

The Role of Conscious Awareness in Consumer Behavior

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Consumer behavior can be influenced by mental processes that occur outside of conscious awareness. It is argued that in each domain of automaticity, researchers should specify the aspects of which consumers are presumably unaware. Three types of awareness are identified. These include awareness of (a) the environmental features that trigger an automatic process, (b) the automatic process itself, and (c) the outcome of that automatic process. Individuals may be unaware of one or more of these stages, thereby making the process nonconscious. With additional clarity regarding which aspects are nonconscious in which domains and the specific role that awareness plays, we can begin building a more comprehensive model of nonconscious processes in consumer behavior.

Dijksterhuis, Smith, van Baaren, and Wigboldus (2005) argued that much of consumer behavior is driven by nonconscious processes. Indeed, the field of automaticity has been growing exponentially within social psychology over the past few decades, and many previously identified forms of automaticity are now being found to influence people in consumer settings as well. It is important to explore the unique ways in which consumers' decisions are influenced outside of awareness by factors in the environment. However, before this happens, it is crucial to refine our definition of awareness in this context. Readers might interpret Dijksterhuis et al. to be suggesting a dichotomy: Consumers are either aware of why they made the choices they made or not (and they argue for "often not"). But perhaps there are different types of awareness, varying with respect to the stage of the decision-making process of which the consumer is aware or unaware. Researchers need to delineate clearly between different types of awareness, not only so that everyone can agree on what consumers are or are not aware of in any given case, but because it has implications for what consumers can control.

How do Dijksterhuis et al. (2005) define awareness? They appear to categorize any given consumer decision as either involving conscious information processing or simply being "unconscious." But does this dichotomy reflect reality? Certain phrases used by Dijksterhuis et al. may lead to the wrong conclusions. For instance, they argued that "people often

choose unconsciously." This suggests that people are unaware of choosing, which is usually not the case. What they are often not aware of is the automatic process influencing that choice (see Fazio & Olson, 2003). I prefer their phrase, "these choices were introspectively blank," because this better captures the lack of awareness: A choice is made, but on introspection, consumers are at a loss as to why they chose what they did.

In general, environmental features activate an automatic process, which in turn leads to an outcome (see Figure 1). Environmental features (A) can include social situations, the presence of other people, events, objects, places, and so on. Automatic processes (B) can include attitude activation, automatic evaluation and emotion, nonconscious behavioral mimicry, automatic trait and stereotype activation, and nonconscious goal pursuit, just to name a few. Dijksterhuis et al. (2005) focused on two of these: automatic processes resulting from the perception-behavior link (including mimicry and trait and stereotype activation) and nonconscious goal pursuit. Outcomes (C) can include behavior, motivation, judgments, decisions, and emotions. For those interested in consumer behavior, outcomes under investigation are often related to consumer choice.

IDENTIFYING WHAT CONSUMERS ARE AWARE OF

Given this model, where does awareness or lack thereof fit in? One may be aware—or unaware—of the environmental features that trigger an automatic process (A), the process it-

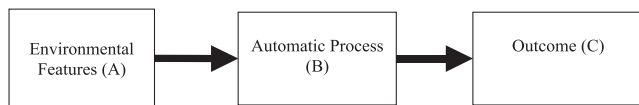


FIGURE 1 Model of Automatic Processes.

self (B), or the outcome (C). Usually individuals are not aware of automatic processes (B), although this depends on the type of automatic process involved. There are four components of automaticity (awareness, control, efficiency, and intent; see Bargh, 1994), but not all four need to be present for any given process to be automatic (and rarely are). Thus, lack of awareness is a sufficient but not necessary condition for automaticity. For example, pianists are certainly aware of playing the piano, but the activity is so ingrained that the pianist no longer has to consciously regulate the playing; it becomes automatic (thus meeting the requirement for the efficiency criterion but not the awareness, intent, or control criteria of automaticity). However, the types of automaticity typically studied in social psychology and in consumer behavior are almost always ones in which the mediator between the environment and the outcome—the automatic process (B)—occurs outside of the individual's conscious awareness. That leaves the environment (A) and the outcome (C), and these may or may not be accessible to conscious awareness.

