

# PRODUCT CONSIDERATION, EVALUATION, AND CHOICE

## CHAPTER

# 10

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

- 1 Explain the stages of consumer choice.
- 2 Describe several marketing techniques for influencing consumers' consideration sets.
- 3 Define stimulus-based, memory-based, and mixed choice.
- 4 Explain the MODE model.
- 5 Explain how many different heuristics or shortcuts are used to simplify prediction and choice.



## Walmart

Walmart is the largest retailer in the world, with over \$400 billion in sales per year.<sup>1</sup> Walmart's famous "everyday low prices" appeal to consumers, and has enabled Walmart to become the largest buyer of products from Disney, Gillette, Kellogg's, Mattel, Procter & Gamble, and others. Some argue that Walmart is too powerful, and that it destroys communities, small businesses, and even previously successful manufacturers such as Rubbermaid and Vlassic. Walmart's rise to power reflects recent trends of significant increases in power in the channel of distribution for retailers and decreases in power for manufacturers.

A 2012 study of the influence of Walmart on manufacturers' profits conducted over a five-year period shows that Walmart increases manufacturers' profits by an average of 18%. Although low prices reduce manufacturers' profits, this reduction is offset by the increase in sales due to market expansion. Hence, Walmart's policies are not as harmful to



manufacturers as many people believe. Walmart attracts a lot of consumers manufacturers would have difficulty reaching otherwise. Furthermore, Walmart shapes many consumers' consideration sets, or sets of brands consumers would seriously think about purchasing. Brands carried by Walmart are likely to be included in Walmart shoppers' consideration sets, and brands not carried by Walmart are unlikely to be included in Walmart shoppers' consideration sets. This chapter focuses on consideration sets and basic consumer choice processes.

OBJECTIVE

1

## The Consideration Set: Determining Choice Alternatives

Before a person can make a purchase, or even make evaluations of various alternative brands, they generate a set of brands to consider and evaluate—even if it's just one. A **consideration set** is the group of brands that consumers think about buying when they need to make a purchase.<sup>2</sup> The brands included in the consideration set can come from the *evoked set* of brands, from brands discovered during external information search, and from point-of-purchase. This is discussed further when we examine consumer choice later in the chapter.

Because consumers can't select a brand unless it is included in their consideration sets, the first job of a marketer is to encourage the consumer to consider buying his or her brand. This is often difficult because the consideration set for many products is quite small. Although consideration set size can range from one (a very brand-loyal customer may consider only one brand) to as many brands as are available in the market—dozens or even hundreds for some products—consumers rarely consider more than seven brands (see Figure 10.1). Aside from the fact that consumers just don't have the time or the desire in many cases (given the limited utility of evaluating 15 different brands of toilet paper, for instance) to carefully consider dozens of brands, limited information processing capacity also prevents people from considering more than Miller's magic number of seven plus or minus two.<sup>3</sup> Although there are always exceptions to every rule, this tendency to have small consideration sets exists across product categories, from toothpaste and breakfast cereal to cars and computers.

Because people consider so few brands, marketers have to be creative in order to encourage consumers to consider their brands over competitors' offerings. One way marketers get consumers to consider brands is by drawing attention to the brand and making it memorable. When a marketer uses the principles of attention, learning, and memory to increase the likelihood that a brand is included in a consumer's consideration set, the marketer is one step closer to a potential sale.

**FIGURE 10.1** | Consideration Sets



SOURCE: Kardes, F. (1997). *Consumer Behavior and Managerial Decision Making*. Upper Saddle River, NJ: Prentice Hall.

Ensuring that a brand is simply included in consumers' consideration sets is an important first step to influencing brand evaluation and ultimate choice, but how many and what other brands are also included in the consideration set are also important factors. As the number of brands in the consumer's consideration set increases, the likelihood of a brand being chosen decreases. Thus, the next step should be to control the number of competitors' brands in the consideration set. Three techniques for influencing consumers' consideration sets are part-list cuing, the attraction effect, and the compromise effect.

## OBJECTIVE 2 Influencing the Consideration Set

**Part-List Cuing** One way marketers influence the consideration set is to decrease its overall size while at the same time maintaining their brand presence in the set. Marketers can reduce the number of brands considered for a purchase through **part-list cuing**, which involves presenting the names of just some brands when consumers are trying to recall as many brands as possible.<sup>4</sup> This technique is designed to make some brands more prominent than others by using a competitive advertisement or by listing the names of only a few competing brands in a promotional campaign or selling situation. As the partial list of brands becomes more conspicuous and more strongly connected with the product category, it becomes more difficult for the consumer to think of

other brands. For example, let's imagine that a consumer wants to purchase a new car. The consumer knows she wants a small, sporty car, but she doesn't know what brand of car she wants, and she knows that at least a dozen brands in the market fit her general purchase criteria. The consumer heads to a nearby new car dealer to "browse around." Of course, a salesperson quickly approaches her. After a few minutes of discussing the features available in a new car, the sales associate directs the consumer to a brand model that best fits her needs. The salesperson may then proceed to compare his brand to one or two other brands in the market. Of course, the salesperson will likely focus on competing brands that are inferior in some way to his brand. As the consumer focuses on these three brands—the one on the lot and the other two mentioned by the salesperson—it becomes more difficult for her to recall other brands that might also fit her needs. Suddenly, her consideration set has been reduced to three brands. The comparative advertisement for ID Patrol on page 271 works in a similar fashion. The ad tries to create a consideration set of just four, one in which ID Patrol is the only brand to offer all five, key attributes.

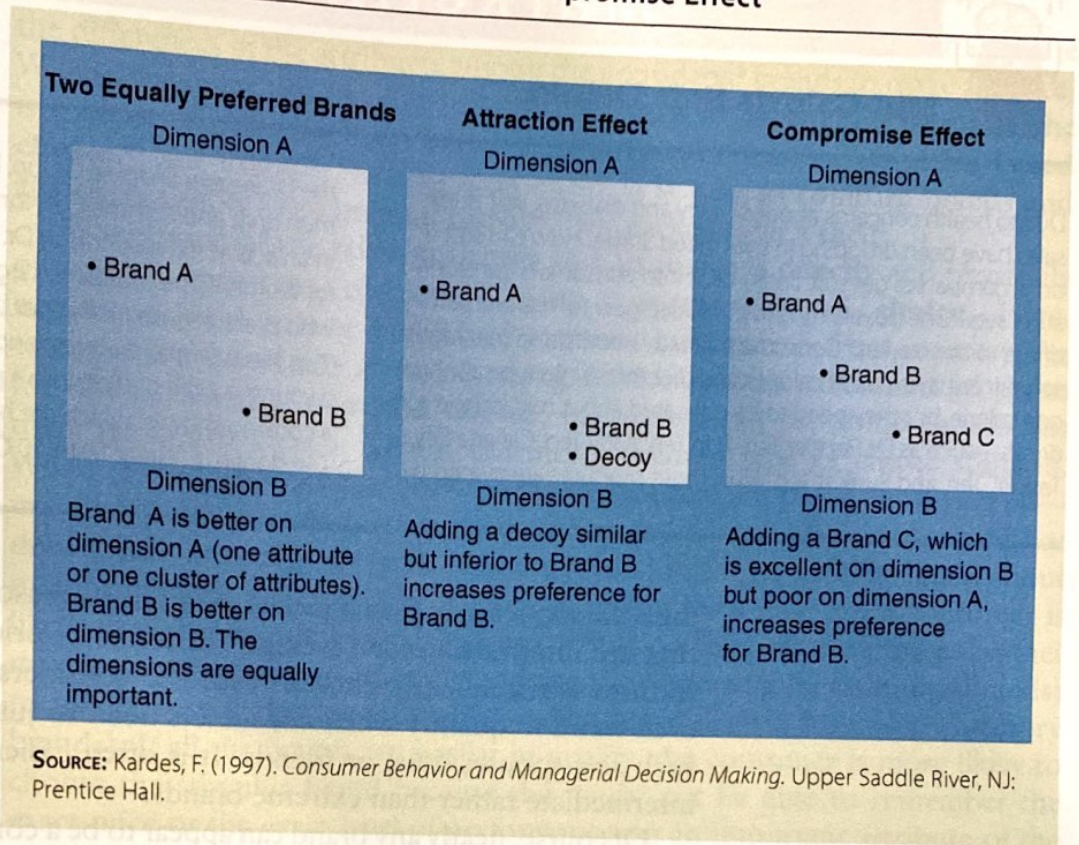
The part-list cuing effect is important because it can help consumers quickly and efficiently come to a decision, plus it can also lead them to focus on some brands while ignoring others that are potentially better. As a result, consumers may make choices they later regret.<sup>5</sup>

