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CHAPTER 15

ATTITUDES AS A BASIS FOR BRAND RELATIONSHIPS

The Roles of Elaboration, Metacognition, and Bias Correction

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A CENTRAL ROLE FOR ATTITUDES IN BRAND RELATIONSHIPS

In a 1980s television ad, Brooke Shields made a famous and controversial declaration of dedication to her favorite brand of jeans, Calvin Klein. Although her statement that "nothing comes between me and my Calvins" can be taken as a double entendre, the statement most certainly also reflects her love of and commitment to her favorite jeans. This type of potentially close relationship is not limited to a model and her jeans; it may be that many consumers can identify with a strong preference for and even love of certain brands or products. In fact, this idea forms the basis for the current volume as well as a growing body of research.

Our chapter examines brand relationships from the perspective that a positive attitude toward the brand may form the core basis for that relationship. Attitudes have long played a central role in theories of relationships and relationship maintenance, even though the construct has often been called by other names. An attitude is one's overall evaluation of an object, person, or idea (e.g., Petty and Wegener 1998a). Therefore, evaluation of one's relationship partner or of the relationship itself certainly qualifies as an attitude. In the relationship domain, however, the more common label for an attitude toward the relationship is relationship satisfaction. That is, satisfaction is one's subjective evaluation of the relative positivity or negativity of outcomes of one's relationship (i.e., as they relate to one's general expectations, or comparison level, for relationships; Rusbult 1980). In the current chapter, we will use the terms attitude and satisfaction interchangeably, with each referring to a person's overall evaluation of the attitude object. Early in research on relationships, it was assumed that people would generally stay in satisfying relationships and leave relationships with which they were dissatisfied (Kelley and Thibaut 1978; Rusbult, 1983).1

However, evidence began to accumulate suggesting that people often stay in relationships even when satisfaction is low, and they also leave relationships that they find
Theoretical Approaches

Multiple Predictors of Intentions

Beyond this measurement-based approach, attitude theories also took two theoretical approaches to the question of when and why attitudes predict behavior or fail to do so. One approach was to develop a theory of behavior prediction that included other variables. The two most prominent versions of this approach are the Theory of Reasoned Action (TRA; Fishbein and Ajzen 1975) and the Theory of Planned Behavior (TPB; Ajzen 1991). The TRA suggests that attitudes toward the behavior and subjective norms related to the behavior both influence behavior by first influencing intentions to perform the behavior, with intentions serving as the proximal cause of behavior. The TPB includes the same variables as the TRA but adds the person's perceived control over the behavior. The person's perceived control over the behavior can influence intentions (e.g., if the person cannot exert control over the behavior, he or she may not form intentions to perform the behavior). Also, perceived control can influence whether the person engages in behaviors that he or she intends to perform. Thus, this approach suggests that attitude-behavior relations might sometimes be weak because the normative (rather than attitudinal) factor provides a stronger influence on intentions or because some factor (such as lack of perceived behavioral control) has weakened the influence of intentions on behavior.2

The multiple-predictor approach is structurally similar to certain aspects of the Interdependence Theory/Investment Model approach that is common in the relationships literature (Kelley and Thibaut 1978; Rusbult 1983). That is, similar to the intention construct in the TRA and TPB (that mediates effects of attitudes on behavior), the proximal influence on relationship maintenance is hypothesized to be commitment to the relationship, with commitment including an intention to remain in the relationship (Arriaga and Agnew 2001). Satisfaction contributes to commitment (just as attitudes influence intentions), but does so alongside comparison level for alternatives (perceived benefits of being in other specific relationships) and investments (tangible and intangible benefits that one would lose if the relationship is dissolved). Thus, similar to the attitudes domain, satisfaction might fail to strongly predict relationship maintenance when alternatives are quite desirable (so that even satisfying relationships fail to engender commitment) or undesirable (so that even dissatisfying relationships seem like the best the person can get) or when investments in the relationship drive commitment (e.g., when large investments keep people in unsatisfying relationships).

The different predictors of intentions in attitude models and in relationship models provide interesting opportunities for integration across the two domains. For example, recent research suggests that subjective norms about one's relationship (i.e., what important others believe one should do about the relationship) predict relationship commitment above and beyond the traditional investment model variables (Etchevery and Agnew 2004). Similarly, intentions to perform a variety of purchase behaviors may be predicted by the benefits people expect to receive from alternative brands (comparison level for alternatives; cf., Kardes et al. 1993; Nedungadi 1990), and costs they might accrue from
switching to a new brand (investments). In the investment model, satisfaction (attitude), comparison level for alternatives, and investments are typically correlated (Le and Agnew 2003). Thus, it is not surprising that in some consumer contexts, researchers might treat beliefs about how one brand compares with another as related to attitude toward the brand. However, at least within the relationships literature, it is clear that these are distinguishable constructs (see Rusbult, Martz, and Agnew 1998).

