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In general, consumers establish a preference for one product early in a decision process. When this preference does not include consideration of product prices, the currently preferred product is called the “benefits leader.” This article proposes that consumers who switch to a cheaper product after learning prices retain a trace of preference for the benefits leader. Retention of the benefits leader is evidenced by the distortion of new information to favor the benefits leader and by greater-than-normative reversion to it. The authors also find that reversion does not occur when the initially leading product (that consumers switch from) is based on a cost savings. This suggests that though consumers retain cognitive elements associated with benefits leaders, they do not retain similar elements associated with leaders based on cost savings.

**Keywords:** pricing, information distortion, preference reversal, discounts, reversion

Benefits Leader Reversion: How a Once-Preferred Product Recaptures Its Standing

Most processing models of consumer decision making reasonably assume that consumers update their preferences as they encounter new information. This updating determines the currently preferred or leading option (i.e., the brand or option that is better on the full balance of information received up to that point in the decision process). Several studies have found that consumers interpret new information to favor that leading option. The robustness of this tendency suggests that the option that emerges as the leader exerts influence on the choice process, regardless of how it came to be the leader (e.g., Bond et al. 2007; Carlson, Meloy, and Russo 2006; Russo, Meloy, and Medvec 1998).

In contrast to this notion of universal leader influence, we posit that in the process of making a decision, consumers who switch to a cheaper brand as their new overall leader do not fully abandon their preprice leader. In other words, we expect that consumers form and retain a cognitive element associated with the product that was preferred before price induced them to switch to a cheaper option. We refer to this latent preference as the “benefits leader.” We further posit that the benefits leader influences the processing of information encountered after price. Consistent with this view, and in contrast with prior research on predecisional distortion, we find that consumers who switch to a cheaper product during the choice process tend to bias subsequent information against their price leader and in favor of their (previous) benefits leader. This distortion is so substantial that a majority of consumers readopt their benefits leader as their overall leader—an effect we refer to as “benefits leader reversion.”

We organize the remainder of this article as follows: We begin with an overview of leaders, how they emerge, and their influence on the decision process. Next, we develop the idea that benefits leaders may coexist with price leaders, and we derive our research hypotheses. We then test the hypotheses with data from a series of studies. In Study 1, we demonstrate the presence of benefits leader reversion. A follow-up study finds benefits leader reversion in real and hypothetical choices. Study 2 demonstrates the strength of this effect by showing that reversion can occur even when postprice information objectively favors the cheaper option. We find evidence in both Studies 1 and 2 that consumers support reversion by distorting postprice information to favor their benefits leader. Finally, Study 3 examines whether reversion occurs only for benefits lead-
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The process we envision for dual leadership is consistent with recent findings on dual attitudes. Specifically, whereas attitude change has been viewed as overwriting an existing attitude with a new one, new findings suggest that old attitudes persist in parallel with new attitudes, even when the old attitude conflicts with the new one (Cohen and Reed 2006; Petty et al. 2006). Although there continues to be debate over whether original attitudes are implicitly or explicitly retained, there is little debate about the claim that original attitudes leave traces that persist in the face of explicit attitude change. Similarly, consumers who switch leaders during a decision process may not fully overwrite their prior leader but instead retain a trace of it. Specifically, we propose that consumers who switch away from their benefits leader (for cost considerations) do not overwrite this leader with their new leader but instead retain a cognitive element associated with the benefits leader, an element that might influence the remainder of the choice process.

Dominance of the Benefits Leader

We expect that consumers who switch to the cheaper product during a decision process continue to retain the originally preferred product as their benefits leader. On the basis of what we know about biased proleader processing, it is possible that the benefits leader exerts influence on how new information is evaluated (Carlson, Meloy, and Russo 2006; Posavac et al. 2004). Alternatively, it is also possible that the current price leader exerts influence over the evaluation of new information in a manner that is consistent with previous work on predecisional distortion. Namely, new information is evaluated to support whichever product is the current overall leader (for a review, see Brownstein 2003). The key question here is which leader (the benefits leader, which is now trailing the decision process, or the price leader, which represents the current overall preference) will have the greatest influence on the evaluation of new information. Ultimately, the answer to this question is empirical. However, there is some evidence to indicate that the benefits leader may be more dominant than the price leader.

It is well documented that consumers struggle to avoid making impulse purchases. That is, consumers often act against what they believe they should do (for long-term welfare) so that they can satisfy immediate desires (e.g., Khan and Dhar 2007; Milkman, Rogers, and Bazerman 2007). In other words, when faced with a conflict between a “want” option and a “should” option, consumers tend to focus on the immediacy of the outcome that often leads to the selection of the want option (Shiv and Fedorikhin 1999). If the benefits leader belongs to the same desire-oriented category as want options and vice options, it might have special status.

Although evidence suggests that the benefits leader is likely to dominate the price leader, the question remains as to how this dominance will play out. Prior research has found that consumers bias new information to favor whichever brand is leading during a decision process (Carlson, Meloy, and Russo 2006; Meloy 2000; Russo, Meloy, and Medvec 1998). If the benefits leader exerts a dominant influence on the predecisional processing of new information, consumers who have both a benefits leader and a price


er or if consumers also revert to price leaders. Specifically, we investigate what happens if the role of price and benefit attributes are switched—that is, whether consumers whose initial preference is based on price information and who switch leaders after receiving some diagnostic nonprice information revert to their initial price leader. We conclude with a discussion of the managerial and theoretical implications of our findings.

