2 Promotion and Prevention in Consumer Decision Making

The State of the Art and Theoretical Propositions

Michel Tuan Pham and E. Tory Higgins

Our understanding of consumer decision making has historically been dominated by information-processing theory and, more recently, by behavioral decision research. These two perspectives have undeniably offered important insights about the cognitive processes underlying consumers’ decisions. However, there is more to consumer decision making than computer-like mental processes, judgment heuristics, and preference construction. Clearly missing from these perspectives is the motivational dimension of consumer decision making. Consumers’ decisions—which brand to purchase, where to go on vacation, or how to decorate the house—do not take place in a motivational vacuum. These decisions take place in the context of goals that consumers are pursuing, needs that they seek to fulfill, and drives that color their thoughts.

The purpose of this chapter is to discuss how regulatory focus theory (Higgins 1997, 1998, 2002)—a theory of motivation and self-regulation that has been rapidly gaining prominence in consumer research (e.g., Aaker and Lee 2001; Briley and Wyer 2002; Pham and Avnet 2004; Zhou and Pham 2004)—can be drawn upon to explain a variety of consumer decision making phenomena. We briefly review the major tenets of the theory, which proposes a fundamental distinction between two modes of self-

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regulation called promotion and prevention. Drawing on existing empirical evidence and new conceptual analyses, we then develop a series of theoretical propositions about the effects of promotion and prevention on consumer decision making. These propositions are organized along the traditional stages of the decision making process postulated by standard consumer behavior theory (i.e., problem recognition, information search, consideration set formation, etc.). Some of these propositions have already received empirical support, but most await formal empirical testing in consumer research. This propositional inventory can thus be viewed as a research agenda for studying the role of regulatory focus in consumer decision making. We hope that this agenda will help revive consumer and marketing scholars’ interest in the motivational analysis of consumer decision making.

An overview of regulatory focus theory

Because regulatory focus theory has been covered extensively elsewhere (e.g., Higgins 1997, 1998), we will discuss here only three aspects of the theory: (1) its major tenets and how it relates to other perspectives on approach and avoidance motivation; (2) examples of empirical findings that support the theory’s basic tenets; and (3) the major antecedents of regulatory focus.

Regulatory anticipation, reference, and focus in approach-avoidance

Motivation is generally conceived of as being driven by the approach of pleasure and by the avoidance of pain—a basic idea known as the hedonic principle. The approach of...
pleasure and the avoidance of pain has been studied from three different perspectives, each associated with its own principle: (1) the principle of regulatory anticipation, (2) the principle of regulatory reference, and (3) the principle of regulatory focus. According to the principle of regulatory anticipation, motivation arises from people’s expectations or anticipations about the consequences or outcomes of their actions. These anticipated consequences can be either positive (“pleasure”) or negative (“pain”). It is in terms of these anticipated consequences that approach and avoidance is conceptualized in regulatory anticipation. People are believed to approach anticipated pleasures and avoid anticipated pains. When Freud (1920/1950) described motivation as “hedonism of the future,” he was referring to the principle of regulatory anticipation. Notions such as “reward” and “punishment” (e.g., Lewin 1935) are characteristic of regulatory anticipation. Mowrer (1960), for instance, viewed regulatory anticipation as the fundamental principle underlying motivated learning. He saw the motivation to learn as driven primarily by “hope” and “fear.” De Mello and MacInnis’s discussion (this volume) of the notion of hope is written from a regulatory anticipation perspective. The standard economic theory of choice, which models choice as a function of expected utility, is also formulated from the perspective of regulatory anticipation.

Whereas regulatory anticipation focuses on the person’s expectations of pleasant versus painful consequences, the principle of regulatory reference focuses on the point of reference that the person uses in self-regulation. Holding outcome expectations constant, self-regulation can operate either in reference to a desired end-state or in reference to an undesired end-state. For example, two students could be equally hopeful when taking an exam, but one may be hopeful that she will be successful in
obtaining an “A,” whereas the other may be hopeful that she will be successful in avoiding a “C.” Similarly, two consumers could be equally apprehensive while choosing a gift, but one may be fearful that she might not able to get “the perfect gift” (a failure to attain a desired end-state), whereas the other may be fearful that she might end-up selecting “a totally inappropriate gift” (a failure to avoid an undesired end-state). In regulatory reference, approach and avoidance is therefore conceptualized in terms of movement toward desired end-states (approach) or away from undesired end-states (avoidance). Like the principle of regulatory anticipation, the principle of regulatory reference has a long history in psychology. Most animal-learning and biological models of motivation make a fundamental distinction between approaching desired end-states and avoiding undesired end-states (e.g., Hull 1952; Lang 1995). This distinction also appears in cybernetic and control process models of self-regulation in the form of positive and negative reference values (e.g., Carver and Scheier 1981; Miller et al. 1960). However, even if many models make a distinction between self-regulation toward desired end-states, and self-regulation away from undesired end-states, the major focus in the psychological literature has been on self-regulation toward desired end-states (see, e.g., Carver and Scheier 1981; Kardes and Cronley 2000; Miller et al. 1960).

