



CONSUMER PERCEPTION

OBJECTIVES After studying this chapter, you will be able to...

- 1 | Define perception, attention, cognitive capacity, and comprehension.
- 2 | Describe how the perceptual process works.
- 3 | Explain how sensory thresholds and physical influences affect perception.
- 4 | Discuss how selective attention is both voluntary and involuntary.
- 5 | Provide examples of how marketers appeal to the senses to obtain and maintain consumers' attention.

APPLE PAINTS THE MARKET

Throughout the 1980s and 1990s—the first two decades of the home computer market—consumers had one choice when it came to computer color—beige. But when the Apple Computer Company launched its teal (officially, “Bondi Blue”) iMac in August, 1998, the computer market changed forever. Surprised and dazzled by the new color, cool new design, and lower price, consumers stormed computer stores and bought more than 800,000 iMacs in less than five months.¹ By January, 1999, Apple had launched five more fruity flavors for its iMac and iBook lines—blueberry, grape, tangerine, lime, and strawberry. By 2000, other major computer manufacturers, including Dell Computer, Hewlett-Packard, and Compaq Computers, were considering offering colorful PCs.² Ironically, the Hewlett-Packard Company had received a proposal from Oregon industrial designer Ziba Design, Inc. to produce a teal-colored computer back in 1996, i.e., two years before Apple introduced its colorful model. Ziba Design suggested teal as the color because it is not gender specific and, at the time, was not considered

trendy, so, they reasoned, it would be seen as new and different. Hewlett-Packard rejected the recommendation, thinking that consumers would not want to buy outwardly colorful computers.³

Apple's success in daring to add a splash of color to computers changed the way computers were viewed and added a new attribute to those considered when consumers shop for personal computers. Apple's success also underscored the importance of color to consumers; it is a strong, distinguishing factor that can be used to grab consumers' attention and boost a company's reputation as an innovator.

Interestingly, while the rest of the computer industry appears to have finally found color, as shown by Dell's new line of Inspiron laptops, Apple has returned to monochromatic white, black, and silver as its signature colors, standing out once again.



OBJECTIVE 1

Defining the Perceptual Process

Why do some product packages stick out on grocery store shelves, while others barely get noticed? Why do some television commercials generate attention, while others are ignored? This chapter describes how consumers physically acquire and interpret information about products, services, and the world around them through perceptual process.

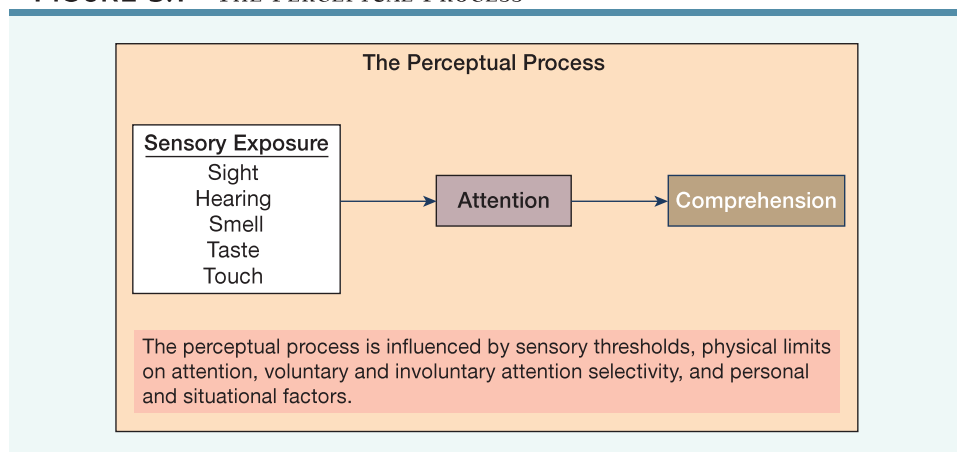
Perception is a process of receiving, selecting, and interpreting environmental stimuli involving the five senses. Through perception, we define the world around us and

create meaning from our environment. For example, consumers eat ice cream, and it feels cold and tastes sweet. People look upward, see blue, and know that they are viewing the sky. But, how cold or sweet or blue is different for every individual because each person's perceptual process is unique. This chapter demonstrates that myriad factors influence consumers' perceptions. That no two people perceive the world in the same way is a challenging concept because it's difficult for people to step outside their own physical senses, i.e., to try to see things as others see them. The erroneous assumption that everyone else perceives the world as we do is called **phenomenal absolutism**.

OBJECTIVE 2

The steps in the perceptual process are shown in Figure 3.1. Although the process appears sequential from sensory exposure through comprehension, the entire process occurs almost instantaneously, and the steps of the process interact and overlap seamlessly.

FIGURE 3.1 THE PERCEPTUAL PROCESS



Perception of the environment requires consumers to use their physical senses. *Sensory exposure* occurs when a stimulus, like the smell of pretzels in the shopping mall or a print ad in the newspaper, is detected by the physical senses. Although the senses include dozens of secondary sensory systems, consumers' primary senses are sight, hearing, smell, taste, and touch. The body's first and immediate response to a stimulus is called **sensation**. Sensation involves gathering data from the sensory organs and nervous system and sending it to the brain for processing and interpretation. But not all stimuli receive attention. People perceive only a fraction of the stimuli to which they are exposed. In other words, consumers are not passive recipients of the world around them. To avoid being overwhelmed by the sheer volume of stimuli available in the marketplace, consumers are selective about stimuli. Thus, an important part of the perceptual process is discriminating among stimuli and selecting those to receive further processing. This step represents the act of attention.

Attention means focusing on one or more environmental stimuli while potentially ignoring others. Attention is highly selective in nature. If consumers didn't have *selective attention* (also called *perceptual selection*), they would be so overloaded with information in the marketplace that they couldn't function effectively. For example, in the United States are more than 1,100 television stations, more than 13,000 radio stations, and about 25,000 newspapers and magazines. The average U.S. consumer is exposed to about 3,000 ad messages per day.⁴ In addition, the typical American watches about 4.3 hours of



Consumers today are in a state of media overload but have limited cognitive capacity, which is why selective attentions is so important.

television per day, spends about 1.5 hours per day surfing the Web, 30 minutes each day talking on the phone, and reads a newspaper at least once per week.⁵

Adding to this state of media overload, American firms spend more than \$45 billion a year on advertising and another \$65 billion a year on promotions (e.g., coupons, sales, free samples, rebates, premiums, sweepstakes, sporting event sponsorships). Obviously, consumers cannot attend to all product information to which they are exposed. **Cognitive capacity**, or the ability to pay attention to and think about information, is limited. Consequently, marketers need to understand what guides consumers' allocation of cognitive capacity and their selective attention.

