JOURNAL OF CONSUMER PSYCHOLOGY, *14*(1&2), 141–150

Goal–Attribute Compatibility in Consumer Choice

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This research advances the notion that product evaluations are a function of the compatibility of consumers' goals with the attributes describing choice alternatives. Building on the concept of self-regulation, it is argued that attribute evaluations are moderated by individuals' goal orientation and, specifically, that attributes compatible with individuals' regulatory orientation tend to be overweighted in choice. This proposition is tested by examining the impact of goal orientation on consumer preferences in 3 different contexts: (a) hedonic versus utilitarian attributes, (b) performance versus reliability attributes, and (c) attractive versus unattractive (good vs. bad) attributes. The data show that prevention-focused individuals are more likely to overweight (in relative terms) utilitarian, reliability-related, and unattractive attributes than promotion-focused consumers, who are more likely to place relatively more weight on hedonic, performance-related, and attractive attributes. Considered together, these findings support the proposition that attributes compatible with individuals' goal orientation tend to be overweighted in choice.

The notion of compatibility has been introduced to account for the violations of the principle of procedure invariance in choice (Tversky, Sattath, & Slovic, 1988). Several types of compatibility have been discussed in the decision literature. Scale compatibility has been introduced to account for the finding that an attribute measured in units similar to those of the response scale will tend to receive more weight in judgment (Slovic, Griffin, & Tversky, 1990; Tversky et al., 1988). Strategy compatibility, on the other hand, relates the nature of the decision task (e.g., quantitative vs. qualitative) to the type of decision strategy evoked (Fischer & Hawkins, 1993).

The notion of compatibility has been further applied to the relation between the nature of the choice task and the type of attributes describing choice alternatives—the relation referred to as attribute–task compatibility (Nowlis & Simonson, 1997). Most recently, the notion of compatibility has been extended to the relation between the decision goals and the nature of the choice task (goal–task compatibility), whereby the most prominent attribute tends to receive more weight in tasks that require differentiating between the alternatives than in tasks that require equating these alternatives (Fischer, Carmon, Ariely, & Zauberman, 1999).

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Building on the prior research, this article extends the notion of compatibility to the relation between consumers' goals and the nature of the attributes describing choice alternatives. Unlike most of the prior decision research, in which goals are determined by the specifics of the choice task given to the decision makers (e.g., differentiating vs. equating choice alternatives), here goals are viewed in a more global context that goes beyond the specifics of the choice task at hand. In this context, current research focuses on goals related to consumers' self-regulatory mechanisms.

Two types of regulatory orientation have been prominently featured in the literature: promotion focus, aimed at achieving positive outcomes, and prevention focus, concerned with minimizing negative outcomes (Higgins, 1997). These two types of regulatory orientation and their impact on consumer choice are the center of this research. Specifically, this research examines the impact of goal orientation on consumer evaluations of three types of attributes: (a) hedonic versus utilitarian attributes, (b) performance versus reliability attributes, and (c) attractive versus unattractive (good vs. bad) attributes. These three attribute types are then used as a context to examine the validity of goal–attribute compatibility hypothesis.

The rest of the article is organized as follows. First, it offers a discussion on the role of self-regulation and goal–attribute compatibility in consumer decision making and choice. The goal–attribute compatibility is then tested in

three attribute contexts: Experiment 1 focuses on goal compatibility in the case of hedonic versus utilitarian attributes; the focus of Experiment 2 is on performance versus reliability features; and finally Experiment 3 tests the goal–attribute compatibility in the context of attractive versus unattractive features. The article concludes with a discussion of the experimental findings and the theoretical contributions and offers directions for further research.

GOAL ORIENTATION AND GOAL–ATTRIBUTE COMPATIBILITY IN CONSUMER CHOICE

The concept of regulatory orientation is based on the general notion that people are motivated to approach pleasure and avoid pain (Higgins, 1997). Thus, it is argued that motivation operates differently when serving fundamentally different needs, such as needs associated with advancement, achievement, and aspirations (promotion needs); and needs associated with safety, security, and responsibilities (prevention needs). Individuals with salient promotion needs are said to have promotional regulatory focus, whereas individuals with salient prevention needs are said to have prevention regulatory focus. Extant research in social psychology has further shown that regulatory focus moderates the strategy individuals use to achieve their goals. Thus, individuals with a promotional focus are shown to be strategically inclined to approach matches with the desired end state; hence, they are likely to focus on achievement and on maximizing gains. In contrast, individuals with a prevention focus are shown to be strategically inclined to avoid mismatches with the desired end state; hence, they are likely to focus on safety and minimizing losses (Brockner & Higgins, 2001; Crowe & Higgins, 1997; Freitas & Higgins, 2002; Higgins, Shah, & Friedman, 1997).