BACKGROUND AND HYPOTHESIS DEVELOPMENT

There are many situations in which consumers know relatively little about the specific options available before they begin the choice process (e.g., houses, new technology, restaurants, hotels in a new city). In such cases, consumers may acquire some information about the benefits of the options before they learn prices. For example, consumers may see advertisements or read reviews for products that cause them to form a tentative preference. Likewise, catalog and Internet retailers frequently provide full descriptions of brand alternatives but also state “call for price.” Finally, it is common for Internet retailers and product search sites to list product attributes side by side to facilitate comparisons that encourage formation of a leading option before prices are learned. Such situations provide the conditions necessary for consumers to develop a preference for one product before learning prices. If they later learn that their leading product is more expensive, they might switch their preference to a cheaper product.

However, when this happens, the consumer may be torn between the two products, with one leading on benefits and the other leading on price.

The Benefits Leader

Festinger (1957) was among the first to propose that choice gives rise to a new cognitive element in the consumer’s mind. He claimed that the element representing the chosen option has a pull that causes the decision maker to bias new information to support it. Since Festinger’s seminal work, a vast body of research has found that most decision makers also establish a tentative leader during predecisional processing. This leader represents the option that is tentatively preferred given the evidence at that point (Fischer, Greitemeyer, and Frey 2008; Gerard 1967; Jecker 1964; Montgomery 1983).

This article extends the work on tentative leaders by examining whether consumers can have two leaders at the same time. The benefits leader is the option that is preferred overall on the basis of the nonprice information encountered so far in the decision process. The price leader is the option that is preferred on the basis of a consideration of benefits and prices. Rarely, the benefits leader and the price leader are the same—that is, when the more appealing option is cheaper or when the more appealing option is more expensive but the cost difference is insufficient to cause the consumer to shift preference to the cheaper option. More typically, however, the price leader and benefits leader are different because most benefits carry with them an additional cost. In our case, we define dual leadership as occurring when a consumer prefers the more expensive brand if price is no object but prefers the cheaper brand given the cost savings it provides.
leader might bias their evaluations of new information (encountered after price) so that it supports the benefits leader. If the benefits leader exists and if it dominates the price leader, consumers might distort postprice information to favor the benefits leader, thereby enabling their reversion to it.

In summary, we posit a benefits leader reversion. When encountering new information, consumers who previously switched to the cheaper option (i.e., the price leader) will revert to their benefits leader with greater frequency than would be expected normatively. If this tendency toward benefits leader reversion is strong enough, consumers might revert even if the new information objectively favors the price leader. That is, although the new information favors the price leader, it may be distorted sufficiently to permit consumers to revert to their benefits leader.

**STUDY 1: DEMONSTRATING BENEFITS LEADER REVERSION**

A test of benefits leader reversion requires that we create conditions necessary for consumers to have dual leadership. To do so, consumers must develop a preference for one option and then encounter a price difference that is sufficient to induce switching to a cheaper option. People who switch as a result of price can have both a benefits leader (their original leader) and a price leader (the cheaper option). We refer to this subset of consumers as the focal sample. If these consumers retain a cognitive element associated with their benefits leader, we should find (1) evidence of its influence on the evaluation of new (postprice) information and (2) greater reversion to the benefits leader than is normatively expected.

**Method**

The decision task. We test benefits leader reversion for a decision process between two “white tablecloth” restaurants (Restaurant L and Restaurant R). Four attributes defined the restaurants: service, desserts, prices, and menus. These attributes were designed to maximize the number of participants in the focal sample. Through pretests, the first two attributes (service and desserts) were designed to slightly favor Restaurant L, so that most participants would have this restaurant as their leader (i.e., their benefits leader) before learning about the price. The service attribute read as follows:

> A local food critic has recently been to both restaurants and had this to say in his column: “Service at Restaurant L is excellent. The waitstaff is well-trained, courteous, knowledgeable, and friendly, and the service is well-timed. The chef and management are polite and responsive to customer requests. Service at Restaurant R is very good. The waitstaff is well-trained, knowledgeable, and friendly. Management is responsive to customer needs.”

The third attribute, price, indicated that, in general, the restaurants had similar prices but that Restaurant R was currently offering a discount. We expected that this attribute would cause many participants to switch from the slightly more appealing restaurant (L) to the cheaper one (R), thus creating the conditions necessary for participants to have two leaders.

We were also interested in whether larger discounts might be related to benefits leader reversion. As such, we created six price discounts ranging from 10% to 35%, in increments of 5%. The price attribute was worded as follows, where X represents the magnitude of the discount and Y represents the dollar equivalent of that discount from a base of $50 for the condition:

> You do some math using prices from the two menus to figure out how much the meal might cost. You compute the average cost for dinner at Restaurant L, assuming one appetizer, a mid-range entrée, and dessert as being roughly $50 per person. You do the same for Restaurant R and discover that it is roughly X% cheaper, with the average cost per person being roughly $Y.