The last step in the perceptual process involves providing meaning to the sensory data that gets processed. **Comprehension** is the ability to interpret and assign meaning to the new information by relating it to knowledge already stored in memory. The ways new environmental stimuli are categorized, interpreted, and experienced are influenced by existing knowledge. Ask two people with radically different political opinions to interpret a political speech, and the answers will differ dramatically. To revisit the ice cream example from the opening of this discussion, when consumers taste chocolate ice cream, their senses take in sweetness, cold, chocolate flavor, the smell of chocolate, and wet stickiness. Consumers' ability to organize, categorize, and interpret these sensations help them recognize that, indeed, they are eating chocolate ice cream. After comprehension, preferences and choice follow.

Perception is important to marketers because it is the communication gateway to the consumer. Understanding perception and how it influences consumers' attention to the environment, their interpretation and comprehension of stimuli, and ultimately their behavior, is essential to developing successful products and marketing messages. The rest of the chapter explores the influences and limits of the perceptual process of importance to marketers, including sensory thresholds, physical limits on attention, and voluntary and involuntary attention selectivity.

MARKETING IN ACTION

Marketing to the Senses: The Ingenious Ways Marketers Use Color

Marketers have long realized the importance of perception and appealing to our physical senses, and perhaps our most important physical sense is sight. Through sight we perceive colors, sizes, and the position of objects in the environment. In fact, the majority of our sensual perception occurs through sight. Visual tools related to perception are used by marketers to increase attention to marketing messages.

An important tool for marketers related to sight is the use of color. According to color experts, color sells! Color catches attention, conveys meaning, and elicits emotions from consumers. Let's look at some common colors and how they are perceived:

- Red is typically associated with appetite and sexual arousal; it is attention-getting and exciting. Red can also convey a warning or a rescue from danger: think of the American Red Cross or a bright red fire engine.
- Orange is also a high-energy color associated with appetite and power. Tide laundry detergent uses an orange package to signify its strength.
- Blue is considered relaxing; it is associated with sky, water, trust, and the future. Blue is America's favorite color, according to the Crayola Crayon makers.

- Green is representative of health, refreshment, and the environment. The Healthy Choice packaged food brand uses green as its signature color to symbolize its low-fat content and health.
- Yellow sends a message of optimism, happiness, and nature. Yellow is symbolic of light, the sun, and cleanliness. Cleaning products are often packaged in yellow.

Marketers know that colors speak to people and give them messages about the product, making color an important part of the overall marketing message.



American Red Cross

PRNewsFoto/American Red Cross/Newscom

OBJECTIVE 3

Sensory Thresholds

The Absolute Threshold

Have you ever watched a dog sniff the ground as he tracks some secret scent? Or listened to your cat move around the dark house at night, able to see every obstacle? There are some stimuli that people simply cannot perceive. Overall, however, the sensory limits or *thresholds* for animals—including humans—are relatively high. The minimum level of stimuli needed for an individual to experience a sensation is called the **absolute threshold**. It is the lowest point at which a person can detect “something” on a given sensory receptor. The smells that dogs can use for tracking are too slight to be detected by humans, so this stimulus is beyond our olfactory absolute threshold. Likewise, the farthest point at which a person can read a billboard advertisement from a moving car represents an absolute threshold.

In addition to the overall physical strengths and weaknesses of human senses, individual differences in sensory ability also exist. For example, children tend to experience lower absolute thresholds, which might explain why infants often react to startling noises and bright lights by crying or showing distress. Research demonstrates that women also tend to have lower absolute thresholds than men. Some



PRNewsFoto/Chick-fil-A, Inc./AP Photo

Marketers need to consider consumers absolute thresholds when designing marketing materials.

people may have their senses impaired or altered because of disability or aging; some people often have one sense that they feel is particularly strong, such as a keen sense of smell or sharp vision. Two consumers riding together in a car may see a billboard advertisement at different times from different distances. Consequently, advertisers need to make sure that the type on the billboard is large enough and brief enough to maximize the number of people capable of reading it. As a general industry rule of thumb, because a billboard is read by the average person in six seconds or less, it should contain no more than six words in the primary message. Pharmaceutical companies and other industries that must include details and fine print in their advertisements must design the type large enough for the average person to read—particularly if the target market is seniors, who typically prefer 16 point font. So, as can be seen, the absolute threshold is an important consideration for marketers when designing marketing stimuli for targeted audiences.