In general, promotion goals are argued to regulate behavior in reference to positive outcomes, either by maximizing the presence of positive outcomes or minimizing their absence. In contrast, prevention goals regulate behavior in reference to negative outcomes, either by minimizing the presence of negative outcomes or by maximizing the absence of negative outcomes (Brockner, Paruchuri, Idson, & Higgins, 2002; Freitas & Higgins, 2002; Higgins & Silberman, 1998; Idson, Liberman, & Higgins, 2000). Thus, both promotion-focused and prevention-focused self-regulatory strategies aim at achieving a desired endpoint, although the nature of this endpoint varies: In the context of a promotion focus, the desired endpoint is the presence of positive outcomes, whereas under a prevention focus the desired endpoint is the absence of negative outcomes.

Of particular relevance to this research is the concept of *regulatory fit,* which suggests that individuals derive additional utility from the degree to which the means used to pursue a particular goal are compatible with these individuals' regulatory focus (Higgins, 2000; Higgins & Silberman, 1998). In this context, the goal–attribute compatibility hypothesis can be derived by applying the regulatory fit principle to choice. Thus, the regulatory fit principle yields the prediction that outcomes consistent with individuals' self-regulatory orientation are likely to be viewed as relatively more important than outcomes that are inconsistent with the goal. The goal–attribute compatibility further conceptualizes the relative importance of the weight given to these attributes in choice, thus allowing direct prediction of the choice outcome.

This compatibility prediction is consistent with the research reported by Aaker and Lee (2001), who demonstrate that attitude change and recall are higher when regulatory focus is compatible with the message content than when it is not. In one of their experiments, prevention and promotion-focused participants were presented with a persuasive message for a fruit juice that promised energy creation in the promotion benefit condition and heart disease reduction in the prevention benefit condition. The message was more persuasive when it was compatible with the participants' regulatory focus: Promotion-focused participants were more persuaded by the appeal-promoting energy creation, and prevention-focused participants were more persuaded by the appeal promising the prevention of clogged arteries. Participants were also found to be more discerning between strong versus weak arguments when the appeal was compatible with their regulatory focus than when it was incompatible.

The notion that consumers tend to overweight goal-consistent information can also be linked to the data reported by Bettman and Sujan (1987). They show that priming respondents with a decision criterion for either reliability or creativity leads not only to a higher number of reliability and creativity-related thoughts but also to higher importance scores for corresponding attributes and a choice for the alternative superior on the corresponding attribute. Although this experiment did not directly manipulate respondents' regulatory orientation, the priming manipulation used there is conceptually similar to a manipulation used to make a particular self-regulatory state more salient (Friedman & Forster, 2001).

Building on prior research, this article examines the impact of consumers' goal orientation on their attribute evaluations and choice. Three types of attributes are considered: hedonic versus utilitarian attributes, performance versus reliability attributes, and attractive versus unattractive attributes. The impact of goal orientation on consumer evaluations of hedonic and utilitarian attributes is discussed in the next section, followed by discussions of the other two attribute types and their goal compatibility.

GOAL ORIENTATION AND CONSUMER EVALUATIONS OF HEDONIC AND UTILITARIAN ATTRIBUTES

Prior research suggests that hedonic and utilitarian aspects of products and product features can play an important role in

consumer choice. Hedonic products are typically linked to more experiential consumption, whereas utilitarian products are viewed as more functional and instrumental (Hirschman & Holbrook, 1982; see also Babin, Darden, & Griffin, 1994; Childers, Carr, Peck, & Carson, 2001). Thus, hedonic products, such as sports cars, designer clothes, and luxury items, are often defined as "frivolous" and associated with pleasure-oriented, fun, and experiential consumption. In contrast, utilitarian products such as microwaves, telephones, textbooks, have been described as "practical" and are associated with necessary functions in life (Strahilevitz & Myers, 1998).