In the consumer behavior domain, where the outcome is often a choice between product options, the decision maker is most often aware of the outcome—that is, of what he or she chose. However, the consumer may not be consciously noting the environmental trigger (e.g., the lighting in the restaurant, the large variety of choices, the presence of a particular friend). One of the most frequent scenarios in consumer settings is one in which the consumer is aware of the environmental trigger and the outcome, but not the automatic process. For instance, the consumer is aware of shopping with her friend (A), and aware of purchasing the \$100 blouse (C), but not aware of the automatic intervening process that led to that decision (B). This is the scenario that most closely maps on to Dijksterhuis et al.'s (2005) hypothetical shopping trip in which the consumer sees the peanut butter in the cart but does not understand what led to that purchase.

Why is it important for researchers to identify precisely the stage or stages of which consumers are aware or unaware? Perhaps the most important reason is that control, modification, elimination, and change can only come with awareness. Many automatic processes are functional and adaptive for people, and even if individuals knew about them, they would not want them changed in any way. Yet some forms of automaticity are not adaptive or beneficial, and others can even be harmful. Choosing the wrong type of peanut butter is a fairly innocuous event, but there are many other choices made every day with more meaningful impact. Choosing the wrong spouse can lead to painful divorce, choosing to smoke can lead to lung disease, choosing the

wrong career path can lead to chronic depression, and choosing not to wear a seat belt can lead to a fatal accident. Some of these decisions (e.g., putting on a seat belt or not) may eventually be completely determined by automatic processes, and others may be multiply determined by both conscious and nonconscious processes. Consumers would presumably want greater control over important outcomes such as these, but they first need to be aware of a given process before they can change it.

Consider each of the three stages for a moment, and how change is contingent on awareness in each case. If one is aware of the environmental trigger (A) that sets off an unwanted automatic process, then he or she can avoid that trigger whenever possible, or perhaps associate that situation with a more constructive behavior (which should become automatic over time and replace or override the old automatic association). But if the consumer is not aware of the environmental trigger (e.g., does not notice the smell of cigarette smoke that triggers a desire for a smoke, or does not pay attention to the lighting or background music in a restaurant that leads to overeating), then the influential situations will not be avoided or even noticed and will, instead, be encountered over and over.

Individuals are usually not aware of the automatic process itself (B). The environment (e.g., cigarette smoke) can automatically trigger a process (e.g., nonconscious mimicry) that leads to a given outcome (e.g., smoking). Because the intervening process will almost never be accessible to conscious awareness (at least without introspection), the individual cannot change, modify, or override it. If consumers become aware of the automatic process, however (e.g., notice that parties tend to lead to more alcohol consumption, or that the presence of one's mother always leads to eating fatty foods), then they can try to change or stop the automatic association.

Finally, awareness of an outcome (C) can often lead consumers to attempt to understand why that outcome occurred. For instance, if one is trying to stop an unwanted behavior (e.g., smoking, overeating, losing one's temper), then noticing oneself engaging in that behavior can be a catalyst for attempts at change. Similarly, if one does something unusual, negative, or surprising and does not know why, then one will often try to understand the cause of that behavior (e.g., Why did I yell at that person? Why did I buy peanut butter at the store?). This can lead one to identify the link between situation and outcome (i.e., the automatic process) and resolve to change it. However, there are cases where the individual is not aware of the outcome (did not notice how much he was eating), and if that is the case, he will not recognize that something needs to be changed.

In sum, it is important to identify for any given nonconscious process whether the consumer is unaware of the environment (A), the automatic process (B), the outcome (C), or some combination of the three, because different mechanisms for change are required at each of the three stages. In the case of the environment (A), one needs to learn

how to avoid or neutralize a particular situation or trigger. In the case of the automatic process itself (B), the consumer needs to either eliminate the automatic association or override it with a conscious and deliberate new behavior or with another competing automatic behavior. Finally, in the case of the outcome (C), consumers need to recognize what aspects of their lives are being affected by the automaticity. To the extent that the consequences are far-reaching or serious or both, this can be a source of insight, motivation, and creativity that in turn facilitates change.