In regulatory focus theory (Higgins 1997, 1998), approach and avoidance is not conceptualized in terms of anticipated outcomes (i.e., anticipated pleasure or pain) or in terms of reference end-states (desired or undesired). Instead, it is conceptualized in terms of strategic means for self-regulation. Self-regulation toward desired end-states—that is, holding regulatory reference constant—can be pursued either with means that are approach-oriented or with means that are avoidance-oriented. For example, a
A person whose desired end-state or goal is to become a college-level tennis player may select strategies that are approach-oriented such as practicing drills two-hours per day and enrolling in a tennis academy, or strategies that are avoidance-oriented such as refraining from smoking and keeping away from junk-food. Self-regulation dominated by strategic means that are approach-oriented is called promotion-focused, and self-regulation dominated by strategic means that are avoidance-oriented is called prevention-focused. According to regulatory focus theory, promotion-focused self-regulation is more likely in the pursuit of goals that are related to advancement and accomplishment. Prevention-focused self-regulation is more likely in the pursuit of goals that are related to security and protection. Promotion-focused self-regulation is characterized by greater eagerness. In signal detection terms, promotion-oriented individuals are primarily concerned with insuring “hits” and minimizing “errors of omission” (i.e., missed opportunities or lack of accomplishment). In contrast, prevention-focused self-regulation is characterized by greater vigilance. In signal detection terms, prevention-oriented individuals are primarily concerned with insuring “correct rejections” and minimizing “errors of commission” (i.e., making “mistakes”; see Crowe and Higgins 1997).

Consider, for instance, two students with the same goal of receiving an “A” in a course (i.e., the same reference end-state). Assume further that they have similar expectations with respect to success versus failure (comparable anticipations of pleasant vs. painful outcomes). They may still differ in whether they represent the goal as a matter of accomplishment or as a matter of security. The former would trigger promotion; the latter would trigger prevention. The difference between promotion and
prevention would not reside in the students’ desired end-state or in their expectations, but in their strategic preferences for *how* to attain the desired end-state. The promotion-focused student would be inclined to use eager approach strategies for attaining the desired goal (e.g., reading non-required materials to gain extra credit), whereas the prevention-focused student would be inclined to use vigilant avoidance strategies for attaining the desired goal (e.g., being careful to finish all requirements on time).

It should be noted that promotion and prevention differ not only in how desired end-states are approached, but also in how undesired end-states are avoided (see Higgins et al. 1994). When avoiding undesired end-states, individuals with a promotion focus would use eager means to move away from the undesired end-state, which involves *approaching mismatches* to the undesired end-state. In contrast, individuals with a prevention focus would use vigilant means to avoid the undesired end-state, which involves *avoiding matches* to the undesired end-state. Consider a person whose goal is to avoid conflict with a roommate (an undesired end-state). If the person is promotion-oriented, he or she might attempt to avoid conflict by organizing a meeting with the roommate to work out a schedule for cleaning the shared apartment (approaching a mismatch to conflict as the undesired end-state). If the person is prevention-oriented, he or she may instead leave the apartment whenever the roommate starts to argue (avoiding a match to conflict as the undesired end-state).

**Support for regulatory focus theory**

The major tenets of regulatory focus theory are supported by a considerable amount of empirical evidence (for reviews, see Higgins 1997, 1998). As examples, we describe
two particular studies. The first study is a study by Förster et al. (1998), which provides a clear demonstration of the difference between promotion and prevention in approaching the same desired end-state. The study focused on the classic “goal looms larger” effect, which refers to the fact that the intensity of motivation typically increases as people move closer to completing their goals (see Lewin 1935). Several months prior to the actual study, participants’ chronic regulatory focus was assessed through the accessibility of their ideals (a measure of promotion orientation) and the accessibility of their oughts (a measure of prevention orientation). In the actual study, all participants were given the same desirable goal to be approached—to identify as many solutions as possible to a series of anagrams. As participants were solving the anagrams, their strategic eagerness versus vigilance was assessed by recording their arm-pressure during arm-flexion (a behavioral signal of eager approach) and during arm-extension (a behavioral signal of vigilant avoidance). Among promotion focus participants, arm-flexion pressure increased as they moved closer to the last anagram, signaling increased eagerness as participants approached goal completion. Among prevention focus participants, it was arm-extension pressure that increased, signaling increased vigilance as participants approached goal completion. Thus, both promotion and prevention participants became more motivated as they approached the desired end-state, but they differed in the strategic orientation of their motivation (eagerness vs. vigilance).

