

The authors propose that the attractiveness and choice probability of an alternative can be enhanced by making it the focus of a comparison (the focal option) with a competing alternative. This proposition is supported in choice problems involving alternatives about which consumers have information in memory (e.g., frozen yogurt and fruit salad). The focal option was manipulated by asking respondents how much more or less attractive one of the two (e.g., fruit salad) was. When descriptions of alternatives' features were provided rather than retrieved from memory, a manipulation of the focal option had a weaker and less consistent effect on preferences. Think-aloud protocols were used to gain insights into the effect of changing the focal option on decision processes. The implications of the results for marketers' communications strategies are discussed.

## The Effect of the Focus of Comparison on Consumer Preferences

In classical preference theory, each consumer is assumed to have a well-defined preference order or utility function, such that the consumer selects from any choice set the alternative that offers the highest utility. This assumption implies that normatively equivalent procedures for assessing preferences should lead to the same preference order (Tversky, Sattath, and Slovic 1988). Recent research, however, suggests that preferences are often sensitive to the particular task and context characteristics (see Payne, Bettman, and Johnson 1992 for a review).

We examine the effect on preferences of shifting the focus of attention to one of two considered options. Specifically, building on the notions of selective attention and loss aversion, we propose that the mere fact that an alternative is the focus of a comparison (referred to here as the focal option) can make it appear more attractive and enhance its choice probability (e.g., Dunning and Parpal 1989; Houston, Sherman, and Baker 1989; Tversky and Kahneman 1991). As an example, consider a woman in a restaurant who is debating whether to order

frozen yogurt or a fruit salad for dessert. We propose that her likelihood of preferring frozen yogurt to fruit salad can be increased by asking her, before she makes the decision, to think how much more or less attractive frozen yogurt is to her. As the example illustrates, we test our proposition by using a simple wording manipulation that determines which alternative is the focal option. Such an effect might have significant implications for marketers' communications strategies, suggesting that the choice probability of a promoted product can be enhanced by making that product the focal option in comparisons with other alternatives.

We further propose that manipulations of the focal option can influence preferences if consumers do not have pre-formed preferences between the alternatives and need to retrieve information about them from memory. Conversely, when alternatives' descriptions are provided (e.g., in a sales catalog), a manipulation of the focal option is not expected to influence the manner in which alternatives are compared and consumers' preferences.

A review of prior research relevant to the effect of the focus of comparison on preferences led to several hypotheses, which we tested in five studies. Using think-aloud protocols, we also examined the decision processes underlying the effect of the manipulation of the focal option on preferences. We report the findings and conclude with a discussion of their implications for marketers.

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*INFLUENCES OF THE FOCUS OF COMPARISON ON PREFERENCES*

Interest in the impact on judgment and decision making of the manner in which alternatives are compared started in the context of similarity judgments and has only recently shifted to preference. Tversky (1977) proposed a model for the comparison process involved in judgments of similarity. This model is based on a feature-matching process in which similarity judgments are assumed to be the result of a linear combination of the shared and distinctive features of the stimuli being compared. As Tversky noted, the model suggests that the direction of comparison of stimuli can influence their degree of perceived similarity. That is, when asked to assess the degree of similarity of *a* to *b*, one's focus of attention is on the unique features of *a*, whereas when assessing the similarity between *b* and *a*, one's focus is on *b*. That asymmetry leads, for example, to a greater perceived similarity of North Korea to China than of China to North Korea, because people are aware of more unique features of China than of North Korea. Thus, task instructions that influence the direction of comparison can affect the perceived similarity between objects (e.g., Johnson 1981). Tversky's work illustrates a general principle, already observed by William James, that human thought tends to be selective and pays more attention to one part of its object than to another (e.g., one of two compared alternatives). This selectivity takes different forms and has been observed in such diverse areas as perception, memory, and language (see Stone 1991 for a review).

Houston, Sherman, and Baker (1989), building on Tversky's research and work by Agostinelli et al. (1986), extended these findings to the domain of preference. They argued that, given the previous findings about the unique role of features in judgments of similarity, features that are unique to the focal option should also exert a greater influence on preferences. That is, when a person is comparing one alternative with another, the relative preference for the focal option depends on whether the focal option has unique good features or unique bad features. In their experiments, Houston and his coauthors assumed that, if alternatives are presented sequentially, the second alternative will be the focal option unless respondents know in advance (before evaluating any alternative) about the forthcoming preference task. Each alternative in their experiments consisted of a list of nine positive and nine negative features. Their results indicated that most subjects preferred the alternative presented last when the two alternatives had common bad features and unique good features, whereas the first alternative was most preferred when the alternatives had unique bad features and common good features. Thus, people appear to focus on the unique features of the focal option in determining the attractiveness of that option in relation to another alternative.