**The Attraction Effect** Marketers also attempt to influence which specific brands consumers are likely to compare and evaluate. A target brand seems more attractive when it is compared to inferior brands and less attractive when compared to superior brands. This is called the **attraction effect**.<sup>6</sup> Marketers want consumers to compare their brands to inferior brands—remember the car salesperson? Again, this can be done in a selling situation or by using comparative advertising and promotion that show the target brand as superior to other brands on some dimension. Alternatively, the attraction effect can unintentionally occur when a firm has multiple brands in its product line (see Figure 10.2).

For example, Williams-Sonoma sold a home bread-baking machine for \$275 and at first, sales were poor. Later, Williams-Sonoma added a much more expensive home bread-baking machine to its product line. When consumers compared the \$275 machine to the much more expensive machine, the \$275 machine seemed very attractive because of the price, and sales of this machine almost doubled! This occurred because \$275 seemed like a more reasonable price when it was compared to an even higher price, and consumers like to save money.

**The Compromise Effect** Another way to improve the evaluation of a particular brand is to make the brand appear as an average (or a good compromise) brand against other brands in the consideration set. A compromise brand seems average on all important attributes or features. While other brands often have some really good and some really bad features, a compromise brand appears to not have any very bad features and is at least acceptable on all features. Thus, a compromise brand seems like a safe choice. This **compromise effect**, or the increased probability of buying a compromise brand, is especially likely to occur when consumers are concerned about making a bad decision (see Figure 10.2).<sup>7</sup> For example, consider a consumer who wants to purchase a camera and is deciding between an inexpensive model and a moderately priced model. If a third camera, a high-priced model, is added to the consideration set,

**FIGURE 10.2** | The Attraction Effect and the Compromise Effect



**ID Patrol™ — new from Equifax.**

**Our whole team behind you and your identity. Count on ID Patrol. Only from Equifax.**



COMPARE FEATURES	*EQUIFAX	*TrueCredit™ by TransUnion®	*Experian®	*LifeLock®
Credit File Monitoring	✓	✓	✓	✗
Credit File Lock	✓	✓	✗	✗
Internet Scanning	✓	✗	✗	✓
ID Theft Resolution Specialist	✓	✗	✗	✓
Fraud Alert	FREE†	FREE†	FREE†	✓

\*Comparisons are based on the following products: Equifax ID Patrol™; Experian's Triple Advantage™ credit monitoring, TrueCredit by TransUnion 3-Bureau Credit Monitoring, and LifeLock. †The ability to place an initial 90-day fraud alert on your credit file is not a part of the above product, but is available for free from the national credit reporting agency affiliate of each company if you believe that you are a victim of identity theft. Once you place an alert on your credit file with one of the national credit reporting agencies, your alert request will automatically be forwarded to the other two so you don't need to contact each of them separately. All marks, service marks, and trademarks are the property of their respective owners.

When comparing their products to their competitors' products, marketers often use the attraction effect to make their product seem more desirable than the others.

AP Images/PRNewswire/Equifax, Inc.



## Marketing in Action

### Mid-Calorie Soft Drinks

Due to health concerns about obesity and diabetes, soft drink sales have been dropping in the United States. How can soft drink companies get soft drinks back into consumers' consideration sets? One possibility is to introduce new ten-calorie soft drinks to the market.<sup>8</sup> Consumers already understand that regular soft drinks have a lot of calories and diet soft drinks typically have one calorie, but they need to be educated about mid-calorie soft drinks—such as Dr. Pepper Ten, 7Up Ten, A&W Ten, Canada Dry Ten, RC Ten, and Sunkist Ten. All of these products are owned by

the Dr. Pepper Snapple Group. Dr. Pepper Ten is positioned for men only, and commercials for this product show a rugged man in an action movie drinking Dr. Pepper Ten. The slogan is: "It's Not for Women." The product is targeted at 25- to 34 year-old men who prefer regular Dr. Pepper but want to cut down on calories. 7Up Ten is targeted at men and women, and a recent ad shows a young couple getting into a pink monster truck and watching a cooking show in which the host is tackled by a football player. The slogan is: "Great Taste, 10 Calories, Get Both."

then the moderately priced model seems like a reasonable compromise. Brands that are intermediate or "average" in terms of price, quality, and number of features are frequently chosen from the consideration set. They are chosen even more frequently when consumers need to justify their choice to others, such as a spouse, boss, or friends. It is often easier to justify the purchase of intermediate rather than extreme brands.

Of course, nearly any brand can appear to be a compromise brand depending on the brands to which it is compared. Advertising and promotion campaigns that encourage consumers to compare a seemingly average brand to more extreme brands increase the influence of the compromise effect.

The choices that consumers make follow their evaluations and judgments of the brands in their considerations sets (see Figure 10.1). Now that we have examined how consumers establish consideration sets and how marketers attempt to influence brand evaluations within these considerations sets, we turn our attention to the desired outcome of the consumer decision-making process: *consumer choice*.

### Constructing Evaluations to Make Choices

Consumer choice involves selecting one product or brand from a set of possibilities. Marketers who want to influence consumers must understand three critical issues:

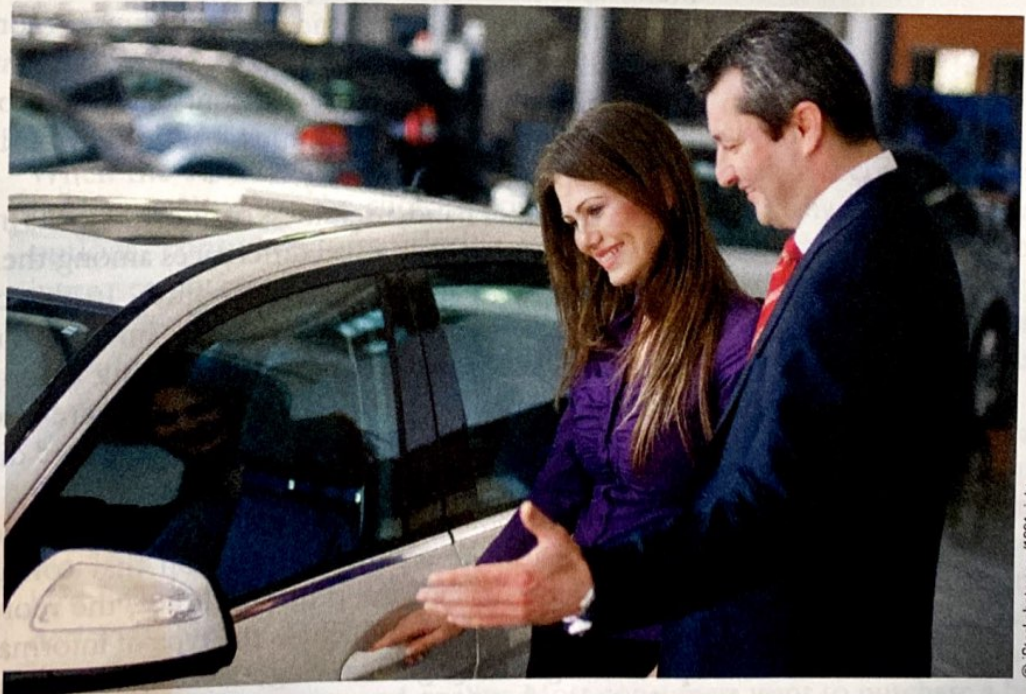
1. The brands in the consideration set
2. The types of information used to detect and evaluate the differences among the considered alternatives
3. How this information is ultimately used in the choice process<sup>9</sup>

The first point has already been discussed. The other two issues are discussed throughout the rest of the chapter. First, three types of consumer choice based on the physical presence or absence of the brand during choice are reviewed: stimulus-based, memory-based, and mixed choice.

