

Nonconscious Memory Processes in Marketing: A Historical Perspective and Future Directions

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ABSTRACT

Nonconscious memory processes play a major role in influencing consumption, yet this topic is an understudied area within marketing. Within the general rubric of nonconscious processes recent marketing articles have focused on preconscious processing of advertising, implicit memory for brand names, and subliminal processing and choice. This article provides a historical overview of *nonconsciousness* by tracing its development in psychology and philosophy. Building on current work in this area, future research priorities are identified to enhance our understanding of this topic.
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Consciousness is a topic that has been examined for centuries. Influential philosophers and psychologists as far back as Plato to as recently as Simon (1997) have written about the distinctions between conscious and nonconscious mental processes. Disagreements about the fundamental nature of this distinction have always existed; however, it is clear that we now know more about this topic compared to even a decade

ago. A historical examination of this topic may be used as a frame for many of the current issues facing researchers.

HISTORICAL PERSPECTIVE ON NONCONSCIOUSNESS

If consciousness is a description of the brain, via the use of self-reflexive insight, then what is nonconsciousness? Nonconsciousness is assumed to exist (or coexist) with consciousness as part of the mind, but historically it has played (and continues to play) a lesser or subservient role to consciousness. In fact, some philosophers have linked consciousness to godliness, placing it on a pedestal far above nonconsciousness. This view suggests that time is the infinite form of consciousness available to gods, whereas time-oriented consciousness and noninfinite consciousness (including the subconscious) are reserved for humans.

Philosophers have debated such views for centuries. The application of the philosophical concepts of consciousness to psychology and psychiatry did not occur until Freud began writing his classic texts. Although others such as Plato, Nietzsche, and Bergson talked about nonconsciousness, Freud actually developed a theory incorporating the hidden mind. Freud's theories about the ego (the seat of the conscious) and the id (the seat of the subconscious) remain a landmark contribution:

What is in your mind is not identical with what you are conscious of; whether something is going on in your mind and whether you hear of it, are two different things.

Hence, consciousness was a fundamental aspect of the beginnings of the study of psychology. The primary mode of learning about nonconsciousness was through an examination of one's own thoughts, namely, introspection. However introspection had its limitations. As James (1890/1952) writes, "The attempt at introspective analysis in these cases is in fact like seizing a spinning top to catch its motion, or trying to turn up the gas quickly enough to see how the darkness looks." Moreover, with the spreading influence of experimentation brought about by Ebbinghaus and others, introspection ceased to be a respectable method for studying nonconsciousness. The role of experimental methods for demonstrating nonconscious aspects of memory was to provide "objective" standards. Interestingly, given the difficulty of devising experimental methods to measure the nonconscious, some recent methods have infused introspection back into the toolkit with the objective of providing a phenomenological account of mental processes (Rajaram & Roediger, 1997). Hence, one recurring issue in examining this topic is "*How can nonconsciousness be measured?*"

In the 1960s, with the advent of modern research on cognitive psy-

chology, there appeared to be a resurgence of interest in examining non-consciousness. This was spurred in part by the new methods that were being devised in the field. However, even as experimental methods gained popularity, it was clear that fundamental issues were not being tackled. In particular, it was not clear how nonconsciousness related to automaticity, awareness, and consciousness. Thus the issue “*How is nonconsciousness related to or different from consciousness?*” continues to be a topic that engages many researchers.

Motivation research in the 1960s also acknowledged the important role of nonconsciousness on our actions. Within the marketing area, Dichter (1964) extended concepts of a partitioned mind (or a self-reflexive mind) and postulated that the subconscious mind significantly controlled motivations and consumption behavior. He argued that, “Whatever your attitude toward modern psychology or psychoanalysis, it has been proven without a doubt that many of our daily decisions are governed by motivations over which we have no control and of which we are quite unaware.” Dichter developed a typology of the hidden meanings in common consumer products. This research spawned the use of various projective techniques that could be used to probe for hidden meanings.

Dichter’s introduction of research techniques designed to probe and describe subconscious motivations popularized the topic and fueled new research. Efforts were made to discover means and methods of controlling the subconscious or repositioning it with respect to the conscious mind. However, one of the by-products of this popularity was that the issues started becoming part of popular culture. For example, the movie *The Manchurian Candidate* focused on brainwashing techniques and the scientific basis for them. Another example is the popular belief that advertisers use subliminal messages to influence consumers to buy products. Although subliminal research shows limited ability to influence consumer choice (Trappey, 1996), researchers continue to explore the effect of subliminal stimuli on nonconscious processes. The main issue that motivation research brought to the forefront was “*In what aspects of consumers’ lives might nonconscious effects be prevalent?*”

Modern research on nonconsciousness was sparked by studies on implicit learning (Reber, 1967, 1993) and implicit memory (Schacter, 1987). These research efforts were more sophisticated than the early experimentation. Nonconsciousness was now generally regarded as unawareness of stimuli or their effects during a task. Methods such as task dissociations (comparison of performance on two different tasks to infer consciousness) and development of specific criteria to assess participants’ state of awareness helped convince even skeptics that humans can learn and remember without awareness of the source of the information.