In the Houston study, the unique and common features

of each alternative were manipulated experimentally, but in many choice situations it is difficult to sort precisely which features of alternatives are common or unique. For example, in the choice between frozen yogurt and fruit salad for dessert, identifying the common and unique features is nontrivial and consumers are unlikely to engage in such analysis. However, even without such sorting of the unique features of alternatives, the mere fact that an alternative is the focus of attention can often enhance its perceived attractiveness. Because most alternatives that consumers consider have more positive than negative features (Howard 1977), the alternative that is the focus of attention is likely to appear more attractive, particularly if the features of the alternatives must be retrieved from memory and are not externally available. For example, in a choice between vacations in Rome and Maui, a consumer who focuses on Rome is likely to retrieve its attractive features while paying less attention to the advantages of Maui.

A second mechanism that might make the focal option appear more attractive is related to the notion of loss aversion. Loss aversion indicates that losses loom larger than corresponding gains, where both losses and gains are assessed in relation to the same reference point (Tversky and Kahneman 1991). Loss aversion has been observed in both risky and riskless choice and can account for a wide range of decision phenomena. The reference point in relation to which the losses and gains are defined may be the status quo option (Samuelson and Zeckhauser 1988), the current endowment of the consumer (Kahneman, Knetsch, and Thaler 1991), or the point through which alternatives are evaluated (Tversky and Kahneman 1991).

In a comparison between two options, the reference point might be determined by making one alternative the focus of the comparison. For example, asking a consumer who is debating between frozen yogurt and fruit salad to consider "How much more or less attractive is frozen yogurt?" is likely to make that option the focus of the comparison. When the focal option is the reference point, its advantages represent potential losses if it is not chosen, whereas its disadvantages represent potential gains. In other words, if the other (nonfocal) option is selected, the consumer is losing the advantages of the focal option but gaining its disadvantages. Because losses loom larger than the corresponding gains, the focal option tends to be perceived as more attractive and subsequently has a higher choice probability.

The preceding discussion is based on the assumption that the focal option serves as the reference alternative and its features receive more attention in the preference formation process. However, this assumption may not hold if the descriptions of alternatives are provided and are externally available rather than retrieved from memory when preferences are formed (Alba, Hutchinson, and Lynch 1991; Biehal and Chakravarti 1986). That is, when the alternatives' descriptions are externally available, consumers are less likely to focus selectively on the fea-

tures of one of the options. For example, when evaluating the relative attractiveness of two alternatives described in a sales catalog, consumers are likely to contrast the desirability of the listed features of these alternatives. In that case, phrasing the evaluation task with an emphasis on one of the alternatives ("How much more or less attractive is A?") is not expected to have much impact on the comparison process. We therefore predict that changes of the focal option in comparisons between alternatives with externally available descriptions will not influence the relative preferences for these alternatives. Our discussion leads to the following hypotheses.

- H<sub>1a</sub>:** In a judgment task involving a comparison between two options about which consumers have information in memory, focusing attention on one alternative (the focal option) tends to enhance its attractiveness.
- H<sub>1b</sub>:** An alternative that serves as the focal option in a comparison (as in H<sub>1a</sub>) subsequently has a higher choice probability than it would have if the other alternative were the focal option.
- H<sub>2</sub>:** If the descriptions of alternatives are provided and are externally available when preferences are formed, being the focal option does not enhance the perceived attractiveness and choice probability of alternatives.

### STUDIES 1 AND 2

#### Method

Studies 1 and 2, designed to test H<sub>1a</sub> and H<sub>1b</sub>, were similar in design and choice problems. The problems used in study 1 were replicated in study 2, in some cases with slight wording changes. Study 2 also included a choice problem involving desserts that was not used in study 1. Because of the similarities between the two studies, we describe them together.

The subjects in the two studies (combined) were 305 undergraduate marketing (about 75%) and psychology students at the University of California, Berkeley. Par-

ticipation was a course requirement. The respondents were informed that they would be presented alternatives in different categories and asked to indicate their preferences. It was emphasized that there were no right or wrong answers and the researchers were interested only in the personal preferences of the participants. Then the scale that was later used for measuring the relative attractiveness of the alternatives was explained briefly.

Each choice problem presented two options that were identified by their names, and respondents were asked to assume they had to choose between the two options. One problem involved a choice between the graduate business schools of Harvard and Stanford (see Figure 1). A second problem, titled "Sweepstakes," pertained to the selection of a vacation spot: "Assume that you have entered a sweepstakes contest which has as its first prize a one week vacation. The vacation spot offered as the first prize is either Rome (Italy) or Maui (Hawaii). In both cases all expenses will be paid." A third problem (included only in study 2) involved the selection of a dessert: "Assume that you and your friend have just had dinner and are thinking of having some dessert. The waiter suggests two alternatives: frozen yogurt and fresh fruit salad (the cost and calorie content of the two desserts are comparable)." A fourth problem involved a choice of a restaurant: "Assume that you are invited for dinner on your birthday by a friend. You are asked to choose between eating at an Italian or a French restaurant (the cost and quality of the food are comparable for the two restaurants)." In study 2, the options were Italian and Chinese restaurants, with similar results.

