

Shrum, L. J., Min Liu, Mark Nespoli, and Tina M. Lowrey (2012), "Persuasion in the Marketplace: How Theories of Persuasion Apply to Marketing and Advertising," in *The Sage Handbook of Persuasion Handbook: Developments in Theory and Practice* (2<sup>nd</sup> ed.), eds. James Dillard & Lijiang Shen, Los Angeles: Sage, 314-330.

## **PERSUASION IN THE MARKETPLACE**

### How Theories of Persuasion Apply to Marketing and Advertising

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Persuasion runs indelibly through all aspects of our lives. Some instances are subtle (e.g., effects of entertainment media), others can be in-your-face annoying (e.g., political communications). If asked, and given sufficient time, most people can come up with a long list of everyday persuasion attempts and practices. However, we suspect that at the top of pretty much everyone's list would be advertising. Whether it is the result of constant exposure to ads, their often entertaining nature, or simply because of our (American) hyperconsumer culture, there are few things that more quintessentially capture the notion of persuasion than advertising. We love the ads (at least, we watch a lot of them), we hate them (at least, we often devise elaborate schemes to avoid watching them), and we may even fear them (mind control). In fact, the early fears about the persuasive power of propaganda on citizens in the 1930s and 1940s soon morphed into worries about the persuasive power of advertising, particularly the worry about subliminal persuasion through advertising (cf. Bargh, 2002; Brannon & Brock, 1994; Packard, 1957).

Given advertising's prominence in the domain of persuasion, it is not surprising that theories of persuasion have played a central role in scholarly research on effects of advertising (and marketing communications more generally). In this chapter, we provide a review of scholarly work on persuasion in the marketplace. However, we hasten to admit that a thorough coverage of all of the applicable persuasion theories and their tests is beyond the scope of this chapter. There are numerous theories of persuasion that have implications for advertising and marketing, many of which are covered in this volume. Rather, we have chosen to highlight the persuasion theories that have been most influential in advertising, marketing, and consumer behavior research over the last 30 years. Some of these theories will be familiar to communication researchers (e.g., theory of reasoned action; elaboration likelihood model), others less so (e.g., persuasion knowledge model). We provide a brief presentation and discussion of each theory, and then review the research that applied these theories to marketing questions. Finally, in the last section, we discuss some new directions in consumer research that pertain to concepts related to persuasion (e.g., preference construction and choice, perceptions, liking).

## **Persuasion Theories in Marketing, Advertising, and Consumer Behavior**

### **Contexts**

#### **Theory of Reasoned Action**

Although perhaps not a strict persuasion theory, the theory of reasoned action is a model of behavioral intentions developed by Fishbein and Ajzen (1975; also see chapter 8 in this volume). The model incorporates both attitudes and subjective norms that people hold in predicting their future behavior. Formally, the theory of reasoned action is:

$$B \sim BI = A_{act}(w_1) + SN(w_2)$$

where

$B$  = a particular behavior

$BI$  = intention to engage in the particular behavior

$A_{act}$  = attitude toward engaging in the behavior

$SN$  = subjective norm pertaining to what others think

The theory posits that the most proximal input into a behavior is a person's intention to engage in that behavior. (Although seemingly obvious, this assumption is important because it implies that behavior is intentional.) In turn, behavioral intentions are determined by one's attitude toward performing the behavior or act ( $A_{act}$ ) and one's beliefs about what important others think about one performing the behavior ( $SN$ ). The weights for each component ( $w_1, w_2$ ) indicate that the relative weights for each component of behavioral intention will vary across people and situations. For example, some behavioral intentions may be overly influenced by subjective norms (wearing a particular brand of clothing), whereas other intentions are more heavily influenced by personal attitudes (choice of chewing gum).

Fishbein and Ajzen further specified that each component of intention, attitudes, and subjective norms were themselves determined by specific beliefs about each. Using an expectancy-value approach, they quantified attitude toward the behavior as a cross-product of the subjective likelihood that performing a particular behavior ( $b$ ) would lead to a specified outcome ( $i$ ) and their evaluation of that outcome ( $e$ ):

$$A_{act} = \sum_{i=1} b_i e_i$$

where  $n$  represents the number of different consequences that come to mind. Similarly, Fishbein and Azjen quantified the subjective norm component as the cross-product of the belief that an important other ( $j$ ) thinks one should perform a particular behavior ( $b$ ) and one's own motivation to comply with that important other ( $m$ ):

$$SN = \sum_{j=1}^n b_j e_j$$

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### *Tests of the Model*

Given that marketers are particularly keen on being able to predict the behavior of their customers, the theory of reasoned action was put to the test in a number of consumer situations, and formed the basis of a number of doctoral dissertations (cf. Lutz, 1973b; Ryan, 1975). For example, the Fishbein model (or variations of it) has been shown to be predictive of the purchase of a specific brand of grape drink (Bonfield, 1974), toothpaste (Wilson, Mathews, & Harvey, 1975), generic prescription drugs (Brinberg & Cummings, 1984), football tickets (Lutz, 1973a), model of automobile (Raju, Bhagat, & Sheth, 1975), and even the purchase of term papers (Weddle & Bettman, 1973). In a comprehensive meta-analysis, Sheppard, Hartwick, and Warshaw (1988) found very strong evidence of the predictive validity of both the relation between intentions and behavior and between the combination of attitudes and subjective norms and behavioral intentions. Interestingly, and of particular interest to marketers, the meta-analysis

found that the predictive validity of intentions on behavior was substantially stronger when the criterion variable represented a choice among alternatives ( $r = .77$ ) than when it did not ( $r = .47$ ).

More recent studies have shown that the Fishbein and Ajzen model is predictive of consumer behavior across cultures. For example, Bagozzi, Wong, Abe, and Bergami (2000) found that the theory of reasoned action predicted fast food restaurant patronage in samples from the U.S., Italy, Japan, and the People's Republic of China. However, they also found that the effects were generally stronger in the U.S. sample, and that the relative influence of attitudes and subjective norms differed across samples. Specifically, those in Western cultures, which are more individualistic (independent) and emphasize internal aspects of the self in decision-making (e.g., be oneself), showed much stronger correlations between attitudes and intentions than those in Eastern cultures. In contrast, those in Eastern cultures, which are more collectivistic (interdependent) and emphasize how personal actions influence the group, showed much stronger correlations between subjective norms and intentions than those in Western cultures.

In general, the theory of reasoned action model is attractive to marketers because it affords them the ability to determine what components of intentions to target. For example, because the theory is quantifiable, it is relatively easy for marketers to determine all of the components of the model through surveys. This allows them to determine which beliefs about the consequences of a purchase decision are salient, how these beliefs are evaluated, which others' opinions about the behavior are most salient, and how motivated consumers are to comply with what those others think. Just as important, for any particular product or service, regression analyses can reveal the relative weights that the attitudes and subjective norms represent. Consequently, each variable in the entire equation represents a marketing opportunity. Advertisements and collateral marketing can be created to change the belief about the behavior (a Volvo results in greater safety), the

evaluation of the belief (how important safety is), what important others (e.g., parents, spouse) would want you to do, and how much you care about what they think.

In sum, the theory of reasoned action has had substantial impact on marketing research, both academic and in marketing practice. It was one of the first models that provided a clear articulation and quantification of the inputs into behavioral intentions, and did so in a way that was easily measurable, and thus easy for marketers to implement. However, one limitation of the model is that it restricts itself to volitional behaviors. Thus, the model has little to say about behaviors performed outside of awareness and specific intention. In fact, the model specifies that thoughts must mediate actions, and thus does not easily allow for the possibility of spontaneous, impulsive types of behaviors or other influences outside of conscious volition (mood, anger, etc., Eagly & Chaiken, 1993; for a spirited debate of these issues, see Fishbein & Middlestadt, 1995, 1997; Haugtvedt & The Consumer Psychology Seminar, 1997; Herr, 1995; Miniard & Barone, 1997; Schwarz, 1997).