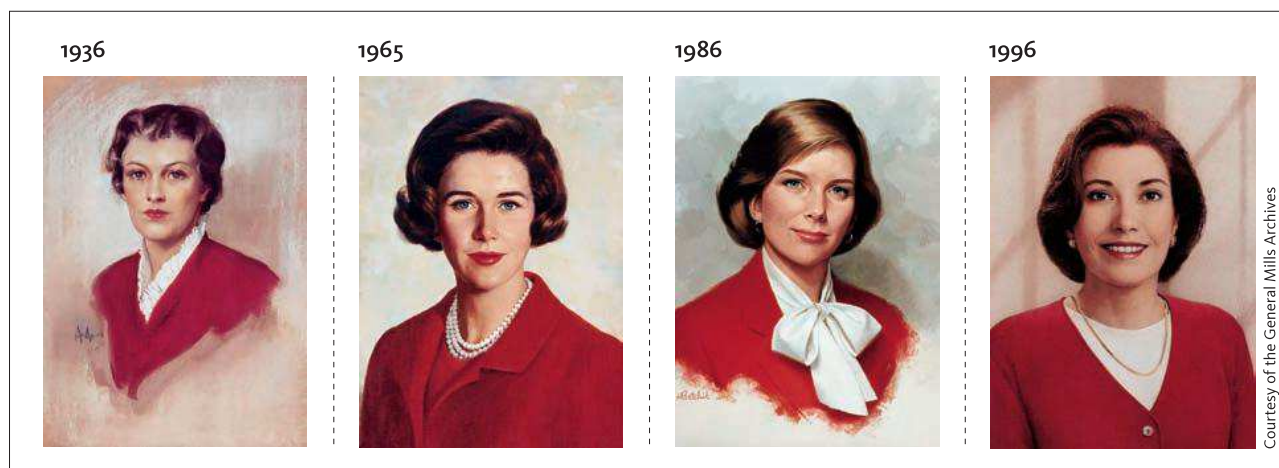
The Just Noticeable Difference

Another important sensory threshold is the ability to detect changes in relative levels of stimuli. The **just noticeable difference (j.n.d.)**, also called the *differential threshold*, is the amount of incremental change required for a person to detect a difference between two similar stimuli. For example, the number of pounds you have to put on before your friends notice you've gained weight is the j.n.d., as is the amount you have to raise your voice in a crowded restaurant until you can be heard by your companions.

In the middle of the nineteenth century, German scientist Ernst Weber found that the magnitude of the j.n.d. between two stimuli was systematically related to the intensity of the first stimulus, rather than some absolute amount. In other words, Weber discovered that the ability to sense a change in stimulus level depends on the original magnitude of that stimulus. The greater or stronger the initial stimulus was, the greater was the amount of change required for it to be noticed. This is known as **Weber's Law**. For instance, consider a product just put on sale. A rule of thumb in retailing maintains that a price should be marked down at least 20 percent for consumers to notice the price change. So, if a grocer marks down a can of pineapple that normally costs \$1.00, the sales price should be \$0.80 cents ($0.80 \times \1.00 or a \$0.20 discount). However, that same \$0.20 discount won't benefit a package of steaks that cost \$10.00; the steaks would have to be marked down to \$8.00 (a \$2.00 discount) to be noticed by consumers.

Consumers' abilities to detect change in stimuli and j.n.d. are critical to marketers, particularly when the goal is to ensure that negative product changes (e.g., increases in price or reductions in product quality) go unnoticed, falling below the j.n.d. Conversely, when positive product changes occur (e.g., sales discounts or updated product features), a marketer wants to ensure that the change is readily apparent, exceeding the j.n.d., without being excessive or wasteful.

Marketers also use j.n.d. in an attempt to increase the profit margin on a product by decreasing the amount of product offered in the package, rather than by increasing the price. Reducing the volume in a product's package reduces the firm's cost per unit. Here, understanding the amount of change that can be made to the product's volume, while remaining below consumers' j.n.d., can generate incremental profits. This practice is called *package-pricing*. It's a way for a company to enact an "invisible" price increase. In recent years, PepsiCo reduced the weight of its snack food bag from 14.5 ounces to 13.5 ounces while keeping the price constant; Dannon reduced the size of its yogurt cup from 8 ounces to 6 ounces—a 25 percent reduction, while only lowering the suggested retail price by 20 percent; Dreyer's and Edy's Grand Ice Cream cut package sizes from 1.89 liters (a half-gallon) to 1.66 liters.⁶



But this tactic is not without risk. When Kimberly-Clark implemented a five percent package reduction while holding prices steady on its Huggies Diapers, rival Procter & Gamble flooded the market with coupons and price promotions on its Pampers and Luvs diaper brands. Consumers often feel cheated if they figure out that a brand has applied package-pricing. Nevertheless, research shows that while consumers prefer a straightforward price increase over reductions in package quantity, if a company can employ package-pricing and effectively fall below the j.n.d., most customers may never notice the change in price.⁷

Marketers also often use j.n.d. estimations to help update existing package designs or brand symbols without losing any brand recognition that has been cultivated through expensive marketing communication. When this is the case, small successive changes are made, each carefully designed to fall below the j.n.d. For example, Tony the Tiger, Betty Crocker, and Colonel Sanders (the Kentucky Fried Chicken Colonel) and Aunt Jemima have been subtly freshened up and modernized over the years.

Of course, sometimes the marketer's goal is to exceed the j.n.d. with package and message changes in order to generate attention and create "buzz." Pepsi has periodically introduced obvious and significant changes to its packaging as part of its marketing campaigns.

Adaptation

Another concept related to sensory thresholds is **adaptation**, the process of becoming desensitized to sensual stimuli. Over time, if a stimulus doesn't change, we adapt or orient to it and notice it less. This is important to marketers because as advertisements and other marketing stimuli become familiar, they are less likely to attract attention. The following conditions can increase adaptation:

- **High Repetition:** When an advertisement is overexposed, it loses the ability to attract attention and interest; this is also known as **advertising wear-out**.
- **Simplicity:** Simple stimuli tend to encourage adaptation because they don't require much cognitive capacity to process. A billboard with no words is easy to comprehend, but may quickly become part of the scenery.
- **Low Intensity:** Soft sounds, faint smells, and dull colors all produce quick adaptation because they require little input from human sensory systems.



HARRODS SNIFFS OUT A NEW WAY TO APPEAL TO CUSTOMERS

Each year, *The Economist* publishes a collection of predictions for the coming year. Recently, the magazine predicted a boom in the business of marketing with scents. Harrods, a premier European retailer, has led this effort by injecting tailored aromas into its stores to try to extend the multi-sensory buying experience for its customers. The scent-marketing tactics were part of larger campaign called the "Senses" promotion, designed to encourage customers to look, touch, smell, taste, and listen more while they shopped.

The luxury retailer, working with The Aroma Company and the Brand sense agency, injected scents into several store areas. Vanilla and chocolate were featured in ladies shoes. The ladies swimwear department sported the scent of coconut oil. Basil and lime scents perfumed store entrances as well as the paper

receipts that customers received after making a purchase (so they took the scents home). The garden living department featured the fragrance of freshly mown grass. In one area, customers were able to sample all 12 different aromas from around the store.