At this point it is useful to examine the specific automatic processes Dijksterhuis et al. (2005) discussed and determine where the awareness lies. I focus on two of these automatic processes: nonconscious behavioral mimicry (the low road to which Dijksterhuis et al. refer) and nonconscious goal pursuit. First I note what stages of the process consumers are likely aware and unaware of, and then I will describe recent studies in each domain that address the various types of awareness.

NONCONSCIOUS BEHAVIORAL MIMICRY

In what Dijksterhuis et al. (2005) referred to as the “low road to mimicry,” the environment (A) consists of another person’s behavior—their mannerisms, posture, gestures, speech patterns, and so on. The individual may or may not notice the other person’s behavior, depending on how salient, unexpected, or negative it is. In any given situation, individuals are not aware of the automatic process (B)—mimicking others—although people do have some meta-awareness that they “copy” other people or imitate their behaviors. The outcome (C)—the behaviors being mimicked—can either be noticed by the individual engaging in the behaviors or not. For instance, one may not be aware of shaking his or her foot during an interaction with another person, or of touching his or her face while speaking, or of slouching in his or her chair. Or perhaps he or she does become aware that he or she is shaking his or her leg back and forth. But this awareness of the outcome (C—the behavior) is separate from awareness of the mimicry process itself (B).

Consequences of Behavioral Mimicry

How can mimicry be used to better understand consumer behavior? Dijksterhuis et al. (2005) described the Johnston (2002) study in which ice-cream consumption is mimicked. Thus, we know that individuals can mimic not only gestures, postures, and mannerisms, but consumption behavior as well. In a preliminary study, Ferraro, Bettman, and Chartrand (2005) sought to test whether the mimicry of consumption behavior might influence subsequent preferences for the consumed product. That is, if an individual mimics the consumption of Product X without awareness, then might that lead to

increased liking of Product X? If so, this would elucidate an important nonconscious source of preferences.

Participants first engaged in a task with a confederate who was casually eating one of two snacks that were in two separate bowls on a table in front of him: goldfish crackers or animal crackers. (There were two additional bowls filled with the same snacks in front of the participant.) During an ostensibly unrelated second study, participants completed a survey that asked how much they like various snacks (including animal and goldfish crackers).

Results revealed that participants with the goldfish-eating confederate ate more goldfish than animal crackers, and those with the animal-cracker-eating confederate ate more animal than goldfish crackers. More important, participants were not aware that they had mimicked the confederate’s eating behavior; the mimicry was nonconscious. Moreover, there were consequences of this mimicry for consumer preferences. That is, participants who mimicked the goldfish-eating confederate reported liking goldfish crackers more than animal crackers, and vice versa for those who mimicked the animal cracker confederate. Path analyses indicated that mimicry mediated the relation between what the confederate ate and what the participant reported liking more. Thus, people’s preferences can be partially determined by nonconscious mimicry of other people’s consumption behaviors. More important, when asked why they liked what they did, none of the participants mentioned the confederate in general, or their eating patterns or the mimicry thereof in particular. Instead, they attributed their preferences to preexisting evaluations or attributes or both of the snacks.

This study provides an example where individuals are aware of the situation (A), that is, the confederate eating goldfish or animal crackers, and aware of their own preferences for the snacks (C), but are not aware of the intervening nonconscious mediating mechanism (B), that is, mimicry of the confederate’s consumption patterns. To the extent that this effect would hold for other consumption behaviors, perhaps some not as innocuous as attitudes toward crackers, it may not be in consumers’ best interests for their attitudes to be partially determined by this automatic mimicry process. Yet because they are not aware of the influential role that nonconscious mimicry plays in their preferences, they cannot stop or control the effect.

Consequences of Being Mimicked for Consumer Preferences

Dijksterhuis et al. (2005) also discussed another application of mimicry research to consumer behavior: the van Baaren, Holland, Steenaert, and van Knippenberg (2003) “mimicry for money” tipping study. Patrons in a restaurant were mimicked or not by a waitress, and this influenced the tip that she received. The increased tip presumably resulted from the liking and rapport that mimicry fosters (see Chartrand & Bargh, 1999). But this rapport and greater liking may have other

consequences related to consumer behavior as well. One possibility is that the general positive feeling will be applied to a product that is associated—even remotely by mere proximity—with the person who mimicked. This was recently tested by Tanner and Chartrand (2005).

