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REVIEW

The hidden life of the consumer mind

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Abstract

Unconscious influences permeate the everyday life of consumers. The scope of unconscious influences is greatly enhanced when the operational definition of "unconscious" shifts from the anachronistic "subliminal" one—whether the person is aware of the triggering information itself—to the far more common situation of being unaware of the influence of that stimulus. People are often unaware of how external events influence their choices and behavior, which is a good reason not to rely on self-report measures of mediating internal mental processes. What are the main forms of mundane unconscious influence? (1) The person's primary evolved needs and motives and active goal pursuits, which operate unconsciously to exert a transformative effect on selective attention, preferences, and purchases, and consumption. These can be triggered through common external means such as grocery store handouts and emails from the boss. (2) Immediate preconscious perceptual inputs from the external environment influence seemingly "free" conscious choices. Finally, (3) postconscious processes have the same effects but come from the carry-over of conscious experiences from one situation into the next. This is the domain of "nudges" or "priming effects" with many field studies as well as meta-analyses demonstrating their validity and replicability.

KEYWORDS
automatic or unconscious process, embodied cognition, goals and motivation

1 | THE HIDDEN LIFE OF THE CONSUMER MIND

The 20th century was a tumultuous one in human history. It was also the first full century of psychology as its own distinct science. Grand theories were proposed and debated that struck at the heart of basic questions of existence and the meaning of life. By this time, the exalted status of the human being in the larger cosmos had already been shaken by Copernicus and Galileo, in that the universe itself did not revolve around us, and by Darwin, in that we were not created as a superior being compared with other animals. Ah, but at least we still possessed our conscious mind, where Descartes had located the soul, our direct connection to God and which was the "uncaused causer" of our thoughts, choices, and actions. Then Psychology entered stage right, playing the role of Brutus to deliver the final blows: first Freud, who argued that this conscious mind of ours was not an original source at all but was itself ruled by a dark unseen unconscious mind full of selfish and self-destructive motivations, and then Skinner, who would not allow us a causal mind of any type, holding that our minds were superfluous and that our behavior merely a function of the reward contingencies of our environment, nothing more than that.

And so by the middle of the century, human beings had been pushed off our pedestal. The Earth had lost its special status as the center of the universe, we were no longer distinct from the other animals, and our conscious minds were no longer supernatural sources of original thought and creation.[1] But it is important to keep in mind that the truth or reality of human nature and existence had not changed over this time period; what had changed was the dominant views of science

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about that reality – and these are not the same things. To wit: in mid-century along came the cognitive revolution in psychology, which showed that the behaviorists were WRONG about human mental processes being epiphenomenal and not causally important—Skinner finally went too far in his 1957 book on verbal behavior and Festinger, Chomsky, (George) Miller, Koestler, and Neisser, among others, let him have it, in what we call the "cognitive revolution." Similarly, Freud was WRONG about there being a separate unconscious mind that played by its own rules. Cognitive and especially neuroscience have made quick work of the purportedly separate Unconscious Mind (Bargh, 2016, 2021a), not that there was much actual science (or even case studies; see Crews, 2017) in support of Freud's theory in the first place.

But at the time, the substantial consensus was that they were right. For example, in 1955, the Introductory Psychology course at Yale was all about Freudian theory, and North American (at least) psychology was dominated by behaviorism for nearly 50 years. We do not have to go far back at all (e.g., to bloodletting or leeches as a standard medical treatment) for examples of the dominant scientific or medical opinion being terribly and consequentially wrong—less than a hundred years ago, highly respected psychology professors and presidents of prestigious universities such as David Jordan of Stanford and James Angell of Yale founded and promoted "institutes of eugenics" with the explicit goal of improving the human gene pool by sterilizing (and worse) what they considered to be inferior types of people. Their writings, such as Madison Grant's *The Decline of the Great Race*, were lauded by Adolf Hitler and on his bookshelf in Landsberg Prison when he wrote *Mein Kampf* (see Ullrich, 2016). And just 70 years ago, the Nobel Prize in Medicine for 1949 went to neurologist Antonio Moniz for inventing and advocating the practice of lobotomies for the treatment of behavioral disorders in children (see the harrowing personal account in Dully, 2007).

The point is that just because a position or belief is currently dominant in a given scientific field is no guarantee that it is correct, especially if there are good logical and empirical reasons why it is not. "Science goes wrong" when it holds and enforces dominant viewpoints and assumptions out of inertia, without regard for the actual evidence for versus against those assumptions. This has been true for many decades now in consumer psychology (and other areas of psychological science) regarding the role of unconscious processes and influences, and this publication bias (see below) is responsible for an ever-wider chasm with applied research in other domains.

Today, there is consistent cognitive and neuroscience evidence that everyday goals can operate either consciously (with awareness and intention) or unconsciously and that their underlying processes, supporting brain regions, and outputs are the same in either case (Bargh et al., 2001; Huang & Bargh, 2014). Pessiglione et al. (2007) found that the same regions responsive to reward are activated differentially by large versus small rewards on a given task trial, when the person is aware of the incentive (a pound versus a penny coin) on the trial but also when they are not aware (i.e., the reward information is presented subliminally). Participants' effort on the task is increased by the larger reward even when they are not consciously aware of the size of the reward. Custers and Aarts (2010) and Takarada and Nozaki (2018) extended this paradigm to present both effort and incentive (reward) cues either in awareness or subliminally and again obtained the same effects either way.

Field studies have also demonstrated the similarity of conscious and unconscious pursuit of the same goals. A decade of research by Latham and his colleagues (Chen et al., 2021) set out to test whether the major tenets and principles of Goal Setting Theory (Locke & Latham, 1990), which had been derived from decades of research on conscious goal pursuit, also held when the goals operated unconsciously. Not only were the same outcomes on job performance obtained but also with the same moderators and mediators—performance feedback, goal commitment, choosing the goal oneself, concrete instead of abstract goals—as in the earlier research on conscious goal pursuit. (For a consideration of some potentially important differences between conscious and unconscious goal pursuits, see Bargh & Hassin, 2021; Laran et al., 2016; Nordgren et al., 2011.)

Although mass media and especially science journalism are constantly confusing the two, reality and the currently dominant scientific account of that reality are not the same things. The 20th century of psychological science provides a perfect illustration. For while the human mind and human nature certainly did not dramatically change during that period, there were at least three very different, dominant grand theories about them. Our mind and our behavior were under the control of an unseen, separate unconscious mind and will; under the control of a relatively omniscient conscious mind and will; or under the control of the external environment, with the mind, conscious or unconscious, not mattering at all. Three theories, and three mutually exclusive positions, could not all be correct.