The hedonic and utilitarian characteristics of a consumer's experience can also be defined on an attribute-specific level (Adaval, 2001; Dhar & Wertenbroch, 2000; Kivetz & Simonson, 2002). In this context, the classification of a product as "hedonic" or "utilitarian" is, in effect, a function of the relative salience of its hedonic and utilitarian attributes. To illustrate, even though ice cream can generally be viewed as a hedonic product, on an attribute level it comprises both hedonic and utilitarian dimensions. Thus, the taste of ice cream can be viewed as a hedonic attribute, whereas its calorie content scores high on the utilitarian dimension. Consistent with this view, research presented in this article focuses on hedonic and utilitarian aspects of product evaluation on an attribute-specific level and, in this context, examines the impact of goal orientation on consumer evaluations of hedonic and utilitarian attributes.

Building on prior research, it is argued that the compatibility principle can be extended to link consumers' goal orientation with the hedonic and utilitarian nature of the attributes describing choice alternatives. Specifically, it is proposed that promotion focus offers a better fit with hedonic attributes, whereas prevention focus is likely to be more compatible with the more practical and conservative utilitarian attributes. This prediction follows from the hedonic principle of approaching pleasure and avoiding pain that underlies the concept of regulatory focus (Higgins, 1997). Consistent with this principle, it is argued that because promotion-focused individuals are more likely to focus on achieving pleasure, they will also be more likely to pay greater attention to hedonic attributes. Following the same logic, because prevention-focused individuals are more likely to focus on avoiding undesired outcomes, they are also more likely to focus on utilitarian attributes. It is further proposed that these differences in individuals' focus on either hedonic or utilitarian attributes translate into differences in weights associated with these attributes. Therefore, it is predicted that promotion-oriented consumers will tend to overweight hedonic (relative to utilitarian) attributes, and vice versa for prevention-focused consumers. This prediction can be expressed more formally as follows:

H1: Product evaluations are a function of the degree of compatibility between attribute type (hedonic vs. utilitarian) and consumers' goal orientation. Specifically, promotion-focused consumers are more likely to overweight hedonic (relative to utilitarian) attributes than are prevention-focused consumers and vice versa.

This hypothesis is tested in the following experiment.

EXPERIMENT 1

The goal of this experiment is to test the prediction that goal orientation affects consumer evaluations of hedonic and utilitarian attributes and, specifically, to show that promotion-focused consumers are more likely than prevention-focused consumers to select the option that is superior on hedonic attributes.

Method

Two hundred eighteen Northwestern University undergraduates were enrolled as participants in a study on consumer preferences. Respondents were randomly assigned to either the promotion or prevention goal orientation condition. They were presented with a binary choice set and asked to select one of the alternatives. On completing the experiment, they were debriefed and compensated for participating in the study.

Goal orientation was manipulated by combining two traditionally used procedures: reporting duties and obligations (e.g., Higgins, Roney, Crowe, & Hymes, 1994) and completing a paper-and-pencil maze (e.g., Friedman & Forster, 2001). Respondents were first asked to write down either their hopes and aspirations or their duties and obligations. Consistent with prior research, the former manipulation is likely to prime a promotional orientation, whereas the latter manipulation is likely to prime a prevention orientation (Higgins, 1997; Higgins et al., 1994). Next, respondents were asked to complete an ostensibly unrelated paper-and-pencil maze task. In both experimental conditions the task depicted a cartoon mouse trapped inside a maze. In the promotion condition, a piece of Swiss cheese was depicted lying outside the maze in front of a brick wall with a mouse hole in it. Subjects were instructed to guide the mouse through the maze toward the cheese. In the prevention condition, instead of Swiss cheese, a snake was depicted presumably ready to swallow the mouse unless it could escape through the maze. Subjects were instructed to guide the mouse through the maze, away from the snake, toward the mouse hole. The rationale for this manipulation is that the completion of the maze in the promotion-cue condition activates the procedural representation of moving toward a desired state (the cheese), whereas in the prevention-cue condition, completion of the maze activates the semantic concept of "seeking security," as well as the procedural representation of moving toward the desired end state of safety (Friedman & Forster, 2001).

On completion of the maze task, respondents were presented with a binary set in which alternatives were described

on two attributes: one hedonic and one utilitarian. The choice set was designed so that one of the alternatives is superior on the hedonic attribute and the other is superior on the utilitarian attribute. Four product categories were used: lunch destination, group member selection, toothpaste, and shampoo. The attributes and attribute values for each of the categories are given in Table 1. These product categories and attributes have been used in a similar context in prior research (e.g., Dhar & Wertenbroch, 2000; Shafir, 1993).