To address the possibility that there may be multiple routes to persuasion (and the formation of attitudes) in general (for a review, see Chaiken & Trope, 1999), dual process models of attitude formation and cognitive processing were developed. In the next section, we review the elaboration likelihood model (ELM) of persuasion (Petty & Cacioppo, 1986), which has been the dominant persuasion model in consumer research over the last three decades.

### **Elaboration Likelihood Model**

The ELM is a model of persuasion that proposes two distinct routes to persuasion, the central route and the peripheral route (for a more in-depth discussion of the ELM, see chapter 9 of this volume), which refer to attitude changes that occur through different levels of evaluative

processing. In the central route, attitudes are formed through an extensive, effortful process that scrutinizes a message for the quality of its arguments. In many respects, this highly effortful central route to persuasion resembles the highly effortful process of attitude formation described by the theory of reasoned action. In contrast, the peripheral route refers to attitude formation that is based on nonargument cues, such as mood, source attractiveness (when not relevant to the argument quality), and heuristics (e.g., number of arguments, source expertise, message length).

The ELM provides an integrative model that addresses some of the perplexing inconsistencies in earlier attitude research. As Petty and Wegener (1999) note, attitude research in the late 1970s was in a remarkable state of disarray. Commonly accepted variables of attitude change, such as the mood of the receiver and the credibility of the message source, often produced conflicting effects (cf. Kelman & Hovland, 1953; Sternthal, Dholakia, & Leavitt, 1978; Zanna, Kiesler, & Pilkonis, 1970). The ELM was intended to provide a unifying framework that could explain how the classic inputs into persuasion (source, message, recipient, context) could have different impacts, depending on the particular route to persuasion. Thus, either the central route or the peripheral route can be evoked in various situations involving different message types, individual differences among receivers, and environmental (or situational) factors. Persuasion can be effective in both routes, although the strength, durability, and resistance of attitudes formed via the two routes may differ (Haugtvedt & Kasmer, 2008; Petty & Wegener, 1998).

The underlying mechanism of the ELM is indicated in its name: elaboration likelihood. The model posits that when people have both the motivation and the ability to process the information presented in a persuasive communication, the likelihood of message elaboration is high, and people will take the central route. In contrast, when the likelihood of message

elaboration is low as a result of either lack of motivation or ability to process information, people tend to take the peripheral route to persuasion. Which route is taken has a number of important implications. First, it determines which components of a persuasive communication will be the most effective, either central cues (message quality) or peripheral cues (mood, expertise, source attractiveness). This helps explain the rather counterintuitive finding that quality of the message may have little effect on persuasion in some situations, such as when motivation or ability to process the arguments is low, but other seemingly comparatively trivial variables (liking for background music in an ad) may have strong effects.

A second important implication of which route to persuasion is taken pertains to the qualities of the attitudes formed. The two routes may yield attitudes that are of equal valence and extremity. However, other important qualities of the attitudes will differ as a function of the two routes. Attitudes formed through the central route tend to be more highly accessible, held with more confidence, more predictive of behavior, more resistant to change, and persist longer over time, compared to attitudes formed through the peripheral route (Petty & Krosnick, 1995). Attitudes formed through the central route result from active information processing and a well-integrated cognitive structure, whereas attitudes formed through the peripheral route are led by passive acceptance or rejection of simple cues and are weaker, particularly over the long term.

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### *Tests of the Model*

Given that the classic persuasion inputs (source, message, recipient, context) that the ELM addresses are all critical components of advertising, the ELM has had substantial influence on persuasion research in marketing and advertising. One of the first studies in consumer behavior to employ the ELM investigated the role of product involvement (Petty, Cacioppo, & Schumann,

1983). Petty et al. manipulated three factors: motivation to process the information in the ad, central cues, and peripheral cues. Motivation was manipulated through product involvement (personally relevant or irrelevant), the central cue was manipulated through argument quality (strong or weak arguments), and the peripheral cue was manipulated via the source (celebrity or noncelebrity endorser). Supporting the ELM, argument quality had a greater effect on attitudes under high than low involvement conditions, whereas the celebrity endorser had a greater effect under low than high involvement conditions.

As noted, even though attitudes formed via both the central and peripheral routes may produce apparently equivalent attitudes (reflected by attitude scores), the two routes produce attitudes that differ on other important qualities. In a series of studies, Haugtvedt and colleagues tested the elaboration-persistence and elaboration-resistance hypotheses, which state that the more extensive elaboration that occurs through the central route produces more persistent attitudes and attitudes more resistant to change (Haugtvedt & Petty, 1992; Haugtvedt, Schumann, Schneier, & Warren, 1994; Haugtvedt & Wegener, 1994). These studies showed that whether degree of elaboration was operationalized via individual differences variables (e.g., need for cognition, Cacioppo & Petty, 1982) or situational manipulations of personal relevance, central route attitudes persisted longer over time and changed less after exposure to an opposing message than did peripheral route attitudes.

One aspect of the ELM that has caused some confusion is precisely what makes a cue central or peripheral. Consider the example of source attractiveness. This variable is typically referred to as a peripheral cue, which it often is. Examples might include automobile and beer ads, which often employ attractive endorsers. Clearly, the attractiveness of the endorser has little relation to the message in these instances. However, that is not always the case. In some instances, endorser

attractiveness may be perceived to be very relevant to the message. For example, the attractiveness of endorsers or models may be considered particularly relevant for certain products but not others. Consistent with this notion, research shows that an endorser's physical attractiveness serves as a central cue for beauty products, such as shampoo (Petty & Cacioppo, 1980) and razors (Kahle & Homer, 1985), yet other aspects of the source, such as their celebrity status (with attractiveness held constant) serve as a peripheral cue for the same product (razors; Petty et al., 1983; see also Kang & Herr, 2006).

Shavitt, Swan, Lowrey, and Wänke (1994) directly examined the relevance hypothesis by testing the proposition that the influence of endorser attractiveness as a peripheral or central cue depends on the message processing goals that receivers have at the time of exposure. Participants were exposed to ads for a fictitious restaurant that was ostensibly supposed to open soon. Processing route was manipulated through personal involvement (to open in a local or distant area), and endorser attractiveness was also varied. The third factor, motive for processing, was manipulated via a priming task intended to make either sensory or image attributes salient. Participants were primed with either a sensory cue, in which they rated 20 sensory experiences (e.g., smelling fresh air, feeling sore muscles) on how good or bad they made them feel), or an image cue in which they rated 20 image events (wearing a Rolex, losing a job) on how much they would make an impression on others. The results from both attitude ratings and cognitive responses showed that under image prime conditions, endorser attractiveness served as a central cue (influenced attitudes under high but not low involvement conditions), but under sensory prime conditions, the opposite effects occurred.

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*Extensions of the Model*

The general notion of dual routes to persuasion has led to advances in other aspects of attitudes and persuasion research that have had a strong input on marketing and advertising research (Haugtvedt & Kasmer, 2008). One example is the notion of metacognitive processing, or “thinking about thinking.” This line of research looks at the extent to which thoughts about thought processes involved in attitude formation affect attitudes, particularly for attitude qualities such as attitude confidence, resistance, and certainty (for a review, see Petty, 2006). For example, attitude certainty tends to increase when people perceive themselves as resisting a persuasive communication (Tormala & Petty, 2002). In a follow-up to that set of studies, Tormala and Petty (2004) demonstrated that this effect depends on source credibility. Participants’ product attitudes were more certain and predicted behavior better when they perceived themselves to be resisting the persuasive communication than when they did not, but only when the communication came from an expert source.