In another study, Crowe and Higgins (1997) used a recognition memory paradigm to show that promotion is characterized by greater eagerness and prevention is characterized by greater vigilance. Participants were first shown a list of target items.
After a delay, they were given test items that included both “old” (target) items from the original list and “new” (distractor) items not from the original list. Participants were to respond “yes” if they believed that the test item was an old target item and “no” if they believed that the test item was a new distractor item. There were four possible outcomes: (a) “Hit” (saying “yes” to a target item); (b) “Miss” (saying “no” to a target item); (c) “False Alarm” (saying “yes” to a distractor item); and (d) “Correct Rejection” (saying “no” to a distractor item). Because eagerness entails an inclination toward hits and against misses, it was predicted that promotion would produce a propensity to say “yes,” resulting in a risky bias. In contrast, because vigilance entails an inclination toward correct rejections and against false alarms, it was predicted that prevention would produce a propensity to say ”no,” resulting in a conservative bias. These predictions were supported (see also Friedman and Förster 2001).

Although space limitations prevent us from reviewing additional studies, numerous other studies indicate that regulatory focus differences in strategic emphasis influence other basic decision processes (for a review, see Higgins and Spiegel, in press), including categorization (e.g., Molden and Higgins, in press), expectancy-valuation (e.g., Shah and Higgins 1997), affective responses to decision making (e.g., Higgins, Shah, and Friedman 1997; Idson et al. 2004), and willingness to consider new options and multiple options (e.g., Liberman et al. 1999; Liberman et al. 2001).

**Sources of regulatory focus**

Promotion and prevention focus are *motivational states*; they are states of an individual during goal pursuit. A major source of these states lies in the individual’s socialization.
According to self-discrepancy theory (Higgins 1987), certain modes of caretaker-child interactions foster children’s acquisition of either goals representing their own or significant others' hopes, wishes, and aspirations for them—goals called ideals—or goals representing their own or significant others' beliefs about their duties, obligations, and responsibilities—goals called oughts. Promotion arises from caretaker-child interactions in which pleasure is experienced as a “presence of positive” and pain is experienced as an “absence of positive.” An example of “presence of positive” pleasure would be when the caretaker hugs and kisses or praises the child for his or her accomplishments. An example of “absence of positive” pain would be when the caretaker acts disappointed when the child fails to fulfill the caretaker’s hopes. By emphasizing advancement, aspirations, and accomplishments, this kind of socialization creates a promotion focus that will subsequently be reflected in a chronic accessibility of the person’s ideals (Higgins and Silberman 1998). In contrast, prevention arises from caretaker-child interactions where pleasure is experienced as an “absence of negative” and pain is experienced as a “presence of negative.” An example of “absence of negative” pleasure would be when the caretaker reassures the child by removing something the child find threatening. An example of “presence of negative” pain would be when the caretaker scolds or punishes the child when the child misbehaves or acts irresponsibly. By emphasizing protection, safety, and responsibility, this kind of socialization creates a prevention focus that will subsequently be reflected in a chronic accessibility of the person’s oughts (Higgins and Silberman 1998).

Note that people’s chronic promotion and prevention orientations are theoretically independent. Hence, individuals can be high in promotion focus only, high in prevention
focus only, high in both, or low in both. It has also been found that individuals from individualist cultures (e.g., North Americans, Western Europeans) tend to be chronically more promotion-focused, whereas individuals from collectivist cultures (e.g., Middle Easterners, East Asians) tend to be chronically more prevention-focused (see Lee et al. 2000; Pham and Avnet 2004, Study 4).

States of promotion and prevention focus can also be determined by situational factors. For example, task instructions framed in terms of “gains” versus “non-gains” tend to activate a promotion focus, whereas task instructions framed in terms of “losses” versus “non-losses” tend to activate a prevention focus (e.g., Shah and Higgins 1997; see also Lee and Aaker 2004; Zhou and Pham 2004). In addition, activation or priming of individuals’ ideals or oughts can temporarily increase their accessibility, thereby creating momentary states of promotion or prevention focus, respectively (e.g., Higgins et al. 1994; Liberman et al. 2001; Pham and Avnet 2004). We now turn to how differences in regulatory focus may affect consumer decision making.