Stone/Getty Images

Harrods' effort follows those of several U.S. retailers, including Macy's, Bloomingdale's, and Saks Fifth Avenue, which all have adopted scent-marketing strategies. **Scent marketing**—associating your brand with a specific smell—supposedly helps brands connect with consumers on an emotional level. The logic behind this assumption is that smell directly enervates the limbic system, which is the part of the brain that controls emotion. According

to the Simon Harrop at the Brand sense agency, the sense of smell is emotionally powerful, affecting humans up to 75 percent more than the other senses.²⁵

Marketers work hard to discourage adaptation. For example, how frequently an ad appears is typically monitored closely to avoid wear-out. In contrast, a marketer may try to increase the intensity of sensory input. Cadillac recently purchased all the ad time for the premier episode of A&E Channel's *Mad Men* to ensure that their message wouldn't get lost in advertising clutter. Additional information about how marketers design messages to rise above the clutter is provided later in the chapter.

Subliminal Perception and Advertising

In a typical college marketing class today, if a professor were to ask how many students believed that subliminal messages are effective in influencing people, the majority would answer in the affirmative.⁸ That's because the public has been fascinated with the topic of subliminal perception for years. The popular press has taken advantage of this interest, perpetuating speculations and inaccuracies about the use of subliminal messaging in marketing. Many people believe in subliminal advertising. One older study reported that approximately 81 percent of the participants had heard of subliminal advertising, and 65 percent believed the practice was successfully used to sell products.⁹ In response to public fears, even though no substantial body of research shows subliminal messaging has any practical behavioral influence on consumers, the practice is banned in Great Britain and Australia and can result in licensure penalties in the United States.

Subliminal perception is the unconscious awareness of a stimulus. Technically, "subliminal" means beneath the absolute threshold (*limen* is another word for threshold). Nevertheless, many subliminal messages are actually *supraliminal*, meaning they fall above the absolute threshold, but are consciously repressed by the recipient. In other words, consumers don't consciously engage these messages; they process them at a subconscious level.

Subliminal advertising has a notorious history. Although the basic terminology and concept of subliminal messaging has been around for more than a century, its close association to advertising emerged in the 1950s, and was brought to the public's attention by James Vicary.¹⁰ In 1957, Vicary conducted a six-week subliminal message experiment in movie theatres in New Jersey during a showing of the movie *Picnic*. He flashed subliminal messages, "Drink Cola-Cola" and "Hungry? Eat Popcorn" during a movie, at 1/3000 of a second—far too quickly to be recognized via conscious awareness. Vicary claimed that popcorn sales increased by 57.7 percent, and Coke sales increased by 18.1 percent as a result of the subliminal embedded message. He coined the term, "subliminal advertising," to describe this form of messaging. His findings launched a flurry of research into subliminal marketing messages, a national debate on the ethics of subliminal messaging, and the perception among many consumers that subliminal messages are commonly (and successfully) employed by marketers. Regrettably, Vicary's results were fabricated to promote his business. After years of other researchers failing to replicate his experiments, Vicary finally admitted that he had done little research and did not have enough data to draw meaningful conclusions.

In the 1970s, Wilson Bryan Key reignited interest the topic.¹¹ His books focused on identifying supposed sexual symbols, pictures, and words embedded in advertising, so-called *subliminal embeds*. He claimed that marketers include the sexually themed subliminal embeds to physically arouse viewers to increase attention and persuasion.



Images courtesy of The Advertising Archives

Subliminal stimuli can be embedded in an image or symbolic, which means that subliminal content is actually visible but repressed by the viewer.

ETHICS



Learn Spanish while you sleep. Just pop in an audiotape or CD before you go to bed; listen to the soothing music as it lulls you to sleep; and

within a few weeks, you will be speaking fluent Spanish. It sounds great, but like so many techniques that promise big results with little effort, subliminal self-help audiotapes are too good to be true. Here's how they claim to work: subliminal material is embedded into audiotapes that play soothing music or nature sounds. As you listen, your subconscious mind processes the subliminal information, resulting in the desired behavioral outcome. The audiotapes typically promise results with just a few weeks of listening. If listening to an audiotape doesn't suit your style, you can now have subliminal text messages flashed at you on your computer screen while you work. A variation on the audiotape theme, these messages work in basically the same way.

Subliminal self-help audiotapes have been around for more than 20 years, and have been used by large numbers of people. Even famous golfer Tiger Woods claims to have listened to subliminal self-help audiotapes as a child. These materials are still strong sellers on the Internet. A simple search of Amazon.com, a popular Web-based bookseller, reveals more than 250 different types of these materials for sale. They promise everything you can imagine, including learning a foreign language, curbing bad behaviors like smoking and overeating, improving self-esteem and self-confidence, curing phobias, and increasing happiness.

Unfortunately, like subliminal advertising techniques, there is no substantial body of credible research that shows that any of these materials yield real results. If a person wants to stop smoking, lose weight, or learn a foreign language, they are better served by doing it the old-fashioned way—through hard work and determination.

In 1989, a lawsuit was filed against the musical group, Judas Priest, for supposedly planting the hidden phrase “Do It” in their song “Better You Than Me.” The subliminal phrase could be heard when the record album was played backward. The parents of two teenage boys brought the lawsuit and alleged that the phrase pushed their suicidal sons to act. The group argued they didn't intentionally place the message on the album and if they had, it should be protected by the First Amendment to the U.S. Constitution, which protects freedom of speech. However, the judge ruled that subliminal messages are not protected by the First Amendment because people can't avoid them, so they constituted an invasion of privacy. But the judge also ruled that actual persuasion via subliminal

messaging had never been proven. As a result, the case was ruled in favor of Judas Priest.

Over the years, companies have tried to profit from the open use of subliminal messaging. The first recognized mass marketing use of subliminal advertising appeared in 1959 when Chevrolet aired a television commercial in which the announcers sang:

“Hey, have you heard about the crazy new way to send a message today?”

It's flashed on a screen too quick to see, but still you get it subliminally . . .

Ladies and gentlemen, the '59 Chevy.

The new car was then flashed on the screen subliminally. In the 1980s, a rash of companies selling self-help subliminal message audio tapes sprang up, promising everything from weight loss to a job promotion. In 2006, Kentucky Fried Chicken planted a hidden coupon in frames of television commercials. These were specifically designed for users of digital video recorders; when the commercials were played frame-by-frame, the coupon was revealed.