Assuming that we find reversion to the benefits leader, there are three possibilities for how reversion might be influenced by the magnitude of price difference. First, a negative relationship (i.e., smaller price differences causing greater reversion) would suggest that benefits leaders are more likely to be abandoned or overwritten when a preference reversal is induced by a large price discount. This result would be consistent with a straightforward cost–benefit trade-off account. Second, a positive case (i.e., larger price differences causing greater reversion) would be consistent with quality inference, such that the privately retained benefits leader is bolstered by an inference that it is far superior in quality to the cheaper option. The idea is that the likelihood of making a quality inference and perhaps even the weight of the inference would increase as the price difference that induced the initial switch increased. Third, the null case (i.e., no relationship between magnitude of price difference and reversion) would imply that all benefits leaders have the same potential to induce reversion.

The fourth attribute, menus, was designed and pretested to be neutral, so that objective participants would (on average) perceive it as favoring neither restaurant. A sample of 37 participants from the same population as participants in the main experiment pretested this attribute. Pretest participants evaluated this attribute by responding to the following item: “Consider the information that you have seen and rate it on the scale below according to your personal judgment. This information strongly favors...” (responses were reported on a nine-point scale anchored on the low and high ends by “Restaurant L” and “Restaurant R,” respectively). The mean pretest evaluation of this attribute (4.80) is an unbiased estimate of its diagnostic value, which did not differ significantly from the midpoint of the nine-point scale (t(36) = .72, p > .45). That is, participants did not (on average) perceive this attribute as favoring either restaurant.

Though neutral on average, the standard deviation (across pretest participants) of the evaluations for this last attribute was 2.06, indicating that some choice participants would likely perceive it as favoring Restaurant R and others would perceive it as favoring Restaurant L. Of pretest participants, 51.3% evaluated it in the 1–4 range on the nine-point scale. This percentage is important because it sets the normative upper bound for benefits leader reversion. That is, if every participant who switches at price from Restaurant L (the benefits leader) to Restaurant R (the price leader) is indifferent between the restaurants after price, up to 51.3% of participants (but no more) could nor-
into the focal sample (i.e., whether higher discount levels created more switching at price). A logistic regression predicted that greater discounts led to more switching to the cheaper restaurant (Restaurant R), whereas the 10% discount caused only 37.8% to switch.

**Benefits leader reversion.** Of the participants in the focal sample, 96 (70.6%) reverted to their benefits leader after reading the final attribute. In other words, a significant majority (z = 4.80, p < .001) did not stay with their price leader after learning of an additional attribute that was objectively neutral. Impressive as this is, the best test for benefits leader reversion is to compare this percentage with the normative upper bound (51.3%), which was established by pretest participants who evaluated the fourth attribute in isolation. A comparison of proportions revealed that the incidence of reversion was reliably above this upper bound (z = 2.11, p < .05).

Next, we examined whether benefits leader reversion differed by discount level. For participants in the focal sample, we regressed reversion to the benefits leader (0/1) on discount level. There was no effect of discount level on reversion (β = −.023, z = .95, p > .30). This null result suggests that the key element in reversion is the presence of a benefits leader, not the magnitude of price difference that compelled participants to switch in the first place.

**Evaluation of the final attribute.** If benefits leader reversion occurs because consumers bias their evaluation of new information to support the benefits leader, focal sample evaluations of the last attribute should be lower than the neutral value of five on the nine-point scale (i.e., participants should perceive this attribute as favoring the benefits leader, Restaurant L). However, if the effect occurs through increased weight to the first two attributes in the sequence (both of which favor Restaurant L), the mean evaluation of the last attribute should not differ from the scale midpoint of five. Finally, if participants bias their evaluation of the last attribute to support the current leader, mean evaluations should exceed five (i.e., they should favor the price leader, Restaurant R).

The average evaluation of the last attribute by the focal sample was 4.32, a value that was below both the scale midpoint (t(135) = 3.65, p < .001) and the objective benchmark obtained from the pretest sample (t(135) = 2.58, p < .01).\(^1\) That is, although this entire sample of 136 participants had Restaurant R as their leader when they examined the last attribute and though the last attribute was objectively neutral (i.e., not different from five), they evaluated it as favoring their benefits leader (Restaurant L).

**Tests for individual differences.** Because participants in the focal sample were qualified for inclusion on the basis of their having switched after learning about price, it is possible that the reversion effect was partly due to a selection bias. For example, focal sample participants may simply have been more prone to switching leaders in general.\(^2\)

\(^1\)The nonfocal sample (n = 130) consisted mainly of participants who had the more expensive restaurant as their leader and kept it as their leader after learning about the price (n = 124). These participants biased their evaluation of the final attribute so that it favored the more expensive restaurant (M = 3.86; t(124) = 6.39, p < .01), even though this attribute objectively favored neither option. For completeness, we compared the mean evaluation of the final attribute by those who had the more expensive restaurant leading throughout with the mean evaluation of those in the focal sample (M = 4.32). This revealed that the evaluations of the former were only marginally more biased in favor of the more expensive option (t(258) = 1.75, p = .08).
To examine this possibility, we compared the proportion of focal sample participants who switched between attributes one and two (.030) with the proportion of nonfocal participants who did so (.071). Not only was the difference in these proportions not reliable ($p > .10$), but it was also not in the direction required for the sample selection argument to gain traction. We also examined a battery of individual difference measures (e.g., mood, price–quality schema, price consciousness, value consciousness) but found no difference between participants in the focal sample and those in the nonfocal sample on any of these measures ($ps > .20$). Moreover, none of these measures were related to reversion in any way ($ps > .20$).