Subjects were expected to have information about the alternatives in these problems in memory, but probably no pre-formed preferences between them. After reading each problem, subjects were asked the following question: "On the scale below, please indicate how much more or less attractive to you is [the focal option]? (circle the appropriate number)." Following Dunning and Parpal (1989), we used a 19-point scale from -9 to +9. Above

Figure 1  
EXAMPLE OF A FOCAL OPTION MANIPULATION

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Graduate School

Assume that you are planning to get an MBA. You have applied to the MBA programs at both the **Harvard Business School** and the **Stanford Business School**.

1. On the scale below, please indicate how much more or less attractive to you is an MBA at the Harvard Business School? (Circle the appropriate number).

	<b>Harvard Less Attractive</b>										<b>Harvard More Attractive</b>							
<b>Much Less</b>				<b>Slightly Less</b>							<b>Slightly More</b>				<b>Much More</b>			
-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9

2. How much more or less do you prefer to do an MBA at the Harvard Business School?

	<b>Harvard Less Preferred</b>										<b>Harvard More Preferred</b>							
<b>Much Less</b>				<b>Slightly Less</b>							<b>Slightly More</b>				<b>Much More</b>			
-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9

3. Assume that you are admitted to both schools, which would you choose? (Check One)

**Harvard** \_\_\_\_\_ **Stanford** \_\_\_\_\_

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the left/right side of the scale (from -9 to -1 or from 1 to 9), the heading was "[focal option] less/more attractive," respectively. The identity of the focal option was manipulated between subjects, such that each option was the focus of the comparison in one version. The next item to which subjects responded was, "How much more or less do you prefer the [focal option]?" A scale similar to the attractiveness measure was used, with the headings "[focal option]" less/more preferred" above the scale. Finally, the two options were listed (in the same order in both conditions) and subjects were asked to indicate the one they would choose.

### Results

The results are summarized in Table 1. Consistent with  $H_{1a}$ , in the graduate school problem, subjects tended to

rate higher the attractiveness and their preference for the school that served as the focal option. In accordance with these ratings and  $H_{1b}$ , each school had a 20% ( $t = 2.7$ ,  $p < .05$ ) greater share when it was the focal option than when the other school was the focal option. A majority of subjects who received the Harvard frame preferred Harvard, whereas a small majority of those with the Stanford focus preferred the Stanford school.

In the sweepstakes problem, the manipulation of the focal option again influenced the ratings and choices (16% share increase,  $t = 2.3$ ,  $p < .05$ ) as predicted by  $H_{1a}$  and  $H_{1b}$ . Similarly, in the dessert problem, the focal option manipulation had a statistically significant effect on both the ratings and subsequent choices as hypothesized (27% share increase,  $t = 3.4$ ,  $p < .05$ ). Finally, in the restaurant problem, the effect of the focal option manip-

Table 1  
STUDIES 1 AND 2: EFFECT OF FOCAL OPTION MANIPULATION ON PREFERENCES IN MEMORY-BASED COMPARISONS  
(standard errors in parentheses)

<i>Problem 1: graduate school</i>				
	<i>Harvard is reference (n = 86)</i>		<i>Stanford is reference (n = 85)</i>	
Average attractiveness	3.3 <sup>a</sup> (.51)	Harvard more	1.3 (.60)	Stanford more
Average preference	3.0 <sup>a</sup> (.54)	Harvard more	1.10 (.62)	Stanford more
Choice	67% <sup>a</sup> 33%	Harvard Stanford	47% 53%	Harvard Stanford
<i>Problem 2: sweepstakes</i>				
	<i>Rome is reference (n = 86)</i>		<i>Maui is reference (n = 85)</i>	
Average attractiveness	4.5 <sup>a</sup> (.52)	Rome more	.5 (.69)	Rome more
Average preference	4.2 <sup>a</sup> (.71)	Rome more	.3 (.62)	Rome more
Choice	78% <sup>a</sup> 22%	Rome Maui	62% 38%	Rome Maui
<i>Problem 3: dessert</i>				
	<i>Yogurt is reference (n = 66)</i>		<i>Salad is reference (n = 68)</i>	
Average attractiveness	.2 <sup>a</sup> (.69)	Yogurt more	2.9 (.58)	Salad more
Average preference	.1 <sup>a</sup> (.68)	Yogurt more	2.9 (.61)	Salad more
Choice	52% <sup>a</sup> 48%	Yogurt Salad	25% 75%	Yogurt Salad
<i>Problem 4: restaurant</i>				
	<i>Italian is focal (n = 86)</i>		<i>French is focal (n = 85)</i>	
Average attractiveness	3.4 <sup>a</sup> (.48)	Italian more	.8 (.52)	Italian more
Average preference	3.7 <sup>a</sup> (.60)	Italian more	.9 (.54)	Italian more
Choice	72% <sup>b</sup> 28%	Italian French	61% 39%	Italian French

<sup>a</sup>The difference between conditions is statistically significant at the .05 level.