**OBJECTIVE 3****Stimulus-Based, Memory-Based, and Mixed Choice**

After the consideration set has been determined, consumers need to evaluate the differences in the attributes among the considered brands to make a choice. When consumers can directly and physically observe all relevant brands in the consideration set and their brand attributes, they make a **stimulus-based choice**.<sup>10</sup> For example, in a grocery store, it is easy to compare brands and attributes simply by examining the different packages on a shelf.

When none of the relevant brands and attributes is directly and physically observable, however, consumers make a **memory-based choice**. Here, consumers must retrieve brand and attribute information from memory. An example is a consumer at home trying to decide what restaurant to go to for dinner. Finally, in **mixed choice**, consumers can see some brands but must remember others. This is the most common type of choice scenario. When this occurs, *stimulus brands*—the brands that are physically observed—usually have an advantage over *memory brands*—the brands not observed but drawn from memory—because consumers tend to forget specific details about memory brands.<sup>11</sup> For example, when shopping for a new car, a consumer is likely to visit an automobile dealership. While on the premises, the consumer may attempt to compare model brands on the dealership lot (stimulus brands) to model brands that she examined earlier at a different dealership (memory brands). If all the brands are similar in quality, the consumer is more likely to choose the stimulus brand because she might not be able to remember the exact price or the exact level of performance on an important attribute of the memory brands.



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Car shopping typically involves a mixed choice situation.

Although consumers usually choose stimulus brands over memory brands, marketers can reverse this effect when memory brands have a very large number of favorable attributes. Consumers are likely to remember that these brands are very good even if they can't remember specific details about the brands.<sup>12</sup> “Puffery”

or exaggerated advertising claims about a memory brand such as, "This brand is rated number 1 in its class," can also increase the likelihood that consumers will choose it. Thus, stimulus brands are preferred over memory brands except in special cases where memory brands seem too good to be ignored.

Now that we have looked at the differences in stimulus versus memory brands, let's examine some common ways consumers evaluate brand information and how the amount of effort expended on the decision-making process influences choice.

### Attitude versus Attribute-Based Choice

Sometimes, consumers make choices based on general impressions about a brand and sometimes on specific brand attribute information. In **attitude-based choice**, they form overall evaluations and general impressions of brands in the consideration set based on a combination of everything they know about all the brands, and then select the one with the highest evaluation. Formally, an *attitude* is an evaluative judgment that a person forms of people, objects, and issues. In contrast to attitude-based choice, when consumers make **attribute-based choices**, they compare the specific attributes or features of each brand and select the one that performs best on key attributes.

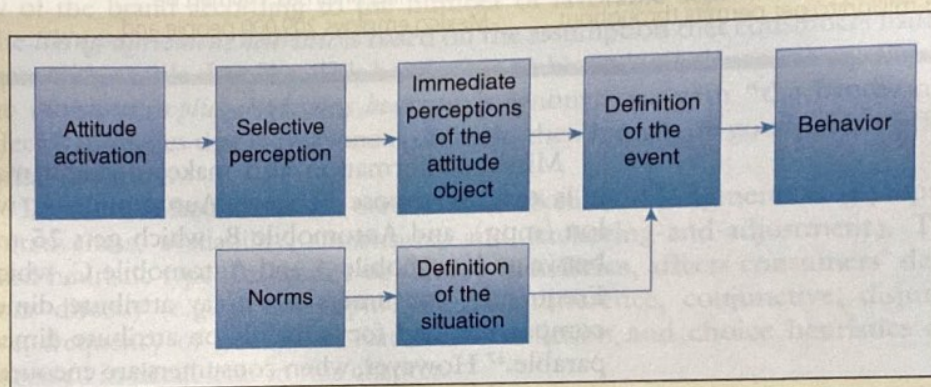
When do consumers use attitude-based versus attribute-based choice strategies? One determinant is *accessibility*, or ease of retrieving either attitude or attribute information from memory. Research shows that, when drawing information from memory, a person usually finds it easier to use attitude-based choice because attitudes are easier to retrieve from memory than are specific brand attributes.<sup>13</sup> For example, it is easier for consumers to recall that they generally like the Skippy brand of peanut butter more than Jif than it is to recall attributes of both brands (e.g., price, nutty taste, smoothness) and individual preferences for each attribute. Of course, attitude-based choice can occur only if the attitudes exist; a person must have a previously formed attitude toward a brand to pull it from memory.

On the other hand, usefulness of information is important too. When brands are very similar overall, small differences among them are easier to detect when comparing them along specific attributes. In this case, attribute-based choice may be preferable because the attribute information is more *diagnostic*, which means it is more relevant for distinguishing among brands. Therefore, while attitudes are often more *accessible*, attributes are often more *diagnostic*. In general, the information that is most accessible *and* diagnostic is the information that is used in a consumer's choice decision.

The accessibility and diagnosticity of information are not the only factors that influence the type of information that consumers use in their choices. The more important the product choice, the more consumers want to think about it, and this too influences the type of information they use. For example, purchasing an engagement ring, selecting a university, or even choosing a new cologne are probably more important than purchasing a bottle of ketchup or selecting a movie rental. According to a theory called the **MODE model**, **Motivation and Opportunity to deliberate** are key **DEterminants** of the processes that influence consumer choice.<sup>14</sup> Motivation is high when the decision is more personally relevant (motivation is synonymous with high involvement).

Opportunity is high when people can take time and have the ability to think carefully and to deliberate about the decision. When both motivation and opportunity are high, consumers are likely to deliberate about the decision. This careful deliberation is more consistent with attribute-based choice because brands are carefully evaluated along every relevant product attribute. Recall that small differences among brands are easier to detect when comparing them along specific attributes, and even small differences between brands may be crucial when the purchase choice is very important. If either motivation or opportunity is low, attitude-based choice is more likely. See Figure 10.3.

**FIGURE 10.3** | The MODE Model



**SOURCE:** Reprinted from *Advances in Experimental Social Psychology*, M. P. Zanna (Ed.), Vol. 23, Fazio, R. H., Multiple Processes by which Attitudes Guide Behavior: The MODE Model as an Integrative Framework, pages 75–109, Copyright 1990, with permission from Elsevier.

**Choice Deferral** Choice deferral refers to the decision to choose nothing. When the choice decision becomes too difficult because there are too many options or because the choice decision requires too many trade-offs among options, consumers often decide to choose nothing.<sup>15</sup> Decision difficulty increases uncertainty, and uncertainty encourages consumers to decide not to decide. This is bad news for marketers, because marketers do not want consumers to go home empty-handed. Hence, it is important for marketers to understand the factors that influence choice deferral.