**Discussion**

Participants who switched to a cheaper restaurant during the decision process reverted to their benefits leader at rates greater than would be expected if they evaluated the last attribute objectively. Moreover, participants biased their evaluation of the final attribute so that it favored the trailing option (i.e., their benefits leader). We also found that though magnitude of the price discount influenced switching at price, it had no effect on reversion, suggesting that reversion is likely to exist for a wide range of price promotion tools. Finally, none of the individual differences that we explored were correlated with benefits leader reversion, indicating that the tendency to revert may be general.

Benefits leader reversion can be understood as a tendency for consumers to flip-flop on price. Although this pattern of behavior is revealing, its external validity for real-world choices hinges on whether people will forgo a cost savings to revert to their benefits leader. To examine this issue, we conducted a follow-up study involving a probabilistically real choice. Participants were 65 undergraduate students who made a restaurant decision similar to that presented in the main study. Each had a 1-in-65 chance to receive a gift certificate to one of two restaurants. Participants were told that if their name was drawn, they would receive a $50 gift certificate to the restaurant they selected after reading the information about both restaurants. They were also aware that $50 would be enough to cover a meal for two at the cheaper restaurant but that it would not cover the full cost of a meal at the more expensive one. Thus, they were aware that selecting the more expensive restaurant would mean that they would need to spend some of their own money to make use of the gift certificate if they won it.

Despite there being a real (probabilistic) cost of reversion, 71% of those in the focal sample reverted to the more expensive (benefits leader) after the last attribute. As in the main study, we used a holdout sample ($n = 31$) to assess the normative upper bound for reversion (35.5%) on the final attribute and found that the incidence of reversion by those in the real choice was significantly greater than this upper bound ($z = 2.61, p < .01$). Finally, although the last attribute was perceived as slightly favoring the cheaper option by those in the holdout sample ($M = 5.95$), it was also evaluated as favoring the benefits leader by participants in the focal sample ($M = 3.62; t(38) = 5.49, p < .01$). In other words, the benefits leader had so much influence on evaluations of the final attribute that the perceived diagnosticity of this attribute was reversed from (objectively) favoring the cost leader to favoring the benefits leader. Because the final attribute was intended to be neutral, this finding is serendipitous and thus would benefit from replication.

**STUDY 2: BENEFITS LEADER REVERSION AS A STRONG BIAS**

We designed this study to determine whether benefits leader reversion would occur even when the last attribute objectively favored the cheaper option. We also designed it to determine whether people can retain two benefits leaders or whether the new benefits leader replaces the old one. That is, if reversion in the foregoing studies occurred because all original leaders are retained, consumers should revert to their original leader, regardless of whether they switched from it for price or benefits considerations. However, if consumers revert only when the switch was for cost considerations, we can infer that consumers do not retain multiple benefits leaders but rather that reversion is viable only when the consumer has a price leader and a benefits leader. To examine this issue, we included a control condition in which a nonprice attribute was used in place of price to induce participants to switch leaders.

**Method**

**Overview.** This study employed the same basic design as that used in Study 1, with two fundamental changes and a few minor differences. The first fundamental change was the construction of the last attribute. To examine the robustness of benefits leader reversion, the final attribute was written to favor the cheaper option. If participants in the focal sample interpret this attribute objectively, they should not revert to the benefits leader. The second fundamental change was the addition of a control condition in which the price attribute was replaced by a nonprice attribute that was designed to create approximately the same level of leader switching as a price difference would.

There were also three minor changes from Study 1. First, in an attempt to establish the reversion effect in another domain, the decision domain here was resort hotels for an upcoming spring break vacation. Second, the decision involved six (not four) attributes; we added two attributes to the beginning of the decision process. Third, the first four attributes were designed to be neutral (on average), which meant that about half the participants would have the cheaper option as a leader before they encountered price. These participants’ choices cannot be used for examining the benefits leader. As such, the focal sample in this study is a smaller proportion of all participants than in Study 1. We deemed this change to be necessary because it enables us to test for benefits leader reversion in a decision in which the initial attributes are not correlated (as they were in Study 1). This is important because the existence of reversion here would rule out the possibility that reversion occurs only when the benefits leader is objectively superior on the preprice attributes.

**Participants and design.** Participants were 139 undergraduate students at a large southeastern university who were paid $8 to participate in this study. Each participant was assigned to either the standard or the control condition.

**Standard condition.** Participants in the standard condition made a decision between resort hotels. The choice
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packet consisted of eight pages: an introductory page, six attribute pages, and a decision page. The six attributes describing the two hotels were airport shuttle service, pool and game area, proximity to shopping and nightlife, rooms, price, and food. The price attribute always appeared in the fifth serial position, far enough into the decision process to allow a benefits leader to have emerged spontaneously and to enable us to examine individual differences in levels of preprice leader switching. The scenario read as follows:

A double occupancy room at Hotel A generally costs $220 per night during the time of year you plan to travel, but there is currently a discount of 20% off for guests staying 3 days or more. Hotel B costs $225 per night for double occupancy during the time of year you plan to travel. Currently, there are no discounts available for Hotel B.