Also, during the early 1980s, the mind–brain problem emerged, as psychologists and computer scientists began to explore the brain via

artificial intelligence. One outcome, parallel distributed processing (PDP) models, continues to offer scientists a means to simulate lower-level mental processes and extend computer-based intelligence, although the approach is not without controversy and shortcomings. During the early PDP years, new frameworks of conscious and nonconscious processes emerged, as well as descriptions of memory and its relations to these processes. Overall, it would be safe to say that the study of nonconsciousness was not peripheral to the advancement of science, but that it was a critical component of various models. For example, a framework was offered by Minsky (1986) to describe how humans pull things from the subconscious into consciousness to solve problems:

Whenever you get a good idea, solve a problem, or have a memorable experience, you activate a k-line to represent it. A k-line is a wire-like structure that attaches itself to whichever mental agents are active when you solve a problem or have a good idea. When you activate the k-lines later, the agents attached to it are aroused, putting you into a mental state much like you were in when you solved that problem or got that idea. This should make it easy for you to solve new similar problems.

MARKETING APPLICATIONS OF NONCONSCIOUS MEMORY PROCESSES

The historical perspective shows that the applications of nonconscious memory processes are still emerging. This Special Issue shows that although much remains to be learned, numerous applications of nonconscious processes may be explored. The topics covered include a new methodology, a false fame test (forgotten exposure to stimuli), a framework for the nonconscious processing of design, and a model of nonconscious repeat purchase behavior. A summary of the articles follows.

A New Methodology. Shapiro, MacInnis, Heckler, and Perez describe a method that fosters the elicitation and detection of unconscious perception. A computer-controlled magazine holds the participants' focal attention while peripherally placed advertisements are processed unconsciously. Because the magazine is computer based, it can track attention to task and monitor when attention shifts from the focal task to the stimulus in the peripheral vision. Preliminary evidence shows that peripherally placed stimuli can be processed without being recognized. The authors also compare the technique to visual masking, dichotic listening, and peripheral placement.

Forgotten Exposure to Stimuli. Holden and Vanhuele explore the false fame effect in a marketing context. They demonstrate that hearing

a brand name once may make the name look familiar and, if the exposure context is forgotten, the name tends to be viewed as an existing established brand. This research suggests that failure to remember such exposures does not preclude the possibility that it can affect future behavioral processes. The authors state that although consumers may be conscious of their inability to remember a specific exposure, they may not be able to suppress its effect on brand familiarity (whatever the source or context). This effect becomes extremely important to the extent that familiarity plays a role in the formation of brand reputation and choice.

A Framework for Processing of Design. Veryzer provides a non-conscious processing explanation and framework for consumer response to design. The author notes that the process of rule development and design interpretation need not be a conscious one. The conscious level involves attending to an object (product design) and registering feelings or other responses to it. The nonconscious level involves perceiving the object and determining its consistency with rules that have been acquired (primarily through nonconscious learning) over time.

Nonconscious Repeat Purchase Behavior. Huang and Yu offer a new look at brand loyalty. A model selection procedure is used to test whether or not a U-shaped relationship exists between the intercorrelation of evoked sets and brand loyalty. The derived model provides a means to measure the degree of a consumer's loyalty and provides an explanation for inertia, the nonconscious repeat purchase behavior due to habit.

FUTURE DIRECTIONS

It is clear that, although these articles have added to the literature on nonconscious memory processes, much needs to be done to resolve some basic issues in this area. First, the theoretical nature of nonconsciousness needs to be articulated very clearly. Given that this word means different things to researchers in philosophy, psychology, computer science, and consumer behavior, building a common vocabulary that cuts across disciplinary boundaries is a starting point. Also important is that researchers indicate clearly what are nonconscious *memory* processes as opposed to perceptual or learning processes.

Second, it is also necessary to integrate nonconscious processes into other theories and frameworks that are more pervasive in marketing. For example, how are nonconscious memory processes involved in classical conditioning and mere exposure effects? Are tacit learning and intuition other forms of nonconscious processing that can be studied with the use of appropriate tools? Such integrative research should not

only enable one to link this topic with other theories, but also be informative about the specific assumptions under which each of these theories operate.

Third, methodological improvements need to be devised for assessing nonconscious processes. Many researchers are interested in online methods for tracking awareness to stimuli, as opposed to self-report measures. This is a particularly challenging task, because online measures may tamper with the inherent response. Also useful would be a metaanalytic review that compares conscious and nonconscious effect sizes on important responses.

Finally, the opportunity to explore substantive marketing phenomena with the use of theories of nonconscious processes should be emphasized. One area that has been explored is advertising effects (e.g., Janiszewski, 1988; Krishnan & Chakravarti, 1999; Krishnan & Shapiro, 1996). These communication effects may be extended to understanding the effects of billboard advertising and product placement, where brief exposures are the norm. However, other marketing contexts may be equally relevant. For example, how can retail stores be designed to capitalize on habitual behaviors where the consumer does not think about the choices for very long? The development of such applications to the theories will also provide a useful forum for understanding theoretical shortcomings, and lead to enhancements of theories of nonconscious processes.

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