Uncertainty appears to be one of the most important factors because uncertainty encourages consumers to postpone decision making, search for additional information before making a decision, or ask someone else to make the decision—someone like a spouse or an advisor. For example, many people hire financial advisors so they do not need to think about difficult financial decisions. Similarly, many consumers buy *Consumer Reports*' "Best Buys" so they do not need to make difficult trade-offs among attributes, such as the trade-off between price and quality. Most consumers want to purchase a high-quality brand, but they do not want to pay too much. How much would you be willing to pay for a 10% increase in quality? This is a common but difficult trade-off that consumers must deal with frequently. *Consumer Reports* helps consumers avoid making this trade-off by labeling some brands as "Best Buys."



## Walmart de Mexico

Walmart de Mexico is Walmart's largest foreign subsidiary.<sup>16</sup> A former Walmart de Mexico executive recently revealed that

his company paid bribes in excess of \$23 million to get permits throughout

Mexico. Specifically, the bribes paid for zoning approvals, reduced environmental protection fees, and support from neighborhood leaders. He gave precise details regarding names, dates, and bribe amounts. Furthermore, Walmart de Mexico's top executives knew about the bribes and attempted to conceal this information from Walmart headquarters in Bentonville, Arkansas. Walmart de Mexico employs 209,000 people and

is Mexico's largest private employer. Walmart headquarters in Bentonville is currently attempting to strengthen compliance with the Foreign Corrupt Practices Act in Mexico. Some argue that Walmart should adopt the highest possible ethical standards. Others argue that Mexico, not the United States, should investigate Walmart's practices in Mexico. What do you think?

Missing information also makes decision making difficult. For example, it is easy to choose between Automobile A, which gets 35 miles per gallon (mpg), and Automobile B, which gets 25 mpg. But how do you choose between Automobile A and Automobile C, which has unknown gas mileage? Frequently, consumers downplay attribute dimensions that are not directly comparable, and focus mainly on attribute dimensions that are directly comparable.<sup>17</sup> However, when consumers are encouraged to form inferences about the possible values of missing attributes, uncertainty decreases, and consumers are more likely to make a decision.<sup>18</sup>

Research also shows that consumers tend to overestimate the quality of the brands included in their consideration sets, and this decreases choice deferral.<sup>19</sup> When one group of consumers receives three brands to consider, and another group of consumers receives three completely different brands to consider, both groups believe that the best brand is likely to be included in their consideration sets. This effect is even greater when consumers have a high need for cognitive closure, or the preference to reach a firm decision as quickly as possible. When the need for cognitive closure is high, consumers underestimate the quality of brands not included in their consideration sets even when they are reminded about several high-quality brands that were not included in their consideration sets.

### OBJECTIVE

#### 4

## Heuristic Processing

The MODE model is an example of a *dual process model*. This model suggests that sometimes consumers think carefully about decisions and sometimes they don't. As we saw in the discussion of the MODE model, motivation and opportunity are important determinants as to how much careful thinking people do when making a product choice. Also important are processing factors related to involvement, ability, and situational factors. In general, when consumers think carefully about decisions, using all relevant information and considering all implications, they are engaging in **systematic processing**. In contrast, sometimes people are unwilling or unable to use

careful and effortful decision-making strategies, such as when motivation or opportunity—according to the MODE model—is low. Instead, consumers use simple **heuristics** that enable them to make decisions quickly and easily. This is known as **heuristic processing**.<sup>20</sup> Heuristics are mental shortcuts that help consumers simplify their decision-making tasks. There are three types of heuristics—persuasion, prediction, and influence. All heuristics aid in simplifying cognitive tasks, but the type of heuristic consumers use depends on the specific task at hand.

**Persuasion heuristics** influence consumers' beliefs and attitudes. They come in three forms.<sup>21</sup> The *length-implies-strength heuristic* suggests “size matters.” For example, advertisements and sales pitches filled with facts and figures appear more compelling than just a few claims. So consumers tend to evaluate the quality of the brand according to the number of favorable attributes it possesses. The *liking-agreement heuristic* is based on the assumption that consumers usually agree with people they like. This heuristic is embodied in balance theory. Finally, the *consensus-implies-correctness heuristic* is synonymous with “the bandwagon effect.” It implies that if everyone is doing it, then it must be good, i.e., it offers social validation.

**Prediction heuristics** are used to form likelihood judgments (e.g., representativeness, availability, simulation, and anchoring-and-adjustment). The third heuristic type, **influence or choice heuristics**, affects consumers' decisions directly (e.g., lexicographic, additive-difference, conjunctive, disjunctive, frequency of good/bad features). Prediction and choice heuristics are discussed in detail later in this chapter.

Heuristic processing occurs most often when a decision is perceived as unimportant—which ketchup brand to buy, for instance—or when decision making is stressful or difficult as a result of time pressure or information overload. Consumers' use of heuristics becomes even more prevalent as the amount of information available to them increases, as potential choice alternatives increase, and as the pace of life increases.

There are many ways consumers use heuristics when evaluating brands. Consumers often use heuristics to predict what will happen if they buy or don't buy a particular product or brand. For example, “If I buy the most expensive laundry detergent, my clothes will be extra clean.” Heuristics also influence what and how much choice-related information consumers use to make a decision and how they use that information. For example, many consumers assume that price and quality are strongly related; that is where the idea that “you get what you pay for” comes from. This assumption leads consumers to predict that expensive products are high in quality, and inexpensive products are low in quality. When consumers use price as a heuristic cue for predicting quality, they base their judgment of quality on price alone. However, many other variables also influence quality, such as product reliability, durability, appearance, ease of use, cost of use, and the number of different uses of a product. Price is just one variable. Here lies a potential pitfall of using heuristic processing. Although it simplifies decision making and enables consumers to make choices quickly and easily, heuristic thinking often oversimplifies choice and leads consumers to overlook important information. Consequently, when consumers focus only on price, they over-simplify prediction and make poor decisions. For example, for many different products, price is only weakly related to quality.<sup>22</sup> This

means that some brands are high in price but low in quality, and some brands are low in price but high in quality. Relying too heavily on the price-quality heuristic can lead consumers to buy a high-priced brand that is low in quality. Of course, price is not the only cue that consumers use to predict the quality of a product. People also rely on brand name, store reputation, warranty, the Good Housekeeping seal of approval, and company membership in the Better Business Bureau, among other heuristic cues.

In addition to using the specific heuristic cues noted above, people also use *general* heuristic cues. In their path-breaking research on the use of general heuristics, Tversky and Kahneman researched four important general cues that people use for simplifying predictions related to decision making: the representativeness heuristic, the availability heuristic, the simulation heuristic, and the anchoring-and-adjustment heuristic (see Figure 10.4).<sup>23</sup> Each of these heuristics can lead all people, including consumers and marketers, to make bad predictions and, thus, bad decisions.

**FIGURE 10.4 | Prediction Heuristics**

Representativeness Heuristic	
Concept	Example
Assessing the likelihood that a particular target belongs to a category based on the degree to which the target and category appear similar.	If a consumer believes that Honda automobiles are high quality, he may conclude that Honda motorbikes are similarly high in quality.
Availability Heuristic	
Concept	Example
Searching memory for relevant examples of a particular event and basing one's prediction of that event on how easily these examples come to mind.	If a consumer recalls many floods, then he or she will predict that future floods are likely. As a result, this consumer may be inclined to buy flood insurance.
Simulation Heuristic	
Concept	Example
An event or sequence of events that is easy to imagine also seems very likely to occur.	Consumers who imagine a brand performing well are more likely to believe that this brand will actually satisfy their needs.
Anchor-and-Adjustment Heuristic	
Concept	Example
Random anchors or "starting points" influence probability estimates.	Real estate agents' estimates of the value of a property are very close to the prior observed list price (anchor).