In sum, the ELM has proved to be a robust model for predicting the effects of advertising and marketing messages on consumer attitudes and behavior. It provides a clear theoretical framework for understanding the conditions under which typical executional variables will have an effect, thereby providing both a guide for how marketers can maximize the persuasiveness of their ads and how consumers can maximize their resistance to those ads. More recently, other models of persuasion have been developed that provide a somewhat different focus on how consumers process persuasive communications, and in particular the thoughts consumers have about motives underlying messages. In the next section, we analyze the persuasion knowledge model.

## **Persuasion Knowledge Model**

Unlike the theory of reasoned action and elaboration likelihood model, both of which originated in the field of social psychology, the persuasion knowledge model (Friestad & Wright, 1994) is uniquely marketing-focused. Although the model could likely be applied to persuasion in other contexts, to date its focus has been on the interaction between marketers and consumers. Because the model is relatively new and has had little exposure outside of the marketing literature, we begin with a more thorough description of the model compared to the previous ones we discussed, and then proceed to discuss recent tests of the model.

The persuasion knowledge model was formally introduced in 1994 as the first model to explain how knowledge of marketers' persuasion tactics affects consumers' responses to such tactics (Friestad & Wright, 1994). The model asserts that over time, consumers develop knowledge of marketers' persuasion tactics and, in doing so, become better able to adapt and respond to such attempts in order to achieve their own personal goals. Figure 19.1. provides a depiction of the model and its components (for a review, see Campbell & Kirmani, 2008).

### **INSERT Figure 19.1. ABOUT HERE**

Friestad and Wright (1994) decompose the persuasion process into two primary elements: the target and the agent. The target refers to the intended recipient of the persuasion attempt (the consumer), whereas the agent represents whomever the target identifies as the creator of the persuasion attempt (the marketer). The persuasion attempt encompasses not only the message of the agent, which itself is influenced by the agent's knowledge of the topic, target, and the effectiveness and applicability of different persuasion tactics, but also the target's perception of the agent's persuasion strategy.

The persuasion knowledge model presumes that consumers formulate coping strategies in order to decide how to respond to marketers' persuasion attempts in a way that optimally aligns with their own goals. When creating such strategies, consumer targets are said to be motivated to utilize and allocate cognitive resources between three different knowledge structures: knowledge of persuasion, knowledge of the agent, and knowledge of the persuasion topic(s). A target's knowledge of persuasion typically depends on three factors: experience, cognitive ability, and motivation. Experience and cognitive ability are straightforward; however, motivation can be influenced in a number of ways.

It can be enhanced by factors such as unfamiliarity with the agent, similar persuasion behaviors having been observed in a different context, use of an uncharacteristic persuasion tactic, or belief that knowledge of the agent is outdated. It can also be deterred by factors such as difficulty in the identification of the agent, perceived leeway of a salesperson, or perceived irrelevance of the agent in the target's personal, professional, and marketplace relationships. Cultural differences may also play a role in motivation. For example, individuals in independent self-construal (e.g., Western) cultures may interpret persuasion attempts predominantly in terms of a personal attitude on the persuasion topic, whereas individuals in interdependent self-construal cultures (e.g., Eastern) may interpret such attempts in terms of a personal attitude on the social relationship with the agent. Such different interpretations may lead to different persuasion responses.

The interaction of the target's coping behaviors and the agent's persuasion attempt forms what Friestad and Wright (1994) refer to as the persuasion episode. The persuasion episode may include one encounter, such as a sales presentation, or multiple episodes, such as a series of television advertisements presented over time. Furthermore, consumers and marketers may

switch roles, with the consumer becoming the agent and the marketer becoming the target when, for example, a consumer attempts to negotiate or bargain, or otherwise influence a firm's selling tactics in any way. Regardless of who occupies which role, the model assumes that both agents and targets want to maximize the effectiveness of their persuasion production and persuasion coping behavior respectively.

The persuasion knowledge model also asserts that consumers utilize persuasion knowledge to evaluate marketers' persuasion behavior on two primary dimensions: perceived effectiveness and perceived appropriateness. Consumers judge persuasion behavior to be effective when it seems to have produced psychological effects that strongly influence purchase decisions. Consumers deem persuasion behavior appropriate to the extent it appears to be ethical or normatively acceptable (i.e., within the rules of the game), especially with regard to consumers' relationship expectations. For example, if a marketer's persuasion attempts are perceived as disrespectful or unexpectedly careless, it will likely lead to a negative consumer evaluation, potentially damaging brand equity and the reputation of the firm overall.

The model also rests on the fundamental assumption that people are "moving targets." In other words, the validity of a consumer's knowledge about the marketer, the marketer's persuasion tactics, and the persuasion topic will ebb and flow over time. A similar thing can be said for marketers, as their knowledge of consumers' interests, preferences, and expectations is also likely to fluctuate over time. As a result, causal relationships between firm behavior and consumer responses are prone to changing over time as well, and, as such, must be reexamined every so often to ensure that they are still valid.

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*Tests of the Model*

A number of studies have provided support for key components of the model. For example, one key component is the notion that consumers have well-developed knowledge structures about persuasion tactics and that people generally understand the motives of persuasion tactics. Consistent with this proposition, research suggests that lay people do have clear knowledge of persuasion tactics of advertising, and the beliefs of lay people about how advertising works are actually quite similar to those of academic marketing scholars (Friestad & Wright, 1995). Moreover, these persuasion knowledge structures are evident in middle school children. Children's knowledge of advertising tactics tends to increase with age, and knowledge about these tactics is positively correlated with skepticism toward advertising (Boush, Friestad, & Rose, 1994; for a review, see Wright, Friestad, & Boush, 2005).

Another aspect of the model that has received support is that consumers make spontaneous, active inferences about agent tactics when consumers encounter persuasive appeals. People use simple cues such as perceived effort a company puts into an appeal as a signal of the company's belief in their product (Kirmani & Wright, 1989) and that these inferences can result from cues as simple as the size of an ad (Kirmani, 1990). Consumers also have schemas (and thus expectations) of tactics used for various product categories and that these schemas guide processing of the persuasion attempts (Hardesty, Bearden, & Carlson, 2007). Moreover, consumers use their knowledge of persuasion tactics and underlying motives to form strategies to cope with marketers' persuasion attempts, and aspects of the consumer (their relationship with the marketer and their experience with persuasive tactics) guide which strategy is employed (Kirmani & Campbell, 2004).

The general notion that consumers understand the motives of companies as well as salespeople, and that consumers have schemas and expectations about persuasion tactics, has

important and sometimes counterintuitive implications about the effectiveness of persuasion attempts. We know from the elaboration likelihood model and other similar persuasion models that consumers often do not pay close attention to persuasion attempts. In persuasion knowledge terms, in these instances, consumers may not have a persuasion knowledge schema fully activated. Thus, one would expect that when knowledge of persuasion tactics is low, persuasion would likely proceed through the peripheral route to persuasion. However, the process of activating persuasion knowledge may lead to central route processing, which in some cases may lead to decreased persuasion. Consistent with this reasoning, DeCarlo (2005) showed that when persuasion knowledge was activated by increasing the salience of ulterior motives, attitudes towards a salesperson were actually more favorable, and purchase intentions were lower when the strength of the sales message arguments were weaker (mildly positive) than when they were stronger, but the reverse was true when salience of ulterior motives was low.