Participants were introduced to an ostensible “new product” that was supposedly in the final testing stages and would be put on the market shortly. In reality, the product was Gatorade Ice (which has a generic sports-drink taste and no color). It was in a pitcher that was kept at room temperature to maintain “ideal testing parameters.” A confederate asked the participants various questions about the drinks they liked, whether they often drank sports drinks, whether they knew various facts about sports drinks (e.g., electrolyte restoration), what drinks they preferred, and so on. During these questions, the confederate was either mimicking the posture, gestures, and mannerisms of the participant or was engaging in “antimimicry”—doing globally different behaviors (e.g., if the participant slouched, the confederate sat up straight in the chair; if the participant crossed his legs, the confederate uncrossed his).

After being asked the questions, participants were then asked by the confederate to taste as much of the new product as they would like. They were also asked to give their opinion of the product on a survey. Results indicated that participants who were mimicked by the confederate during the presentation of the product drank more of it and stated they would be more likely to buy it than those who were not mimicked. Thus, preference effects were found on both a self-report measure and a behavioral (drinking the product) measure. More important, it was never clear to participants whether the confederate cared one way or the other about the product; he was not a salesperson overtly trying to influence them, he was merely a “facilitator.” Thus, the positive feelings generated by mimicry (Chartrand & Bargh, 1999) transferred to the product at hand, even though that product was not endorsed by the mimicker.

Tanner and Chartrand (2005) conducted a follow-up study to test whether the role of the confederate influences the effects found on preference. Specifically, what if the confederate is a salesperson with something invested in the product? Based on previous research, individuals should not be aware of the mimicry itself, but should be aware of the positive feelings generated by that mimicry (Chartrand & Bargh, 1999, Experiment 2). Yet when asked to express opinions about the salesperson and product, individuals would not attribute those positive feelings to the salesperson, so instead they would be attributed or “funneled” toward the product. Counterintuitively, this would lead to greater liking for the product in the salesperson–mimicry condition. The study was the same as the first one, except that the confederate introduced himself in one of two ways: He was either a disinterested third party collecting data on the product, or he was working for the company and earned more money if the product succeeded. He then mimicked or antimimicked the par-

ticipants, and their opinions toward the product were measured (i.e., how much they tasted the product, how much they liked the product, if they thought the product would succeed, how likely they were to buy the product).

Replicating the first study, Tanner and Chartrand (2005) found that participants in the disinterested confederate condition who were mimicked liked the product more than those who were antimimicked. As predicted, this boost in liking for the product among mimicked participants was even stronger for those in the salesperson condition. Unlike in previous research (Chartrand & Bargh, 1999), participants in the mimicry condition did not report liking the salesperson more, suggesting that the positivity generated by the mimicry that would normally affect perceptions of the mimicker was entirely transferred to the product.

In these studies, individuals are not aware of the environmental trigger (A) of being mimicked by a confederate, are not aware of the positivity that this generates (B; Chartrand & Bargh, 1999), but are aware of how much they like and taste the product when asked (C). Thus, consumers might know how good they feel, but not truly understand the origins of this attitude and assume that it is due to the product. In the case of a beverage, consumers would probably not wonder why they like the drink to the extent that they do. Attitudes toward drinks are subjective to begin with, and so consumers would assume that their opinion of the drink is due to the qualities of the beverage itself, rather than to any automatic effect of mimicry. Because in this case the effect is fairly harmless, there would probably not be much motivation to uncover the true or underlying origin of the attitude.

NONCONSCIOUS GOAL ACTIVATION AND CONSUMER CHOICE

Another type of automatic process involves the automatic activation of a goal and subsequent goal-driven behavior. Which part or parts of the sequence is the person aware of in this case? Nonconscious goal triggers in the environment (A) can include the presence of a significant other (Fitzsimons & Bargh, 2003; Shah, 2003), means that are often used to attain a goal (Shah & Kruglanski, 2003), temptations that frequently interfere with goal pursuit (Fishbach, Friedman, & Kruglanski, 2003), exposure to stereotypes (Aarts et al., 2005), the presence of anthropomorphized objects (Fitzsimons, Chartrand, & Fitzsimons, 2005), and situations of power or ego threat (Bargh, Raymond, Pryor, & Strack, 1995; Spencer, Fein, Wolfe, Fong, & Dunn, 1998).