And the currently dominant view of psychology, now in the hands of cognitive science, remains with us. In the first heady decades of the cognitive revolution, the conscious mind, not the stimulus environment or a hidden unconscious mind, was presumed to be in control of the higher mental processes—choices, judgments, and behavior (Baars, 1986; Neisser, 1967). Unconscious processes, if they were acknowledged to exist at all, were portrayed as crude and limited in their influence ("dumb"; see Greenwald, 1992; Loftus & Klinger, 1992). And after fighting so hard to overthrow behaviorism, the revolutionaries were not about to acknowledge the possibility of external causation of human higher mental processes.

1.1 | "Unconscious" of what, exactly?

One legacy of Freudian theory that is still with us today is the operational definition of an unconscious influence in terms of subliminal stimulus presentation. Freud structured the psyche in terms of separate conscious and unconscious minds, with the latter screening all perceptual input before allowing it (or not) into conscious awareness. Thus, early experimental tests of this theory's predictions regarding unconscious processes had to use tachistoscopes to present information subliminally, to preclude any conscious awareness of that information. This was the method of the classic New Look research of Bruner and Postman (see Allport, 1955; Bruner, 1957; McGinnies, 1949), which tested for "perceptual defense and unconscious vigilance and censorship of emotionally disturbing stimuli.

However, this "two minds" hypothesis has since been discredited by new evidence. We know now that there are not, in fact, two separate minds up there and that processes that operate unconsciously—outside of the person's awareness and ability to report on—use the same brain regions in the same way as do the same processes when operating in awareness. Yet the operational definition of unconscious processes in terms of subliminal information processing, based on this false idea of two separate minds, remains with us today, 75 years later (see Bargh & Hassin, 2021). But more than being archaic, and based on false premises, there is a methodological confound involved with subliminal presentations because "unconscious" presentations are also, perforce, much weaker in intensity and briefer in duration. Weaker inputs have weaker effects (Werner, 1956). This confound between "unconscious" and "weak stimulation" led an expert panel of cognitive psychologists to conclude that the unconscious was "dumb" because only limited and crude analyses could be performed on these unnatural, weak stimuli (Loftus & Klinger, 1992).

The subliminal definition also ran counter to the theoretical work on the "evolutionary unconscious" by Rozin (1976), Reber (1992) and others. Unconscious information processing capabilities evolved to serve highly adaptive functions and did so in environments of "regular strength" stimuli; they did not evolve in environments of unnatural, subliminal strength stimuli. These older unconscious systems are argued to have become locked in by evolutionary forces because they provide the inputs, the starting points for the conscious, and deliberate processing systems that evolved later (Deacon, 1997; Rozin, 1976). And the unconscious mechanisms did not disappear with the emergence of conscious modes of thought, quite the opposite. Brain anthropology and evolutionary psychology have documented how the human brain developed incrementally over time, with newer adaptive functions based on and integrated with already existing older circuits and processes (Bargh & Morsella, 2008; Dennett, 1991; Rozin, 1976). As the human brain adapted and evolved, the ancient, unconsciously operating primary motivational circuits became locked in as the starting points for the newer conscious and strategic systems (Reber, 1992; Simon, 1962). In other words, our modern goal pursuits and the attitudes, and belief systems that support them, take the outputs of the older unconscious systems as their inputs. Hence contemporary research is finding that what seem to be "free" preferences and choices are actually guided by and in the service of these primary motives (see Kenrick et al., 2010).

Chartrand (Chartrand, 2005; see also Chartrand & Fitzsimons, 2011) usefully distinguished between three domains of unawareness—of the stimulus or environmental event that triggered the mental process, of the mental process itself, and of its consequences or effects. Subliminal presentation methods do take care of all three but are of very limited ecological validity and also confound the awareness aspect with the strength of the stimulus (intensity and duration). And we are generally unaware of mental processes (Nisbett & Wilson, 1977), relative to the output of those processes. This means that the most common and relevant form of unawareness in real world, everyday settings is lack of awareness of the effects or consequences that an event, context, or environmental feature has on your choice or behavior. Thus, here we adopt the definition of the unconscious influences in everyday life as those effects on feelings, choices, goals, and behavior of which the person is not aware—whether or not they are aware (as they usually are) of the external stimuli or event that generated those influences (see also Bargh, 1992, 2016; Bargh & Hassin, 2021).

The choice of a definition of what constitutes an unconscious mental process is not a matter of personal preference, or arbitrary in any way. Our definition in terms of influence and consequences is the traditional and historical one that predated Freud and the New Look research by centuries (e.g., by George Washington, Charles Darwin, and Arthur Conan Doyle, among others; see Bargh & Hassin, 2021; Bowers, 1984; Whyte, 1960) and continues to be the popular usage today. What matters in the everyday life of human beings is not whether the event itself is perceived consciously or not (it almost always is), it is whether the person is aware of how that event *affects* their choices and behavior (Bargh, 1992, 2017). That people are often unaware of the powerful influences on their choices and behavior has been a central message of social psychology for more than 50 years (e.g., Darley & Batson, 1973; Haney et al., 1973; Milgram, 1963; Nisbett & Wilson, 1977).

And although they are the orphan children of contemporary scientific psychology, unconscious influences have been intuited and exploited by poets, politicians, governments, and advertisers for centuries. Franklin Roosevelt famously admonished us that "we have nothing to fear, but fear itself" in 1933, intuitively sensing the causal link between threat and conservative attitudes that political psychology research has only recently established. And Dante, in the early 14th century, intuited the "embodied" connection between physical coldness and social coldness when he reserved the lowest pit of his *Inferno* for those who betrayed close others—by freezing them eternally in ice, in the midst of otherwise fiery Hell. Remarkably, seven centuries later, social psychology, psychopharmacology, and neuroscience established the hard connection in human insula between physical temperature sensation and social warmth and coldness feelings that was the basis for Dante's *contrapasso*.

Advertisers certainly know how to manipulate these hidden mechanisms, in studies discussed below, exploiting imitation and contagion mechanisms to increase consumption behavior (food and drink) at home (Brownell & Horgen, 2004; Harris et al., 2009; Naimi et al., 2016). Economists have received the Nobel Prize for demonstrating how subtle nudges can prod people to do the right or socially good thing (Thaler & Sunstein, 2008; for the similarity of nudges and priming, see Laran et al., 2019; Lindenberg & Papies, 2019). In one of the best examples of government nudges, Cialdini (2005) showed how national park signs asking visitors not to take souvenirs of the rare tree bark—because of the damage it was doing to the trees—were actually increasing the problem; the signs showed three cartoonish masked thieves absconding with bags of the bark. Cialdini recognized that depicting *three* thieves unconsciously signaled the souvenir-taking to be a norm that many people engaged in and thus

served to unwittingly prime the unwanted behavior—when the signs were changed to show only one thief, bark theft was markedly reduced.