**Attitude Strength as a Moderator**

A second and more far-reaching approach to attitude-behavior consistency is to examine properties of attitudes that contribute to their strength, a component of which is the extent to which the attitude is capable of guiding future behavior (see Petty and Krosnick 1995). The idea behind this moderation approach is that it is often not enough that an attitude is positive toward a particular behavior. It may also be necessary that the attitude is strong enough to guide the behavior.

So even if consumers have a positive attitude toward a particular brand, they might not go out and buy the product. The stronger the attitude toward the brand, the more likely the attitude will last over time (until the point of purchase), will resist change (if attacked by an opposing brand's advertising), and will influence future thinking and behavior (see Petty, Haugtvedt, and Smith 1995; Fabrigar, MacDonald, and Wegener 2005). Many strength-related properties of attitudes have been studied (Wegener et al. 1995). For example, attitudes are stronger when the topic is of great importance to the person (Eaton and Visser 2008). So, if one can create a positive attitude toward a brand and the attitude is perceived as important to the person (e.g., because the brand supports the person's cherished values; cf., Holbrook et al. 2005), then this attitude may produce a lasting relationship with the brand (including repeated purchases, personal promotion of the brand, etc.). Thus, the goal of advertising should often be to facilitate development of strong attitudes that might create true brand loyalty (i.e., commitment to the brand), which can be contrasted from spurious brand loyalty (i.e., continued purchase by inertia, see Bloemer and Kasper 1995; cf., Chapter 3).

Some strength-related properties of an attitude may hold particular relevance for brand relationships. For example, the more knowledge one has about a brand, the more likely a positive attitude toward the brand will result in brand-supportive behaviors, such as purchases or publicizing the brand to others (cf., Davidson et al. 1985; Suinan, 1985). The more accessible an attitude is (i.e., the more quickly and easily the attitude comes to mind; Fazio 1995), the more likely the attitude will guide behaviors (e.g., Berger and Mitchell 1989; Fazio et al. 1982; for relations between accessibility and consumer behavior, see also Chapter 16). The more certain a person is in their attitude toward a product (Tormala and Rucker 2007), the more likely that attitude will guide consuming behavior. Certainty (confidence) will be discussed in greater detail in the subsequent section on metacognition as attitude certainty can serve as the mediator through which other variables (e.g., importance, knowledge, accessibility, etc.) exert their impact on behavior.

Some recent research on relationships shows that “strong” commitment (like strong attitudes) better predicts relationship persistence and maintenance (e.g., willingness to sacrifice, accommodative responses). That is, Etchevery and Le (2005) found that commitment predicted relationship persistence and maintenance to a greater extent as commitment was reported more quickly in a reaction-time procedure (i.e., as relationship commitment was more accessible in memory, cf., Fazio et al. 1982). In a similar vein, it could well be that relationship commitment will better predict relationship stay-leave behaviors and maintenance when the commitment is based on higher levels of knowledge (perhaps associated with a longer time in the relationship), when the commitment is held with high certainty, or when the relationship is subjectively important to the person.

**CREATING STRONG ATTITUDES: THE ELABORATION LIKELIHOOD MODEL**

One factor that has much in common with many of the strength-related properties of attitudes is the extent to which people elaborate on the attitude object when forming or changing their attitudes. Elaboration is scrutiny of available attitude-relevant information in an attempt to assess the central merits of the attitude object. When people elaborate, they go beyond the information given to relate that information to existing knowledge they hold in memory (see Petty and Cacioppo 1986). Thus, when people elaborate, they gain knowledge from any new information presented, and they integrate that knowledge with previous knowledge. As a result of repeated activation and use of the attitude in processing, the attitude also becomes more accessible (see Kokkinaki and Lunt 1999; Priester and Petty 2003). Also, simply believing that one has thought carefully about the attitude object can increase one's confidence in an attitude (Barden and Petty 2008). Therefore, in part because of its many links with attitude strength, the amount of elaboration involved in attitude formation and change has become a central concern in research on persuasion (for links between elaboration and brand loyalty, see Bloemer and Kasper 1995).