Automatic goal activation is by definition nonconscious, so individuals are not aware of that process (B). But the goal pursuit itself—the behaviors that the individual engages in to pursue that goal (C)—can certainly be consciously engaged in, even though the person is not aware of the source of those behaviors. For example, a person might be aware of monitoring what she says, but not aware that a self-presentational

goal is driving that behavior; an individual may be aware of choosing the apple instead of the cake for dessert, but not aware that a goal to lose weight has been automatically activated and is driving that choice.

Nonconscious Activation of Consumer-Related Goals

Can consumer-related goals become automatically activated and drive consumer choice? Chartrand, Huber, and Shiv (2005) tested this in a series of studies. In a first study, participants engaged in a Scrambled Sentence Test (SST) that was adapted from Chartrand and Bargh (1996). This task served to prime individuals with one of two goals: a *value* goal (e.g., obtaining a good product for not much money) or an *image* goal (e.g., obtaining a product high in prestige). Participants were then presented with a fictitious scenario in which they need new crew socks and have to decide whether to buy Nike at \$5.25 a pair or Hanes at \$6 for two pairs. An examination of the choices made by participants revealed that the choice of Nike, the higher priced option, was significantly higher in the brand-image condition (48%) than in the value condition (19.2%). During debriefing, participants were asked if the SST affected their choice of crew socks; none of the participants answered positively. These findings suggest that previous evidence in support of nonconscious goal pursuit may extend to shopping goals and to choice contexts as well.

It is unclear from this first study, however, whether goals for value or image were primed, or whether trait construct activation guided the subsequent behavior. Previous work has demonstrated that individuals primed with trait constructs behave in line with the trait that was activated (e.g., Bargh, Chen, & Burrows, 1996). Thus, one explanation for the results from the first study is that when the traits of value conscious or image conscious are activated, people behave in line with those traits—no motivational state is required. To demonstrate that a motivational state is indeed present, Chartrand et al. (2005) used a delay paradigm used by Bargh, Gollwitzer, Lee-Chai, Barndollar, and Trötschel (2001). Bargh et al. argued that, if there is a goal present, the effect of the priming should not dissipate during a relatively brief delay—in fact, it should increase if anything, because one signature of drives or goal states is that they increase over time until satiated. However, if only a trait is being activated and no goal state is involved, then the priming effect should dissipate in the brief delay period. Thus, Chartrand, Huber, et al. (2005) primed participants with either a value or image goal. After a delay or no delay, participants made three hypothetical choices between a high-prestige option and a high-value option. Results revealed that across the three scenarios, a greater percentage of people in the image-prime condition than in the value-prime condition chose the option higher on prestige and image. This difference was strong with no delay and even more pronounced with a delay, indicating that a goal state was at least partially driving the effect.

Another quality of motivational states is that once satiated, they go away. So if a goal has been nonconsciously activated, and it is then satisfied through making a choice that is in line with that goal, then the goal should no longer be present (and should therefore not drive any subsequent decisions). It is possible that making hypothetical choices in the laboratory differs in a fundamental way from making real choices: The latter satisfies goal states and the former does not. If this is true, then making a real choice in the laboratory should deactivate the nonconscious goal.

To test this, Chartrand et al. (2005) primed participants with a brand image or value goal through a SST. Following the goal-priming task, participants watched a video for 5 min. Participants then made a real or hypothetical choice. This goal-satiation factor was manipulated by having participants make a choice between two options of crew socks valued at \$6, one more expensive (1 pair of Tommy Hilfiger) than the other (3 pairs of Hanes). Participants in the high goal-satiation conditions were told, “This is a real choice. That is, you will actually receive the option you pick.” Participants in the low goal-satiation conditions were told, “Pretend that this is a real choice. That is, pretend that you will actually receive the option you pick.” Following the real or hypothetical choice, participants were told that by taking part in the study they would automatically be entered in a lucky draw. Two winners would receive one of two prizes: either a Timex watch worth \$25 plus \$77.50 in cash, or a Guess watch worth \$75 plus \$25 in cash (pilot testing established these options as equally desirable). Participants had to choose which of these prizes they would like to receive should they win the lottery.