Results and Discussion

It was predicted that goal orientation moderates consumer preferences for hedonic and utilitarian attributes and that individuals in the promotion-focus condition are more likely to select the hedonic brand than individuals in the prevention-focus condition. The data show an effect that is directionally consistent with the experimental predictions in both product categories. Thus, when choosing a lunch destination, 59% of the respondents in the promotion-focus condition selected the hedonic option (dessert menu) compared to 45% of respondents in the prevention-focus condition. Similarly, when choosing a team member, 31% of respondents in the promotion-focus condition selected the hedonic option (fun to work with) compared to only 6% of respondents in the prevention-focus condition. In the toothpaste category, 39% of the respondents in the promotion-focus condition selected the hedonic option (teeth whitening) compared to only 17% in the prevention-focus condition. Similarly, when choosing a shampoo, 83% of respondents in the promotion-focus condition selected the hedonic option (hair softness) compared to 65% of respondents in the prevention-focus condition.

Categorical data analysis of these directional effects reveals that the effect of goal orientation on consumer preference for hedonic and utilitarian attributes is significant, $\chi^2(1) = 10.58$, $p = .001$. The data further show that although the main effect of product category is significant, $\chi^2(3) = 33.92$, $p < .001$, this effect is consistent across both categories, as evidenced by the nonsignificant (category) × (goal orientation) interaction, $\chi^2(3) = 1.89$, *ns*.

These data support the experimental predictions that regulatory orientation moderates individuals' evaluations of hedonic and utilitarian attributes, and that promotion-focused consumers are more likely to overweight hedonic (rather than utilitarian) attributes relative to prevention-focused individuals. More generally, these findings support the notion of goal–attribute compatibility, whereby consumers tend to overweight attributes that are compatible with their active goals.

The goal orientation dependency of product evaluations can be extended beyond the hedonic and utilitarian attribute typology. Based on their goal-relevance, product attributes can be further classified into two distinct categories: attributes related to performance and attributes related to reliability. This attribute typology and its implications with respect to goal orientation are discussed in more detail in the next section.

GOAL ORIENTATION AND CONSUMER EVALUATIONS OF PERFORMANCE AND RELIABILITY ATTRIBUTES

Consider attributes such as the speed and power of a car, picture clarity of a TV, or memory size of a computer. All of these attributes are associated with how well a product will perform a given task. Now consider attributes such as warranty, maintenance cost, and repair record. Unlike the previous set, these attributes are associated with the product's reliability rather than performance. This distinction is important because, conceptually, these two types of attributes are likely to be associated with different goals. Specifically, performance attributes are more likely to be associated with accomplishment, advancement, and achieving maximal goals, whereas reliability attributes are likely to be associated with security, safety, and the absence of negative outcomes.

TABLE 1
Choice Shares of the Alternatives as a Function of Goal Orientation and Feature Type (Experiment 1)

		Goal Orientation	
Product Category	*Option Superior On*	*Promotion*	*Prevention*
Lunch (N = 63)			
Option A	Dessert menu (hedonic)	59%	45%
Option B	Walking distance (utilitarian)	41%	55%
Group member (N = 63)			
Option A	Fun to work with (hedonic)	31%	6%
Option B	Reliability (utilitarian)	69%	94%
Toothpaste (N = 46)			
Option A	Teeth whitening (hedonic)	39%	17%
Option B	Decay prevention (utilitarian)	61%	83%
Shampoo (N = 46)			
Option A	Hair softness (hedonic)	83%	65%
Option B	Cleaning effectiveness (utilitarian)	17%	35%

Note also that classifying attributes as either performance or reliability attributes differs from the hedonic and utilitarian classification. Indeed, although performance attributes appear to be more similar to hedonic than utilitarian attributes and reliability attributes appear to be closer to utilitarian than performance attributes, this is not necessarily the case. To illustrate, the speed and engine performance of a car can be viewed as performance attributes, whereas attributes such as gas mileage, safety, and reliability score heavily on the reliability dimension. Yet, all of these attributes could be classified as utilitarian because they are functional, practical, and instrumental.

How does goal orientation moderate consumer evaluations of performance and reliability attributes? Because a promotional focus is concerned with advancement and with the presence of positive outcomes, it is argued that performance attributes are likely to be more compatible with a promotion orientation. In contrast, prevention focus is concerned with safety and with the absence of negative outcomes; therefore, reliability attributes are predicted to be more compatible with a prevention orientation. More formally, this prediction can be stated as follows:

H2: Product evaluations are a function of the degree of compatibility between attribute type (performance vs. reliability) and consumers' goal orientation. Specifically, promotion-focused consumers are more likely to overweight performance (relative to reliability) attributes than are prevention-focused consumers and vice versa.