<sup>b</sup>The difference between conditions is statistically significant at the .10 level.

ulation on the ratings, as predicted by  $H_{1a}$ , was statistically significant and the effect on choice probability, 11%, was marginally significant ( $t = 1.5, p < .10$ ).

In study 1, we manipulated the focal option by asking subjects, "How much more or less attractive is the [focal option]?" Possibly the fact that the word "more" appeared before "less" created the impression that the focal option alternative was expected to be more rather than less attractive. To test this explanation, we replicated in study 2 the business school and sweepstakes problems, using the wording "How much less or more attractive . . ." and "How much less or more do you prefer. . . ." For the business school problem, the difference in ratings posited in  $H_{1a}$  was smaller, but still statistically significant ( $t = 2.8, p < .01$  for attractiveness;  $t = 1.9, p < .05$  for preference). Similarly, the difference in choice probabilities was smaller and marginally significant ( $t = 1.3, p < .10$ ). In the sweepstakes problem, the results were almost identical to those of study 1 ( $t = 3.5, p < .01$  for attractiveness;  $t = 2.5, p < .01$  for preference;  $t = 1.8, p < .05$  for choice).

### Discussion

Studies 1 and 2 demonstrated that a manipulation of the alternative used as the focal option can have a systematic effect on the evaluations and choice probabilities of alternatives. Specifically, respondents tended to judge focal alternatives more favorably and were subsequently more likely to select them. All of the problems included in studies 1 and 2 involved alternatives about which respondents had information in memory but which were probably not previously compared. Study 3 examined the effect of the focal option manipulation when descriptions of alternatives were provided rather than retrieved from memory.

### STUDY 3

Study 3 tested  $H_2$  and also examined the effect of the focal option manipulation on recall of the alternatives' features. The focal option manipulation was predicted to lead to better recall of the features of the focal option, but that effect was expected to be small. When evaluating the attractiveness of the focal option in relation to the nonfocal option, respondents were expected to elaborate more on the features of the former and later to have better recall of these features. In contrast, because respondents received written descriptions of the alternatives and rehearsed their features in anticipation of a recall test, the differences in actual recall between the focal and nonfocal options were expected to be small.

### Method

**Procedure.** The subjects were 151 undergraduate students enrolled in a marketing class. Participation in the experiment was part of a course requirement. There were two differences between the task in study 3 and that in the previous studies. First, the two alternatives in each

problem were described in the questionnaire. With the exception of one category in which the described options had familiar brand names, the alternatives were referred to as brand AAA and brand BBB. A second difference in study 3 was that in the first three categories (35mm camera, cassette player, and answering machine), in addition to rating the relative attractiveness and making a choice, respondents performed a recall task.

In these three categories, subjects sequentially received the descriptions (including pictures) of alternatives, each on a separate handout, and were told that later they would be asked questions about these alternatives. For each alternative, subjects were given two minutes to read the attribute information. They then indicated the relative attractiveness of and their preference for the focal option, using the same manipulation and questions as in studies 1 and 2 (e.g., "How much more or less attractive is alternative BBB?"), followed by a choice between the two options. Next, subjects were given a recall task and asked to list as many features as they could remember for each of the two alternatives. Within each focal option condition, the order in which alternatives were listed in the recall part was manipulated between subjects. This manipulation was included to account for the possibility that the recall task for one alternative would inhibit recall for the second.

After completing the task for the first three product categories, subjects evaluated two alternatives in four additional categories to test  $H_2$  without a recall task. In these categories, the descriptions of the alternatives were contained in the questionnaire (rather than on separate handouts), such that subjects could refer back to the product information when assessing the relative attractiveness of alternatives.

**Stimuli.** As indicated, the features and pictures (taken from *Consumer Reports* and a sales catalog) of the alternatives included in study 3 were presented in the questionnaire (or, for the first three problems, on handouts). Each alternative was described in terms of five or six features and subjects were asked to evaluate the attractiveness of alternatives (with the same manipulation as in studies 1 and 2) and make choices. Figure 2 shows the alternatives in one category (without the pictures).

### Results

As can be seen in Table 2, contrary to  $H_2$ , the focal option manipulation did influence the attractiveness and preference ratings in favor of the focal option. This effect, however, tended to be weaker than that found in studies 1 and 2. In terms of choice, consistent with  $H_2$ , the shares of the focal options increased in only three of the seven categories. Even in these three categories, the share increases associated with the focal option manipulation were smaller than those found in studies 1 and 2.