A key theory that deals with the importance of elaboration is the Elaboration Likelihood Model (ELM; Petty 1977; Petty and Cacioppo 1986; Petty and Wegener 1999; see also Chaiken, Liberman, and Eagly 1989; MacInnis, Moorman, and Jaworski 1991). The ELM was developed, in part, to account for the fact that some attitudes are stronger than others (i.e., that some attitudes persist longer over time, better resist change, and provide greater influence on thinking and subsequent behavior; see Petty and Cacioppo 1986; Petty et al. 1995). In the following sections, we discuss general factors that influence how much people elaborate on available information and how specific persuasion variables can influence the valence of attitudes (and attitude strength) in different ways across different levels of elaboration.

**The Elaboration Continuum**

According to the ELM, people are motivated to hold accurate evaluations of attitude objects in their environment. Although this may be the default motivation, the extent to which people are willing and able to exert cognitive effort in reaching these reasonable
views will vary across individuals, situations, and attitude objects. When people are motivated and able to work at evaluating the object, they will likely carefully scrutinize (elaborate on) information for its relevance to evaluation of the attitude object (e.g., tennis shoes, a vacation package, a restaurant). This scrutiny involves a careful assessment of the central merits of an attitude object, in order to reach a conclusion about the extent to which the object is good or bad.

The amount of elaboration is postulated as falling along a continuum ranging from minimal thought about product-relevant information to comprehensive elaboration and integration of all available product-relevant information. The high end of the continuum, involving complete elaboration, is referred to as the central route because the processing is in service of assessing the central merits of the attitude object. High levels of processing occur when motivation and ability to think are relatively high. Motivation can be high when the issue or object is important to the person (as when a product is personally relevant to the person, because the person is planning to make an imminent choice from that product class; Petty, Cacioppo, and Schumann 1983). Thus, one reason for important attitudes to be strong may be that those attitude objects receive high levels of elaboration (e.g., Blankenship and Wegener 2008; Holbrook et al. 2005; Petty and Cacioppo 1979). High levels of ability to think are present when people have the requisite knowledge to understand, interpret, and scrutinize available information (Ratneshwar and Chaiken 1991) as well as sufficient cognitive resources to be able to devote to the task of elaboration (e.g., an environment that lacks external distractions or other sources of divided attention, Petty, Wells, and Brock 1976).

At the low end of the elaboration continuum, people are said to follow the peripheral route, because when elaborative processing is lacking, even factors quite peripheral to the central merits of the attitude object can influence attitudes. For example, if a restaurant is known as a place for great food, then attractiveness of the endorser in an advertisement is quite peripheral to the primary (central) qualities of the restaurant. Yet, when ad recipients lack motivation to process the ad carefully, attractiveness of the endorser can influence attitudes toward this type of restaurant (Shavitt et al. 1994; see also Petty et al. 1983).

According to the ELM, across different levels of elaboration, persuasion variables serve in different roles. The initial ELM research focused on four roles that variables can play. That is, a persuasion variable can serve as a cue when elaboration is low, can serve as an argument (i.e., information about the object’s central merits) or can bias processing when elaboration is high, and can influence amount of processing when other factors in the persuasion setting do not constrain elaboration to be high or low (often with a baseline of relatively moderate elaboration). After describing these roles, we highlight a new (fifth) role that has been examined most recently.

**Low Elaboration: Use of Persuasion Variables as Cues**

When motivation or ability for processing is low, persuasion variables can influence attitudes by serving as a cue. In some cases, a variable may serve as a cue by simply becoming associated with the attitude object. For example, positive or negative affect might become associated with a brand or product through classical conditioning (e.g., Gorn 1982; Shimp, Stuart, and Engle 1991). This could occur when the mood state of the ad recipient colors evaluation of the product in the ad (e.g., Batra and Ray 1986; cf., Petty et al. 1993). Similarly, a variable such as mood can serve as part of a relatively simple decision rule or heuristic that suggests a certain attitude without the person having to process the merits of available information. One example of a decision rule that may be employed is the “How do I feel about it?” heuristic (Schwarz and Clore 1983; Cacioppo and Petty 1982). The idea behind this heuristic is that, when people are not thinking carefully about the attitude object (or when full scrutiny of all relevant information would be too costly to be worth the effort; Schwarz 1990), they may simply consult their feelings and assume that their current feelings reflect their reactions to the attitude object (when, in fact, their feelings may be attributable to the context surrounding the advertisement).