## OBJECTIVE

## 5

## Prediction Heuristics

Good consumer decision making often requires accurate probability or likelihood judgments about events, such as accurate predictions about future product performance (will the product do what I need it to do?), about when a product needs replacement (Should I buy a new car now or risk future repair bills?), about the behavior of others (Will my sister like this gift? Will this salesperson try to trick me?), and about one's own future behavior (Will I still like this color of paint two years from now?). However, although the ability to make predictions is very important, research suggests that people are not very good at making them, largely because they often unknowingly use heuristics to generate those predictions.

**Representativeness Heuristic** Predictions are sometimes based on similarity or representativeness. People using the **representativeness heuristic** make predictions based on perceived similarities between a specific target and a general category. For example, if a new product has a similar name, package, or appearance to another product we like a lot, we usually predict that we will like the new product, too. If a person we just met reminds us of another person that we do not like—perhaps because the two people have similar glasses, clothing, gestures, or mannerisms—we often predict that we will dislike the new person, as well. Because whales have many traits and characteristics similar to those possessed by fish—such as fins, tails, and the ability to swim and live in water—children often believe that whales are fish. Consumers make similar mistakes when they focus on superficial similarities between an object and a category. In the same way, marketers can use the representativeness heuristic to their advantage. For example, a private store brand often packages products in boxes with sizes, colors, and graphics similar to that of leading national brands, hoping that the superficial package similarities will lead consumers to predict that the store brands are similar to leading national brands on more important dimensions.



Private labels such as Kroger can appear to be similar to or representative of national brands.

AP Images/Al Behrman, file

Unfortunately, consumers often focus on these irrelevant similarities—package color and graphics—so their predictions may suffer.

Important information often overlooked because of the representativeness heuristic is the *base rate*, which is the incidence rate of an event. If consumers know that 10% of the products in a particular industry fail or need repair, then they can predict a 10% chance of a randomly selected product from this industry failing. In the absence of other information, that prediction should be based entirely on the base rate. However, Tversky and Kahneman have shown that even a small amount of marginally useful information can lead people to rely too heavily on the representativeness heuristic and subsequently neglect, overlook, or ignore the base rate.<sup>24</sup> For example, in a classic study, Tversky and Kahneman told research participants that a panel of psychologists administered personality tests to 30 engineers and 70 lawyers. Participants were asked to predict the likelihood that a randomly selected person from this sample was an engineer. When no other information was provided, most participants predicted correctly that there was a 30% chance that the randomly selected person was an engineer. However, in another experimental condition, participants received a brief, marginally informative description of the randomly selected person:

*Jack shows no interest in political and social issues and spends most of his free time on hobbies, which include home carpentry, sailing, and mathematical puzzles.*

When participants received this brief description, they categorized Jack as an engineer, and they predicted that it was highly likely that Jack was an engineer. Even marginally relevant descriptive information can lead people to ignore highly relevant base rate information.

Another bias related to the representativeness heuristic deals with the *law of large numbers*, which states that the larger the sample size, the more likely it is that statistics estimated from a sub-sample apply to the larger population from which the sub-sample was drawn. Unfortunately, people expect even very small samples to be representative of larger populations, but this may not be the case. For example, a small group of friends may tell you that a new movie is really good or a particular new restaurant is bad. It is very likely that you will rely on this information received from a small group and ignore that fact that the opinion of such a small group may not be representative of what the majority of people think.

The representativeness heuristic also encourages people to commit the *gambler's fallacy*. Gamblers often foolishly believe that events alternate frequently in random sequences and that long streaks of the same event must be nonrandom. Consequently, if a basketball player makes several baskets in a row, gamblers believe the player is more likely to make the next basket.<sup>25</sup> The streak seems nonrandom because it does not correlate with people's conceptions of chance. Similarly,

The advertisement for the Continental Ultimate Adventure sweepstakes features a yellow background with a black curved banner. At the top, it says "The Continental Ultimate Adventure sweepstakes". Below that, it offers "FREE MAGELLAN ROADMATE 1200 WITH THE PURCHASE OF 4 CONTINENTAL TIRES FOR A TOTAL OF \$499 OR MORE". A central image shows a Magellan Roadmate GPS device on a road. At the bottom, it says "PLUS ENTER THE ULTIMATE ADVENTURE SWEEPSTAKES FOR YOUR CHANCE TO WIN!" and "ENTER SWEEPSTAKES AT CONTISWEEPS.COM". The Continental logo is at the bottom right.

Sweepstakes can appeal to the *gambler's fallacy*.

when betting on whether a coin will turn up heads or tails, gamblers often believe that tails is more likely after a string of heads (e.g., four heads in a row). However, the actual likelihood of tails after four heads in a row is still the base rate: 50%. In the long run, the number of times tails turns up is 50%, but in small samples, random streaks are highly likely to be observed. Marketers use the gambler's fallacy to convince people to buy lottery tickets, enter sweepstakes, and look for winning game tokens, based on the idea that if consumers purchase enough tickets, etc., they will eventually win.

In business, a string of successes seems nonrandom, and lucky marketing managers often conclude that they have beaten the odds. Consequently, they predict that they will continue to beat the odds. This is another example of the gambler's fallacy. After a string of failures, unlucky marketing managers often predict that the odds will even out and, therefore, they are due for a success. Again however, marketing managers can get lucky or unlucky as a result of chance, and the laws of chance never change. Fortunately, many business outcomes are influenced by both skill and chance. What marketers should hope is that the skill component is great enough to increase the probability of success, regardless of chance. But whenever chance exists, no matter how small, the probability of success cannot be 100%.

Finally, the representativeness heuristic influences how consumers might use information prematurely to make decisions. The likelihood of one specific extreme or unusual event is very low, by definition. Usually, extreme or unusual events are followed by less extreme or less unusual events. This is known as *regression to the mean*. In the long run, the average or typical level of a variable is observed. For example, many top athletes have remarkable rookie years and much less remarkable second years (the so-called sophomore slump). Many restaurants seem to serve outstanding meals once, but less exciting meals over subsequent visits. Regression to the mean occurs for extreme negative events, also. A store where you received terrible customer service when you visited it the first time may offer better service over the long term. In each of these examples, an initial extreme or unusual performance is followed by a more moderate, typical, or average performance. This is because the initial extreme performance was influenced by random factors (e.g., the rookie's style of play just happened to click well with the other players; the chef had especially fresh and delicious ingredients). However, in the long run, individuals, groups of people, and organizations perform at an average or typical level.

The representativeness heuristic makes it difficult to fully appreciate the statistical concept of regression to the mean. Good performances seem to come from skill, and skill seems to ensure continued success. Poor performances seem to stem from mediocrity, and mediocrity seems to ensure continued failure. However, chance factors can lead consumers to jump to conclusions. Prematurely categorizing customer service, products, or organizations on the basis of their initial performance can lead to poor predictions. Thus, it is important for marketers to limit the number of unusual events that can happen when dealing with customers, and to strive for consistently good performance from their products and services.

To summarize, the representativeness heuristic encourages people to focus on simple similarities and to ignore complex but highly relevant statistical concepts, such as base rates, gambler's fallacy, and regression to the mean.



Geoffrey Robinson/Alamy

In order to minimize the loss of customers due to poor customer service experiences, retailers must strive to maintain consistently good performance in the minds of their customers.