1.2 | Overview

We next turn to the three major forms of unconscious influences on consumer choices and behavior (1) *motivational:* the powerful influences of currently active goals (whether consciously or unconsciously operating), (2) *preconscious:* unconscious inputs into conscious choices and judgments, and (3) *postconscious:* carryover or "priming" effects of conscious experiences and mental processes from one situation into the next.

In an interesting way, these varied phenomena can be seen as a legacy of those three grand theories of the 20th century. While none of those theories was entirely correct in their uncompromising, extreme forms, neither were they entirely wrong—each was based on its own kernel of truth about human nature (Bargh, 2019; Bargh & Ferguson, 2000). Freud was right about motivational influences on daily life of which the person was unaware; Skinner was right about the power of external stimuli to activate and guide human higher mental and behavioral processes; the cognitive psychologists were right about the central moderating role of internal mental representations and processes. And when you put these three kernels together, voila, you have the unconscious influences on everyday life, often generated by external environmental events, often motivational in nature, and always mediated by internal cognitive representations.

The final section of this article returns to the current state of consumer psychology research, which continues to rely heavily on self-report measures that assume accurate introspective access to internal moderating cognitive processes (Williams & Poehlman, 2017). However, as the research summarized below shows, people are often not aware of the important influences on their choices and behavior and so cannot accurately self-report on them. Moreover, not all choices and behavior are the results of consciously made choices. Thus, this research has implications for the validity of consumer research theory and methods going forward.

2 | THE HIDDEN OPERATION OF UNCONSCIOUS MOTIVATIONS

A person's currently active goals exert a powerful influence over the rest of cognition. This was perhaps the single most important change brought about by the cognitive revolution—the behaviorists had insisted that the higher mental processes in humans were driven by features of the external environment. Neisser's (1967) seminal book on cognitive psychology—the "manifesto" of the cognitive revolution—replaced the external stimulus environment with internal, top-down executive processes (i.e., intentions and will and goal pursuits) as the proximal determinant of the higher mental processes. The 50 years of research since has validated Neisser's predictions concerning the pervasive involvement of goal pursuits in the higher mental processes, and now 25 years of work on unconscious goal pursuit has shown further that these effects do not depend on the person's awareness of the operation of that goal.

Hundreds of laboratory and field experiments have now studied unconscious goal pursuit induced by verbal priming of the goal in question. A meta-analysis of nearly 350 of these experiments (Weingarten et al., 2016), which included an active solicitation of unpublished "file drawer" studies, concluded that goal priming was a robust and reliable effect. The meta-analysis also showed that a significant moderator of the priming effect was the importance of the goal to the individual. The more important the goal, the stronger the effects of the primed goal. Another recent meta-analysis of goal priming in field and organizational settings has similarly concluded goal priming to be a robust and reliable effect, with stronger effects in field settings than in laboratory studies (Chen et al., 2021).

2.1 | Deep influences of the human past

Sigmund Freud popularized the idea of unconscious motivations, but his were often rather strange and maladaptive (especially regarding one's parents); evolutionary biologists such as Mayr (1976) and Dawkins (1976) regarded human goal pursuit systems as the mechanism for carrying out, in local time, the adaptive evolutionary directives of the distant past. The evolved primary motives correspond to the eonic constancies in those living conditions, the most basic and general drives that will remain adaptive even with changes in cultures and physical conditions on Planet Earth. These are the paramount motivations of survival and safety, reproduction (mating), disease avoidance, resource acquisition (related to hunger, shelter, and warmth), and (in social animals) cooperation. In humans the guiding hand of these primary motives helped keep us safe and (re)productive long before the relatively recent emergence (ca. 100 K years ago) of the more conscious, strategic forms of control (Bargh & Morsella, 2008; Corballis, 2007; Deacon, 1997; Dennett, 1995).

Goal pursuit systems were argued to be a necessary proxy for evolved drives and motives because genetic modifications driven by natural selection processes occur quite slowly, but dramatic changes in environmental and cultural conditions can be much more rapid. Our particularized goal pursuits are thus "on the ground" instantiations of these more general, open-ended innate motivational systems. As the stand-in for adaptive tendencies stamped in through eons of natural selection, our currently active goals are granted tremendous power and influence over our choices and behavior.

In both conscious as well as unconscious modes, the currently active goal directs *selective attention* to goal relevant features of the environment (Anderson & Pichert, 1978)—increasing attentional sensitivity to information relevant to the current need state, even to the point of causing normally subliminal strength stimuli to now become visible (Bruner, 1957; Ferguson, 2008; Xu et al., 2015, Study 1). The active goal changes *evaluations and preferences* (Huang & Bargh, 2014), and even implicit attitudes (see Melnikoff &

Bailey, 2018; Melnikoff & Strohminger, 2020) if doing so would facilitate the current goal pursuit. The currently active goal also changes choices and decisions, including the assessment of risk, when pursued unconsciously (Ferguson, 2008; Ferguson & Bargh, 2004; Hill & Durante, 2011; Huang & Bargh, 2014) just as it does in conscious goal pursuit (Bargh et al., 2010; Gollwitzer, 1999; Kruglanski et al., 2002; Locke & Latham, 1990).

2.2 | Evolved primary motives

The paramount innate motivation is survival and safety. Feelings of physical safety versus threat influence abstract political attitudes; there are many studies that show physically threatening experiences in a laboratory such as a loud, startling, and unpredictable sound causes participants' social and political attitudes to become more conservative (Skitka et al., 2002). Remarkably, 4-year-old children who show greater fear responses to a startle stimulus are found, 20 years later, to have more conservative social attitudes (Block & Block, 2006), and the amygdala brain region, associated with fear and emotional responses, is anatomically larger in conservatives than liberals (Kanai et al., 2011). Conversely, Napier et al. (2018) showed that richly imagining being completely *physically safe* caused political and social attitudes to move in the liberal direction.

Disease avoidance and the associated emotion of disgust are central components of the survival motive, as disgust is a highly adaptive response to the likely presence of germs and bacteria that can spread disease and infections. Incidentally raising the specter of a flu virus pandemic (e.g., reminding participants it was important to get a flu shot, and to wash hands regularly) caused subsequently measured attitudes towards immigration to become more negative—but when the person had already had their flu shot, or was given the opportunity to disinfect their hands with Purell, their attitudes towards immigration became more positive. These findings were predicted based on the deep metaphor or analogy between the primary disease avoidance motivation, to prevent viruses and germs to enter one's physical body and the higher-level and political concept of immigrants entering one's country. That worries about or steps taken against the flu virus could move around these political attitudes demonstrate the hidden power of these basic primary motives over higher mental processes, choices, and judgments.

Relatedly, Schnall et al. (2008) and others have shown that physical disgust reactions to a filthy room carry over to create greater moral disgust and thus harsher proposed sentences for a crime, compared with deliberations in a clean room. It is extremely unlikely that jurors are aware that the cleanliness of their deliberation room changes how many months in prison they recommend for a crime—they would no doubt strongly deny this mattered (for related findings in actual California courtrooms, see Konečni & Ebbesen, 1982). Relatedly, the act of washing our hands also washes away feelings of guilt (Zhong & Liljenquist, 2006; also Lee & Schwarz, 2021; Schaefer et al., 2015).