This hypothesis is tested in the following experiment.

EXPERIMENT 2

Method

Sixty-three Northwestern University undergraduates were presented with two binary choice sets and asked to select one of the available alternatives. Each individual was presented with three choice sets from different categories (TV, computer monitor, and car) and was asked to choose one of the options in each set. On completing the experiment, respondents were debriefed and paid for participating in the study.

The goal orientation manipulation was identical to the one used in Experiment 1. Choice sets consisted of two options, each described on two attributes (except for the car category, in which each option was described on four attributes: two performance-related and two reliability-related). The attributes and attribute values for each of the categories are given in Table 2. The stimuli were designed so that one of the options is superior on the performance attribute or attributes and the other one superior on the reliability attribute or attributes. As in the first experiment, the dependent variable was the dispersion of respondents' choice shares across the two regulatory focus conditions.

Results and Discussion

Hypothesis 2 predicts that the impact of goal orientation on attribute evaluations is moderated by the nature of the choice task and, specifically, that promotion-focused respondents are more likely (relative to prevention-focused respondents) to select the option superior on performance attributes. Data presented in Table 2 are consistent with this prediction. Each of the 63 respondents made three choice decisions, yielding 189 observations in total. All three categories display a similar pattern of results, whereby respondents' preference for performance features is more pronounced for promotion-focused than for prevention-focused individuals. To illustrate, in the TV scenario, 59% of the respondents in the promotion-focus condition chose the option superior on performance attributes, compared to only 48% of the prevention-focused respondents.

Categorical analysis of the data shows that the impact of regulatory focus on choice was significant, $\chi^2(1) = 4.38$; $p < .05$. As in the first experiment, the main effect of the product category was also significant, $\chi^2(2) = 10.99$; $p < .005$. The (regulatory focus) × (product category) interaction, however, was nonsignificant, $\chi^2(1) < 1$, *ns,* indicating that the observed effect is consistent across the product categories tested.

TABLE 2
Choice Shares of the Alternatives as a Function of Goal Orientation and Feature Type (Experiment 2)

		Goal Orientation	
Product Category	*Option Superior on*	*Promotion (N = 32)*	*Prevention (N = 31)*
TV Set			
Option A	Picture clarity (performance)	59%	48%
Option B	Reliability (reliability)	41%	52%
Computer monitor			
Option A	Display resolution (performance)	62%	52%
Option B	Warranty (reliability)	38%	48%
Car			
Option A	Speed, power (performance)	41%	19%
Option B	Warranty, maintenance (reliability)	59%	81%

Overall, the data support the notion that attribute evaluations are a function of goal–attribute compatibility and that promotion-focused consumers are more likely to overweight performance (relative to reliability) attributes than are prevention-focused consumers. These data are consistent with the idea of goal–attribute compatibility, whereby consumers tend to overweight attributes that are compatible with their salient goals.

The research presented so far examined the impact of goal compatibility on consumer preference for hedonic and utilitarian and performance and reliability attributes. The concept of goal–attribute compatibility can be further extended to consumer evaluations of attractive and unattractive product features. The impact of goal orientation on evaluations of attractive and unattractive features is examined in more detail in the next section.

GOAL ORIENTATION AND CONSUMER EVALUATIONS OF ATTRACTIVE AND UNATTRACTIVE FEATURES

Prior research has documented that evaluating attributes with varying degrees of attractiveness can evoke different processing strategies and lead to alternative choice patterns (Chernev, 2001; Dhar & Sherman, 1996; Houston, Sherman, & Baker, 1989; Nowlis & Simonson, 1996; Shafir, 1993). Most of this research, however, has examined the impact of the feature valence on choice in a more local context without necessarily relating it to decision makers' regulatory goals. Thus, one of the goals of this article is to examine the moderating role of goal orientation on evaluating attractive and unattractive features.