**Availability Heuristic** People use the **availability heuristic** to make predictions based on how easily they can retrieve information from memory.<sup>26</sup> Events that are highly memorable because of media exposure, frequent exposure, or recent exposure are easily recalled. Easily recalled events tend to be overestimated. For example, let's suppose a consumer is booking a flight reservation and is trying to determine the likelihood that his flight will be delayed. If his flight was delayed the last time the consumer flew with a particular airline, then that event will be easily recalled. As a result, this consumer will be more likely to predict that his upcoming flight will be delayed, also. Likewise, events that are unmemorable tend to be underestimated. For example, is it more likely to be killed by a shark or by falling airplane parts? Most people believe that shark attacks are more likely because of movies featuring giant sharks and media reports of shark attacks. Deaths resulting from falling airplane parts, however, receive much less media attention. In reality, a person is 30 times more likely to die from falling airplane parts than from a shark attack.<sup>27</sup>

It is also important to distinguish between the *ease* with which examples of a to-be-predicted event can be retrieved from memory and the *number* of examples of a to-be-predicted event that can be retrieved from memory.<sup>28</sup> If it is easy to retrieve examples, the event seems likely. If it is possible to retrieve many examples, the event also seems likely. In many situations, ease of retrieval and the number of examples that can be retrieved are confounded. That is, ease and number are either both high or both low. When this is the case, it is impossible to determine whether ease of retrieval or the number of examples that can be retrieved has a stronger influence on predictive judgment.

In some circumstances, however, ease and number are *inversely related* (i.e., as one variable increases, the other variable decreases). In an important experiment that separates the effects on prediction of ease of retrieval versus number of examples retrieved, participants were asked to generate either ten (difficult task) or one (easy task) reason that a BMW is better than a Mercedes-Benz.<sup>29</sup> The results revealed that the BMW was more strongly preferred over the Mercedes-Benz when one reason was generated than when participants

offered ten reasons. These results are surprising because ten reasons are better than one. However, one reason is easier to retrieve, and ease of retrieval is more important than the number of items retrieved when the availability heuristic is used as a basis for prediction.<sup>30</sup>

**Simulation Heuristic** People use the **simulation heuristic** to make predictions based on how easily an event or a sequence of events can be imagined or visualized.<sup>31</sup> If an event or sequence of events is easy to imagine, it tends to be overestimated. If an event or sequence of events is difficult to imagine, it tends to be underestimated. In one study of this phenomenon, participants were asked to imagine how likely they were to contract a disease called Hyposcenia-B.<sup>32</sup> In the easy-to-imagine condition, participants were told that the symptoms of the disease were headaches, muscle aches, and low energy. Most of us have experienced these symptoms at some point in our lives, and consequently, it is easy to imagine suffering from them. By contrast, in the difficult-to-imagine condition, participants were told that the symptoms of the disease were disorientation, a malfunctioning nervous system, and an inflamed liver. Most of us have not experienced these symptoms, so they are difficult to imagine. The results indicated that people believed they were personally more likely to contract Hyposcenia-B when the symptoms of the disease were easy to imagine as opposed to difficult to imagine. These effects disappeared, however, when participants did not attempt to imagine experiencing any of the symptoms.

These findings have important implications to marketers. For example, the simulation heuristic affects healthcare marketing. Consumers with high blood pressure often forget to take their medicine because the symptoms usually aren't that bad, so it is difficult to imagine that their condition is serious. Consequently, their health deteriorates, and marketers at pharmaceutical firms sell fewer pills. Similarly, consumers suffering from infections often take antibiotics for a few days and then stop before finishing the course because they feel better and it is difficult for them to imagine that they are still sick. Consequently, antibiotic-resistant infections develop, and pharmaceutical firms have to spend millions on the development of new antibiotics.

**Anchoring-and-Adjustment Heuristic** People using the **anchoring-and-adjustment heuristic** make predictions based on a first impression or an initial judgment (or anchor) and then shift (adjust or fine-tune) this judgment upward or downward depending on the implications of the imagined possibilities.<sup>33</sup> Unfortunately, people often do not adjust enough, and as a result, final judgments tend to be too close to initial judgments. For example, thinking about big numbers leads to big judgments, and thinking about small numbers leads to small judgments. Consequently, if you are asked to think of a big number first, such as 975, you would be more likely to overestimate the price of an inexpensive product that you don't buy frequently. If you are asked to think of a small number, such as 1, you would be more likely to underestimate the price of the same product. Similarly, expert real estate agents who receive a high list price (or high anchor value) for a house overestimate the value of a house, while agents who receive a low list price (or low anchor value) underestimate the value of the same house.<sup>34</sup>

The anchoring-and-adjustment heuristic can be used to trick consumers into buying more at a grocery store. In many cases, consumers intend to buy

only one unit of a product when they enter the store (e.g., one container of milk); obviously the number one is a relatively low anchor. However, merely mentioning larger numbers can encourage consumers to consider higher anchors.<sup>35</sup> For example, multiple-unit pricing such as 3 for \$1.99, or 12 for the price of 10, encourages consumers to buy more than one unit for two reasons: first, to obtain the volume discount, and second, multiple units suggest an anchor value that is higher than one. Ironically, purchase quantity limits (e.g., a limit of 10 per customer) can also encourage consumers to think about higher anchors and buy more than one unit, even if they do not come close to purchasing the amount implied by the limit. Suggestive selling (grab six for studying, buy eight and save a trip, buy 12 for your freezer, etc.) and expansion anchors (e.g., 101 uses around the house) also encourage consumers to consider larger anchors and to purchase multiple units.

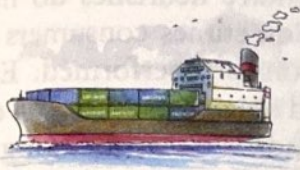


Grocery store marketers oftentimes use the anchoring-and-adjustment heuristic to convince consumers to buy more than one unit of a particular product.

Consumers and marketers could make better predictions and better decisions if they relied more heavily on statistics and less on perceptions of similarity, ease of retrieval, ease of imagination, and first impressions. However, statistical knowledge requires training and effort, while heuristic thinking does not. Consequently, heuristic thinking is common despite the fact that it usually leads to poor predictions and poor decisions. The next section examines heuristics further in how consumers use them when selecting products.

### Choice Heuristics

**The Lexicographic Heuristic** Consumers using the **lexicographic heuristic** (or single-attribute heuristic) compare all brands on one *key* attribute, such as price, size, weight, reliability, durability, calories, sugar, etc., and choose the brand that performs the best on that single attribute, while generally ignoring the other attributes.<sup>36</sup> If there is a tie, consumers examine the next most important attribute to break the tie. Assume that a particular consumer views style as the most important attribute for a new pair of blue jeans and comfort as the second most important attribute. This consumer will select the brand that appears to be most stylish, ignoring price, durability, colorfastness, and other attributes.



Why choose Anchor Butter that's shipped frozen



when you can choose Country Life?

Before Anchor Butter reaches your table it's frozen and shipped over 10,000 miles from New Zealand. Country Life, however, is made with milk from British farms and is proud to carry the Ford Tractor logo for food standards. So why choose anything else?



Image Courtesy of The Advertising Archives

Consumers often compare brands on one key attribute.

Style is the key attribute; it is all that matters. If two brands appear equally desirable with respect to style, then this consumer chooses the brand from these two that performs best on comfort.

The lexicographic heuristic is a *non-compensatory choice strategy* because a high score on one attribute cannot compensate for a low score on another attribute. In this particular case, no other attribute can compensate for inadequacy on the key attribute. In fact, most choice heuristics are non-compensatory because attributes are evaluated one at a time. Unfortunately, this leads consumers to sometimes choose brands that are not the best choice because trade-offs are ignored. Consumers typically don't like making trade-offs because it is difficult to determine how much they should give up on one attribute to gain on another. For example, it is difficult for a consumer to express how much he would pay for a 10% improvement in the speed of his computer. But ignoring trade-offs can lead to bad decisions. Nevertheless, consumers assume this risk when they use quick-and-dirty heuristics that oversimplify the choice process.