Many different persuasion factors have been studied in their role as cues (for reviews, see Petty and Wegener 1998a; Wegener and Carlston 2005). These factors include various source characteristics, such as expertise (e.g., Petty, Cacioppo, and Goldman 1981; Ratneshwar and Chaiken 1991), attractiveness (e.g., Kang and Herr 2006; Petty et al. 1983), and likeability (e.g., Chaiken 1980; Kahle and Homer 1985); message characteristics, such as length/sheer number of arguments (e.g., Petty and Cacioppo, 1984; see also Alba and Marmorstein 1987); and contextual factors, such as audience support/consensus (Axson, Yates, and Chaiken 1987).

From an attitude strength point of view, the downside of cue effects is that the attitudes that result from these processes do not tend to have lasting impact. A number of studies of persistence over time or resistance to counterpersuasion have compared low-elaboration cue effects of source characteristics or number of arguments with high-elaboration effects of message arguments, and high-elaboration argument effects produce stronger attitudes (e.g., Haugtvedt and Petty 1992; see Petty et al. 1995; Wegener et al. 2004). In recent research comparing low- and high-elaboration effects of the same variable (such as group membership in an impression-formation paradigm or numerical anchors), however, the high-elaboration effects continue to result in perceptions that last longer over time and better resist attempts at social influence (Blankenship et al. 2008; Wegener, Clark, and Petty 2006). This suggests that low-elaboration cue effects of a variable such as source expertise would also persist less over time or resist change less well than the same favorable attitudes produced by the high-elaboration (biased processing) effects of source expertise (see Chaiken and Maheswaran 1994).

**High Elaboration: Persuasion Variables Scrutinized as Arguments and Biasing Processing of Available Information**

When elaboration is high (i.e., with high motivation and ability to think), people scrutinize available information for its relevance to the attitude object’s central merits (i.e., the primary qualities that determine whether the object or position is desirable or undesirable). When people are thinking carefully about the attitude object, people can consider many of the same persuasion variables that served as cues when elaboration was low (e.g., an
expert source or their own positive mood). In contrast, however, when elaboration is higher, message recipients assess whether that variable constitutes a good reason to view the attitude object positively. In at least some cases, the variable itself is viewed as a central merit of the attitude object (i.e., as an argument for support of the object). For example, when evaluating the quality of a roller coaster or the quality of a potential dating partner, an individual’s feelings may be viewed as highly relevant to the merits of choosing that roller coaster or that person. Similarly, a person’s ethnicity or gender might be viewed as quite peripheral to some decisions about the person, but in other circumstances, the same qualities might be viewed as central and important (e.g., when choosing members of a committee where ethnic or gender balance is important).

Depending on the value of the given persuasion variable, the outcome of high-elaboration assessments of central merits might result in either favorable or unfavorable attitudes toward the attitude object. From an attitude strength position, however, the benefit of creating positive attitudes toward a brand through this route is that the positive attitudes should be stronger than those created by low-elaboration use of the variable as a cue (all else being equal).

Serving as a central merit of the attitude object is not the only high-elaboration way in which persuasion variables can influence attitudes, however. When people are thinking carefully, the persuasion variable can also bias the thoughts that come to mind. The use of the term bias should not necessarily be taken to denote less accuracy. In this instance, bias simply refers to a slanting of interpretation or emphasis to provide greater support for one of two or more equally plausible assessments of the attitude object. To be sure, biased interpretations cannot all be equally accurate. However, it would not necessarily be true that positive moods would always lead to judgments that are too positive or that negative moods would always lead to judgments that are too negative. There may be relative differences between the mood states that can be referred to as mood-based bias in thinking (e.g., Petty et al. 1993), but locating which perceptions differ from a no-bias control would often require additional conditions that are not present in a particular study.

Some biases in processing may be primarily cognitive in nature. For example, the persuasion variable might simply activate a construct or idea that guides the processing. In one possible instance of this, Krosnick and Kinder (1990) showed that media coverage of the Iran-Contra affair in the 1980s influenced people’s use of knowledge related to intervention in Central America when evaluating the performance of President Reagan (see also Sherman, Mackie, and Driscoll 1990; Yi 1990).

Other biases may be more motivational, however. For example, the person might want to maintain a positive self-view or might want to support an existing attitude. Of course, in each of these cases, it might often be that one’s existing self-views or existing attitude might also activate knowledge that supports the existing view. This may make it difficult to argue clearly for a motivational rather than cognitive bias (cf., Clark 2005; Kunda 1990; Tetlock and Levi 1982). A number of variables common in consumer settings might bring about biases in processing that have both cognitive and motivational components. For example, the moods or emotions of message recipients might activate certain material in memory or might motivate efforts to manage the feelings (e.g., Ison 1987; Wegener, Petty, and Smith 1995). People might tend to agree with an expert message source because of knowledge that makes the person seem more likely to be correct or because of motives to identify with successful people (cf., Hovland, Janis, and Kelley 1953; DeBono and Harnish 1988). When one wishes to claim support for a motivational rather than cognitive explanation of the bias, it may be especially important to at least measure the presumed motives in order to support the motivational part of the bias (see Clark and Wegener 2008).