Other research also supports the notion that the activation of persuasion knowledge can have a detrimental effect. For example, take the case of flattery in personal selling. A substantial amount of research has shown that flattery can have positive effects on attitudes toward the flatterer in a variety of domains (Gordon, 1996). However, the persuasion knowledge model suggests that if this flattery comes from a salesperson, and persuasion knowledge (e.g., ulterior motives) is activated, then flattery may actually backfire. In fact, research suggests that this is indeed the case. Flattery by salespeople can spontaneously activate suspicions of ulterior motives, oftentimes even more than a situation warrants (sinister attribution error, Kramer, 1994), and thus decrease rather than increase persuasion (Campbell & Kirmani, 2000).

Although the findings regarding detrimental effects of salesperson flattery fit nicely within the persuasion knowledge model, other research suggests that the process may not be that simple.

In a provocative set of studies, Chan and Sengupta (2010) showed that flattery by marketers actually produces two attitudes, one explicit (of which one is aware and can control) and one implicit (outside a person's awareness), which coexist with each other in memory. The explicit attitude, which is what most prior research has assessed, did indeed appear to be corrected for, or discounted. Explicit attitudes were always more negative than implicit ones. More importantly, implicit attitudes were much stronger predictors of behavioral intention than were explicit attitudes. These results suggest that even though consumers are knowledgeable of persuasive tactics and attempt to correct for them, they may not always be successful, even though their responses on attitude scales suggest they are.

As the research reviewed clearly shows, persuasion knowledge can be easily activated by environmental cues. One implication of the model, and a challenge for marketers, is to understand how to navigate consumers' propensities to activate persuasion knowledge. For example, one marketing persuasion tactic that has seen a large increase in usage is product placement (Shrum, 2004, 2012), which is the practice of inserting branded products into films, television, programs, and other media (McCarty, 2004; McCarty & Lowrey, 2012). One question that has worried advertisers is which placements are most effective. Placements can vary greatly, from simple, subtle background placements to more overt placements that include a shot of the brand name or even a mention in the dialogue. Although effectiveness may depend on how it is measured (e.g., via recall, attitudes, etc., Law & Braun-LaTour, 2004), the persuasion knowledge model makes some predictions about this process. If prominence of a placement in film is sufficient to cause viewers to notice the placement, it may activate persuasion knowledge and thus reduce brand attitudes. Consistent with this reasoning, Cowley and Barron (2008) found that prominent placements produced more negative attitudes for those who were high in program

involvement (and thus more likely to notice the placement) than for those who were low in program involvement. Thus, not properly managing consumers' persuasion knowledge activation can be detrimental to the goals of particular marketing tactics.

In sum, the key contribution of Friestad and Wright's persuasion knowledge model is that consumers are active and often knowledgeable participants in marketers' persuasion efforts, and that their persuasion knowledge, motivation, cognitive ability, and goals are all factors that should be taken into account when examining the effectiveness of any marketing attempt at persuasion. Furthermore, the interaction between marketers' persuasion efforts and consumers' strategies for coping with those efforts is one that is constantly changing, as the persuasion knowledge of both consumers and marketers varies over time. Finally, the model is useful for both the targets and the agents. It provides agents (marketers) with an understanding of how consumers react to persuasion attempts and guidance on how to minimize persuasion knowledge activation. For targets (consumers), it provides a model for how they may actively discount or correct for persuasion attempts, how they may actually overcorrect in some situations, but also how their corrections may ultimately not be sufficient (Chan & Sengupta, 2010).

### **Nonconscious Processing and Persuasion**

The three theories just reviewed represent the primary theoretical models that have impacted marketing, advertising, and consumer behavior research over the last few decades. These models continue to be tested and refined, particularly the elaboration likelihood model and persuasion knowledge model. However, in the most recent years, the area of research that has had perhaps the most provocative impact is the role of nonconscious processing in consumer judgment and

decision making (Bargh, 2002; Dijksterhuis, Smith, van Baaren, & Wigboldus, 2005). As a number of scholars of nonconscious processing have noted, there are different aspects of awareness that may play a role in how environmental features may influence consumer outcomes outside of consumer awareness, and lack of awareness of any one of these may lead to nonconscious effects (Chartrand, 2005). Three particular aspects are important: awareness of an environmental stimuli, awareness of the automatic processes that influence behavior, and awareness of the actual outcome.

A good example of lack of awareness of environmental stimuli is through subliminal presentation. The notion of subliminal persuasion is one with which most students and scholars of persuasion are very familiar, and the potential use of the concept has long been a fear of many lay people. Interestingly, the reason for this fear is captured by the persuasion knowledge model: people worry that they will not know they are being persuaded, and thus their persuasion knowledge will not be activated, leaving them vulnerable to the persuasive communication.

Although there have been quite a number of scholarly writings dismissing the notion of subliminal effects in general and subliminal persuasion in particular (Pratkanis & Aronson, 1992), we now know that subliminal effects are actually fairly easy to produce, at least in the lab (for a review, see Dijksterhuis, Aarts, & Smith, 2005). Examples include the mere exposure effect, in which subliminal exposure to various stimuli increased liking for those stimuli in a linear function of frequency of exposure (Zajonc, 1968), subliminal exposure to positive versus negative symbols prior to a supraliminal presentation of an image that influenced liking for the image (Murphy & Zajonc, 1993), subliminal exposure to stereotypical information that influenced behavior in the direction of the stereotype (Bargh, Chen, & Burrows, 1996), subliminal presentation of threatening stimuli that induced anxiety (Robles, Smith, Carver, &

Wellens, 1987), and subliminal conditioning of attitudes (Krosnick, Betz, Jussim, & Linn, 1992), among a host of others.

Some recent research has actually demonstrated subliminal persuasion in a setting conceptually similar to the lay notion of subliminal advertising. Strahan, Spencer, and Zanna (2002) primed thirst by subliminally exposing participants to either thirst-related or non-thirst-related words. Although they did not find any differences in self-reported thirst, those subliminally primed with thirst drank more of a liquid whose brand name suggested a thirst-quenching attribute (Super Quencher) than of a liquid whose brand name suggested a non-thirst-related attribute (PowerPro). A second study replicated the same general effect by showing that subliminally primed mood (via sad faces) caused participants to prefer a music choice that was described as mood lifting to music described as powerful. Thus, these studies suggest that although subliminal priming may not create needs (i.e., make someone thirsty), priming the goal (quench thirst) can influence choices that can help achieve the goal.

Although the specter of nonconscious persuasion has always been held in fear and fascination by consumers, nonconscious influences on behavior do not require subliminal presentation of the primes. As Bargh has pointed out a number of times (cf. Bargh, 1992, 1999; see also Chartrand, 2005), if people are unaware of how the prime may affect them, they are just as likely to be influenced. For example, when people walk into a store, they may be aware of music being played (supraliminal presentation). What they may not know, however, is that the tempo of music can affect the speed with which consumers shop. Slow music causes people to go slower in their shopping, fast music causes them to shop faster (Milliman, 1982).

Thus, consumers may not know that department stores are playing slower music to get them to shop longer (and thus spend more money), whereas fast food stores are playing faster music to

decrease customer dining time and increase customer turnover. As another example, when consumers go into a grocery store to buy some fruit, they are clearly aware of the sign that advertises 2 lemons for \$1. What they are unlikely to be aware of, however, is that the number chosen in the advertisement influences their buying behavior independent of need. Thus, consumers will tend to buy more items when those items are advertised as 4 lemons for \$2 than when they are advertised as 2 lemons for \$1 (Wansink, Kent, & Hoch, 1998). This effect results from an anchoring and adjustment process (Tversky & Kahneman, 1974), in which the applications of the primes are conscious, but because consumers are unaware of the primes' effects, consumers have no more ability to combat the primes' effects than they do when primes are presented outside their awareness.