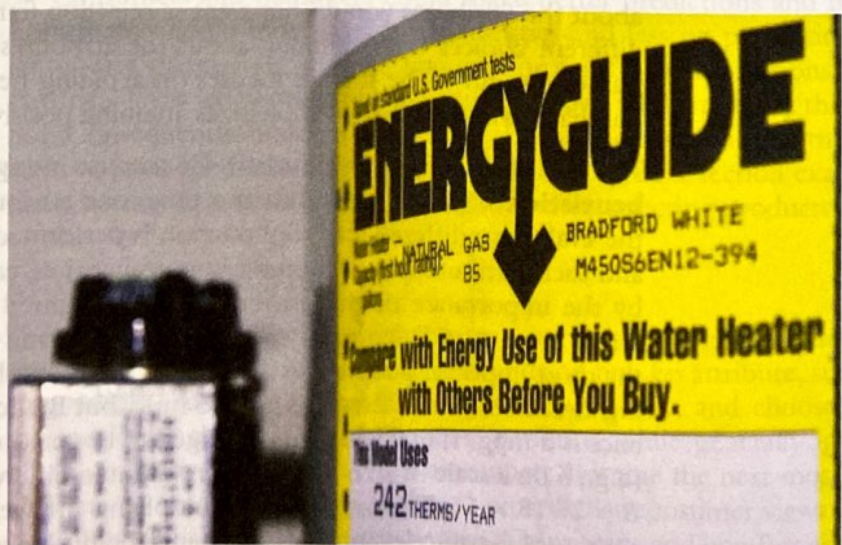
**The Elimination-By-Aspects Heuristic** Another non-compensatory choice heuristic is the elimination-by-aspects heuristic. Consumers using the **elimination-by-aspects heuristic** reject all brands that do not have a key feature they want.<sup>37</sup> For example, if a consumer wants to buy a hybrid automobile, she might reject all non-hybrid cars. Next, she would focus on a different attribute and reject all brands that did not meet her requirements on that particular feature. For example, if the consumer prefers front-wheel drive, she might reject all hybrid automobiles that are rear-wheel drive. The process continues until only one brand remains. Rejecting brands is often easier than accepting multiple brands and then choosing among them. Consumers rarely need to examine a large set of attributes when using this choice heuristic. Furthermore, thinking about the attributes you do not want (a rejection frame of mind) often leads to different choices than thinking about the attributes you want (an acceptance frame of mind). The former focuses on avoiding negative outcomes from the purchase, while the latter emphasizes attaining positive outcomes.

**The Additive-Difference Heuristic** Consumers using the **additive-difference heuristic** compare two brands at a time, one attribute at a time, and subtract the evaluative differences.<sup>38</sup> Subtraction is performed on all relevant attributes, and each attribute is weighted for importance, i.e., each difference is multiplied by the importance of the attribute. Each weighted score is then summed to arrive at an overall score for each brand. The brand that performs the best on the most important attributes is selected. For example, if a consumer is evaluating automobiles and Brand A gets 35 mpg, but Brand B gets 30 mpg, the difference is 5 mpg. If fuel economy is judged to be very important for this consumer (e.g., 5 on a scale of 1 to 5), then the weighted difference between Brand A and B = 25 (5 × 5). This method of multiplying the weights times the differences continues for all relevant attributes, and the differences are summed for a total score. This heuristic requires more effort because math (subtraction, multiplication, and addition) is used. However, more effort can lead to better decisions.

**The Conjunctive and Disjunctive Heuristics** Choice heuristics do not always involve making comparisons among brands. Sometimes consumers focus on one brand at a time, and no brand comparisons are performed. Examining one brand at a time is easy, and if the first brand seems satisfactory, a consumer might buy it without examining any other brands. Consumers using the **conjunctive heuristic** set a minimum value for all relevant attributes and select the first brand that meets this value for each attribute.<sup>39</sup> With this approach, all the attributes are considered together, and one poor attribute can eliminate the brand. In other words, if a brand performs unsatisfactorily on one or more attributes, it is rejected, and another brand is considered. Typically, however, the first brand considered has a large advantage over other brands; consumers often choose the first brand they consider.

Consumers using the **disjunctive heuristic** set an acceptable value, rather than a minimum value, for all relevant attributes and select the first brand that meets this value on one particular attribute—which is not necessarily the most important attribute. In contrast to the conjunctive heuristic, this approach focuses on each attribute separately, and one good attribute can save the alternative. Again, the first brand has a large advantage and is likely to be chosen unless it is clearly unsatisfactory.

**The Frequency Of Good and Bad Features Heuristic** While all the heuristic choice strategies we've considered thus far have been non-compensatory choice strategies, consumers also use *compensatory choice strategies*. With a compensatory choice strategy, good attributes can compensate for bad attributes. When using the **frequency of good and bad features heuristic**, consumers form a simple attitude toward each brand alternative by counting the number of good and bad product features and choosing the brand with the greatest difference between good product features and bad product features. For example, if Brand A appears to have six good attributes and three bad attributes ( $6 - 3 = 3$ ), and Product B has nine good features and seven bad features ( $9 - 7 = 2$ ), then



While various tools can help consumers make purchase decisions, relying solely on those resources oversimplifies the choice task.

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Product *A* is chosen. This heuristic is easy to apply because counting is easy and relatively little information is needed. Consumers are concerned only with the number of attributes, not the importance of each attribute. In other words, all attributes are treated equally.

As we've seen, choice heuristics help consumers make purchase decisions quickly and easily. Unfortunately, these approaches also often reduce the likelihood of making the best possible decision because they oversimplify and minimize the amount of information involved in the choice task. See Figure 10.5 for a summary of choice heuristics.

**FIGURE 10.5** | Choice Heuristics

<b>Lexicographic Heuristic</b>
A consumer chooses the brand that appears best on the most important feature, ignoring all other attributes. If two or more brands are viewed as equal on this important feature, then the consumer chooses the brand that appears best on the second most important feature, and so on.
<b>Elimination by Aspects Heuristic</b>
A consumer rejects all brands that lack a key feature or possess an undesirable feature. Then, the remaining brands are evaluated on another important dimension in a similar manner. Eventually, only one brand remains.
<b>Additive-Difference Heuristic</b>
A consumer assigns important weights to all relevant attributes for a product and then compares brands, two at a time. Values for each attribute are then assigned to each brand. Next, the importance weights are multiplied by the differences in the values of the two brands' attributes and summed. More formally, $P = \sum w_i(A_i - B_i)$ , where $P$ = preference $w_i$ = importance weight for attribute $i$ , $A_i$ = value of attribute $i$ for brand $A$ $B_i$ = value of attribute $i$ for brand $B$ A positive score for $P$ indicates a preference for Brand $A$ , a negative score for $P$ indicates a preference for Brand $B$ , and a score of zero for $P$ indicates no preference.
<b>Conjunctive Heuristic</b>
A consumer sets a minimum value for all relevant attributes and selects the first brand that meets these values for each attribute.
<b>Disjunctive Heuristic</b>
A consumer sets an acceptable value (usually higher than minimum) for all relevant attributes and selects the first brand that meets this value on one particular attribute (not necessarily the most important attribute).
<b>Frequency of Good-Bad Features Heuristic</b>
A consumer counts both the number of good product features and bad product features for each brand. The brand with the largest difference between its number of good and bad product features is chosen.