Biased processing is most likely to occur when product-relevant information is ambiguous or unclear (Chaiken and Maheswaran 1994; Ha and Hoch 1989). Therefore, manipulations of ambiguity of accompanying information might be one way to distinguish between high-elaboration effects that are due to biased processing and those that are due to the persuasion variable representing a central merit of the attitude object.

For both types of high-elaboration effects, the resulting attitudes should generally be stronger than effects of the same variables via their use as simple persuasion cues. This is because the high-elaboration attitudes should be more cognitively interconnected with existing knowledge, they should be more accessible in memory, and they should be associated with confidence and other perceptions that the attitude has merit (see Petty and Cacioppo 1986; Petty et al. 1995).

Moderate Background Levels of Elaboration: Persuasion Variables Influencing Amount of Information Processing

According to the ELM, a fourth role a variable can play is to affect how much people process attitude-relevant information when other factors in the persuasion setting do not constrain levels of motivation and ability to be especially high or low (i.e., when background elaboration likelihood is relatively moderate). For example, if a person is unsure whether processing available information is worth the effort, then additional variables in the persuasion setting might “tip the scales” to increase or decrease motivation to put effort into thinking about the brand or product.

A number of variables influence amount of processing when elaboration likelihood is moderate even though they serve as cues when motivation or ability is lacking and/or bias processing when elaboration likelihood is high. Some of the effects discovered so far are reasonably simple and “unidirectional.” For example, messages that match rather than mismatch the functional basis of one’s attitudes can increase message processing (e.g., Petty and Wegener 1998b). In many, if not most, cases, however, these effects are probably moderated by additional factors in the persuasion setting. Some examples of these higher-order effects include that high self-monitors (Snyder 1974) are more likely to process a message from an attractive (but nonexpert) source, whereas low self-monitors are more likely to process a message from an expert (but unattractive) source (DeBono and Harnish 1988). Also, although early research suggested that positive moods decreased processing of persuasive communications (e.g., Batra and Stayman 1990; Kyungdall and Keating 1990; Schwarz, Bless, and Bohner 1991), later research showed that positive mood can increase processing (if processing will help to maintain the positive state...
or decrease processing (if processing will remove the positive state; see Wegener et al. 1995). Positive mood can also increase processing if the processing will help the message recipient maximize his or her long-term hedonic outcomes (i.e., if the processing serves long-term mood management; see Chen et al. 2005; Raghunathan and Trope 2002).

When a variable increases processing, this is more important from an attitude strength point of view than when the same variable increases favorability toward the attitude object through low-elaboration use as a cue. This is because the attitude resulting from the cue effect is likely to have less lasting impact than the attitude resulting from the higher level of processing. If the two attitudes are equally favorable after the message, then this would suggest that the attitude from the high-processing condition will be likely to last longer over time, to better resist attempts at change, and to have greater influence on future brand-relevant thinking and behavior.

Summary of Four Roles for Variables

According to the ELM, a given persuasion variable can influence attitudes in different ways across different levels of elaboration. Four potential roles were described: A variable can serve as a relatively simple cue when motivation or ability to think is lacking. A variable can influence motivation or ability to think, thereby influencing the extent of elaboration (especially if other factors in the persuasion setting do not constrain motivation or ability to be high or low). A variable can represent a central merit of the attitude object that is assessed when motivation and ability to think are high. Finally, a variable can bias the effortful processing that occurs when motivation and ability are high, especially if available information is open to alternative interpretations.

It is important to note that the same variable (e.g., source attractiveness, message recipient mood) could serve any of these different roles depending on the situation and could, therefore, ultimately lead to attitudes with different consequences over time. This does not mean that an attitude reached via the central route (high elaboration) is necessarily different in valence or is more extreme compared with an attitude reached via the peripheral route (low elaboration). High- and low-elaboration attitudes could be equally favorable or unfavorable toward the attitude object (e.g., the brand). The difference in consequences is that an attitude based on thorough elaboration of product-relevant information should persist over time, resist counterattack, and affect future thinking and behavior to a greater extent than an attitude based on only cursory thought about the product or brand. If so, then positive attitudes that come from low-elaboration cue effects are also less likely to result in the desired type of lasting and supportive brand relationship.