The other primary motives also exert unconscious influences. *Reproduction* (sex and attraction) was the most widely studied primary motive in evolutionary psychology for many years (Kenrick, 2011), with a wide variety of unconscious influences discovered (such as by pheromones on attraction, see Miller & Maner, 2011). For example, when the mating or "being attractive" goal is subtly activated by having undergraduate women first browse a dating website, they became more positive towards health-risky but attractiveness-enhancing behaviors such as taking diet pills and frequenting tanning salons and also considered those activities to be less risky than they did before (Hill & Durante, 2011). *Hunger* as a drive state is also primary and fundamental. Here again, the influence of physical hunger pangs extends well beyond its specific domain and has general effects on shopping behavior. The hungrier that big-box-store customers reported being when leaving the store, the more money they had just spent on non-food items (Xu et al., 2015).

Finally, *cooperation* with others and the associated *need to belong* in close relationships and social groups have been argued to be a primary human motivation as well (Baumeister & Leary, 1995; Tomasello et al., 2005). In a test of the hypothesis that cooperation is an innate human motivation, Over and Carpenter (2009) first primed 18-month-old toddlers with a series of photographs of two dolls in a friendly (bonded) facing-each-other orientation. Subsequently, compared with the control conditions, these children were three times more likely to spontaneously help the experimenter.

This deep and literal social need for human contact and interaction, evidenced by the devastating effects on physical and mental health of social isolation (e.g., living alone is as much a risk factor for early death as tobacco smoking; Berkman & Syme, 1979; Holt-Lunstad, 2010; Holt-Lunstad et al., 2015) also influences seemingly free conscious choices in unconscious ways. In Gabriel and colleagues' work on entertainment choices (e.g., Gabriel et al., 2016), different choices are made when the person is homesick or has just broken up with their partner—there is a greater tendency to choose TV shows or books or movies, and so on, where they "know" the main characters and are familiar with them. Lonely, homesick, or recently rejected individuals watch more media where they know the characters or novels where they are familiar with the protagonists than they do normally (Gabriel et al., 2016) and insecurely attached individuals read more novels featuring the same, known protagonists than do securely attached individuals. These "parasocial" relationships serve to partially satisfy the social needs that are not currently being satisfied by actual real-life relationships. What seem to be "free" entertainment choices are instead in the service of the deeper primary motive to "belong" in groups and close relationships.

2.3 | Unconscious goal pursuit in everyday life

One theme of the above studies is that the hidden motivational influences occur in mundane, real-life settings. The past decade of research on goal priming in the workplace by Gary Latham and colleagues (see meta-analytic review in Chen et al., 2021) has

demonstrated the efficacy of unconscious goal pursuit in many such field settings and for goals and motives that truly matter to the individual (and their employers). In these studies, the dependent variables have ranged from achievement and performance, creativity, learning, to cooperation among team members in the workplace. The goal priming effects were consistent and robust across many goals and many settings. For example, high performance primes embedded in a CEO's regular Monday morning email significantly increased productivity in employees randomly assigned to that condition, over the entire subsequent work week, compared with the other employees randomly assigned to the control condition. In another study conducted in large customer service call centers, performance priming increased customer satisfaction ratings and the probability that the customer's problems were solved during the initial call about the problem.

Health psychologists have shown how actual purchasing and consumption behavior can be shaped by subtle "nudges', such as in the form of recipe flyers or posters in grocery stores, butcher shops, and university cafeterias. Words related to dieting and healthy eating produce a significant reduction in purchase of snack foods or in sampling of free samples—tasty but fatty—in a butcher shop (Papies et al., 2014; Papies & Veling, 2013), even though shoppers are unaware of the influence and often cannot remember having seen the flyer or poster.

Behavioral economists have put forward similar models of unconscious goal pursuit triggered by situations and contexts. Ernst Fehr and colleagues (Cohn et al., 2014) have shown how the honesty and morality of investment bankers change when their self-concept and work identity are subtly primed. Even though the study was conducted on the weekend when the bankers were home with their families, having them first describe their weekday office environment (or not) made them greedier and more dishonest in an "honor system" task in which they self-reported how many "heads" they tossed for a monetary reward. One's close relationship partners are also a context in which certain goal pursuits can become chronic and unconscious—Fitzsimons and Bargh (2003) showed that for students who had the goal of making their mothers proud of them, merely thinking about their mother's neighborhood caused them to significantly outperform the other participants on verbal tasks.

One important feature of the unconscious goal pursuit literature is that the effects only occur for participants who do possess the goal in question. This supports the conclusion that these effects are truly motivational and not a semantic or behavioral priming effect. For example, Papies et al.'s (Papies et al., 2014; Papies & Veling, 2013) recipe and poster priming of dieting behavior only affected obese customers who were the most likely to have the dieting goal. In studies of the effects of situational power, whether subtle power priming caused the participant to become more selfish or more selfless was a function of their pre-existing chronic communal versus interpersonal orientation (Chen et al., 2001). And in the "mom" priming study of Fitzsimons and Bargh (2003), only those who had the chronic interpersonal goal of making their mothers proud of them showed improved task performance after drawing a map of their mother's neighborhood or other subtle reminders of their mother. In the consumer brand priming research of Fitzsimons et al. (2008), subliminal presentation of the Apple brand logo (compared with IBM) produced more creativity on a subsequent task, and subliminal priming with the Disney logo produced greater honesty—but only for participants for whom creativity or honesty was especially important to their self-concepts. These findings are in harmony with Kurt Lewin's field-theory principle that you can only prime or nudge goals that a person already possesses.

3 | PRECONSCIOUS INPUTS INTO CONSCIOUS CHOICE PROCESSES

Even when choices are made consciously and deliberately, they can be influenced by unconscious sources of input and valuation. The above section on unconscious motivational influences shows how various options change in value as a function of the person's current goal state, which is often operating outside of their awareness. Over the past 15 years there have been many controlled experimental studies, described below, in which subliminal information shapes and changes what are experienced as "free" conscious choices. But unconscious input into conscious processes is not just a psychology laboratory phenomenon, it is a basic principle of human brain function.

In our evolutionary history, the unconscious workings of the mind came first, the selective attention mechanisms and perceptual analysis modules that became "locked in" to brain anatomy because they produced the inputs and starting points for the later-evolving conscious and strategic processes (Reber, 1992; Rozin, 1976; Simon, 1962). As Michael Gazzaniga (2009), a founder of cognitive neuroscience, put it: "Here's the fundamental fact … by the time you are consciously aware of something, your brain has already done it. How else can it be?"