We designed and pretested the last attribute in the information sequence, food, so that it favored the cheaper hotel (Hotel A). As in Study 1, we tracked the decision process using the three progress questions after each attribute.

Control condition. Participants in the control condition responded to the same stimuli as participants in the standard condition, with the exception that an entertainment attribute was substituted for the price attribute. We designed and pretested this attribute to favor the targeted option (Hotel A) so that participants who were leaning toward Hotel B would be inclined to switch leaders. It was also designed to be slightly less diagnostic than the price attribute used in the standard condition. The idea was to create a new leader (for participants in the control condition) for which commitment was not stronger than in the standard condition. If reversion rates were lower in the control condition than in the standard condition, it could not be due to greater commitment to the new leader adopted after switching at the fifth attribute.

Pretests. We pretested the attributes in this study to verify their neutrality and diagnosticity as prescribed by the design and also to establish a normative upper bound for reversion. For the first pretest, we drew 25 participants from the same population as the main study. These participants read and reviewed the stimuli and evaluated each attribute on a nine-point scale in response to the item, “Please consider the information that you have just received. Rate it on the scale below according to your personal judgment.” A score of 1 favored the first alternative listed, and a score of 9 favored the second alternative listed. We used different hotel names for each attribute (i.e., Hotels K and Q for the first attribute, Hotels M and W for the second, and so forth) to preclude a preference from developing.

As we expected, the four neutral attributes did not differ from the scale midpoint of five either collectively (M = 4.99, t(24) = .04, p > .95) or individually (ps > .40) (range = 4.64–5.48). The 20% discount in the price attribute was significantly diagnostic in favor of Hotel A (M = 1.88; t(24) = 10.15, p < .001). We conducted a second pretest to calibrate the entertainment attribute that replaced price in the control condition and the food attribute that would be the last attribute. This pretest revealed that the entertainment attribute favored Hotel A (M = 4.77), though as we intended, it did not favor Hotel A as strongly as the price attribute (t(55) = 7.47, p < .01).2 Likewise, the mean evaluation of the food attribute (M = 3.80) was significantly below the scale midpoint of five (t(55) = 2.26, p < .05), indicating that it favored the cheaper hotel.

To establish an upper bound on the proportion of participants who might normatively view the postprice attribute as favoring the more expensive option, we calculated the proportion of pretest participants who evaluated the final attribute as favoring the more expensive alternative on the nine-point scale. As we expected, a minority of pretest participants (28.3%) evaluated it as favoring the more expensive hotel. Thus, normatively, we should expect no more than 28.3% of focal sample participants to revert to their benefits leader after learning about the last attribute.

Results

Focal samples. Of the 49 participants in the standard condition, 14 preferred the cheaper hotel before receiving the price information. These participants do not qualify for dual leadership, so we ignore their data. Nineteen had the more expensive hotel as their leader before they examined price but were not swayed by the 20% price discount (i.e., they retained the more expensive option as leader throughout). This left 16 participants who qualified for dual leadership; they constitute the focal sample for the standard condition. In the control condition, 27 of the 90 participants preferred the targeted option when they received the entertainment attribute, disqualifying them from the possibility of dual benefits leadership. Another 48 participants declined to switch in face of this benefits-based information, leaving a focal sample of 15 participants in the control condition.

Benefits leader reversion. Examination of leadership data in the standard condition revealed that 11 of the 16 participants (68.8%) who qualified for dual leadership reverted to their benefits leader after the last attribute. This proportion is significantly greater than the normative benchmark of 28.3% (z = 3.59, p < .001) and establishes that benefits leader reversion occurs in a second domain. In contrast, only 5 of the 15 participants (33%) in the control condition focal sample reverted to their preentertainment leader after reading the last attribute. This is both not greater than the normative benchmark of 28.3% (z = .37, p > .70) and lower than the reversion proportion from the standard condition (z = 2.11, p < .05). Thus, it seems that whereas consumers can hold both a price leader and a benefits leader in their minds, they do not simultaneously retain two benefits leaders.

Evaluations of the final attribute. As in Study 1, we examined evaluations of the last attribute to understand the benefits leader reversion effect. The mean evaluation of the

2We conducted a third pretest to determine the objective importance of the price and entertainment attributes. Thirty-eight additional pretest participants read either the six attributes for the control condition (n = 20) or the six attributes for the standard condition (n = 18) and then allocated 100 importance points across the six attributes. A comparison of the importance of price and the importance of entertainment revealed the former to be statistically more important than the latter before the decision (31.6 points for price and 11.5 for entertainment; t(36) = 6.29, p < .001). After the decision, however, the gap narrowed (26.9 for price and 18.9 for entertainment; t(36) = 1.29, p > .10). This eliminates any possibility that reversals due to the entertainment attribute would result in a more strongly held new leader.
last attribute by participants in the focal sample of the standard condition was 6.40, a value that was both reliably above the scale midpoint of five ($t(15) = 2.26, p < .05$) and well above the objective mean evaluation (3.80) provided by participants in the pretest sample ($t(15) = 4.90, p < .01$). That is, although these 16 participants had Hotel A as their leader when they read the last attribute and though the last attribute objectively favored Hotel A, they evaluated it as favoring their benefits leader (Hotel B).

