eloquent. The other person, however, carefully watched the speech, thinking a great deal about and scrutinizing each word the candidate uttered. This second person in turn created a positive attitude because she agreed with the arguments within the speech. Thus, though both people now hold positive attitudes toward the candidate, the former person's attitude was based upon less elaboration than was the latter person's attitude. For the most part, attitudes created through high-elaborative processes are stronger than are attitudes created through low-elaborative or nonelaborative processes.

Elaboration can be measured through several means. First, researchers can ask people to what extent they have thought about an attitude object; higher reported thinking indicates that more elaboration has led to the creation of the attitude. Second, a “thought-listing” procedure, most commonly used in laboratory studies, can also be used to determine to what extent an attitude was created or changed based upon elaborative processes. In such a procedure, immediately after participants form or change an attitude (typically after reading information about an attitude object), they are asked to list all the thoughts that went through their minds when they read the information. Participants who list many thoughts are thought to have engaged in more elaboration than are people who list few or no thoughts at all. Third, researchers can employ a manipulation of argument quality. Participants may be randomly assigned to two groups: Whereas one group receives information full of strong, compelling arguments about the attitude object, another group receives information with only weak, spurious arguments about the attitude object. Groups of people who show similar attitudes regardless of argument quality—those groups of people for whom argument quality does not influence attitudes—are thought not to be elaborating on the messages carefully. Indeed, if they had been paying close attention to the arguments and elaborating on the messages, they should show differences as a function of the quality of the arguments. Groups of people who show differences in attitudes based on argument quality—those groups of people for whom argument quality *does* influence attitudes—are thought to be elaborating on the messages more carefully. Thus, asking people how much they have thought about the attitude, or use of thought-listing or argument-quality techniques can all be utilized to measure elaboration.

**Current Controversies**

It is clear that numerous features are associated with strong attitudes. What is less clear is how these features are related. Within the psychological research, two general camps have developed: Whereas some scholars conceptualize the features as being indicators of one or several higher-order constructs, others con-
ceptualize the features as being related, but not mere indicators of a small number of factors. The distinction is not simply one of semantics: The manner in which a researcher measures and analyzes strength features depends on his or her viewpoint.

Some researchers feel that there are one or several overarching “strength” factors, and that the various features mentioned above are simple manifestations of those higher-order constructs. Exploratory factor analyses have provided some support for this notion in that some strength-related attitude features consistently load on the same factors. Researchers who use this single- or multifactor concept of strength will often create composite “strength” measures in their research—they may take an average of, for example, the certainty, accessibility, and importance of an attitude as a global measure of attitude strength. Some research has indeed found theoretically driven effects using such composite measures.

Other researchers, however, argue that such a conceptualization is faulty. These researchers argue that, although to conceptualize attitude strength as being one or several overarching factors is appealing and parsimonious, such a concept does not truly represent what is going on. These scholars point to several pieces of evidence to support their assertion. First, confirmatory factor analyses have provided evidence against the single- or multifactor concepts. Second, because many of the features have vastly distinct antecedents and consequences, they clearly cannot be mere indicators of latent constructs. Because research has shown, moreover, that the features can affect each other (e.g., enhancing the importance of an attitude can make it more accessible), they also cannot be simple indicators of a latent factor. These researchers argue that averaging across features is ill-advised, as doing so wastes meaningful variance, combining distinct concepts into an atheoretical mix. This latter camp, therefore, recommends that researchers measure the various features of attitude strength that are of interest in the particular study, rather than arbitrarily measuring many features and then creating less-meaningful composite variables.

As there are so many features associated with strong attitudes, which should a researcher measure? Unfortunately, there is still no consensus within the field of when a particular feature should be measured. It is, however, clear that not every feature has the same consequences. For example, attitude importance has been shown to predict the extent to which people will seek out information that is consistent with their attitudes, while the knowledge that people possess about those attitudes has been shown not to. Conversely, the amount of knowledge people possess about an attitude has been shown to predict the extent to which they feel that a news article is biased against them, while attitude importance has been shown not to. Similarly, whereas importance, but not certainty, has been shown to predict the extent to which a person will try to persuade another about a political candidate, certainty, but not importance, has been shown to predict the likelihood that a person will find his or her nonpreferred candidate to be “acceptable.” At this time, the multitude of cognitive and behavioral processes that may be moderated by attitude-strength features has only begun to be explored. Until research can more fully address these questions, researchers must carefully choose which attitude-strength features to measure based upon a clear understanding of the phenomena that they think attitude strength will explain.
As attitudes play such a fundamental role in our everyday lives, researchers have devoted a great deal of research to understanding them. One important arena of research, attitude strength, deals with answering questions about why some attitudes are resilient and have tremendous impacts on our lives, whereas others are relatively fleeting and inconsequential. Although much has yet to be learned about the concept, it is clear that to truly understand an attitude, one must have a clear understanding of the attitude's strength.

**Further Reading**


*George Y. Bizer*