The proposition advanced in this research is that attractive features are more compatible with a promotion regulatory orientation, whereas unattractive features are more compatible with a prevention regulatory orientation. This proposition follows from the notion that promotion-oriented individuals tend to focus on positive outcomes, whereas prevention-oriented individuals tend to focus on (the absence of) negative outcomes. Building on the regulatory fit idea that individuals derive additional (dis)utility from the degree to which product attributes are compatible with their regulatory focus, the goal–attribute compatibility hypothesis predicts that the relative importance of a given attribute is likely to be a function of the degree of compatibility between its perceived attractiveness and individuals' goal orientation. Specifically, it is argued that prevention-focused consumers are more likely to overweight (in relative terms) bad features than are promotion-focused consumers.

The proposition that goal orientation moderates consumer evaluations of attractive and unattractive features is tested in the context of the experimental paradigm introduced by Houston et al. (1989). This research paradigm was adopted by Dhar and Sherman (1996) to examine the relative impact of attribute valence on consumer preference for the no-choice option. Of particular relevance to this research is the finding that manipulations of the uniqueness of the good or bad features can influence the likelihood of not choosing either option. Specifically, it has been shown that the likelihood of choosing from a given set is greater when the good features are shared and the bad features are unique than when the good features are unique and the bad features are shared by all alternatives.

Building on the notion that consumer valuations of attractive and unattractive features are a function of the consumers' regulatory orientation, it is proposed that the differential impact of attractive and unattractive features on consumer preferences for the no-choice option is moderated by individuals' self-regulatory mechanisms. Specifically, it is argued that prevention-focused individuals are more likely (relative to promotion-focused individuals) to select the no-choice option when deciding among alternatives with unique bad and common good features than when choosing among alternatives with common bad and unique good features.

The rationale for this prediction is that in a scenario where features differentiating choice alternatives are unattractive, prevention-focused consumers, who tend to overweight bad features, will find it more difficult to decide among the available choice alternatives and will be more likely to prefer the no-choice option. In contrast, when features differentiating choice alternatives are attractive and bad features are common to all alternatives, the choice task is relatively less difficult because the commonality of the bad features allows consumers to discount these features and focus on the attractive attributes. This proposition can be summarized as follows:

H3: Product evaluations are a function of the degree of compatibility between the attractiveness of the attributes describing the choice alternatives and consumers' goal orientation. Specifically, the tendency to prefer the no-choice option when choosing among alternatives with unique bad and common good features than when choosing among alternatives with common bad and unique good features will be more pronounced for prevention-focused than for promotion-focused consumers.

This hypothesis is tested in the following experiment.

EXPERIMENT 3

Method

One hundred twenty-six Northwestern University undergraduates were randomly assigned to the conditions of a 2 (goal orientation: promotion vs. prevention) × 2 (feature at-

tractiveness and uniqueness: unique bad vs. unique good) × 2 (feature type: hedonic vs. utilitarian) factorial design. Each individual was presented with two choice sets from different categories (vacation or apartment) and was asked to choose one of the options in each set. Unlike the first two studies in which respondents had to select one of the available options, in this study they were also given the option of not selecting either of the alternatives. Respondents' preference for the no-choice option was the key dependent variable.

Product categories and attributes used as stimuli were borrowed from prior research (Dhar & Sherman, 1996; Houston et al., 1989) and modified to fit the purpose of the study. Each option was described on four attributes, two attractive (good) and two unattractive (bad). In some of the experimental conditions the attractive features were unique and the unattractive features were shared (unique good condition), whereas in the other conditions the attractive features were shared and the unattractive features were unique (unique bad condition). In addition, the nature of the good and bad features was counterbalanced across the experimental conditions: In some cases the good features were hedonic and the bad were utilitarian, whereas in the others good features were utilitarian and bad features were hedonic. The purpose of counterbalancing hedonic and utilitarian features was to account for the potential effects of regulatory focus on these attributes, similar to the effects reported in the first experiment. The stimuli design matrix is given in the Appendix.

The goal orientation manipulation was identical to the one used in the first two studies. Feature attractiveness was manipulated within subjects: Each individual was presented with a set in which the unique features were good and another set (in a different category) in which the unique features were bad. Finally, feature type was manipulated both between and within subjects: For some of the respondents, good features were either hedonic or utilitarian for both choice sets, whereas for others the good feature was hedonic for one of the choice sets and utilitarian in the other. The purpose of this counterbalancing was to avoid possible confounds of the effects of feature attractiveness and feature type.