Recently, researchers have returned to the subject of the potential influence of subliminal stimuli. Some research has shown that under controlled circumstances, subliminal stimuli can influence attitudes and behaviors (we will return to this research when we discuss automatic information processing later in the text). Still, applications for subliminal messaging in a mass-marketing environment have not been demonstrated because the conditions needed to generate subliminal perception are very difficult to produce outside the laboratory. Unfortunately however, misconceptions about the use of subliminal messaging still persist today. In reality, the majority of marketers do not

intentionally use subliminal messaging because it would be a waste of time and money. So, when subliminal words, symbols, or pictures do appear in marketing communications, they are typically accidental or the work of an unhappy, vindictive employee.

Now that we have examined the physical thresholds of the senses, let's look at two other physical influences on the perceptual process: cognitive limitations related to short-term memory and physical arousal.

OBJECTIVE 4

Physical Influences on Attention

Beyond the physical limitations of our senses, consumers possess limited cognitive capacity and mental resources for information processing, particularly with respect to attention. People are able to attend to and think about only a small amount of information at one time, and attention varies from person to person and from situation to situation. The next section examines two pervasive physical influences on attention: short-term memory limits and physical arousal.

Short-Term Memory

Short-term memory is the part of memory where small bits of information are stored for short periods of time. All information that is actively and consciously considered is processed in short-term memory. This is why short-term memory is sometimes called “*working memory*,” “*active memory*,” or “*conscious awareness*.” Recently received sensory input utilizes short-term memory.

According to famous Harvard psychologist George Miller (1956), people are able to consider approximately five to nine (seven plus/minus two) units of information at one time. This is often referred to as “**Miller’s Rule**.”¹² A unit of information can be very small, such as a single number, letter, or word, or very large, such as a string of numbers, letters, words, or ideas.¹³ It is easy to test Miller’s Rule. Quickly, off the top of your head, recall as many brands of breakfast cereal as you can. How many brands do you recall? For most, the number will fall between five and nine.

Because people can attend to only about seven units of information at a time, it is easy to overwhelm or overload consumers with too much information. For example, a grocery store may carry a dozen or more different brands of laundry detergent. In addition, detergents are often available in large (e.g., 150 ounces), medium (e.g., 100 ounces), and small (e.g., 50 ounces) containers. If 12 brands are available in each of these three sizes, consumers are faced with 36 different alternatives from which to choose. To compare all possible pairs of these 36 alternatives, consumers would have to make over 1,200 comparisons ($36!/(36 - 2)! = 1,260$). Few consumers are willing to commit the time and effort necessary to choose among a set of just 12 alternatives (resulting in $12!/(12 - 2)! = 132$ pairwise comparisons).

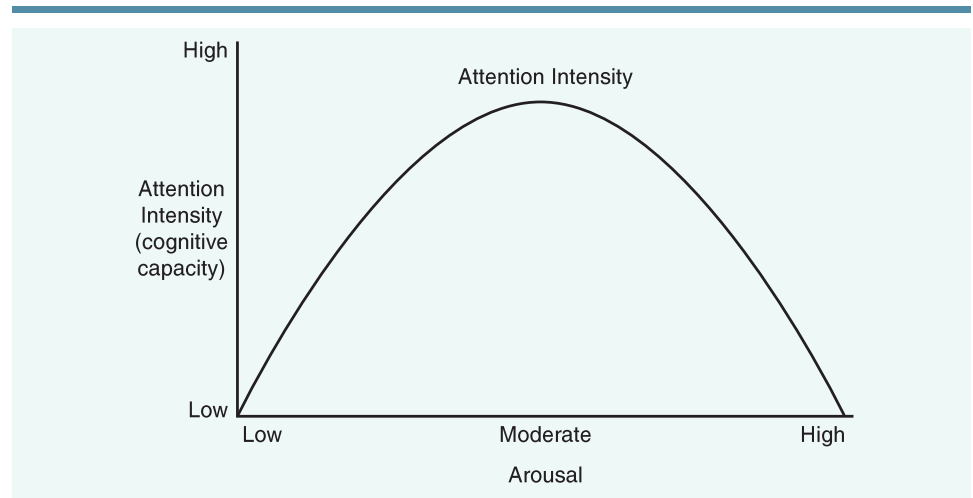
Interestingly, one factor that influences the amount of information people can attend to at one particular moment is prior knowledge or expertise.¹⁴ People who are knowledgeable about a topic are able to attend to more pieces of information, and as knowledge increases, unit size increases. Consequently, compared with novices, experts attend to and think about larger units of information. Ultimately, this processing advantage enables experts to solve problems more effectively and efficiently compared to novices.

Arousal

Arousal, a state of physical wakefulness or alertness, also influences consumers' attention.¹⁵ When arousal is extremely low, people are asleep. The level of wakefulness or alertness people experience during the normal course of a day is moderate. Viewing exciting events like action movies, rock concerts, basketball games, and football games (and, yes, even stimulating lectures) produce high levels of arousal. Consumption of caffeine products (e.g., coffee, tea, cola, energy drinks), as well as exposure to loud noises, flashing lights, and unexpected events, also produces high levels of arousal. Similarly, physical exertion from roller coaster rides, sports activities, and aerobic exercise produces high arousal.

An inverted-U-shaped relationship exists between arousal and consumers' ability to attend to information. Consumers' ability to pay attention to information is low when arousal is extreme (low or high). When arousal is too low, the amount of cognitive capacity and mental resources available for information processing is also low. It is difficult to attend to much information when people are tired, drowsy, or completely disinterested. Surprisingly, when arousal is high, cognitive capacity is also low. Under conditions of high arousal, consumers are over stimulated, and this arousal competes with their ability to attend to large amounts of information. On the other hand, when consumers are moderately aroused, they are alert but not over stimulated, freeing up cognitive capacity which can be used to attend to information (see Figure 3.2).

FIGURE 3.2 THE RELATIONSHIP BETWEEN ATTENTION AND PHYSICAL AROUSAL



Consider the results of an interesting field experiment on attention and memory for television commercials aired during the Super Bowl.¹⁶ Fans from the two cities represented in the Super Bowl were highly aroused and over stimulated, and as a consequence, attention and memory for the television commercials aired during the game were poor. In contrast, viewers from other cities across the country were only moderately aroused, and these viewers exhibited much better attention and memory for the same television commercials. Under moderate levels of arousal, attention and memory are at their best.