To examine the impact of the focal option manipulation on recall of features, we conducted an analysis of variance with each alternative providing one observa-

**Figure 2**  
**STUDY 3: EXAMPLE OF PROVIDED DESCRIPTIONS**

<p><b>BRAND "AAA"</b> <b>VIDEO CASSETTE RECORDER WITH REMOTE</b> [picture of brand AAA] Brand AAA Price: \$259.00</p> <p>The Brand "AAA" video cassette recorder has the following features: On Screen Display: provides detailed instructions for programming on the screen itself; 4-event/1 month programmable timer: makes for easy recording for any day of the month; Special effects: includes freeze frame for great still shots; Variable speed slow motion: allows for greater enjoyment of sports programs.</p>
<p><b>BRAND "BBB"</b> <b>VIDEO CASSETTE RECORDER WITH REMOTE</b> [picture of brand BBB] Brand BBB Price: \$209.00</p> <p>The Brand "BBB" video cassette recorder has the following features: Digital Visual Tracking: automatically adjusts for optimum picture quality; Auto Eject: ejects tape at end of play and switches off power supply; Auto Index: marks tape, making it easy to find the start of each recording during rewind or fast forward; 2-week timer: allows you to reserve programs for recording two weeks in advance.</p>

**Table 2**  
**STUDY 3: EFFECT OF FOCAL OPTION MANIPULATION**  
**ON PREFERENCES WHEN ALTERNATIVE DESCRIPTIONS**  
**ARE PROVIDED**  
(standard errors in parentheses)

Category	Effect on attractiveness rating <sup>a</sup>	Effect on preference rating <sup>b</sup>	Effect on choice <sup>c</sup>
<i>Memory</i>			
Camera	3.42 <sup>d</sup> (.59)	3.48 <sup>d</sup> (.62)	11% <sup>d</sup> (.066)
Cassette player	1.43 <sup>d</sup> (.64)	1.43 <sup>d</sup> (.70)	-7% (.076)
Answering machine	2.18 <sup>d</sup> (.59)	1.89 <sup>d</sup> (.65)	7% (.076)
<i>Nonmemory</i>			
PC printer	2.12 <sup>d</sup> (.64)	1.79 <sup>d</sup> (.67)	-2% (.080)
Typewriter	2.17 <sup>d</sup> (.67)	2.08 <sup>d</sup> (.75)	10% (.075)
VCR	.90 (.73)	.71 (.82)	-1% (.079)
Color TV	2.33 <sup>d</sup> (.66)	2.08 <sup>d</sup> (.71)	0% (.075)

<sup>a</sup>Effect on attractiveness rating is the difference in average ratings between the two conditions (with sign reversal in one condition). For example, if the average rating is 3 when A is focal and -1 when B is focal, the effect size is 2.

<sup>b</sup>Effect on preference rating is the difference in average ratings between the two conditions.

<sup>c</sup>Effect on choice is the increase in choice share when the alternative is the focal option.

<sup>d</sup>Statistically significant at the .05 level.

tion. The dependent measure was the number of features correctly recalled for that alternative. A listed attribute was coded as correctly recalled if it was included, as is, in the description of the alternative. The independent variables included four 0-1 dummy variables. One variable received a value of 1 if the alternative was the focal option. A second variable received a value of 1 if the alternative was listed first in the recall task. A third variable received a value of 1 if the alternative was the one chosen. This variable was included on the basis of prior research suggesting that people have better recall for the alternatives they choose (Biehal and Chakravarti 1982; Johnson and Russo 1981). The fourth variable received a value of 1 if the alternative was evaluated first, to account for a possible effect on recall of the order in which alternatives' descriptions were considered.

The effect of being the focal option on the number of correctly recalled features was positive and statistically significant ( $F = 4.1, p < .05$ ). On average, there was an increase of .2 correctly recalled attributes when an option was the focal option. Respondents also had better recall for the alternatives they chose ( $F = 6.6, p < .05$ ). The effects of the order of the options in the recall task and the order in which alternatives were evaluated were not significant ( $p > .5$  and  $p > .2$ , respectively). A similar analysis with the total number of features recalled rather than just those recalled correctly indicated that none of the effects were significant. This result might reflect the tendency of subjects to list the same number of features for both alternatives considered, even when they had difficulty remembering those features.

### Discussion

The results of study 3 indicate that, even when alternatives' descriptions are provided, the perceived attractiveness of the focal alternative is enhanced. The results also indicate that the focal options are associated with better recall, though that difference is rather small. Apparently, the manipulation causes respondents to elaborate more on the focal option even when the descriptions of both alternatives are provided. However, this effect is weaker than that found in studies 1 and 2, where alternatives' features were retrieved from memory, and there is no consistent effect on subsequent choices.