Results and Discussion

Hypothesis 3 predicts that the impact of goal orientation on product evaluations is moderated by the attractiveness of the hedonic and utilitarian features describing choice alternatives. Specifically, it was predicted that the tendency to prefer the no-choice option when choosing among alternatives with unique bad and common good features (compared to when choosing among alternatives with common bad and unique good features) will be more pronounced for prevention-focused than for promotion-focused consumers.

Data presented in Table 3 are consistent with these propositions. One hundred twenty-six respondents made two decisions each, which yielded 252 observations in total. The main effect of feature attractiveness was consistent with prior research: The preference for the no-choice option was greater when respondents were choosing between pairs of options with unique bad and common good features than when they were choosing between pairs with unique good and shared bad features. Furthermore, consistent with Hypothesis 3, the effect appeared to be more pronounced for prevention-focused than for promotion-focused subjects. To illustrate, when choosing an apartment, 47% of respondents in the promotion-focus condition preferred the no-choice option when choice alternatives had unique bad and shared good features compared to 28% when bad features were shared and good features were unique. In contrast, for respondents in the prevention-focus condition these numbers were 61% and 26%, respectively.

The significance of the directional effects reported in Table 3 was examined by testing a model in which individuals' preference for the no-choice option was given as a function ofgoal orientation (GOAL), feature attractiveness (ATTR), feature type (TYPE), and product category (CAT). The four-way interaction as well as all relevant three-way interactions involving the focal GOAL*ATTR effect were nonsignificant, $p > .20$, indicating that this effect is consistent across the two categories, as well as for both hedonic and utilitarian attributes. More important, the GOAL*ATTR interaction is significant, $\chi^2(1) = 4.87$, $p < .05$, lending support for the proposition that consumers' valuations of the attractive and unattractive attributes are

TABLE 3
Consumer Preference for the No-Choice Option as a Function of Goal Orientation and Feature Attractiveness (Experiment 3)

	Goal Orientation			
	Promotion		*Prevention*	
Product Category	*Unique Good (N = 64)*	*Unique Bad (N = 64)*	*Unique Good (N = 62)*	*Unique Bad (N = 62)*
Apartment				
Choice	71.9%	53.1%	74.2%	38.7%
No choice	28.1%	46.9%	25.8%	61.3%
Vacation				
Choice	59.4%	43.7%	71%	19.4%
No choice	40.6%	56.3%	29%	80.6%

moderated by their regulatory orientation. These data are consistent with the predictions made in Hypotheses 3.

The data further show a significant main effect of feature attractiveness, $\chi^2(1) = 23.09$, $p < .001$. Furthermore, feature attractiveness had a significant impact on both prevention-focused, $\chi^2(1) = 21.00$, $p < .001$, and promotion-focused respondents, $\chi^2(1) = 4.07$, $p < .05$. These findings are indicative of a strong effect of feature attractiveness and are consistent with prior research (Dhar & Sherman, 1996).

The data also show that the impact of feature type was nonsignificant (recall that for counterbalancing the experimental design included both hedonic and utilitarian features). Thus, both the GOAL*ATTR*TYPE and GOAL*TYPE interactions were nonsignificant ($p > .20$) indicating that the observed effects cannot be directly attributed to the respondents' preferences for hedonic and utilitarian attributes, which, as shown by Experiment 1, were also likely to be influenced by the regulatory focus manipulation. The finding that the impact of goal orientation on feature type (hedonic vs. utilitarian) is nonsignificant when product features varied in attractiveness can be used to make conjectures about the relative strength of these effects. Thus it is possible that respondents paid more attention to a given feature's attractiveness than to any of its other aspects and, as a result, a feature's valance overshadowed some of its hedonic or utilitarian nature.

Overall, the data support Hypothesis 3, demonstrating that consumer evaluations of attractive and unattractive features are moderated by their goal orientation. The data further show that, relative to those in the promotion-focused condition, consumers in the prevention-focused condition were more likely to prefer the no-choice option when choosing among alternatives with unique bad and common good features than when choosing among alternatives with common bad and unique good features.

GENERAL DISCUSSION

The data reported in this research demonstrate that consumers' evaluation of product attributes is contingent on their self-regulatory mechanisms and, specifically, their goal orientation. Two types of goal orientation are examined: promotion and prevention. The data show that promotion and prevention-focused individuals differ in the way they process the information describing choice alternatives. Specifically, prevention-focused individuals are more likely than promotion-focused consumers to overweight (in relative terms) utilitarian attributes and select the option superior on these attributes (Experiment 1). Prevention-focused individuals are also more likely than promotion-focused consumers to overweight (in relative terms) attributes associated with reliability and select the option superior on these attributes (Experiment 2). The self-regulatory dependency of attribute evaluations is further demonstrated in the context of consumer evaluations of attributes with varying degrees of attractiveness. Thus, consumers' tendency to prefer the no-choice option when choosing from a set in which alternatives have unique bad and shared good features (compared to when choosing from a set in which alternatives have unique good and common bad features) is more pronounced for prevention-focused than for promotion-focused individuals (Experiment 3).