Preconscious perceptual input analyses shape and add meaning to incoming informational input (Neisser, 1967). We are not aware of these analyses and transformations, only of their products—the faces, houses, book pages, people, and clouds in the sky that are the starting points of our conscious experience. An important quality of preconscious influences is that they are trusted as valid signals or cues about external reality. Coming into our minds so effortlessly and without any cognitive work on our part, they are experienced as "out there" in the world instead of the result of any inference or assumption on our part and so tend to be trusted as accurate and valid in the same way we trust other incoming sensory information (Jones & Nisbett, 1971; Schwarz et al., 2021). This subjective validity gives preconscious inputs considerable power in subsequent conscious decisions and behavior.

While subliminal strength information is not a natural occurrence, its use in laboratory demonstrations provides the most conservative test possible of unconscious influences, ruling out any possibility that the person is aware of the influence of that stimulus. Many such demonstrations have shown that subliminally presented information influences "free" conscious choices, such as motor responses to targets on the focal experimental task (Damian, 2001; Hughes et al., 2009; Klotz & Neumann, 1999; Ocampo, 2015). In Damian (2001),

participants chose on each trial which of two buttons to press. Before each trial started, there was a masked, subliminal prime (e.g., a left or right arrow); participants were more likely to freely choose the response key that was congruent with the prime (an effect replicated by Wenke et al., 2010, and Teuchies et al., 2016). Interestingly, not only do these unconscious inputs influence the "free" choice that is made; they (paradoxically) also increase the person's feeling of having consciously intended to make that choice (Aarts et al., 2009).

Which arrow key to press may seem like a trivial matter, but the same subliminal influences occur in more involving and consequential choice-making. Payne et al. (2016) conducted 6 high-powered experiments with a total of over 1000 participants, in which participants made gambling choices. In an online blackjack game, primes related to betting (*bet*, *gamble*, *wager*) or 'standing pat' (*pass*, *fold*, *stay*) on a given hand were presented subliminally before the participant was asked to make the decision to bet or not. [Only hands in the moderate indecision range (8–17) were included because most everyone bets with hands of 18–21 and hardly anyone bets with hands of 4–7.] In every one of the six experiments, participants were significantly more likely to bet, or not, in line with the behavioral prime on that trial. Altogether, this body of research demonstrates unconscious inputs and influences on "free," consciously made decisions.

3.1 | Sensory experiences influence higher mental processes

Another main source of unconscious inputs into conscious choices and behavior is physical experiences, such as warmth, distance, safety, and disgust. We are certainly cognizant of the warmth generated by a mug of hot coffee as we hold it, or the softness of the chair we sit in, but we are not aware of the effect these physical experiences have on our feelings of social warmth towards our family and friends or leniency towards a moral transgressor. These have been studied over the past 20 years or so under the rubric of "embodied cognition". How do these effects work, and why are they there in the first place?

Physical experiences activate their corresponding mental concepts such as warmth, distance, softness, and verticality (for example), but this activation does not stop there; it spreads to associated analogous or metaphorical senses of those concepts. Indeed, it seems we do not have much of a separate vocabulary for psychological and social qualities and have appropriated concepts from the physical world instead (Mandler, 1991). For instance, we refer easily to a "warm" friend or a "distant" father, a "close" relationship, "high" status, a "smooth" interaction, a "hard" test, all the while not realizing how naturally we are using concrete terms in more abstract ways.

Why do we do this? Developmental psychologists point out that associations between the physical and the more abstract versions of these concepts form early in life, because the basic sensory concepts are the first ones that infants and toddlers develop. These "first in" concrete concepts then serve as a kind of preverbal scaffolding for the development of language, including more abstract concepts (Clark, 1973; Lakoff & Johnson, 1980; Mandler, 1991; Schubert, 2005; Williams et al., 2009). Throughout the rest of life, then, activation of these concepts by actual physical experiences spreads automatically across these associative connections to the more abstract senses of the concept which possess the additional meanings.

Some of these physical influences appear to be hard-wired. The warm–cold dimension is particularly important because neuroscience research has shown that the same brain region—insula—becomes active both when holding something warm and when doing socially warm activities such as texting to family and friends (Inagaki & Eisenberger, 2013; Williams & Bargh, 2008). Moreover, a nearby region of insula becomes active when something cold is held and when another person betrays you in an economics game (Kang et al., 2011). Controlled hospital studies show that one's actual body temperature covaries with warmer or colder feelings towards family and friends (Inagaki et al., 2016).

There are many other physical-to-psychological connections. Different forms of physical and social distance seem to swap for each other (Liberman & Trope, 2014), such as physical distance, temporal distance, social distance (status), and emotional distance. This suggests that the more abstract notions of distance are grounded in a common, more primitive concept of physical distance (which moderates the experience of external threats). Holding something smooth causes participants to then rate a social interaction as having gone more smoothly, with the degree of somatosensory cortex activation from the physical smoothness (or roughness) experience correlating with the extremity of the social judgment (Ackerman et al., 2010; Schaefer et al., 2014). Faces presented on the top row of a matrix of faces are judged to be people of higher status than those presented lower down, and words related to high versus low status are identified more quickly if presented to the analogous portion of a computer screen (Schubert, 2005). Overall, basic sensory experiences are an important category of everyday unconscious influences because they are constantly occurring and then spreading to influence more abstract judgments, all unconsciously.

3.2 | The power of faces

Other people's faces are an important source of preconscious influences in at least three ways. First, the attractiveness of the face is immediately and uncontrollably rewarding (to varying degrees) and this pleasure or displeasure is then often misattributed to the perceiver's current conscious focus—for example, an evaluation of the performance or job application. Attractive faces are (by definition) pleasurable to look at, and this pleasure is produced automatically and reflexively. Infants already show a preference to interact with an attractive instead of unattractive person (Langlois et al., 1990), and in adults attractive faces activate reward centers of the brain even when the participant has no explicit task to evaluate the faces (O'Doherty et al., 2003).

Because it is a direct preconscious effect, however, the rewarding or pleasant feelings associated with attractive faces can be attributed instead one's current conscious focus, such as in the case of personnel directors, the person's qualifications for a job. This is the basis for the well-known "halo" effect in social judgment (Eagly et al., 1991). In field studies recounted in Maestripieri et al. (2017), over 1000 job applications were sent to actual job postings in Italy, but these applications had been manipulated such that the identical application had attached to it either an attractive or unattractive photograph of a male or female candidate (or no photograph). Shockingly, 54% of the applications with the attractive female photograph but only 7% with the unattractive photograph were contacted for follow-up interviews. (For male applicants it was not quite so bad: 47 versus 26%.)

A second important preconscious influence of faces comes from the information they convey about the person's race, gender, age, and ethnicity as well—social group information that automatically activates cultural stereotypes about that group (Bargh et al., 1996, Study 3; Brewer, 1988; Chen & Bargh, 1997). The activation of group stereotypes based on face-conveyed information is lightning fast and, for the most part, unavoidable. It is for this reason that faces are routinely used in implicit measures such as the IATs of racial and gender bias.