THE ROLE OF METACOGNITION IN PERSUASION AND ATTITUDE STRENGTH

Although ELM research originally focused on the four roles discussed previously (i.e., argument, cue, influence on amount of processing, and bias in processing), a fifth role for persuasion variables postulated by the ELM—affecting the structure of cognitions—has been investigated recently. Although variables might affect various structural aspects of thoughts such as their accessibility, much recent attention has been paid to metacognitive aspects of thoughts (i.e., thoughts about thoughts) that can influence the extent of attitude change and attitude strength. After describing research dealing with metacognitions about thoughts to a persuasive message, we turn to metacognitions about the attitude itself (see Petty et al. 2007).

Using an attitude toward the brand as an example, the attitude can be thought of as a primary cognition (e.g., "I like Brand X"). If so, then a metacognition reflects a secondary cognition about the primary cognition (e.g., "I am sure that I like Brand X" or "it is undesirable to like Brand X"). A number of dimensions of metacognition parallel those for primary cognition. That is, a person can have thoughts about 1) the target of the thought (what the thought is perceived to be about), 2) the origin of the thought (from where the thought came), 3) the valence of the thought (whether the thought reflects something positive or negative about the target), and 4) the amount of thoughts (extent of thinking). In addition, some dimensions of metacognition go beyond these typical dimensions for primary thoughts (Petty et al. 2006). Two metacognitions that have received the most empirical attention are evaluation of a thought (whether it is a good thought to have) and confidence in thoughts (which can include confidence that one holds a particular thought, or confidence that a thought is correct or reasonable, see Petrocelli, Tormala, and Rucker 2007).

Before reviewing relevant work on metacognition, it is worth noting that the different types of metacognition are likely to be correlated in many settings. For example, thoughts whose origin is perceived to be the self are likely to be evaluated more favorably (Greenwald and Albert 1968; Wheeler, DeMarree, and Petty 2007) and perceptions that one has thought a lot about an issue can lead one to be more confident in the primary thoughts that arose from that processing (Barden and Petty 2008).

Effects of Confidence on Attitude Change

In addition to the four roles for variables in persuasion situations already reviewed, recent research has addressed a fifth role that variables can play to influence the extent of persuasion, that is affecting the confidence or doubt that people have in the thoughts they generate to the message. Most of this research has addressed the self-validation hypothesis (Petty, Briñol, and Tormala 2002), that increasing confidence in thoughts increases their impact on attitudes but increasing doubt in one's thoughts decreases their impact on attitudes. Thus, when people are thinking positive thoughts, their attitudes should be more favorable to the extent that people hold the thoughts with confidence. But when people are thinking negative thoughts, their attitudes should be less favorable to the extent that people hold the thoughts with confidence. The reverse is true for doubt. Research supports the self-validation hypothesis regardless of whether the thought confidence is measured or manipulated by having people think about previous experiences of certainty or doubt or by telling people that their thoughts are similar or dissimilar to those listed by peers (Petty et al. 2002).
A number of traditional persuasion variables have also influenced thought confidence and, therefore, attitudes. For example, people hold their thoughts with more confidence when nodding their head up and down rather than shaking it side to side (Briñol and Petty 2003), when learning that a previous message came from an expert rather than nonexpert source (Briñol, Petty, and Tormala 2004), and when placed in a happy rather than sad mood following the message (Briñol, Petty, and Barden 2007). Consistent with the idea that metacognition is more likely when motivation and ability to think are high, the metacognitive effects of head nodding, source expertise, and mood were also shown to be more likely under conditions of high than of low elaboration.

The logic of self-validation may also help to explain certain persuasion effects that have previously been attributed to fluency. For example, Lee and Aaker (2004) showed that messages that matched individuals' promotion or prevention focus were viewed as easier to process and were more persuasive. It could be that the matching messages led to thoughts that were held with greater confidence than mismatching messages and this led to the greater persuasion (assuming that thoughts were generally favorable; see Petty et al. 2007, for additional discussion of this effect and of more general issues relating metacognition and persuasion processes).