Another example of how conscious environmental primes may influence nonconscious, goal-directed behavior can be seen in a set of experiments by Chartrand, Huber, Shiv, and Tanner (2008). Chartrand et al. primed groups of participants with different goals (value vs. image) via a scrambled sentence task. Later, participants were given a fictional scenario in which they had to choose between a pair of socks that represented a good value (Hanes socks at \$6 for two pairs) or a good image (Nike socks at \$5.25 for one pair). When participants were primed with the image goal, they were much more likely to choose the Nikes (48%) than when they were primed with the value goal (18%).

Finally, conscious environmental primes can exert an influence on consumer behavior if consumers are unaware of the actual outcomes of their behavior. Brian Wansink and colleagues have developed an extensive program of research that looks at how simple environmental cues influence eating habits despite conflicting goals (Wansink, 2010). For example, people tend to eat more when the same portions are served on larger plates or bowls than when they are served

on smaller ones. The larger plates make the amount of food on the plate look smaller relative to the size of the plate, and thus people underestimate how much they are actually consuming (Wansink & van Ittersum, 2006).

## **New Directions in Persuasion in the Marketing Place: The Next Big**

### **Thing(s)**

So what's next in commercial persuasion? From our vantage point, we see the field progressing in three different areas that have some degree of overlap and synergy. These are a continued intensive investigation of nonconscious processing and persuasion, a renewed focus on the role of mood in persuasion (and consumer decision-making in general), and the incorporation of social cognitive neuroscience into the study of persuasion and decision-making processes.

#### **Nonconscious Processing and Persuasion**

In our opinion, the previous review of nonconscious processing and persuasion barely touches the surface of research currently being conducted. As we noted in the previous section, what makes consumers so fearful of subliminal advertising is the notion that they may not be able to defend against an unwanted persuasion attempt. However, stimuli need not be outside of conscious awareness to persuade: Supraliminal primes may also influence attitudes and behavior without consumers' awareness if they are not aware of the influence of the prime on their attitudes and behaviors.

Consequently, we believe that marketing and consumer research will increasingly focus how supraliminal stimuli can influence consumer behavior outside of consumers' awareness. One example we touched on earlier is nonconscious goal pursuit. As Morsella & Bargh (2011) note,

material objects can prime goals. For example, scents such as cleaning fluid can prime goals of cleanliness (Holland, Hendriks, & Aarts, 2005), seeing dollar bills can prime greed motives (Vohs, Mead, & Goode, 2006), and briefcases can prime competitiveness but backpacks cooperation (Kay, Wheeler, Bargh, & Ross, 2004). It is not too difficult to imagine that the marketing environment can be manipulated to influence goal activation. Indeed, North, Hargreaves, and McKendrick (1999) demonstrated that manipulating the type of in-store music (French vs. German) increased sales of French and German wines, respectively.

### **Mood and Emotion**

The effects of mood and emotions on consumer behavior are well-documented. Much of marketing efforts are designed to put consumers in a more positive mood, and most of the extant marketing research has focused on the effect of mood valence. However, more recent theoretical models of emotion have expanded the inquiry to look at how different moods of the same valence (e.g., sadness vs. anger) may produce qualitatively different decisions, depending on the context. For example, Lerner and colleagues have proposed the Appraisal-Tendency Framework as a model to distinguish the effects of different types of emotions on decision-making (Han, Lerner, & Keltner, 2007; Lerner & Keltner, 2000).

They detail in particular how two similarly valenced emotions—fear and anger—produce different perceptions of risk. Fear, which is associated with low certainty, was associated with increased perceptions of risk, whereas anger, which is associated with high certainty, decreased risk perceptions. In another demonstration using different emotions having similar valences (sadness and disgust), they showed that sadness, which is associated with an appraisal theme of loss, increased choice prices, whereas disgust, which is associated with wanting to expel,

reduced choice prices. In contrast, both sadness and disgust reduced selling prices (Lerner, Small, & Lowenstein, 2004). Thus, disgust eliminated the well-documented endowment effect (Kahneman, Knetsch, & Thaler, 1990), whereas sadness actually reversed it. It is important to note here that the emotions that influenced those decisions were incidental (primed by a prior irrelevant situation).

Other models of affect have also been introduced in the consumer behavior literature. For example, what is referred to as the Affect-based Evaluation and Regulation Model (Andrade & Cohen, 2007; see also Shiv, 2007), integrates both goal-directed (affect regulation) and informational (affect evaluation) properties of affect. The key contribution of this research is its focus on the underlying mediators of each component: The link between affective evaluation and behavior is mediated by cognitive appraisals, whereas the link between affective regulation and behavior is mediated by motivational appraisals. The general framework has been used to make predictions in a variety of disparate domains, including risk taking, eating, and helping behavior. Although this work and that of Lerner and colleagues has primarily focused on decision making more generally, and not persuasion in particular, the next generation of persuasion research will likely focus on applying these concepts to persuasion situations.

### **Social Cognitive Neuroscience**

The third area we see becoming a focal area of research in the coming years is the application of social cognitive neuroscience to persuasion. Advances in neuroscience techniques now allow social and cognitive scientists to determine neural correlates of many of the mental processes that are integral parts of persuasion theories (e.g., emotions, memory, thought activation, etc.).

Integrating neuroscience with persuasion theories allows for more direct tests of existing theory,

potential refinements of theory, and tests of new theories (Shiv, 2007). Consider the debate around the theory of reasoned action, and its stipulation that thoughts mediate action. The use of neuroscience techniques may allow for the resolution of this debate by tracing neural outputs during persuasion situations. Similarly, the notion that certain types of cues (e.g., attractive models) may function as peripheral ones in some situations but central in others have the potential for direct tests using neuroscience techniques.

Some neuroscience research on persuasion has already begun to test aspects of the persuasion process and existing persuasion theory. For example, results from fMRI scans have been shown to predict behavior change over and above self-reports (Falk, Berkman, Mann, Harrison, & Lieberman, 2010). In tests associated with the elaboration likelihood model, fMRI scans were used to investigate the neural processes that predict effects of source expertise on attitude development and change (Klucharev, Smidts, & Fernandez, 2008). Neuroscience techniques have been used to document actual changes in perceptions of pain resulting from placebos (Wager et al., 2004), to show that cognitive dissonance occurs automatically independent of explicit memory (Lieberman, Ochsner, Gilbert, & Schacter, 2001; see also Shiv, 2007), and that the “pain of paying” is more than a metaphor by showing that spending money activates an area of the brain that is also active during the experience of physical pain (Knutson, Rick, Wimmer, Prelec, & Lowenstein, 2007).

## **Conclusion**

As noted in the introduction, persuasion is all around us, and even more so in a consumer society such as the U.S., where marketing and persuasion are virtually synonymous. Thus, where better

to understand persuasion principles, develop new research questions, and test new persuasion models than the marketplace? The different streams of research reviewed here just touch on the many different theories of persuasion that have application to marketing contexts. Rather than take a comprehensive approach to reviewing persuasion theories and applications in marketing, we have attempted to highlight the theories that have had the most recent impact. Across those theories, there are important overlaps as well as differences. Many of the differences were developed as researchers noted that current models had difficulty accounting for certain patterns of data. That will surely continue, and so new discoveries should be welcome but not surprising.