Results revealed that participants’ choices on the first task—whether real or hypothetical—were influenced by the goal prime, such that those primed with value were more likely to choose the Hanes crew socks than those primed with brand image. More important, when participants made a hypothetical choice on the first task, the nonconscious goals were not satiated. That is, priming effects were found on the second task after hypothetical choices were made in the first task. However, real choices did satiate nonconscious goals, such that no priming effects were found on the second task when the first task involved a real choice.

In this set of studies, individuals were aware of the situation (completing the SST) that activated the goal (A), were not aware of the goal activation itself (B), but were aware of the outcome (C) of choosing one option over another. However, it is important to keep in mind that the priming manipulation in these studies is used as a proxy for the real-world activation of goals by features of the environment. Consumers are primed in naturalistic settings by any number of things; a brand-image goal could be made more accessible by the presence of a wealthy friend, or a value goal could be activated by a sale sign in a store. These environmental triggers may or may not be consciously attended to by the consumer. Thus, if a consumer is faced with an outcome that is either

disturbing (e.g., an unwise purchase) or mysterious (e.g., a different brand of peanut butter in the cart), she will have to first identify the environmental trigger and then attempt to uncover the automatic process, including potential goal activation, that may be driving the purchase.

Behavioral Consequences of Brand Exposure

In sum, there is substantial evidence that consumer-related goals can become automatically activated and guide consumer choice and behavior. Another interesting question is whether consumer-related objects can serve as the environment that activates nonconscious goals. Recent research has investigated whether consumer-related images (e.g., brands and their logos) can influence behavior via the automatic activation of a goal.

Previous research has supported the association between brands and human personality characteristics (Aaker, 1997; Aaker, Benet-Martínez, & Garolera, 2001; Aaker, Fournier, & Brasel, 2004). Using survey methods, research examining the existence of brand personality has found remarkable consistency and agreement among members of a given culture about the personality of popular brands (Aaker et al., 2001). Fitzsimons et al. (2005) sought to test whether brands have automatic associations with specific goals by examining how people behave after subliminal exposure to consumer brand logos. For a consumer brand of interest, the computer company Apple was chosen. Apple has labored to cultivate a strong and appealing brand personality, based on the ideas of nonconformity, innovation, and creativity. As a comparison consumer brand, IBM was used. These two brands are both highly familiar to consumers, although each has a distinct personality. In contrast to Apple's innovative and creative personality, IBM is perceived as a traditional, smart, and responsible brand (Aaker, 1997). More important, both of these brands are rated very positively, but only Apple is associated specifically with "creativity." To investigate the automatic effect of these brands on behavior, participants were subliminally exposed to images of either Apple or IBM brand logos and then completed a standard creativity measure, the "unusual uses test" (Guilford, Merrifield, & Wilson, 1958). Participants primed with Apple logos performed more creatively on the unusual uses test than did control or IBM-primed participants. This provided the first clear evidence that subliminally priming a brand name or logo or both can influence consumers' actual behavior.

To examine the underlying mechanism behind the effects of the first study, Fitzsimons et al. (2005) replicated its basic design and added the delay factor mentioned earlier—in this case, whether participants experienced a delay between the priming task and the creativity measure—to test for the presence of a motivational state. The researchers also investigated whether the effects would hold only for people who felt positively toward Apple (Apple users), or whether all partici-

pants would be equally affected by the primes. Results indicated that the priming effect became significantly stronger with the delay, indicating the manipulation of a goal to be creative (rather than simply the activation of creativity as a trait). Interestingly, the results held equally strongly for both IBM and Apple users, indicating that knowledge of the association between the brand and the image—Apple and creativity—was enough to produce the effects.

Participants in these studies were not aware of the triggering stimuli of the subliminally presented brand logos (A) and were not aware of the intervening goal activation (B). They were aware of coming up with uses for a task (C), although one could argue that individuals did not likely have any meta-awareness of how creative they were being on the task. This represents an instance of very little, if any, awareness of the stages in the process. Because individuals would not be likely to notice the mundane outcome of this automatic process (i.e., more or less creativity on a test), there would be no attempt to identify or change it. If the outcome were truly negative, however, it is more likely that the consumer would notice it and then could attempt to identify the environmental trigger (the brand) and what it is activating (the goal).