**Persuasion Variables and Attitude Confidence**

A sense of certainty or uncertainty could presumably apply to almost any aspect of one's judgments or perceptions (Tormala and Rucker 2007). When certainty is applied to one's thoughts, it can affect the extent of persuasion. Despite a recent surge of studies on thought confidence, the majority of attention in social psychology has been to confidence in the validity of one's attitudes or perceptions of objects. For example, when one is not sufficiently certain that one's attitude is "correct," persuasion models predict, and research has shown, that message recipients can increase elaboration of available information (e.g., Chaiken et al. 1989; Petty et al. 2006; Tiedens and Linton 2001). Presumably, this increase in processing is aimed at increasing confidence in one's attitude (whether it means changing one's attitude to make it more defensible or gathering additional evidence to bolster one's current point of view). On the other hand, when people are already confident in their attitudes, it may not be necessary to engage in additional processing. Instead, the attitude held with certainty possesses a number of qualities associated with strong attitudes. That is, the attitude is likely to persist over time (Bassili 1996), to resist change (Tormala and Petty 2002), and to guide behavior (Berger and Mitchell 1989; Fazio and Zanna 1978).

Certainty in thoughts or attitudes can be influenced by many factors, including direct experience with the attitude object (Berger and Mitchell 1989; Fazio and Zanna 1981), repeated expression of the attitude (Holland, Verplanken, and van Knippenberg 2003), ease of generating attitude-consistent thoughts (Haddock et al. 1999; Tormala, Petty, and Briñol 2002), and consensual support for one's attitude (Visser and Mirabile 2004). Because persuasive messages can influence attitude valence and extremity, it should not be surprising that various qualities of persuasive messages and settings can also influence the certainty with which people hold their attitudes.

**Effects on Confidence of Resistance Success and Resistance Failure**

Traditional views of attitudes suggest that a message that does not change one's report of the attitude has had no effect. However, in a series of studies, Tormala and Petty have shown that the persuasive attempt might have important consequences even when message recipients seem to have completely resisted the claims of the persuasive message. For example, when people believe they have resisted strong arguments (Tormala and Petty 2002) or an expert source (Tormala and Petty 2004b), they are more certain of their attitudes. However, when people believe that they have resisted weak arguments or a nonexpert source, attitude certainty can actually decrease. These effects occur when message recipients consider the implications of their own resistance in the context of the qualities of the persuasive appeal. Also, when people believe that they have resisted in some flawed or illegitimate way, attitude certainty can decrease (Tormala, Clarkson, and Petty 2006; Tormala, Petty, and DeSensi in press). Consistent with the idea that metacognition is more likely to occur when motivation and ability to think are high, Tormala and Petty (2004a) showed that these effects of resistance on confidence were more likely when message recipients were high in need for cognition (Cacioppo and Petty 1982) or when the persuasive message was high in personal relevance (Petty and Cacioppo 1990).

Just as successful resistance can have implications for attitude certainty, so can failed attempts at resistance. Rucker and Petty (2004) asked research participants to find fault with a persuasive message (an ad for a pain reliever), but created arguments that were so strong that they were not vulnerable to counterarguments. Ad recipients who could not generate reasonable counterarguments when trying to do so were actually more convinced that their new (post-ad) attitude was valid compared with people who processed the message without the goal of countering it.

**Evaluation-Based Metacognition and Bias Correction**

In many circumstances, people may come to view their thoughts or reactions as bad, unwanted, or inappropriate. When this happens, they may attempt to change or correct their thoughts or reactions, or they might try to limit effects of their reactions on subsequent judgments or behavior. For example, attempts to correct for the undue negative influences of an illegitimate source may play a role when people are more open to persuasion after resisting a minority source (Tormala et al. in press).

A number of theories have been developed to address attempts at bias correction (see Petty et al. 2007; Wegener and Petty 1997, 2001). According to the flexible correction model (FCM; Wegener and Petty 1997), attempts at bias correction are guided by perceivers' use of naive theories of biases potentially at work (see also Petty and Wegener 1993; Strack 1992; Wilson and Brekke 1994). That is, corrections occur when perceivers are motivated and able to identify potential biases and correct for the perceived influences of those biases. According to the FCM, a given theory-based correction is likely to guide corrections to the extent that it is perceived to facilitate the perceiver's goal, is applicable to the time and setting, and is accessible in memory.
Similar to other types of metacognition, theory-based corrections are more likely to occur under high rather than low thinking conditions, all else being equal (e.g., DeSteno et al. 2000; Szesny and Kühnen 2004). Over time, however, a particular correction might become well practiced and occur with less effort (cf., Glaser and Banaji 1999; Madux et al. 2005).