One limitation of these results is that the product categories included in study 3 were different from those in studies 1 and 2. Consequently, the observed differences between these studies might be explained by the choice of product categories rather than any inherent differences in the evaluation process. Study 4 was designed to examine this alternative explanation by contrasting memory-based and provided-description-based (or stimuli-based) decisions, with the same product categories across conditions.

### STUDY 4

#### Method

The subjects were 132 undergraduate marketing students. Participation was part of a course requirement. Each respondent was asked to rate alternatives and make choices in two categories, graduate schools and vacation spots. One version of each problem was similar to that used in study 1, involving two alternatives that were identified by their names (Harvard or Stanford and Rome or Maui, respectively). In the other version, two alternatives (alternatives A and B) were described. The provided attribute descriptions of each alternative were derived from a pilot study (designed primarily for a different purpose) in which 260 undergraduate marketing students were asked to list the advantages and disadvantages of the specific school and vacation spot alternatives (e.g., of spending a one-week vacation in Rome vs. Maui). The most common responses from that study were used in constructing the descriptions of the alternatives for study 4. For example, Rome was described as "a city in Western Europe, historical monuments, ancient architecture, good shopping, good ethnic cuisine." Finally, as in the previous studies, subjects entered relative attractiveness and preference ratings and then made a choice.

#### Results

As can be seen in Table 3, the results of study 1 were replicated in the problem versions that included the names of the schools and vacation spots. Consistently, the focal option manipulation shifted the ratings and choices in favor of the focal option, though because of the small sample size, the effect in the sweepstakes problem was not statistically significant. In contrast, when alternatives' descriptions were provided, the effect of the focal

option manipulation on ratings and subsequent choices was consistently weaker.

Thus, study 4 replicated the results of the previous studies with the same product categories across task conditions. These findings are consistent with the assumption that the focal option manipulation influences decision processes differently in the two types of problems. Specifically, as in our previous discussion, the focal option is assumed to receive more attention if alternative evaluation is memory-based. Conversely, when alternatives' descriptions are externally available, the effect of the focal option manipulation on decision processes is weaker, consistent with the results of studies 3 and 4.

### STUDY 5

The effect of the focal option manipulation on decision processes was investigated by means of think-aloud protocols. Respondents were expected to focus their attention on the focal option when forming memory-based judgments. This prediction can be tested by counting the number of thoughts on the focal and nonfocal options. In addition, the mechanisms that were hypothesized to underlie the effect of the focal option manipulation, as well as the types of alternatives used in our research, suggest that respondents would be more likely to consider positive than negative features of alternatives. For example, respondents would be more likely to talk about the quality of education they would receive at Harvard or Stanford than to talk about the cost of that education.

#### Method

The subjects were 37 undergraduate students enrolled in a marketing class. Participation was part of a course requirement. Each subject first received detailed instructions on the task and the importance of thinking aloud while responding to problems. It was emphasized that there were no right or wrong answers, and that the researchers were interested only in the preferences and thoughts of the participants. Before starting the actual task, subjects were given one problem to practice thinking aloud while being recorded. As in the previous studies, the focal option was manipulated between subjects in the two versions of the questionnaire.

The task included five choice sets used in prior studies, including three problems in which alternatives were identified by name—the graduate school, sweepstakes (vacation spot), and restaurant (Chinese vs. Italian) problems—and two problems involving a cassette player and a typewriter with alternatives that were described in the questionnaire. By using different product categories for the five problems, we were able to obtain from each subject protocols of both memory-based and provided-description-based choices.

The protocols were analyzed by two independent judges. Specifically, the judges were instructed to count the number of positive and negative thoughts about the two alternatives in each of the five problems. The interjudge reliability was 87%. Disagreements were re-

Table 3  
STUDY 4: FOCAL OPTION MANIPULATION—MEMORY-BASED VERSUS PROVIDED DESCRIPTIONS  
(standard errors in parentheses)

<i>Problem: graduate school</i>				
<i>Memory-based descriptions</i>				
	<i>Harvard is reference (n = 28)</i>		<i>Stanford is reference (n = 28)</i>	
Average attractiveness	3.5 <sup>a</sup> (.74)	Harvard more	.2 (.82)	Stanford more
Average preference	3.5 <sup>a</sup> (.86)	Harvard more	.7 (.78)	Stanford more
Choice	66% <sup>b</sup> 34%	Harvard Stanford	46% 54%	Harvard Stanford
<i>Provided descriptions</i>				
	<i>School A is reference (n = 38)</i>		<i>School B is reference (n = 38)</i>	
Average attractiveness	1.6 <sup>b</sup> (.89)	School A more	.5 (.95)	School B more
Average preference	.9 (.92)	School A more	.6 (.95)	School B more
Choice	57% 43%	School A School B	47% 53%	School A School B
<i>Problem: sweepstakes (vacations)</i>				
<i>Memory-based descriptions</i>				
	<i>Rome is reference (n = 28)</i>		<i>Maui is reference (n = 28)</i>	
Average attractiveness	3.9 (1.00)	Rome more	2.5 (1.05)	Rome more
Average preference	4.0 (.95)	Rome more	2.6 (.85)	Rome more
Choice	79% 21%	Rome Maui	69% 31%	Rome Maui
<i>Provided descriptions</i>				
	<i>Vacation A is reference (n = 38)</i>		<i>Vacation B is reference (n = 38)</i>	
Average attractiveness	1.2 (.85)	Vacation A more	.6 (.80)	Vacation A more
Average preference	1.2 (.90)	Vacation A more	.7 (.85)	Vacation A more
Choice	59% 41%	Vacation A Vacation B	59% 41%	Vacation A Vacation B