**Individual differences.** Again, we examined whether participants in the focal sample were especially prone to changing leaders before learning about the price by comparing preprice switch rates of participants in the focal sample with switch rates of participants not in the focal sample. Participants in the focal sample of the standard condition switched an average of .33 times across the first four attributes, a rate that was not significantly different from that of participants not in the focal sample (.22; $t(47) = 1.15, p > .25$). Thus, there is no indication that participants in the focal sample were more likely to switch in general.

**Discussion**

As in Study 1, we found evidence of benefits leader reversion in a selection between two hotels for an upcoming spring break trip. This reversion occurred even though the final attribute objectively favored the cheaper hotel. Moreover, participants’ attribute evaluations suggest that they biased their evaluation of this final attribute so that it favored their benefits leader. We also found that reversion occurred only when the cause of the initial reversal was a cost savings. That is, we found no reversion to an abandoned benefits leader when information that caused the consumer to change leaders was not cost based, even though that information was less diagnostic and less important than the price information used to induce an initial reversal in the standard condition. Thus, it seems that consumers overwrite old benefits leaders with new ones, but they do not overwrite old benefits leaders with new price leaders.

What might explain the benefits leader reversion effect? Is it possible that the leadership question does not fully capture the “true” cumulative preference of participants when answered after price? If so, the leader reported after participants learn about price information would not correspond with the final choice made when price is the last attribute. Is there something special about the serial position of the price attribute deep in the decision process? Do people need to feel a sense of strong commitment to their benefits leader for benefits leader reversion to occur? To examine these and other issues, we conducted a series of follow-up studies.

**Replicates**

To address the aforementioned issues, we ran several replicate experiments. The study design and stimuli for these experiments were similar to the main study, except as noted. We report these replications in summary form to avoid repetition in description of their common methods.

**Validity of the postprice leader.** Thus far, we have assumed that the leader that participants report after learning the price is a good measure of overall preference at that time. However, if people who switch to the cheaper option do not actually select it as their final preference at that time, reversion might be due to our measuring the leader (i.e., an epiphenomenon). To examine this possibility, we asked 184 participants to pick between two hotels that were described by the first four attributes from Study 2 and a price attribute. Participants reported their leader after all five attributes and then were asked to form a final overall preference and pick their preferred hotel on a subsequent page. Of the 184 participants, only 11 (<6%) reported a final choice that differed from the leader they reported after learning about the price. In short, the postprice leader question is a good measure of cumulative preference up to that point.

**Commitment to the benefits leader.** Participants (n = 117) selected between two resort hotels. Each participant was randomly assigned to one of four conditions that varied in the number of attributes that constituted the decision process and where price appeared in the sequence. Specifically, price was varied to be in serial positions 2, 3, 4, or 5, but it was always second to last in the sequence, with a diagnostic attribute appearing last. This meant that the choices involved three, four, five, or six attributes, respectively. Likewise, preprice benefits leaders were based on one, two, three, or four neutral attributes, respectively. The postprice attribute used in this study was the same as that in Study 2, so the normative upper bound for reversion was 28.3%. The findings revealed that benefits leader reversion was lowest when price was the second attribute 31.4% (i.e., when the benefits leader was based on just one attribute), but thereafter, it jumped to a plateau (51.9% with price third, 53.6% with price fourth, and 51.8% with price fifth). Tests revealed no difference in reversion when price appeared in serial positions 3–5 ($\chi^2(2) = .022, p > .90$) but a significant difference when these reversion rates were compared with that when price was in the second position ($\chi^2(1) = 4.36, p < .05$). Thus, it seems that benefits leader reversion requires some commitment to the benefits leader, the kind that develops from viewing two or more attributes.

**Cognitive closure and need for decisiveness.** Prior research has likened predecisional distortion to selective hypothesis testing, in which the hypothesis being tested is that the leader is better and the process of selective hypothesis testing relies on distorting new information to favor the leader (Carlson, Meloy, and Russo 2006). If a similar mechanism is at work here, constructs that moderate selective hypothesis testing should moderate benefits leader reversion. Along these lines, it has been argued that consumers high in need for cognitive closure are less likely to test multiple hypotheses (Croney et al. 2005; Kardes et al. 2004). As such, they may also be less likely to have multiple leaders. If so, people high in need for cognitive closure should be less likely to switch at price, and if they switch at price, they should be less likely to revert (i.e., exhibit benefits leader reversion). Because the decisiveness factor of Webster and Kruglanski’s (1994) need-for-cognitive-closure scale is the most relevant for our decision tasks (e.g., “I usually make important decisions quickly and confidently”), we tested it as a potential moderator of reversion. We expected that people high in decisiveness would be less likely to gain entry to the focal sample, but if they
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... did, they would be less likely to revert to the benefits leader.