More generally, these findings support the notion of goal–attribute compatibility advanced in this article, whereby attributes that are compatible with an individual's self-regulatory goals tend to receive more weight in choice. This rationale has been applied to predict how regulatory orientation affects consumer evaluations of hedonic versus utilitarian, performance versus reliability, as well as good versus bad features. The common denominator in both cases is the goal–attribute compatibility. Thus, hedonic features tend to be overweighted (relative to utilitarian features) by promotion-oriented consumers because these features are more compatible with the self-regulatory goal of achieving pleasure, whereas utilitarian features tend to be overweighted (relative to hedonic features) by prevention-oriented consumers because these features are more compatible with the self-regulatory goal of providing basic functionality and ensuring against failure.

In the same vein, the data show that performance attributes tend to be overweighted (relative to reliability attributes) by promotion-oriented consumers because these features are more compatible with the self-regulatory goal of maximizing positive outcomes. Similarly, reliability attributes tend to be overweighted (relative to performance attributes) by prevention-oriented consumers because these features are more compatible with the self-regulatory goal of minimizing undesired outcomes. The same rationale applies in the case of attractive and unattractive features. Attractive features are more likely to be overweighted (relative to unattractive features) when promotion goals are more salient because these features offer a better fit with the self-regulatory goal of maximizing positive outcomes. Similarly, unattractive features are more likely to be overweighted (relative to attractive features) when prevention goals are more salient because these features offer a better fit with the ultimate goal of avoiding negative outcomes.

An interesting question implied by this research is extending regulatory focus theory to other areas of decision making and, specifically, to goal–task compatibility. Thus, one can argue that certain decision tasks are more compatible with a promotion orientation, whereas others are more likely to be compatible with a prevention orientation. Specifically, one can argue that a selection task is likely to be more compatible with a promotion rather than prevention orientation, whereas a rejection task is more likely to be compatible with a prevention than with a promotion orientation. This prediction is

based on the notion that individuals with strong promotion goals are strategically inclined to approach matches to the goals, whereas individuals with strong prevention goals have the strategic inclination to avoid mismatches to the goals. In this context, a selection task should be more compatible with the approach strategy associated with the promotion orientation, whereas a rejection task should be more compatible with the avoidance strategy associated with the prevention orientation.

An additional question not addressed in this research concerns consumers' ability to "correct" for the goal orientation effects. In other words, the question is whether the overweighing of certain attributes due to an individual's regulatory focus can be decreased, eliminated, or even reversed if individuals are made aware that their regulatory orientation may lead to biased information processing. Investigating "correction" processes in how self-regulation impacts consumer decision processes is a promising area for further research.

ACKNOWLEDGMENTS

I thank Dawn Iacobucci, Brian Sternthal, and anonymous reviewers for their constructive comments. This research was partially funded by the McManus Research Chair I received.

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APPENDIX
Stimuli Overview (Experiment 3)[a]

	Feature Valence			
	Attractive (Good) Features		*Unattractive (Bad) Features*	
Category/Feature	*Hedonic*	*Utilitarian*	*Hedonic*	*Utilitarian*
Vacation				
Feature 1	Beautiful scenery (Attractive beaches)	Convenient travel (Excellent transportation)	Unappealing scenery (Limited recreation activities)	Long travel time (Poor transportation)
Feature 2	Good restaurants (Plenty of nightspots)	Inexpensive (Late checkout time)	Mediocre restaurants (Very few nightspots)	Expensive (Early checkout time)
Apartment				
Feature 1	Lake view (City skyline view)	Close to work (Nearby grocery shopping)	Overlooks a large parking lot (Overlooks an abandoned building)	50-min drive to work (Far away grocery shopping)
Feature 2	Fireplace (Attractive décor)	Convenient parking (Fast elevators)	No fireplace (Outdated décor)	Remote parking (Slow elevators)

Note. [a]Features used to make common attributes unique are shown in parentheses.