<sup>a</sup>The difference between (focal option) conditions is statistically significant at the .05 level.

<sup>b</sup>The difference between (focal option) conditions is statistically significant at the .10 level.

solved by discussion. To test the predicted effect of the focal option manipulation on decision processes, we compared the number of thoughts on the focal option with the number on the other alternative. We also examined the number of positive and negative thoughts on each alternative.

### Results

The effect of the focal option manipulation on the ratings and choices replicated the results of the previous studies. In the graduate school, sweepstakes, and restaurant problems, there was a statistically significant shift in the attractiveness and preference ratings in favor of

the focal option ( $p < .05$  for all). The increase in choice probability due to the focal option manipulation was 26% in the graduate school problem, 10% in the sweepstakes problem, and 25% in the restaurant problem.

In the problems with provided descriptions, the focal option manipulation had a statistically significant effect on the ratings and increased the choice probability by 7% in the cassette player category. In the typewriter category, the direction of the effect on the ratings was reversed (not statistically significant) and there was no change in the choice probabilities of the two alternatives. In sum, similar to the previous findings, the results show a rather consistent effect of the focal option manipulation



**Table 4**  
**STUDY 5 (PROTOCOLS): EFFECT OF FOCAL OPTION MANIPULATION ON NUMBER OF THOUGHTS**  
**FOR AND AGAINST ALTERNATIVES**  
 (standard errors in parentheses)

Problem type	Average number of thoughts on focal option			Average number of thoughts on nonfocal option		
	Positive	Negative	Total	Positive	Negative	Total
Memory-based choice sets	.85 <sup>a</sup> (.11)	.31 (.05)	1.17 <sup>b</sup> (.11)	.50 <sup>a</sup> (.07)	.18 (.04)	.68 (.08)
Fully described choice sets	1.49 <sup>a</sup> (.15)	.71 (.13)	2.20 (.17)	1.33 <sup>a</sup> (.16)	.56 (.09)	1.89 (.19)

<sup>a</sup>The difference between average number of positive and negative thoughts is statistically significant at the .01 level.

<sup>b</sup>The difference between average total number of thoughts on the focal and nonfocal options is statistically significant at the .01 level.

on ratings and subsequent choices when judgments were memory based, but a weak and inconsistent effect when the descriptions of alternatives were provided.

Table 4 reports the average number of positive and negative thoughts on the focal and nonfocal alternatives within the two types of problems. In the graduate school, sweepstakes, and restaurant problems combined, the average numbers of positive, negative, and total thoughts about the focal alternative were significantly greater than the average numbers of such thoughts about the nonfocal alternative ( $t = 2.3$ ,  $t = 2.2$ , and  $t = 3.6$ , respectively,  $p < .05$  for all). This finding is consistent with the assumption that the focal option manipulation causes respondents to focus their thoughts on the focal alternative. Particularly noteworthy is the finding that, despite the tendency to prefer the focal option, respondents expressed more negative thoughts about that alternative than about the nonfocal one. In addition, as expected, more positive than negative thoughts were expressed about both the focal and nonfocal alternatives (for both,  $p < .01$ ).

These results indicate that, when alternatives were evaluated from memory, the focal option received more attention and positive features were more salient. In contrast, in categories with provided descriptions (cassette player and typewriter), there was on average only a small increase in the number of positive, negative, and total thoughts when an alternative was the focal option, and this effect was not statistically significant ( $p > .10$ ).

#### GENERAL DISCUSSION

Consumers usually are assumed to have well-defined attitudes and preferences for alternatives offered to them. A further assumption is that, to change consumer preferences, marketers should employ various means of persuasion (e.g., Fishbein and Ajzen 1975; Petty, Cacioppo, and Schumann 1983). Recent research, however, indicates that consumers' preferences are often fuzzy and uncertain (e.g., March 1978; Payne, Bettman, and Johnson 1992), making them susceptible to various other influences. We examined effects on consumer preferences that are produced by influencing the manner in which alternatives are compared. Specifically, the results in-

dicate that shifting the focus of comparison to an alternative can enhance that alternative's perceived attractiveness. This effect was obtained for alternatives about which respondents had information stored in memory but probably had no pre-formed preferences between them.