Voluntary and Involuntary Selective Attention

Consumers are exposed to so much marketplace information that they cannot possibly process and think about each and every product-related piece of data they encounter. If consumers had to think carefully about every ad, each package label, and every marketing communication they saw or heard, little time would be left for anything else. According to famous researcher Daniel Kahneman, the allocation of attention is influenced by both voluntary and involuntary factors.¹⁷ People voluntarily attend to information consistent with their current knowledge and expertise and to information relevant to their plans, intentions, and goals. Specifically, we manage our perceptual exposure by focusing our attention to things in the environment that are meaningful and appealing. For example, people who dislike country music avoid tuning in to country-music radio stations. Likewise, consumers shopping for new laptops purposefully seek out marketing information about computers.

One real concern for marketers today is how to win the battle for broadcast advertising exposure in this age of the remote control. With the growing popularity of digital video recorders (DVRs), consumers can mute, fast-forward, and skip over commercials entirely. Some advertisers are trying to adapt to these technologies, similarly to the Kentucky Fried Chicken coupon example described earlier. Other practitioners are trying to make their advertisements more interesting and entertaining to discourage viewers from zapping past ads; still others are simply opting out of television advertising altogether. Some industry experts speculate that eventually cable providers and advertisers will be forced to provide incentives to encourage consumers to watch their messages. These incentives may come in the form of coupons, patronage rewards, or in extreme cases, a reduction in the cable bill for each ad watched.

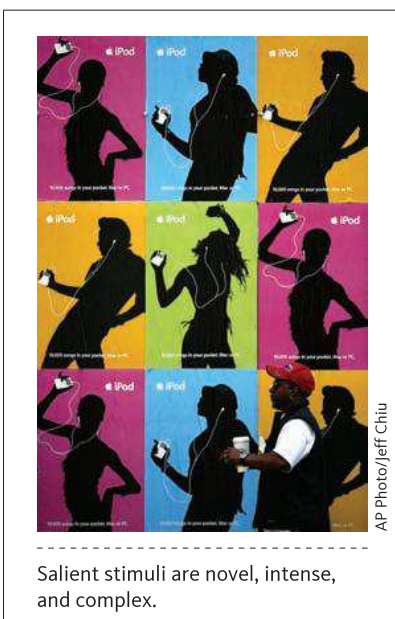
Involuntary influences on attention are rooted in the very nature of the stimuli. Some marketing stimuli draw so much attention, they are difficult to tune out, even when consumers make a concerted attempt to ignore them. A clear understanding of these involuntary influences enables marketers to more effectively design and implement marketing strategies. Let's take a closer look at these influences.

OBJECTIVE 5

Salient Stimuli

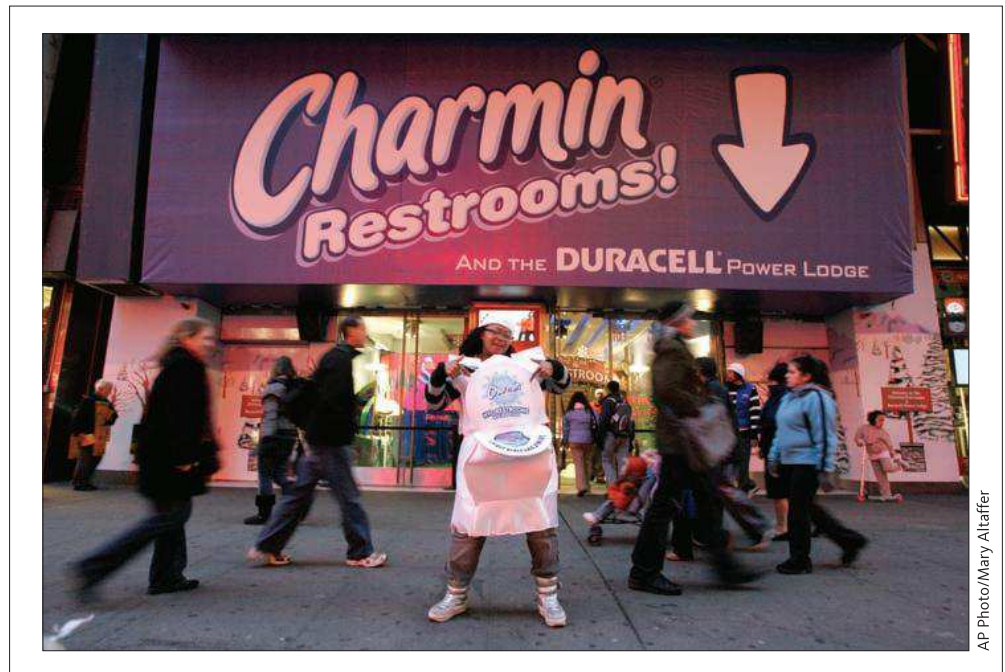
Salient stimuli draw consumers' attention involuntarily.¹⁸ Some products, packages, and ads just "stick out" because they are different and interesting. For example, Rolls Royce is notably different from other types of automobiles; as a consequence, the brand stands out on the road. Pringles potato chips come in tall, cylindrical packages that are distinguishable from typical potato chip bags. Consequently, Pringles potato chip packages are conspicuous on grocery store shelves.

However, salience depends on context. In other words, stimuli that stand out in one context or situation may not stand out in another. For example, while a Rolls Royce automobile might be quite noticeable driving through most typical American college campuses, it would not be very salient in the parking lot of an exclusive country club in Beverly Hills, California, whose members all drive luxury automobiles. Stimuli are salient only when they are very different from other stimuli in a specific context. From a perception perspective, when a stimulus is salient, it is figural or focal, and everything else fades into the background. This is known as the **figure-ground principle** of perception. Marketers create salience through novelty, intensity, and complexity.



NOVELTY A novel stimulus is one that is new, original, different, or unexpected. Sometimes the product itself is novel. Procter & Gamble is now offering flavor cartridges, called Pur Flavor Options, for the Pur Water Filtration System. Sunseeds are roasted sunflower seeds that are energized with caffeine.