Thirdly, independently of the social group information conveyed, emotion-related characteristics of a person's facial structure immediately communicate personality trait information such as competence and trustworthiness, and these are then a powerful influence on others' first impressions of that person (see review in Todorov, 2017). Various personality trait judgments made with only 100-ms exposure to the face are highly correlated with those judgments made by other participants with unlimited exposure. Again, because these trait categorizations are preconscious effects, people tend to have high confidence, even certainty, in the validity of those impressions. For example, the trait judgments of trustworthiness and competence made by participants in one country predict the outcome of elections in another country (Todorov et al., 2005). These face-based personality judgments are generated involuntarily, as they occur even when the participant's task has nothing to do with impression formation or social judgment (see Slepian et al., 2012).

Overall, immediate, preconscious affective reactions are important "gut" feelings that then guide and constrain subsequent conscious decision-making, which becomes less an objective appraisal process than an exercise in justifying the initial positive or negative response. This was Zajonc's (1980) seminal point about the primacy of affect, that people often have immediate affective reactions such as likes and dislikes prior to any conscious reasoning about the object or event and its features. And it was the basis for Haidt's (2001) model of moral judgment—the immediate affective or emotional response then driving subsequent thought in a consistent manner. The affect from stereotypes, attractiveness, and seemingly trustworthy faces guides not only conscious choices but also the subsequent justification for those choices, produced by conscious reasoning processes.

4 | POSTCONSCIOUS EFFECTS

Walking across the Capilano suspension bridge north of Vancouver is an exciting, though somewhat unnerving experience, as the bridge dangles over a deep gorge. In the 1970s, Dutton and Aron (1974) took advantage of the arousing nature of the crossing to study carry-over effects of physiological arousal from one situation into the next. Specifically, they hypothesized that arousal from the bridge crossing would persist when male hikers were stopped by a female experimenter, who asked them if they would mind completing her survey. If so, then the hikers would misunderstand this carry-over arousal as being due to their attraction to the experimenter, the current focus of their conscious attention. Indeed, when the experimenter offered her phone number so the hikers could call to find out the results of the study, more of the hikers crossing the scary bridge took up this offer compared with a control group who were crossing a less scary and arousing bridge. Arousal from one experience transferred over to the next situation and was consciously experienced as greater attraction to the experimenter (see also Cantor et al., 1975).

Just as arousal lingers on when one moves from one situation to the next, so too does excitation in terms of the activation and "accessibility" of mental representations (e.g., Higgins, 1996; Higgins et al., 1985). When we move from one situation into the next, our present surroundings may have completely changed, but the activation state of those various representations take some time to return to baseline. Just like arousal, the activation of mental representations also involves physiological and biochemical processes that take some amount of time to dissipate. Yet we tend to interpret these internal states entirely in terms of our present circumstances, not appreciating the effect of recent experiences carrying over to our present situation.

Priming and implicit memory phenomena are produced by this same carry-over effect. In the 1960s, researchers in the domain of verbal learning presented information in a first experimental task and showed that it influenced responses in a second, unrelated task even though the participant had no explicit conscious memory for that information any longer (Grand & Segal, 1966; Segal, 1967; Segal & Cofer, 1960) studies. This they called the "priming" of the response.[2] These same effects were then demonstrated in densely amnesiac patients by Warrington and Weiskrantz (1968, 1974), Schacter and Graf (1986), and Shimamura (Shimamura, 1986; Shimamura et al., 1987), despite the patients' lack of any explicit memory for the prime words. These findings with amnesiacs clearly demonstrate that conscious awareness or explicit memory for the priming stimuli is not necessary for the primes to have an influence on subsequent responding. Higgins et al. (1977) based their original "social priming" study on this same "separate study" paradigm, presenting participants with various trait terms in a first "memory" study, and showed that these primed trait categories influenced the interpretation of ambiguous social behaviors in a subsequent impression formation task.

Since that seminal study, hundreds more have demonstrated carryover priming effects on first impressions, on job performance, retail

purchases, customer satisfaction ratings, moral judgments, personal and situated identity, eating behavior, political and environmental attitudes, and interactive social behavior, and meta-analytic reviews have confirmed these are robust and reliable effects (for reviews see Bargh, 2017, 2021b; Chen et al., 2021; Loersch & Payne, 2011; Shariff et al., 2016; Weingarten et al., 2016). Priming methods have also played a key role in our current understanding of implicit stereotyping and prejudice, as a target person's easily identified racial and gender-related features activate or prime the group stereotype that then guides judgment of and behavior towards that person (Bargh et al., 1996, Study 3; Brewer, 1988; Devine, 1989; Fiske & Neuberg, 1989).

In everyday life, these priming influences from the external environment are constantly impinging on the individual, and many field studies show priming effects on important social issues and financial decision making. Decision scientist Elke Weber and colleagues demonstrated that survey respondents' degree of concern about climate change and global warming was a function of whether the weather that day happened to be warm or cold (Zaval et al., 2014). Respondents believed that climate change was more of a problem when the temperature on that day was hot and to be less of a problem when the temperature that day was cooler. To show this was a conceptual (postconscious) priming effect caused by the conscious experience of the day's weather, Zaval et al. conducted a further laboratory experiment in which participants were first primed with words related to warm or cold. That priming manipulation had the same effect on participants' estimates of the severity of the climate change problem as had that day's weather in the other study. Similarly, Lee et al. (2010) showed that recently witnessing another person sneezing caused respondents to then rate a variety of health risks, including heart attacks and contracting a serious disease, as significantly more serious.

In a demonstration of environmental "brand" priming effects, DeVoe et al. (2013) showed that the speed of participants' online financial decision making is predicted by the density of fast-food restaurants in their local environment (as indexed by their zip code). And in the field, participants' financial decisions made in front of a fast-food restaurant were faster than those in a control location. The fast-food brand that is activated by the restaurants and signs one sees in everyday life contains the "trait" of speed and fast service, and this carries over to influence ongoing behavior by the participant. Such priming effects in the field are consistent with laboratory demonstrations of brand-identity priming effects such as on creativity and honesty (Fitzsimons et al., 2008).

Priming influences are driven by the activation of the relevant concept, and this can occur in any of a variety of ways. The key is for the participant to not be aware of the potential influence of the prime, so prime 'delivery' should be subtle and incidental. A creative example comes from a study by Fishbach et al. (2011), who primed the framing of repeated brand choice to reflect either loyalty (encouraging the same choice) to or boredom (discouraging the same choice) with a particular brand. They did so by means of the title of a book incidentally given to participants on which to answer the study questionnaire. Aarts and Dijksterhuis (2003) showed how the norms and behavior associated with the mental representation of a destination (the university library) influenced behavior (talking more quietly) on the way to the library, because it was active and on the participants' minds even though they were not actually yet in the library.