We also examined situations in which descriptions of alternatives are provided (e.g., in a sales catalog) and are externally available when relative preferences are formed. In these cases, the focal option tended to receive higher attractiveness ratings, but we found no consistent effect on subsequent choices (see also Sanbonmatsu, Kardes, and Gibson 1991). This result suggests that, even when alternative descriptions are provided, the focal option manipulation can lead consumers to pay more attention to the focal option, though the magnitude of that effect was small.

#### *Theoretical Implications*

Our research demonstrates that preferences between alternatives can be influenced systematically by using a simple wording manipulation that causes respondents to use one option as the focus of comparison. These findings extend the growing literature on the effect of the direction of comparison on preferences (e.g., Dunning and Parpal 1989; Houston, Sherman, and Baker 1989; Sanbonmatsu, Kardes, and Gibson 1991). Two mechanisms were hypothesized to account for the effect of the focal option manipulation. First, a tendency to focus on the features of the focal option can enhance its attractiveness and subsequent choice probability if the option has primarily positive features. A second explanation is based on the principle of loss aversion and the assumption that the focal option serves as the reference alternative and thus appears more attractive. Unfortunately, there are no process measures that can "prove" the effect of loss aversion on preferences in any particular case. The power of loss aversion as an explanation is derived from its ability to account for a wide variety of decision phenomena that are inconsistent with standard theories of choice (Tversky and Kahneman 1991).

Both the attention focus and loss aversion mechanisms were likely to be operating and contributing to the ob-

served results, though separating the two may be difficult. The two explanations could be disentangled by using choice problems in which the alternatives' negative features are more salient than their positive features. In that case, the attention focus explanation leads to the prediction that the focal option would appear less attractive, because its negative features are the focus of attention. According to loss aversion, in contrast, the positive features of the reference option (which are potential losses if that option is not selected) would tend to loom larger than its negative features. Thus, according to the loss aversion explanation, an option whose negative features are more salient than its positive features would still tend to appear more attractive when it is the focal option than when the other option is the focal option.

We tested several problems in which the negative features were expected to be more salient. In one problem, subjects evaluated two flights, one nonstop but more expensive and the other requiring two stops but less expensive. In another problem, the choice was between two blood pressure medications with different side effects (mild headache vs. mild indigestion). A third choice was between an apartment requiring a longer commute and an apartment that was in worse condition. We tested these problems twice; in the first study the task wording was "How much more or less attractive is . . .?" and in the second it was "How much more or less unattractive is . . .?" However, we did not find a consistent pattern of results, and differences were not statistically significant. The fact that the focal option manipulation did not have a significant effect in these tests might reflect the conflicting effects of loss aversion and attention focus on preferences. Future research should further investigate the impact of changing the focal option when alternatives' negative features are more salient. Finding appropriate alternatives for such tests may be difficult, because merely counting the number of positive and negative features is not sufficient and because of the difficulty of assessing *a priori* the degree of loss aversion on various attributes.

#### Marketing Consequences

Our findings suggest that marketers can affect consumer preferences by influencing the manner in which the product they promote is compared with competing alternatives. In particular, when designing comparative ads, shelf talkers, and personal communications, marketers could encourage consumers to consider the advantages and disadvantages of their product in relation to a competitor (rather than the competitor's disadvantages in relation to their product). Furthermore, the results suggest that it might be more effective to use a promoted brand as the focal option in a comparison with other brands (e.g., using comparative advertising) than to feature the promoted brand exclusively. That is, consumers may feel more confident if brand evaluations are based on a comparison with other alternatives (assuming

the comparison is perceived as credible) than if a brand is evaluated in isolation.

A limitation of our research is that it was conducted in the laboratory and employed questions that subjects in an experiment may expect to answer but consumers would not. Marketers therefore should find an appropriate way to translate the laboratory instructions into evaluation guidelines that focus attention on the alternative they are trying to promote. For example, a salesperson may try to focus a customer's attention and evaluation process on the relative advantages and disadvantages of the brand he or she wants to sell rather than on those of the competitor.

The finding that an option that is the focus of a comparison tends to appear more attractive and to have a higher choice probability provides another reason to promote brand awareness and recall. Specifically, when purchase decisions are being made, brands associated with greater awareness and better recall of features are more likely to be the focus of comparisons with other alternatives and thus appear more attractive. Finally, marketers should also take the focal option effect into consideration when presenting various alternatives within their product line. For example, the findings suggest that if a car with options (e.g., cruise control) is the standard package (e.g., "How much more attractive to you is the car with the options?"), a consumer is likely to perceive greater benefits associated with the added options and to be more likely to prefer the car with the options than he or she would if the car without the options were the standard.

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