One type of new discovery that we highlighted at the end of this chapter pertains to nonconscious processing. This represents one of the exciting new frontiers in persuasion research, as researchers attempt to determine just what types of judgments are conscious and which ones are driven by more automatic (nonconscious) responses to stimuli. As researchers attempt to answer the question of what consciousness is actually good for (Bargh & Chartrand, 1999; Baumeister, Mele, & Vohs, 2010), the more we learn about what types of consumer judgments are actually driven by nonconscious processes. Although it is perhaps uncomfortable to realize how little control we actually have over daily decisions, the more we learn about how these persuasion processes work, the better we should be at making good decisions.

## References

Andrade, E. B., & Cohen, J. B. (2007). Affect-based evaluation and regulation as mediators of behavior. The role of affect in risk taking, helping and eating patterns. In K. D. Vohs, R. F.

- Baumeister, & G. Loewenstein. *Do emotions help or hurt decision making? A hedgefoxian perspective* (pp. 35–68). New York, NY: Russell Sage.
- Bagozzi, R. P., Wong, N., Abe, S., & Bergami M. (2000). Cultural and situational contingencies and the theory of reasoned action: Application to fast food restaurant consumption. *Journal of Consumer Psychology, 9*, 97–106.
- Bargh, J. A. (1992). Why subliminality does not matter to social psychology: Awareness of the stimulus versus awareness of its influence. In R. F. Boorstein & T. F. Pitman (Eds.), *Perception without awareness: Cognitive, clinical, and social perspectives* (pp. 236–255). New York, NY: Guilford Press.
- Bargh, J. A. (1999). The cognitive monster: The case against controllability of automatic stereotype effects. In S. Chaiken & Y. Trope (Eds.), *Dual-process theories in social psychology* (pp. 361–382). New York, NY: Guilford Press.
- Bargh, J. A. (2002). Losing consciousness: Automatic influences on consumer judgment, behavior, and motivation. *Journal of Consumer Research, 29*, 280–285.
- Bargh, J. A. (2005). Bypassing the will: Toward demystifying the nonconscious control of social behavior. In R. R. Hassin, J. S. Uleman, & J. A. Bargh (Eds.), *The New Unconscious* (pp. 37–58). New York, NY: Oxford University Press.
- Bargh, J. A., & Chartrand, T. L. (1999). The unbearable automaticity of being. *American Psychologist, 54*, 462–479.

- Bargh, J. A., Chen, M., & Burrows, L. (1996). Automaticity of social behavior: Direct effects of trait construct and stereotype activation on action. *Journal of Personality and Social Psychology, 71*, 230–244.
- Baumeister, R. F., Mele, A. R., & Vohs, K. D. (Eds.) (2010). *Free will and consciousness: How might they work?* New York, NY: Oxford University Press.
- Bonfield, E. H. (1974). Attitude, social influence, personal norm, and intention interactions as related to brand purchase behavior. *Journal of Marketing Research, 11*, 379–389.
- Boush, D. M., Friestad, M., & Rose, G. M. (1994). Adolescent skepticism toward TV advertising and knowledge of advertiser tactics. *Journal of Consumer Research, 21*, 165–175.
- Brannon, L. A., & Brock, T. C. (1994). The subliminal persuasion controversy: Reality, enduring fable, and Polonius's wheel. In S. Shavitt & T. C. Brock (Eds.), *Persuasion: Psychological insights and perspectives* (pp. 279–293). Boston, MA: Allyn and Bacon.
- Brinberg, D., & Cummings, V. (1984). Purchasing generic prescription drugs: An analysis using two behavioral intention models. In T. Kinnear (Ed.), *Advances in consumer research* (Vol. 11, pp. 229–234). Provo, UT: Association for Consumer Research.
- Cacioppo, J. T., & Petty, R. E. (1982). The need for cognition. *Journal of Personality and Social Psychology, 42*, 116–131.
- Campbell, M. C., & Kirmani, A. (2000). Consumers' use of persuasion knowledge: The effects of accessibility and cognitive capacity on perceptions of an influence agent. *Journal of Consumer Research, 27*, 69–83.

- Campbell, M. C., & Kirmani, A. (2008). I know what you're doing and why you're doing it: The use of persuasion knowledge model in consumer research. In C. P. Haugtvedt, P. Herr, & F. R. Kardes (Eds.), *Handbook of consumer psychology* (pp. 449–573). New York, NY: Erlbaum.
- Chaiken, S., & Trope, Y. (Eds.). (1999). *Dual process theories in social psychology*. New York, NY: Guilford Press.
- Chan, E., & Sengupta, J. (2010). Insincere flattery actually works: A dual attitudes perspective. *Journal of Marketing Research*, *47*, 122–133.
- Chartrand, T. L. (2005). The role of conscious awareness in consumer behavior. *Journal of Consumer Psychology*, *15*, 203–210.
- Chartrand, T. L., Huber, J., Shiv, B., & Tanner, R. J. (2008). Nonconscious goals and consumer choice. *Journal of Consumer Research*, *35*, 189–201.
- Cowley, E., & Barron, C. (2008). When product placement goes wrong: The effects of program liking and placement prominence. *Journal of Advertising*, *37*(1), 89–98.
- DeCarlo, T. E. (2005). The effects of sales message and suspicion of ulterior motives on salesperson evaluation. *Journal of Consumer Psychology*, *15*, 238–249.
- Dijksterhuis, A., Aarts, H., & Smith, P. K. (2005). The power of the subliminal: On subliminal persuasion and other potential applications. In R. R. Hassin, J. S. Uleman, & J. A. Bargh (Eds.), *The New Unconscious* (pp. 77–106). New York, NY: Oxford University Press.

- Dijksterhuis, A., Smith, P. K., van Baaren, R. B., & Wigboldus, D. H. (2005). The unconscious consumer: Effects of environment on consumer behavior. *Journal of Consumer Psychology, 15*, 193–202.
- Eagly, A. H., & Chaiken, S. (Eds.). (1993). *The psychology of attitudes* (2nd ed.). Orlando, FL: Harcourt Brace.
- Falk, E. B., Berkman, E. T., Mann, T., Harrison, B., & Lieberman, M. D. (2010). Predicting persuasion-induced behavior change from the brain. *The Journal of Neuroscience, 30*(25): 8421–8424. doi: 10.1523/JNEUROSCI.0063-10.2010
- Fazio, R. H. (1986). How do attitudes guide behavior? In R. M. Sorrentino & E. T. Higgins (Eds.), *The handbook of motivation and cognition: Foundations of social behavior* (pp. 204–243). New York, NY: Guilford Press.
- Fishbein, M., & Ajzen, I. (1975). *Beliefs, attitudes, intentions, and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.
- Fishbein, M., & Ajzen, I. (2010). *Predicting and changing behavior: The reasoned action approach*. New York, NY: Psychology Press.
- Fishbein, M., & Middlestadt, S. (1995). Noncognitive effects on attitude formation and change: Fact or artifact? *Journal of Consumer Psychology, 4*, 181–202.
- Fishbein, M., & Middlestadt, S. (1997). A striking lack of evidence for nonbelief-based attitude formation and change: A response to five commentaries. *Journal of Consumer Psychology, 6*, 107–115.