To test this prediction, 203 participants made a choice between two hotels under the same procedures used in Study 2. After doing so, they answered the seven questions that make up the decisiveness factor of the need-for-cognitive-closure scale. Participants who switched to the cheaper option after learning about price (n = 73) constituted the focal sample. Of these, 44% (n = 32) reverted to their benefits leader. Next, we examined the need for decisiveness, finding that this construct was negatively related to being in the focal sample (r = -0.166, p < .05). More important, conditional on being in the focal sample, need for decisiveness was negatively correlated with benefits leader reversion (r = -0.345, p < .01). In other words, not only does need for decisiveness cause participants to stay with the more expensive hotel, but for those who switch to the cheaper option, it also causes them to stick with it. Need for decisiveness successfully moderates the benefits leader reversion effect.

**STUDY 3: DO CONSUMERS REVERT TO PRICE LEADERS?**

Thus far, we have found that the benefits leader prevails over the price leader when consumers who are eligible for dual leadership encounter new information. The mechanism that allows this reversion to occur is the biased processing of new information to support the benefits leader. A natural next question is whether consumers will revert to a price leader. That is, if an initial preference is formed on the basis of price information and people switch from it to a more expensive option with better benefits, will they revert to the cheaper brand after examining additional cost information? If price leader reversion occurs, we can conclude that consumers retain both their price leader and their benefits leader, never fully integrating both into their current cumulative preference. However, if price leader reversion does not occur, we can conclude that though consumers integrate their price leader into their current preference when they switch from it to a benefits leader, they do not do the reverse. That is, a lack of price leader reversion would suggest that consumers retain a cognitive element associated with their benefits leader, but they do not do so for a price leader.

**Method**

**Participants and procedures.** Ninety-one undergraduate students participated in exchange for a donation to charity. The decision task involved a choice between two resort hotels, with the stimuli adapted from Study 2. To address whether price leader reversion occurs, the price attribute was first in the sequence (a 20% discount for Hotel Z), followed by a benefits attribute (created by combining the attributes one through four from Study 2), amenities, that was intended to induce some of the participants to switch to the more expensive hotel (Hotel A). This amenities attribute was followed by the other-cost-considerations attribute, which revealed a clear but small difference in favor of the discounted hotel (Hotel Z).

**Pretest.** We conducted a pretest to verify the diagnosticity of the other-cost-considerations attribute and to establish the normative upper bound for price leader reversion. Ninety-one participants evaluated this attribute in isolation on a nine-point scale, anchored on the low and high ends by Hotel A and Hotel Z, respectively. The mean evaluation of this attribute (M = 6.14) was significantly above the scale midpoint (t(90) = 5.96, p < .01), indicating that it objectively favored Hotel Z (i.e., the cheaper hotel). Analysis of individual responses revealed that the normative upper bound for switching was 51.6%. That is, 51.6% of pretest participants (47 of 91) rated this attribute as favoring the cheaper hotel (i.e., Hotel Z). A switching rate higher than this would suggest leader reversion effects for price as well as benefits.

**Results and Discussion**

Although the diagnostic price attribute created unanimity in a preference for Hotel Z after the first attribute, just 41 of the 91 participants switched to Hotel A after reviewing the amenities attribute. These 41 participants form the focal sample for the current study. We are interested in what proportion of this focal sample reverts to the cheaper hotel after reading the final attribute. Examination of participants’ choices revealed that only 5 participants (12.2%) reverted to their initial price leader, a number substantially lower than the normative upper bound (z = 5.39, p < .01). We interpret this result to mean that participants who switched to a more attractive (but more expensive) hotel were not compelled to return to their price leader by a diagnostic cost-related attribute that objectively favored the cheaper option. In other words, there is no evidence that reversion exists for both price leaders and benefits leaders, which suggests that consumers fully integrate over their price leader such that if they leave it for another option, they abandon it altogether.

**GENERAL DISCUSSION**

A majority of consumers who switched to a cheaper option during their decision process reverted to their original (benefits) leader after encountering additional information about the options. This benefits leader reversion effect is a within-consumer preference reversal that violates the axiom of monotonicity (i.e., the more-is-better principle). Specifically, switching to a less preferred option in light of objectively neutral information is nonnormative. When observed without knowledge of a person’s emerging preference history, this kind of behavior appears odd indeed. However, by knowing the history of consumers’ emerging preferences, it becomes apparent that consumers are not leaving a currently preferred option; they are simply returning to a previously preferred option (i.e., reverting to their benefits leader).

Benefits leader reversion is a strong bias that is present when postprice information either is objectively neutral or favors the cheaper option (i.e., the price leader). In addition, it appears that reversion is aided by the biased evaluation of new information to support the benefits leader. It is worth highlighting how this form of distortion differs from previous work on predecisional distortion. Predecisional distortion occurs when consumers bias new information to favor the currently leading option. However, in the current work, people biased new information to favor their trailing option. That is, they biased their interpretation of new information to support the option that was leading before...
they learned about price (i.e., their benefits leader), the same option that was trailing when the information was encountered. By itself, this finding (of distortion to favor the trailing option) is surprising when considered in light of the tenaciousness of predecisional distortion (see Russo, Melyn, and Medvec 2008).