Placing marketing messages in unexpected places also increases novelty. Charmin Toilet Tissue has opened a Charmin-themed public restroom in Times Square in New York. Other unexpected advertising venues are on eggs, airsickness bags, airplane tray tables, the sides of straws, and embedded in candy.¹⁹



AP Photo/Mary Altaffer

Advertisers constantly experiment with novel advertising and promotional executions. New characters, themes, and scenarios are constantly under development. For example, the Apple versus PC television commercials initially were novel, amusing, and attention-generating. They featured two actors playing the roles of an Apple brand computer and a PC, bantering about the flaws of the PC in humorous ways. Apple Computer Co.'s advertising agency was able to sustain the novelty for an extended period of time by developing many different variations on the theme.²⁰ One version of the ad showed the PC ill with a virus, while another version showed Apple giving PC a photo album for a gift. The ad campaign's novelty would have waned much more quickly if numerous variations of the theme had not been employed.

INTENSITY The intensity of a stimulus, such as its loudness, brightness, or length, affects salience, and in turn, induces attention. Intensity can be influenced through several stimulus characteristics, including size, volume, color/brightness, odor, length, and position. Larger print ads, longer radio and television ads, and bigger retail displays tend to be more intense. Ever notice that sometimes a television ad is louder than the show you're watching? Bright colors are exciting, and warm colors (e.g., red, yellow, and brown) are more arousing than cool colors (e.g., blue, green, and grey). *Position* is the place an object occupies in space or time. A stimulus that is easy to see is more likely to be noticed,



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which is why suppliers jockey for the eye-level shelf or the displays at the end of aisles in stores. In magazines, ads placed either on the front or back covers or near the front of the magazine on the right hand page are more likely to be noticed than their counterparts.

While more intense stimuli generally draw more attention, the goal is to generate a level of intensity that results in that product or message standing out from surrounding stimuli. Thus, having a silent television ad among a series of loud ones or using a black and white print ad in a colorful magazine can also create intensity based on simple contrast.

COMPLEXITY Stimuli that require substantial cognitive processing or that challenge consumers to make sense of them can be intriguing and draw attention. Dynamic stimuli—with constant change and movement—can be perceived as different and salient. Spokespersons in television commercials typically move or walk while they talk because presentations delivered by stationary speakers are much less engaging. Moving signs, like the famous Las Vegas cowboy sign with the arm that moves up and down, also draw more attention than stationary signs. Neon signs often display letters that light up one at a time and appear to move. Such stimuli are difficult to ignore.

Two perceptual concepts also related to complexity are closure and grouping. **Closure** is the tendency for

a person to perceive an incomplete picture as complete, either consciously or subconsciously. People like to fill in missing pieces when a puzzle is incomplete (see Figure 3.3). Incomplete messages from marketers beg for completion, thus drawing the perceiver in, and messages where closure is required tend to elicit strong recall.

FIGURE 3.3 CLOSURE: THERE ARE NO COMPLETE SHAPES, BUT WE FILL IN THE MISSING PIECES.



Grouping is the tendency to arrange stimuli together to form well-organized units. Thus, objects viewed in close proximity tend to be grouped together, as do stimuli that move in the same direction together. Marketers can use grouping to create positive associations for their brands. For instance, placing an attractive, well-liked celebrity endorser in an advertisement with the brand can create a positive association to that brand. If marketers want an audience to associate the product with the presenter, they should place them close together; if marketers want consumers to perceive two ideas as associated, they should present them in close proximity.

Both closure and grouping help provide salient attention-drawing stimuli. Next, we examine another attribute of stimuli that draws attention involuntarily—vividness.

Vividness

Vivid stimuli, like salient stimuli, draw attention automatically and involuntarily.²¹ However, unlike salient stimuli, vivid stimuli are attention-drawing across *all* contexts. Because vividness is context independent, it does not matter what other stimuli are present in a given situation. Vivid stimuli are:

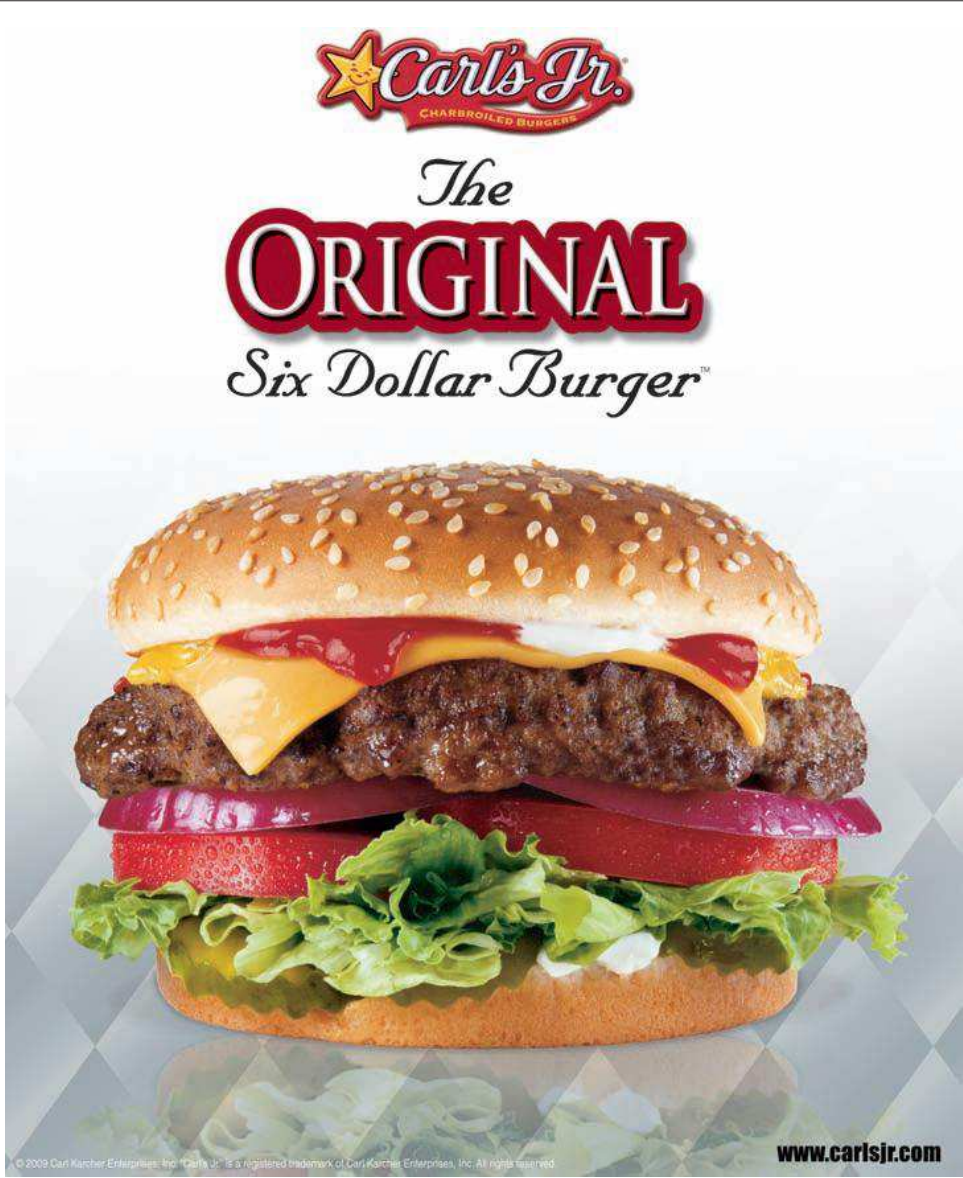
- emotionally interesting
- concrete and imagery provoking
- proximate in a sensory, temporal, or spatial way²²