Reactance: Automatic Contrast in Nonconscious Goal Activation

In sum, consumer-related images can serve as environmental triggers of nonconscious goals. Another potential trigger is the presence of a significant other who has a goal for the perceiver (e.g., Shah, 2003). Individuals automatically associate the person with the goal the person has for them, so the mere presence of the person can activate the goal automatically. However, under certain circumstances, one can imagine an automatic association forming between the opposing goal and the significant other, especially if that other is perceived as being controlling.

This was recently explored in a set of studies by Chartrand, Dalton, and Fitzsimons (2005), who investigated whether nonconscious exposure to the names of significant others can evoke a reactant motivational state and result in behavior that is the opposite to what the significant other would like to observe. It was reasoned that two variables should determine whether or not a person demonstrates reactance in response to a significant other prime: the extent to which a person perceives the significant other as trying to control his or her life and the extent to which a person associates a task-relevant goal with the significant other. Information about these two variables was collected and used as selection criteria for bringing participants into the laboratory. Participants were subliminally primed with the name of a significant other who was highly controlling and highly associated with the goal to "work hard" or with the goal to "have fun." As predicted, performance on a subsequent achievement task was found to be significantly better for

have-fun-primed participants than for work-hard-primed participants.

A second study was designed to provide more compelling evidence that reactance against a controlling significant other can instigate people to adopt an opposing goal. First, it was reasoned that people's perceptions that their relationship partners are controlling might be a consequence of a more habitual tendency to believe that people in general wish to control them. Rather than emphasizing people's perceptions of their relationship partners as the driving force behind nonconscious reactance, in the second study the role of chronic reactance was explored as a moderator of the influence of significant-other primes on goal-directed behavior. Thus, participants who were either high or low scorers on the Hong Refined Reactance Scale (Hong, 1992) were subliminally primed with the name of the significant other who either wanted them to work hard or to relax (as assessed on a prescreening questionnaire). They then completed an achievement task. Analyses revealed that high-reactant participants showed goal-contrast, and low-reactant participants showed goal-assimilation in response to a significant-other prime. That is, a significant-other prime triggered goal-congruent behavior in individuals low on trait reactance, and goal-incongruent behavior in individuals high on trait reactance.

In these studies, individuals were not aware of the environmental feature triggering the goal (A) because the names of the significant others were presented subliminally, and they were not aware of a goal being activated (B). They were aware of the outcome (C) of completing the achievement task, although one could argue that they lacked meta-awareness of how well they were performing. However, the subliminal priming of the significant other was used to simulate the real-world presence of a significant other, and individuals would of course be aware of this presence in naturalistic settings. Thus, if the outcome were negative, it would be possible for the person to identify the presence of a significant other as the environmental trigger.

CONCLUSIONS

In sum, consumer behavior is often mediated by processes that occur outside of conscious awareness. However, it is important for researchers in this area to specify in each instance exactly what part of the process lies outside awareness—the environmental features that trigger an automatic process, the automatic process itself, the outcome of that automatic process, or some combination of the three. Only then will we be able to move forward with a comprehensive model of nonconscious processes in consumer behavior. Specifying type of awareness is also important to aid consumers in controlling and improving their decisions. Awareness must pre-

cede attempts at control, and awareness is not an all-or-none phenomenon.