# Global Perspectives

## Decision-Making Styles Vary across Cultures

When making decisions, many North Americans are said to be analytical, relying on factual information, and individualistic, making one choice independently of others. Similarly, the French tend to consider many alternatives, and are highly rational and thorough in their decision making, while Russians are said to place more emphasis on values and appearance than facts. Germans are said to be deductive, and the Danes tend to be pragmatic when making decisions. In contrast, in Japan and other Asian cultures, logic and rationality seem less important; instead, one's "gut feeling" needs to be right, and the collective consensus is more important than the individual's opinion. Similarly, many Saudi Arabians are more intuitive in their decision making and avoid persuasion in favor of empirical evidence.<sup>40</sup>

In recent years, researchers have extensively examined cultural differences in decision making. While cross-cultural

research related to decision making covers a broad range of topics, the overall results show that cultural differences are pervasive, not just along Eastern and Western philosophies, but also between countries and cultures within those countries. Additionally, within individuals, cultural influences are thought to influence consumers at all stages of the decision process.<sup>41</sup>

Developing a fuller understanding of how people from different cultures make decisions is essential for marketers as they expand globally. As our world becomes smaller as a result of information technology and the political opening of borders and economies, understanding cross-cultural differences in consumer behavior, decision making, and choice will become essential. Only by understanding cross-cultural differences can marketers effectively craft products and messages to satisfy global consumers.

## Chapter Summary

Consumer choice involves choosing one brand from a set of products. The set of products that consumers think about and evaluate—the consideration set—usually consists of fewer than seven brands, and the best brand is not always included in the consideration set. The more consumers think about some brands, the more difficult it is to think about other brands (the part-list cuing effect). Moreover, a given brand can seem attractive (the attraction effect) or unattractive depending on what other brands are included in the consideration set. Compromise brands, or brands that are average on multiple dimensions, often have an advantage over brands that are good on some dimensions and bad on others (the compromise effect). Attraction and compromise effects are often more pronounced when consumers feel the need to justify or explain their decisions to themselves or others.

After the consideration set has been determined, consumers need to evaluate the differences in features and attributes between the considered brands in order to make a choice. When consumers can

directly and physically observe all relevant brands in the consideration set and the brand attributes, they make a stimulus-based choice, but when brand alternatives are drawn from memory, choice is memory-based. Mixed choice combines both stimulus-based and memory-based choices. In addition, choice often involves focusing on differences among brands and using these differences as reasons or justifications for making decisions. These differences may be general (attitude-based choice) or specific (attribute-based choice), depending on the accessibility (salience in memory) and the diagnosticity (relevance) of the information used as a basis for choice.

Choice heuristics are mental shortcuts that simplify difficult decisions. Consumers use many different choice heuristics. Sometimes consumers focus on only one attribute (the lexicographic heuristic), and sometimes consumers eliminate brands that do not have a desired feature (the elimination-by-aspects heuristic). On other occasions, consumers compare two brands

at a time and subtract the difference in the values of the attributes (the additive-difference heuristic). In other circumstances, consumers can focus on only one brand and choose the brand if it is satisfactory on all attributes (the conjunctive heuristic) or satisfactory on one attribute (the disjunctive heuristic). Finally, consumers may simply add up a product's good and bad

features and choose the best overall brand (the frequency of good and bad features heuristic). Choice heuristics can lead to bad decisions when consumers overlook important information. Nevertheless, consumers are often forced to use choice heuristics when information overload, time pressure, or other stresses make decision making difficult.

## Key Terms

additive-difference heuristic  
anchoring-and-adjustment  
heuristic  
attraction effect  
attribute-based choices  
attitude-based choice  
availability heuristic  
choice deferral  
compromise effect  
conjunctive heuristic

consideration set  
disjunctive heuristic  
elimination-by-aspects heuristic  
frequency of good and bad  
features heuristic  
heuristics  
heuristic processing  
influence or choice heuristics  
lexicographic heuristic  
memory-based choice

mixed choice  
MODE model  
part-list cuing  
persuasion heuristics  
prediction heuristics  
representativeness heuristic  
simulation heuristic  
stimulus-based choice  
systematic processing

## Review and Discussion

- How can marketers increase the likelihood that their brands are included in consumers' consideration sets?
- How can marketers use the part-list cuing effect to decrease the likelihood that competitors' brands are included in consumers' consideration sets?
- Why does the trade-off contrast occur?
- Describe a situation in which you purchased a compromise brand. Why does compromise seem like such a compelling reason on which to base a choice?
- How does the availability heuristic influence how consumers make predictions about products?
- How might the law of large numbers be related to word-of-mouth marketing?  
(*Word-of-mouth* marketing occurs when marketing messages, product information, and/or people's opinions of the product are passed from person to person through informal conversation).
- When are consumers likely to use a choice heuristic? When are they unlikely to do so?
- Choice heuristics are often non-compensatory. Explain what this means and how it can lead to bad choices.
- Some choice heuristics involve comparing several brands on the same attribute or set of attributes. Describe a situation in which you used one of these choice heuristics.
- Some choice heuristics involve focusing on one brand at a time rather than making comparisons across brands. Describe a situation in which you used one of these choice heuristics.

## Short Application Exercises

1. Find three advertisements that use puffery. Do you think that puffery or exaggeration is an effective advertising tactic? Do you think the use of puffery is ethical? Why or why not?
2. Choose three products you purchased recently. Identify whether your choice of the product was stimulus-based, memory-based, or the result of mixed choice. How could a marketer use package information to better appeal to you for any of the products under conditions of stimulus-based choice?
3. Find two advertisements, one that appeals to consumers using attitude-based choice and one that focuses on attribute-based choice.
4. Identify a product for which you think people generally use price as a prediction of quality. Design an experiment to test this idea. Can you find evidence from the Internet that supports or refutes the price-quality relationship for this product?

## Managerial Application

In the early 1980s, a format war took place between VHS and Betamax videotapes for video storage. VHS ultimately won. History always repeats itself. Between 2000 and 2008, another format war took place between Sony's Blu-Ray and Toshiba's HD DVD (high density optical disc for video storage). Blu-Ray ultimately won. But why? HD DVD had several advantages over Blu-Ray. HD DVD was the pioneering brand, or the first brand to enter the market, plus it was less expensive than Blu-Ray. Initially, almost as many movie titles appeared in HD DVD as did in Blu-Ray. Using the concepts in Chapter 10, how would you compare and evaluate these differences?

In January 2008, an important event tipped the scale in favor of Blu-Ray when Warner Brothers Studios decided to support Blu-Ray exclusively. Because Sony Blu-Ray already had the exclusive support of Sony Pictures (including MGM/Columbia Tristar), Disney (including Touchstone and Miramax), Fox, and Lions Gate, the Warner decision gave Blu-Ray the support of 70% of the movie studios. Toshiba was unable to overcome this advantage. In addition, Blu-Ray discs hold more data than HD DVD discs (50 GB versus 30 GB). The Sony PlayStation 3 can also play PS3 games, Blu-Ray discs, and standard DVDs. Using the concepts in Chapter 10,

how would you compare and evaluate these differences?

### Your Challenge:

1. What strategies could HD DVD have used to beat Blu-Ray?
2. What strategies could Blu-Ray have used to beat HD DVD more quickly?
3. After Warner Brothers decided to support only Blu-Ray in January 2008, Toshiba reduced the price of HD DVD players to \$150. Explain why this was too little, too late. In February 2008, Net Flix, BestBuy, and Walmart announced that they would phase out HD DVD. After these announcements, Toshiba announced that they would stop producing HD DVD players. Explain why Toshiba needed the support of Warner Brothers, Net Flix, BestBuy, and Walmart.
4. In what other product categories do you currently see a format war? What steps can competing companies take to try to avoid format wars?