Let's examine more closely these characteristics of vivid stimuli.

EMOTIONAL INTEREST Consumers' goals, hobbies, and interests determine what information is emotionally interesting and vivid. Stimuli that are interesting to one person may not be interesting to another, but a stimulus that is emotionally interesting tends to get noticed. Stamp collectors find stamps incredibly fascinating. They spend hours studying their collections, examining watermarks, postmarks, and even perforations. Stamp collectors have been known to dream about stamps and see stamps when looking at plaid shirts (the plaid squares turn into stamps). To these individuals, stamps are very vivid and emotionally interesting. By contrast, people who are not stamp collectors find stamps hopelessly boring.

Although both salient and vivid stimuli draw attention involuntarily, what is salient in one situation may not be salient in another, and what is vivid to one person may not be vivid to another. Salient stimuli capture the attention of all of the people some of the time, while vivid stimuli grab the attention of some of the people all of the time. Unfortunately, marketers can't make their products interesting to everyone, just like stamp collectors can't make stamps interesting to everyone. Emotional interest is but one factor that influences the vividness of a product, ad, promotion, or package. Vividness is also affected by concreteness and proximity.

CONCRETENESS Concrete information is specific, easy to picture, imagine, and visualize, versus abstract information, which is conceptual or theoretical. For instance, the taste of a hot, juicy hamburger is more concrete than a picture of the hamburger, but the picture is more concrete than a written description. Research demonstrates that making product attributes more concrete in a marketing message increases the amount of attention paid to the attribute and subsequently increases the perceived importance of the attribute.²³



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Marketers try to make their advertisements as concrete, and thus vivid, as possible.

Face-to-face communications are typically more concrete and vivid than written communications, an important advantage of a field-based sales force. One research study investigated the effects of face-to-face versus written messages on judgment by presenting subjects with a description of a new personal computer.²⁴ The exact wording of the description was held constant. However, the description was presented either in a face-to-face format or in a written format. Even though the words presented in each situation were exactly the same, the face-to-face message had a much stronger impact on subjects' evaluations of the described product. However, results also showed that the vividness effect is weaker when subjects had a strong prior opinion about the described product and when a lot of negative information is available. When a product

is described with many negative descriptions, strongly negative opinions are formed regardless of whether information is presented in a vivid or pallid manner.

PROXIMITY Information that is proximal, or close to a consumer, is more vivid and has more impact than information that is distant or not immediately relevant. Three different kinds of proximities are important: sensory, temporal, and spatial. *Sensory proximity* refers to firsthand (proximal) versus secondhand (distant) information. Information that is perceived by consumers' own eyes and ears is more vivid than information perceived and relayed by another person. When consumers see for themselves that a product works, they are more convincing than if they receive secondhand, hearsay evidence. This is one reason marketers encourage consumers to sample products. *Temporal proximity* refers to how recently an event occurred. Events that occurred recently are much more vivid and draw more attention compared with events that occurred a long time ago. People are much more aware of and concerned about the awful flight they had the last time they flew on a particular airline than about the great flight they had five years ago. Finally, *spatial proximity* refers to the location of events. Events that occur near consumers' homes are much more vivid than events that occur far away in other countries.

To summarize, information can be made more vivid and draw more attention in many different ways. Vividness can be increased by making information more emotionally interesting, more concrete, or more proximal to the consumer. Obviously, information that grabs our attention has a stronger influence on judgment and choice relative to information that is virtually ignored.

Chapter Summary

This chapter looks at perception, the process through which we define the world and create meaning from our environment. Broken down, the perceptual process includes sensory exposure, attention, and comprehension. The process first relies on physical senses, such as sight, sound, smell, touch, and taste, to take in stimuli. Through attention and comprehension, those sensations are processed into meaningful and useful information and knowledge.

Not all stimuli to which consumers are exposed receive attention. People pay attention to a fraction of the stimuli to which they are exposed. In other words, attention is highly selective, and there are important limits and influences on attention and the perceptual process. The first of these influences deals with the thresholds of our sensory systems, including the absolute threshold, the just-noticeable-difference (j.n.d), and adaptation. Subliminal perception, the unconscious perception of stimuli, is an interesting topic related to these sensory thresholds.

Beyond the physical limitations of the senses, people also have limited cognitive capacity to devote to attention.

Because of short-term memory limitations, people are able to attend to and think about a relatively small amount of information at a time, usually between five and nine pieces of information. This ability varies from person to person and from situation to situation.

Finally, the allocation of attention is also voluntarily influenced by factors unique to each individual. Consumers voluntarily pay attention to stimuli consistent with their existing knowledge and expertise and their plans, intentions and goals. People involuntarily pay attention to stimuli that salient and/or vivid. Stimuli that are salient draw attention involuntarily but are context dependent. Novel, intense, and complex stimuli tend to be salient. Vivid stimuli are emotionally interesting, concrete, and proximal, and these stimuli are vivid, regardless of the physical context. Combined, the influences on attention and perception are pervasive, but these influences help us to function in an environment of information overload.