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REFERENCES

- Aaker, J. (1997). Dimensions of brand personality. *Journal of Marketing Research*, 34, 347–357.
- Aaker, J., Benet-Martínez, V., & Garolera, J. (2001). Consumption symbols as carriers of culture: A study of Japanese and Spanish brand personality constructs. *Journal of Personality & Social Psychology*, 81, 492–508.
- Aaker, J., Fournier, S., & Brasel, A. (2004). When good brands do bad. *Journal of Consumer Research*.
- Aarts, H., Chartrand, T. L., Custers, R., Danner, U., Dik, G., Jefferis, V., et al. (in press). Stereotype activation and goal priming. *Social Cognition*.
- Bargh, J. A. (1994). The four horsemen of automaticity: Awareness, intention, efficiency and control in social cognition. In R. S. Wyer Jr. & T. K. Srull (Eds.), *The handbook of social cognition* (Vol. 2, pp. 1–40). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- 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.
- Bargh, J. A., Gollwitzer, P. M., Lee-Chai, A., Barndollar, K., & Trötschel, R. (2001). The automated will: Nonconscious activation and pursuit of behavioral goals. *Journal of Personality and Social Psychology*, 81, 1014–1027.
- Bargh, J. A., Raymond, P., Pryor, J., & Strack, F. (1995). Attractiveness of the underling: An automatic power → sex association and its consequences for sexual harassment and aggression. *Journal of Personality and Social Psychology*, 68, 768–781.
- Chartrand, T. L., & Bargh, J. A. (1996). Automatic activation of impression formation and memorization goals: Nonconscious goal priming reproduces effects of explicit task instructions. *Journal of Personality and Social Psychology*, 71, 464–478.
- Chartrand, T. L., & Bargh, J. A. (1999). The chameleon effect: The perception–behavior link and social interaction. *Journal of Personality and Social Psychology*, 76, 893–910.
- Chartrand, T. L., Dalton, A., & Fitzsimons, G. J. (2005). *Evidence for automatic reactance: When controlling significant others automatically activate opposite goal*. Manuscript submitted for publication.
- Chartrand, T. L., Huber, J., & Shiv, B. (2005). *Nonconscious value versus image goals and consumer choice behavior*. Manuscript submitted for publication.
- Dijksterhuis, A., Smith, P. K., van Baaren, R. B., & Wigboldus, D. H. J. (2005). The unconscious consumer: Effects of environment on consumer behavior. *Journal of Consumer Psychology*, 15, 193–202.
- Fazio, R. H., & Olson, M. A. (2003). Implicit measures in social cognition: Their meaning and use. *Annual Review of Psychology*, 54, 297–327.
- Ferraro, R., Bettman, J., & Chartrand, T. L. (2005). *I see, I do, I like: The consequences of behavioral mimicry for attitudes*. Manuscript submitted for publication.
- Fishbach, A., Friedman, R. S., & Kruglanski, A. W. (2003). Leading us not unto temptation: Momentary allurements elicit overriding goal activation. *Journal of Personality and Social Psychology*, 84, 296–309.

- Fitzsimons, G. M., & Bargh, J. A. (2003). Thinking of you: Pursuit of interpersonal goals associated with relational partners. *Journal of Personality and Social Psychology, 84*, 148–164.
- Fitzsimons, G. M., Chartrand, T. L., & Fitzsimons, G. J. (2005). *Behavioral response to subliminal brand exposure*. Manuscript submitted for publication.
- Guilford, J. P., Merrifield, P. R., & Wilson, R. C. (1958). *Unusual uses test*. Orange, CA: Sheridan Psychological Services.
- Hong, S.-M. (1992). Hong's psychological reactance scale: A further factor analytic refinement. *Psychological Reports, 70*, 512–514.
- Johnston, L. (2002). Behavioral mimicry and stigmatization. *Social Cognition, 20*(1), 18–35.
- Shah, J. (2003). Automatic for the people: How representations of significant others implicitly affect goal pursuit. *Journal of Personality and Social Psychology, 84*, 661–681.
- Shah, J. Y., & Kruglanski, A. W. (2003). When opportunity knocks: Bottom-up priming of goals by means and its effects on self-regulation. *Journal of Personality and Social Psychology, 84*, 1109–1122.
- Spencer, S. J., Fein, S., Wolfe, C. T., Fong, C., & Dunn, M. A. (1998). Automatic activation of stereotypes: The role of self-image threat. *Personality and Social Psychology Bulletin, 24*, 1139–1152.
- Tanner, R., & Chartrand, T. L. (2005). *Strategic mimicry in action: The effect of being mimicked by salesperson on consumer preference for brands*. Manuscript submitted for publication.
- van Baaren, R. B., Holland, R. W., Steenaert, B., & van Knippenberg, A. (2003). Mimicry for money: Behavioral consequences of imitation. *Journal of Experimental Social Psychology, 39*, 393–398.

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