Research guided by the FCM has shown that people correct their judgments in different directions when they hold opposite theories of bias, even when they are for different people perceiving the same context and target (Wegener and Petty 1995). People correct for perceived biases, even if there is no real bias (e.g., Wegener and Petty 1995). These corrections can then ironically create the opposite bias. One example of this type of effect is when people correct for perceived negativity toward the dislikeable source of a persuasive message. When the dislikeable source is encountered under high-elaboration conditions, little impact of source likeability is observed (as in Chaiken 1980). However, corrections for perceived negative influences of the dislikeable source can lead to more favorable attitudes than when the source was likeable (Petty, Wegener, and White 1998; see also Schul and Goren 1997).

Correction for perceived rather than real bias also means that people sometimes correct for one bias but leave others to influence their perceptions. For example, Szesny and Kühnen (2004) found that people believe that gender can bias judgments of leadership qualities, but do not realize that physical features of masculine versus feminine appearance can have similar effects. Therefore, when encountering mock application materials that included photos, research participants corrected for gender but not for physical appearance when they had sufficient cognitive resources for corrections to occur. When cognitive load was high (and metacognitive activity should be reduced), research participants were more likely to hire male than female applicants and those with masculine rather than feminine appearance. However, when cognitive load was low (and corrections were more likely), research participants actually hired more female than male applicants, even though their preference for masculine rather than feminine applicants remained.

When forming or changing perceptions under high-thinking conditions, there could also be correction-related effects that parallel traditional ELM patterns. For example, initial perceptions that are formed in thoughtful ways might prove to be more resistant not only to external messages (e.g., Wegener et al. 2004) but also to more internal metacognitive analyses of whether corrections are needed. At times, high levels of initial thinking might make biases less likely to be identified as such and corrected (Petty and Wegener 1993). High levels of elaboration should lead to a great deal of integration of perceptions with existing knowledge (Petty and Cacioppo 1986). Depending on the type of knowledge related to the target, the highly integrated view of the target may seem justified by the existing information. If so, then people may view their opinions of the target as relatively appropriate and unbiased. Of course, this would undermine any perceived need to correct one's view of the target (see Wegener, Clark, and Petty 2006; see also Schul and Burnstein, 1985). High levels of integration could also spread the bias across many disparate perceptions, making identification of the bias more difficult.

**SUMMARY**

Brand relationships are likely to begin with positive attitudes toward the brand, and these relationships are likely to be maintained, at least in part, as a result of these positive attitudes being strong (i.e., persisting over time, resisting attempts at change, and guiding thoughts and behaviors related to the brand). This makes formation of strong positive attitudes a very important goal for communications about the brand. Much research in the area of attitudes has addressed features of attitudes that make them strong, and many of these features are tied to the amount of elaboration in which people engage when they receive attitude-relevant (in this case, brand-relevant) information.

The ELM specifies multiple roles for persuasion variables that operate across different levels of elaboration likelihood. A given persuasion variable may be able to act as a simple cue when elaboration likelihood is low or as a central merit of the attitude object (i.e., as an argument) when elaboration likelihood is high. The persuasion variable may also bias processing of brand-relevant information when elaboration likelihood is high and may affect the confidence in the thoughts generated. The biasing effect of variables is more likely when the variable precedes message processing, but an impact on thought confidence is more likely when the variable is salient following thought generation. Finally, variables can affect the level of elaboration likelihood when other background factors do not constrain elaboration likelihood to be high or low. From an attitude strength perspective, it would be the argument, biased processing, self-validation, and amount of processing roles that have the greatest potential for creating lasting brand relationships.

In addition to affecting thought confidence, recent research and theory on metacognition suggests how attitudes can be strengthened through metacognitive processes. A number of different metacognitions have been studied. Of greatest relevance to the current discussion, persuasion variables can influence how confident people are in their attitudes following a persuasive appeal, and these metacognitions can determine how strong or weak the resulting attitudes are. Finally, persuasion variables can also serve as biases that people wish to avoid. These corrections can sometimes reduce the judgmental impact of the perceived biases, but corrections for perceived biases that are not real can also ironically create the opposite bias.

**NOTES**

1. Similarly, consumer researchers sometimes talk about product satisfaction/dissatisfaction rather than product attitudes to describe effects of positive or negative behavioral experiences with the product or brand (e.g., Churchill and Surprenant 1982), and it is generally assumed that consumers will tend to stay with products with which they are satisfied and be motivated to switch when dissatisfied (e.g., Oliver 1980).

2. Other models of behavior prediction have also included other predictor variables, such as habits (see Chapter 3).

3. The concept of investment might also be related to some aspects of the concept of perceived behavioral control in the Theory of Planned Behavior (Ajzen 1991).
REFERENCES