- Friestad, M., & Wright, P. (1994). The persuasion knowledge model: How people cope with persuasion attempts. *Journal of Consumer Research*, *21*, 1–31.
- Friestad, M., & Wright, P. (1995). Persuasion knowledge: Lay people's and researchers' beliefs about the psychology of advertising. *Journal of Consumer Research*, *22*, 62–74.
- Gordon, R. A. (1996). Impact of ingratiation on judgments and evaluations: A meta-analytic investigation. *Journal of Personality and Social Psychology*, *71*, 54–70.
- Han, S., Lerner, J. S., & Keltner, D. (2007). Feelings and consumer decision making: The Appraisal-Tendency Framework. *Journal of Consumer Psychology*, *17*, 158–168.
- Hardesty, D. M., Bearden, W. O., & Carlson, J. P. (2007). Persuasion knowledge and consumer reactions to pricing tactics. *Journal of Retailing*, *83*, 199–210.
- Haugtvedt, C. P., & The Consumer Psychology Seminar (1997). Beyond fact or artifact: An assessment of Fishbein and Middlestadt's perspectives on attitude change processes. *Journal of Consumer Psychology*, *6*, 99–106.
- Haugtvedt, C. P., & Kasmer, J. A. (2008). Attitude change and persuasion. In C. P. Haugtvedt, P. Herr, F. R. Kardes (Eds.), *Handbook of consumer psychology* (pp. 419–436). New York, NY: Erlbaum.
- Haugtvedt, C. P., & Petty, R. E. (1992). Personality and persuasion: Need for cognition moderates the persistence and resistance of attitude changes. *Journal of Personality and Social Psychology*, *63*, 308–319.

- Haugtvedt, C. P., Schumann, D. W., Schneier, W. L., & Warren, W. L. (1994). Advertising repetition and variation strategies: Implications for understanding attitude strength. *Journal of Consumer Research*, *21*, 176–189.
- Haugtvedt, C. P., & Wegener, D. T. (1994). Message order effects in persuasion: An attitude strength perspective. *Journal of Consumer Research*, *21*, 205–218.
- Herr, P. M. (1995). Whither fact, artifact, and attitude: Reflections on the theory of reasoned action. *Journal of Consumer Psychology*, *4*, 371–380.
- Holland, R. W., Hendriks, M., & Aarts, H. A. G. (2005). Smells like clean spirit: Nonconscious effects of scent on cognition and behavior. *Psychological Science*, *16*, 689–693.
- Kahle, L. R., & Homer, P. M. (1985). Physical attractiveness of the celebrity endorser: A social adaptation perspective. *Journal of Consumer Research*, *11*, 954–961.
- Kahneman, D., Knetsch, J. L., & Thaler, R. H. (1990). Experimental tests of the endowment effect and the Coase Theorem. *The Journal of Political Economy*, *98*, 1325–1348.
- Kang, Y. S., & Herr, P. M. (2006). Beauty and the beholder: Toward an integrative model of communication source effects. *Journal of Consumer Research*, *33*, 123.
- Kay, A. C., Wheeler, S. C., Bargh, J. A., & Ross, L. (2004). Material priming: The influence of mundane physical objects on situational construal and competitive behavioral choice. *Organizational Behavior and Human Decision Processes*, *95*, 83–96.
- Kelman, H. C., & Hovland, C. I. (1953). "Reinstatement" of the communicator in delayed measurement of opinion change. *The Journal of Abnormal and Social Psychology*, *48*, 327–335.

- Kirmani, A. (1990). The effect of perceived advertising costs on brand perceptions. *Journal of Consumer Research*, *17*, 160–171.
- Kirmani, A., & Campbell, M. C. (2004). Goal seeker and persuasion sentry: How consumer targets respond to interpersonal marketing persuasion. *Journal of Consumer Research*, *31*, 573–582.
- Kirmani, A., & Wright, P. (1989). Money talks: Perceived advertising expense and expected product quality. *Journal of Consumer Research*, *16*, 344–353.
- Klucharev, V., Smidts, A., & Fernandez, G. (2008). Brain mechanisms of persuasion: How ‘expert power’ modulates memory and attitudes. *Social Cognitive and Affective Neuroscience*, *3*, 353–366. doi: 10.1093/scan/nsn022
- Knutson, B., Rick, S., Wimmer, E., Prelec, D., & Loewenstein, G. (2007). Neural predictors of purchases. *Neuron*, *53*, 147–156.
- Kramer, R. M. (1994). The sinister attribution error: Paranoid cognition and collective distrust in organizations. *Motivation and Emotion*, *18*, 199–230.
- Krosnick, J. A., Betz, A. L., Jussim, L. J., & Lynn, A. R. (1992). Subliminal conditioning of attitudes. *Personality and Social Psychology Bulletin*, *18*, 152–162.
- Law, S., & Braun-LaTour, K. (2004). Product placements: How to measure their impact. In L. J. Shrum (Ed.), *The psychology of entertainment media: Blurring the lines between entertainment and persuasion* (pp. 63–78). Mahwah, NJ: Erlbaum.
- Lerner, J. S., & Keltner, D. (2000). Beyond valence: Toward a model of emotion-specific influences on judgment and choice. *Cognition and Emotion*, *14*, 473–493.

- Lerner, J. S., Small, D. A., & Loewenstein, G. (2004). Heart strings and purse strings: Effects of emotions on economic transactions. *Psychological Science, 15*, 327–341.
- Lieberman, M. D., Ochsner, K. N., Gilbert, D. T., & Schacter, D. L. (2001). Do amnesics exhibit cognitive dissonance reduction? The role of explicit memory and attention in attitude change. *Psychological Science, 12*, 135–140.
- Lutz, R. J. (1973a). *Comparison of two alternative models of the attitude-behavior relationship*. Paper presented at the meeting of the American Psychological Association meeting, Montreal, Canada.
- Lutz, R. J. (1973b). Cognitive change and attitude change: A validation study (Doctoral dissertation, University of Illinois, 1973). *ProQuest Dissertations and Theses, 0090*, 285.
- McCarty, J. A. (2004). Product placement: The nature of the practice and potential avenues of inquiry. In L. J. Shrum (Ed.), *The psychology of entertainment media: Blurring the lines between entertainment and persuasion* (pp. 45–61). Mahwah, NJ: Erlbaum.
- McCarty, J. A., & Lowrey, T. M. (2012). Product integration: Current practices and new directions. In L. J. Shrum (Ed.), *The psychology of entertainment media: Blurring the lines between entertainment and persuasion* (2nd ed., pp. 45–61). Mahwah, NJ: Erlbaum.
- Milliman, R. E. (1982). Using background music to affect the behavior of supermarket shoppers. *Journal of Marketing, 46*(3), 86–91.
- Miniard, P. W., & Barone, M. J. (1997). The case for noncognitive determinants of attitude: A critique of Fishbein and Middlestadt. *Journal of Consumer Psychology, 6*, 77–91.

- Morsella, E., & Bargh, J. A. (2011). Unconscious action tendencies: Sources of 'un-integrated' action. In J. Decety & J. T. Cacioppo (Eds.), *The Oxford handbook of social neuroscience*. New York, NY: Oxford University Press.
- Murphy, S. T., & Zajonc, R. B. (1993). Affect, cognition, and awareness: Affective priming with optimal and suboptimal stimulus exposures. *Journal of Personality and Social Psychology*, *64*, 723–739.
- North, A. C., Hargreaves, D. J., & McKendrick, J. (1999). The influence of in-store music on wine selections. *Journal of Applied Psychology*, *84*, 271-276.
- Packard, V. (1957). *The hidden persuaders*. New York, NY: David McKay.
- Petty, R. E. (2006). A metacognitive model of attitudes. *Journal of Consumer Research*, *33*, 22.
- Petty, R. E., & Cacioppo, J. T. (1980). Effects of issue involvement on attitudes in an advertising context. In G. G. Gorn & M. E. Goldberg (Eds.), *Proceedings of the Division 23 Program*, (pp. 75–79). Montreal, Canada: American Psychological Association.
- Petty, R. E., & Cacioppo, J. T. (1986). *Communication and persuasion: Central and peripheral routes to attitude change*. New York, NY: Springer/Verlag.
- Petty, R. E., Cacioppo, J. T., & Schumann, D. (1983). Central and peripheral routes to advertising effectiveness: The moderating role of involvement. *Journal of Consumer Research*, *10*, 135–146.
- Petty, R. E., & Krosnick, J. A. (Eds.). (1995). *Attitude strength: Antecedents and consequences*. Hillsdale, NJ: Erlbaum.