A final but vital source of behavioral priming is the perceived behavior of other people around us. What we see other people do directly and immediately increases the likelihood that we will do the same thing. This imitation or mimicry effect is especially true of (but not limited to) physical actions, such as facial expressions and bodily movements and posture (Chartrand & Bargh, 1999). The perception-behavior link appears to be innate given that human infants as well as other social animals show this tendency (Dijksterhuis & Bargh, 2001; Meltzoff & Moore, 1977; Rizzolatti & Sinigaglia, 2006).

Advertisers are well aware of behavioral contagion effects and use it to increase product consumption at home. The presence of food ads causes greater incidental snacking, by adults as well as 8 year olds, while watching a comedy TV show in a laboratory setting (Harris et al., 2009). And research on a representative national sample of teenagers showed that the more ads for alcoholic beverages they were exposed to in a given month, the more of these beverages they (as underage drinkers) consumed (Naimi et al., 2016).

This "perception-behavior link" (Dijksterhuis & Bargh, 2001) operates via the accessibility of internal representations of different types of social behavior, which become active when perceiving other people's behavior. Several studies have demonstrated this mediating link. Foulk et al. (2016) demonstrated that observing a rude behavior had the same effect on the accessibility of the internal concept of 'rude' as did rude-related verbal primes (see Bargh et al., 1996, Study 1). And behavioral contagion effects do not require the actual physical behavior of another person in the present moment. Verbal descriptions of mood or behavior over social media are contagious as well. Again, what matters for behavioral priming effects is the activation of the internal mental representation of that type of behavior, which can be driven by signs of past behavior of that type as well as witnessing it in the present moment.

For example, in a field experiment with nearly 700,000 participants (Kramer et al., 2014), the mood expressed in Facebook users' own posts over several days was modified by a slight manipulation of the mood of the posts sent to their newsfeed by Facebook staff. And antisocial behavior spreads as well through its signs and visible consequences. Keizer et al. (2008) attached pamphlets to the handlebars of bicycles in several Dutch cities. The bicycles were parked either in alleyways with graffiti covered walls or alleys where the graffiti had been removed. Consistent with the hypothesis, there was more littering of the pamphlets when the graffiti was present than when it was not.

An important positive consequence of behavioral mimicry is the facilitation of cooperation through coordinating behavioral and emotional responses within a group, with an apparent beneficial side effect of increasing bonding and trust within the group as well

(Chartrand & Bargh, 1999, Study 2; see Chartrand & Lakin, 2013). Two field studies demonstrated this positive benefit of mimicry: Dutch waitresses received larger tips (Holland et al., 2005) and French salespeople significantly increased both sales and customer satisfaction (Jacob et al., 2011) after they had subtly mimicked the customer's questions and requests, compared with wait and sales staff in the no-mimicry control conditions.

Yet, given that the outside world is replete with these potential priming influences, what prevents us from being constantly at their mercy, our choices and behavior moved around like a puppet on a string (Bargh, 2006)? The answer comes from Section 1 above, the dominance of our active goals when they conflict with other behavioral impulses. Take away that ability and the person does indeed become a pawn in the hands of the external environment. This was dramatically demonstrated by Lhermitte (1986), in his research on two stroke patients. Their behavior was remarkable in that it was entirely at the mercy of situational suggestions. For example, they would repeatedly drink a glass of water that Lhermitte kept filling, despite complaining that they were painfully full; taken into a stranger's bedroom around noon, they would undress, get into bed, and fall asleep. Autopsies revealed damage to the same motivational-control brain region in both patients.

Note that we all share with these patients the part they had intact—the directive power of preconscious behavioral impulses coming from the external environment. What they lacked was the capability of the currently active goal pursuit to inhibit these impulses, if they conflicted with current purposes (for experimental demonstrations of this control, see Macrae & Johnston, 1998; also Gollwitzer et al., 2011). If it were not for this hierarchy of control, and the power of the active goal over attention, choices, and behavior, we would all have Lhermitte's syndrome.

5 | IMPLICATIONS FOR CONSUMER RESEARCH

The studies discussed above involve consumer choices and purchasing behavior, goal-directed changes in valuation and preferences, influences of advertising, with many applied, real-world demonstrations. All of them demonstrated the effect of Intentions and purposes of which the participant was not aware. The effects were then not a product of any conscious choice. Instead, there were deeper, evolved goals and needs operating, or carryover sources of arousal and affect, or immediate appraisals and assumptions operating, guiding choices and behavior with the participant unaware of and so unable to report on these influences.

Further, because they were not aware of the influences, they would have no way to accurately self-report on them. Models of consumer choice and behavior that assume conscious choice, and which rely on the validity and accuracy of self-report on the choice processes, thus do not apply to any of these findings. And if they had been used, they would have provided inaccurate and misleading evidence about what was really going on. There were deeper, evolved goals and needs operating, or carryover sources of arousal and affect, or immediate appraisals and assumptions generated, to guide choices and behavior with the participant unaware of and thus unable to report on these influences.

But this is a situation that has persisted now for decades. It seems every 10 years or so a review article comes along that argues that unconscious influences continue to be understudied in consumer research (e.g., Bargh, 2002; Chartrand & Fitzsimons, 2011; Williams & Poehlman, 2017). There is a growing disconnect to reality, because as the above examples show, reliable unconscious mechanisms have been actively invoked by advertisers, marketers, public and governmental officials, and politicians for some time now. [As a case in point, a recent *Science* magazine article reports that consumer corporations such as Microsoft and Coors are enlisting academic sleep researchers to find ways to cause people to dream about their product (Moutinho, 2021).] And there is a similar growing disconnect between consumer research and other areas of psychological research, especially applied domains such as health and organizational psychology, and behavioral economics. Despite all the above evidence, in the past decade most research and models still presume that choices are made consciously and intentionally and that the participant has accurate introspective conscious access to mediating internal cognitive processes. In their review, Williams and Poehlman (2017) noted the continued predominance of self-report measures of internal mediating processes in the contents of major journals such as *Journal of Consumer Research* and *Journal of Consumer Psychology*.

If we want to avoid yet another review article 10 years hence, making these same points, we need to consider *why* this disconnect persists and then do something about it.

One important factor would seem to be the different research traditions in social psychology (my home base) and consumer research, which has its roots in the judgment and decision-making (JDM) research domain. Social psychology has been arguing for over 50 years now that people are often unaware of the powerful influences on their choices and behavior (e.g., Darley & Batson, 1973; Haney et al., 1973; Milgram, 1963; Nisbett & Wilson, 1977). And this is not just some antiquated literature of little relevance to modern life. In a contemporary demonstration, Sommers and Bohns (2019) asked one group of participants what they would do if the experimenter asked them to unlock their smartphone and hand it over, so that the researchers could see what was on it. Over 82% said no way, they would not agree to this. Yet in another condition of the study, the researchers did not ask a hypothetical, they just directly asked participants to unlock and hand over their smartphones. In this actual situation, over 97% agreed and handed over their phones. People can just be out of touch with what really influences them and self-report of behavioral intentions in these cases produce just noise, not an actual signal.