With respect to boundary conditions, we found that consumers do not revert to a previous benefits leader from a new benefits leader (Study 2), nor do they revert to a previous price leader (Study 3). We also discovered that benefits leader reversion was minimal when the benefits leader was based on just one attribute but that it quickly reached a plateau when the benefits leader was based on two or more attributes. This suggests that a minimum level of commitment to the benefits leader is necessary for reversion to occur but that the minimum is reached quickly. We also found that the need for decisiveness moderates benefits leader reversion, with people high in need for decisiveness being less likely to revert to the benefits leader. This finding is consistent with claims made elsewhere that people high in need for cognitive closure are less likely to entertain multiple hypotheses. When applied to the current findings, this result indicates that people high in need for cognitive closure might be more likely to abandon their benefits leader when they switch away from it.

Our findings have managerial implications for pricing strategy, sales closing techniques, and the design of comparative advertising. For example, in terms of pricing strategy, the implications are that managers offering a discount to induce purchase should consider this a last resort after all the benefits of the various options have been considered. This follows from the finding that a price inducement may establish a brand as the price leader, but subsequent consideration of nonprice information may be distorted by the consumer to allow the benefits leader to reemerge as the preferred option. Implications for closing techniques follow directly from this view. In particular, the strongest attempt to close a deal for a product that is cheaper but not as good should follow immediately after a strong case has been made for cost savings. Even if the cheaper brand has a previously unnoted benefit, our findings suggest that salespeople should avoid mentioning this benefit because consumers’ privately held benefits leaders might cause them to distort this information and, ultimately, to revert to their benefits leader.

Note that these implications apply only to situations in which consumers form preferences with respect to novel options. In situations in which consumers already have preferences, these conclusions might not hold. For example, a price discount might be the only way to induce trial of a well-known, less-preferred brand. Although our findings have implications only for decisions between novel options, in many ways these early preferences form the foundation of years of purchase behavior.

Perhaps the most important implication of our findings is about the role of price as an attribute. Most models of consumer decision making (e.g., conjoint analysis) do not afford unique status to price beyond allowing it enough weight to reflect its substantial importance. Our data suggest that price, as an attribute, should be treated as a unique entity. That is, when cost is an issue and when it is material to the choice, consumers do not seem to fully reconcile it with their preference for the more expensive option. When viewed this way, price is still treated as an attribute, but its ability to create sway in consumer choice is restricted by the information environment—in particular, by the possible existence of a benefits leader and by the presence of new information that might give rise to reversion.

Our findings also raise the possibility that previous research on predecisional distortion has unwittingly captured the effect of the benefits leader on the evaluation of new information. That is, it is not the cognitive element associated with the current cumulative preference that consumers are supporting with their evaluations but rather the benefits leader. In some situations (i.e., when price is not used as an attribute), these two are the same. However, by decoupling the benefits and price leaders (as we did in the studies presented herein), we found that only benefits leaders are capable of inducing distortion of new information. The effect is so profound that it occurs when the benefits leader is the trailer and when the new information encountered diagnostically opposes the benefits leader.

Although we have identified benefits leader reversion as a robust phenomenon, it is not clear why people exhibit reversion. There are at least two ways to frame the issue. First, is there something special about a leader that is based on nonprice information? To answer this question, we need to know more about what the benefits leader means to people in the context of a choice. A possibility is that it represents the consumer’s true desire (i.e., if cost were no object). In aggregate marketing terms, the proportion of consumers who have a particular product as their benefits leader might be used to represent that product’s share of heart among prospective buyers. As such, the benefits leader may have more in common with wants and vices than with shoulds or virtues (Kivetz and Zheng 2006; Shiv and Fedorikhin 1999). When considered in this light, it is possible that the benefits leader has a stronger link to the affective system. That is, it might be marked with positive affect (Damasio 1994). If so, we might envision a larger class of effects that involve distortion to favor affectively appealing options but not cognitively appealing ones. Similarly, examining leaders on the basis of tangible versus intangible attributes (Horsky, Nelson, and Posavac 2004) might prove insightful. In this light, a possibility is that leaders based on intangible attributes are more affective, so even if people switch leaders when given a tangible attribute, they may revert if shown an intangible one.

The second way to frame the question is why benefits leader reversion occurs is to consider that price is a special attribute. This framing is in accordance with a substantial amount of speculation that price has a unique status in consumer decision making. This unique status derives in large part from the notion that market prices respond to demand. All else being equal, cheaper products are less desirable. Therefore, in any setting in which the value of an item is even slightly uncertain, consumers are likely to experience conflict when they learn that the option they like more is also more expensive. That is, on the one hand, consumers can make a price–quality inference to support their benefits leader. On the other hand, the cost difference may be too large (even given the inference) not to switch to the cheaper option.
The evidence presented in this article suggests that under certain conditions, consumers can and do hold more than one leader during a predecisional choice process. By itself, this is noteworthy. When added to the finding that consumers bias new information to build support for a previously abandoned benefits leader, even in the presence of a publicly revealed cumulative preference for a cheaper option, the finding is even more revealing. If this effect is a special case of a larger tendency (e.g., not to overwrite preferences for desired options), similar preference reversals might be observed in settings in which consumers are torn between an option they desire and one they believe to be the best given all the constraints.

REFERENCES