- Petty, R. E., & Wegener, D. T. (1998) Attitude change: Multiple roles for persuasion variables. In D. Gilbert, S. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (4th ed., Vol. 1, pp. 323–390). New York, NY: McGraw-Hill.
- Petty, R. E., & Wegener, D. T. (1999). The elaboration likelihood model: Current status and controversies. In S. Chaiken & Y. Trope (Eds.), *Dual process theories in social psychology* (pp. 41–72). New York, NY: Guilford Press.
- Pratkanis, A. R., & Aronson, E. (1992). *Age of propaganda: The everyday use and abuse of persuasion*. New York, NY: W. H. Freeman.
- Raju, P., Bhagat, R., & Sheth, J. (1975). Predictive validation and cross-validation of the Fishbein, Rosenberg and Sheth Models of attitudes. In M. J. Schlinger (Ed.), *Advances in consumer research* (Vol. 2, pp. 405–426). Chicago, IL: Association for Consumer Research.
- Robles, R., Smith, R., Carver, C. S., & Wellens, A. R. (1987). Influence of subliminal visual images on the experience of anxiety. *Personality and Social Psychology Bulletin*, 13, 399–410.
- Ryan, M. J. (1974). An empirical test of a predictive model and causal chain derived from Fishbein's behavioral intention model and applied to a purchase intention situation (Doctoral dissertation, University of Kentucky, 1974). *ProQuest Dissertations and Theses*, 0102, 297.
- Schwarz, N. (1997). Moods and attitude judgments: A comment on Fishbein and Middlestadt. *Journal of Consumer Psychology*, 6, 93–98.

- Shavitt, S., Swan, S., Lowrey, T. M., & Wänke, M. (1994). The interaction of endorser attractiveness and involvement in persuasion depends on the goal that guides message processing. *Journal of Consumer Psychology, 3*, 137–162.
- Sheppard, B. H., Hartwick, J., & Warshaw, P. (1988). The theory of reasoned action: A meta-analysis of past research with recommendations for modifications and future research. *Journal of Consumer Research, 15*, 325–343.
- Shiv, B. (2007). Emotions, decisions, and the brain. *Journal of Consumer Psychology, 17*, 174–178.
- Shrum, L. J. (Ed.). (2004). *The psychology of entertainment media: Blurring the lines between entertainment and persuasion*. Mahwah, NJ: Erlbaum.
- Shrum, L. J. (Ed.). (2012). *The psychology of entertainment media: Blurring the lines between entertainment and persuasion* (2nd ed.). New York, NY: Routledge.
- Sternthal, B., Dholakia, R., & Leavitt, C. (1978). The persuasive effect of source credibility: Tests of cognitive response. *Journal of Consumer Research, 4*, 252–260.
- Strahan, E. J., Spencer, S. J., & Zanna, M. P. (2002). Subliminal priming and persuasion: Striking while the iron is hot. *Journal of Experimental Social Psychology, 38*, 556–568.
- Tormala, Z. L., & Petty, R. E. (2002). What doesn't kill me makes me stronger: The effects of resisting persuasion on attitude certainty. *Journal of Personality and Social Psychology, 83*, 1298–1313.
- Tormala, Z. L., & Petty, R. E. (2004). Source credibility and attitude certainty: A metacognitive analysis of resistance to persuasion. *Journal of Consumer Psychology, 14*, 427–442.

- Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. *Science, 185*(4157), 1124–1131.
- Vohs, K. D., Mead, N. L., & Goode, M. R. (2006). The psychological consequences of money. *Science, 314*, 1154–1156.
- Wager, T. D., Rilling, J. K., Smith, E. E., Sokolik, A., Case, K. L., Davidson, R. J., et al. (2004). Placebo-induced changes in fMRI in the anticipation and experience of pain. *Science, 303*, 1162–1167.
- Wansink, B. (2010). From mindless eating to mindlessly eating better. *Physiology and Behavior, 100*(5), 454–463.
- Wansink, B., & van Ittersum, K. (2006). The visual illusions of food: Why plates, bowls and spoons can bias consumption volume. *The Journal of the Federation of American Societies of Experimental Biology, 20*(4), A618.
- Wansink, B., Kent, R. J., & Hoch, S. J. (1998). An anchoring and adjustment model of purchase quantity decisions. *Journal of Marketing Research, 35*, 71–81.
- Weddle, D. E., & Bettman, J. R. (1973). Marketing underground: An investigation of Fishbein's behavioral intention model. In S. Ward & P. Wright (Eds.), *Advances in consumer research* (Vol. 1, pp. 310–318). Urbana, IL: Association for Consumer Research.
- Wilson, D. T., Mathews, H. L., & Harvey, J. W. (1975). An empirical test of the Fishbein behavioral intention model: Introduction and theory. *Journal of Consumer Research, 1*(4), 39–48.

- Wright, P., Friestad, M., & Boush, D. M. (2005). The development of marketplace persuasion knowledge in children, adolescents, and young adults. *Journal of Public Policy & Marketing*, 24(2), 222–233.
- Zajonc, R. B. (1968). Attitudinal effects of mere exposure. *Journal of Personality and Social Psychology*, 9, 1–27.
- Zanna, M. P., Kiesler, C. A., & Pilkonis, P. A. (1970). Positive and negative attitudinal affect established by classical conditioning. *Journal of Personality and Social Psychology*, 14(4), 321–328.

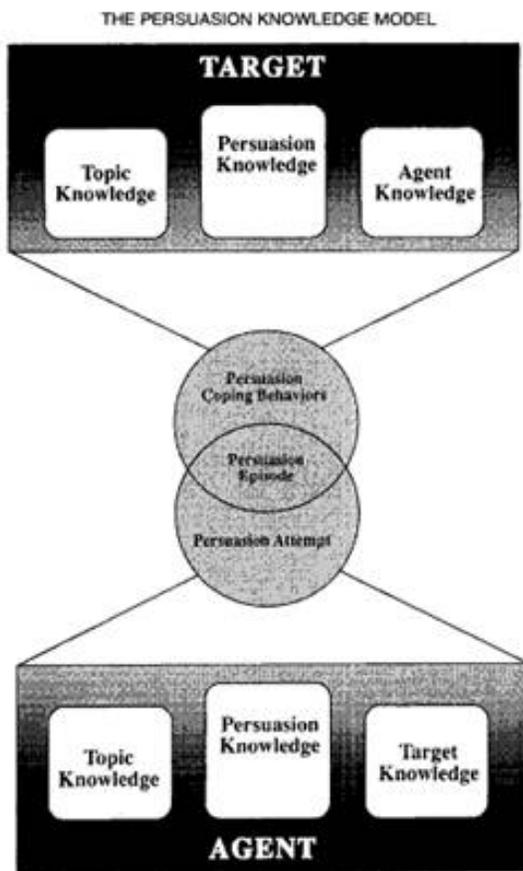


Figure 19.1. Reproduced from Friestad and Wright (1994)