Cialdini (e.g., Cialdini, 2005) has consistently emphasized this same point. In powerful real-life field demonstrations that people are not aware of the power of local norms over their own choices and behavior—of what your neighbors are doing—he and colleagues (Nolan et al., 2008) showed that providing California residents with

information about what neighbors are doing to conserve energy was the #1 most powerful subsequent influence on their own energy-use decisions, despite these same consumers rating this factor as the *least* influential factor on what they did.

But the roots of consumer psychology are instead in JDM research which has long been dominated by models that exclusively featured conscious choice and deliberate action (see Woerfel, 2021)—such as the ELM and HSM models of the 1980s and the theory of reasoned action (Ajzen, 1985). By 2001, this dominance was still in place (Chartrand & Fitzsimons, 2011), and Williams and Poehlman (2017) showed by an examination of published research that not much has changed since the turn of the century. As Donald Campbell (1979) pointed out, the tribal nature of science, as a self-perpetuating belief community, means that research traditions are passed down from generation to generation, and decisions to publish (or not) are made by like-minded editors and reviewers that share the same, inherited basic assumptions and methodological approaches. It is obvious, I hope, that our goal as scientists should not be merely to pass down traditions and ideological assumptions to our students—after all, we are a science, not a craft. And we are not doing our students any favors by doing so; when there is growing evidence against their validity (internal as well as ecological) and successful practitioners in related, applied fields are increasingly abandoning them.

Researchers are finally starting to complain about the rather gross double standards by editors and reviewers when it comes to conclusions of unconscious versus conscious mechanisms for a given effect (see reviews in Bargh, 2021a; Bargh & Hassin, 2021; Williams & Poehlman, 2017). Published attacks and critiques of the methods of studies concluding in favor of unconscious influences and causes are not met with comparable skeptical scrutiny of studies that claim conscious awareness and involvement. To get research published that supports a form of unconscious influence, one must prove beyond a shadow of a doubt that there was no conscious-process possibly involved in an effect (thus often mandating the use of weak subliminal stimulus presentations), but no such supporting evidence is needed at all if one wishes to conclude a process involved conscious choice and awareness. Those conclusions get a free pass from editors and reviewers (Williams & Poehlman, 2017), resulting in a much easier path to publication.

For (especially) young researchers who need to publish to get and keep their jobs, this tilted playing field really matters. The field is incentivized for researchers to follow the party line and make the traditional assumptions and draw the traditional conclusions about the role of conscious processes in choice and behavior. They learn this is how you play the game and gain success, and you cannot really blame them. But you can worry about what this ideological gatekeeping is doing to the value and relevance of the field of consumer research, because the bias and double standards are intended to perpetuate a folk psychology, common sense myth about the human mind and human nature. The consequent lack of objectivity can only result in models of consumer choice and behavior that are misleading and of limited relevance to the real world.

6 | CONCLUSIONS

Putting aside the moral and scientific problems with the superficial 'common sense' approach to consumer behavior for the moment, there is just so much *potential* here for new ways of studying and, admittedly, influencing consumer behavior. We know that a person's current goals and motives change even their strong attitudes and preferences, if doing so helps attain that current goal (see Ferguson & Bargh, 2004; Huang & Bargh, 2014; Melnikoff & Strohminger, 2020). And we also know that these goals and motives can be triggered, activated from outside by subtle cues (e.g., Bargh et al., 2001; Chartrand & Bargh, 1996; Chartrand et al., 2008; Chen et al., 2020; Weingarten et al., 2016).

Unconscious causal influences have already made significant inroads into real-life domains such as eating behavior and snack food purchases, employee job performance, customer satisfaction, fund-raising success, behavior contagion, political attitudes, close relationships, and energy conservation attitudes and behavior. But as we know that unconscious goals have their strongest effects on a person's most important goals, there is even more reason to study them in the context of the everyday life of consumers. Along with close relationships, where they are equally understudied, financial decision making and consumption behavior are among the most important areas of a person's life. In short, this would seem to be low hanging fruit, ripe for exploitation in new lines of consumer research.

But this research should not only seek to exploit the unconscious vulnerabilities that advertisers and politicians already know so well. Chartrand and Fitzsimons (2011) pointed to our common responsibility to serve the consumer as well. They concluded by expressing their hope for "… more research on the important role that the unconscious plays in the lives of consumers and in doing so improve both researcher understanding as well as consumer welfare" (p. 3). Knowing, for example, about the effects of hunger on nonfood purchases, or emotions on valuations, or how ads can trigger goals and motives that move us away from our core values and principles can only help people avoid any unwanted effects and take back control from those who are nudging us for their good, not ours. Informing consumers of the unconscious influences on their important choices and consumption behavior at least gives them the chance to adjust or correct for any unwanted influences (Wilson & Brekke, 1994). Somewhat paradoxically, it is by admitting or realizing that we are not aware or in control of all influences on us, that we actually gain control and "free will" over our choices and behavior. Kahneman's (2011) book on judgmental heuristics was a tremendous, practical boon for policy and financial decision makers, and negotiators of every stripe, because it showed how unconscious forces can influence their conscious decisions in deleterious ways. Knowing about these influences leads to the development of strategies and procedures to avoid them.

The same principle applies in the case of consumers. However, here we run into the same "common sense" bias that plagues consumer (and much psychological) research. It is like the old joke about how many psychologists it takes to change a light bulb. Answer: just one, but the light bulb has to want to change. The evidence is that

hardly any of us accept the possibility that we can be influenced unconsciously, outside of our awareness. In a large nation-wide survey by Scopelliti et al. (2015) on unconscious racism and other biases, only 1 of nearly 650 respondents said that they personally had any unconscious biases. They readily acknowledged that most *other* people had them, just not they themselves. It is a blind spot that self-interested outside parties will continue to exploit, as long as we let them.

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ENDNOTES

[1]It would get even worse, in 1976, with publication of *The Selfish Gene*, and our further demotion into mere "meat machines" existing only to help carry our genes into the next generation. But early psychology had certainly done its part.

[2]Indeed, the initial skepticism expressed over these "social" priming effects (see Harris et al., 2013; Klatzky & Creswell, 2014) was based in part on a confusion of the verbal learning and implicit memory "priming" research with the sequential semantic "priming" studies of Meyer and Schvaneveldt (1971), in which priming effects are much shorter in duration (see Bargh, 2014, 2021b; Sherman & Rivers, 2021).

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