**Promotion, prevention, and consumer decision making**

Standard consumer theory depicts consumer decision making as a series of stages progressing through (1) problem recognition, (2) information search, (3) formation of a consideration set, (4) evaluation of alternatives, (5) choice/purchase, and (6) post-choice/post-purchase processes (e.g., Hoyer and MacInnis 2003). This stylized stage-model, illustrated in Figure 2.1, provides a convenient way of organizing our theoretical propositions.

[Insert Figure 2.1 about here]


**Problem recognition (or need arousal)**

Consumer decision making is assumed to be triggered by the recognition of a problem or the arousal of a need. Problem recognition is typically conceptualized as the detection by the consumer of a discrepancy between an actual state (e.g., the fridge is empty) and a desired state (e.g., the children should eat dinner by 7 p.m.). This discrepancy may arise in two distinct manners (Bruner and Pomazal 1988). First, a desired state may move away from a current state that is stationary. For instance, a consumer who, until now, has been satisfied with owning a single car (the current state) may now experience a new need or want for a second car (a change in desired state). Changes in desired states may occur as a result of new personal circumstances (e.g., a new job out of town), marketing pressures (e.g., advertising, price promotions), or social comparisons (e.g., witnessing other consumers enjoy having a second car). A second type of discrepancy between actual and desired states arises when a current state moves away from a desired state that is stationary. For instance, a temporary illness in a normally healthy consumer creates a discrepancy between the new current state of sickness and the unchanged desire to be healthy. Our theoretical propositions with respect to problem recognition in consumer decision making are summarized in Table 2.1 (in each Table the predictions that remain to be tested empirically are marked with an asterisk).

[Insert Table 2.1 about here]

**Experience of problem recognition**

We propose that pre-existing states of promotion versus prevention will induce different perceptions of discrepancy between actual and desired states and result in different
experiences of problem recognition (Proposition 1.1). Individuals in a promotion state are concerned with advancement and pursue advancement by adding “hits.” Thus, under promotion, consumers will pay relatively more attention to the desired state (perceived as advancement) compared to the actual state. In contrast, individuals in a prevention state seek to prevent problems and want to reject mistakes. Thus, under prevention, consumers will pay relatively more attention to the actual state (perceived as a problem) compared to the desired state. For example, we predict that a promotion-oriented consumer who needs a second car because of a new out-of-town job will tend to focus on the desirability of the second car, whereas a prevention-oriented consumer in the same situation will tend to focus on the problem of not having a second car. In this example, both consumers would be motivated to move from their current state to the desired end-state; however, they would likely attend to different aspects of the situation. In general, promotion-oriented consumers will tend to experience the situation as a “need to be met,” whereas prevention-oriented consumers will tend to experience the same situation as a “problem to be fixed.”

Activation of promotion versus prevention

Not only can states of promotion and prevention influence the experience of problem recognition, they can also be differentially activated by different types of problem recognition. Different types of discrepancies between actual and desired states may result in different activations of promotion and prevention and, therefore, in different patterns of decision making. As mentioned previously, there is a fundamental distinction between two types of desirable end-states (Higgins 1987): (a) ideals, which refer to
consumers’ aspirations, hopes, and wishes (e.g., wanting a beautiful house, dreaming of an exotic vacation); and (b) oughts, which refer to consumers’ obligations, duties, and responsibilities (e.g., having to provide for a child’s education, having to repay one’s debts). According to regulatory focus theory (Higgins 1997, 1998), discrepancies between consumers’ actual states and desired ideals will trigger states of promotion, whereas discrepancies between consumers’ actual states and their desired oughts will trigger states of prevention (Proposition 1.2). Although this prediction has not been directly tested in a consumer decision making context, it has received ample support in other contexts (e.g., Higgins et al. 1994; Pham and Avnet 2004). Higgins et al. (1994) have found, for instance, that respondents whose ideals were primed or chronically accessible tended to favor approach strategies in self-regulation (e.g., being emotionally supportive of friends), whereas respondents whose oughts were primed or chronically accessible tended to favor avoidance strategies instead (e.g., keeping secrets about friends).

We additionally hypothesize that, holding the type of desired state constant (e.g., the need for a new car), discrepancies that arise from a change in the desired state (e.g., a new job requires an additional car) will tend to activate states of promotion, whereas discrepancies that arise from a change in the actual state (e.g., the current car broke down) will tend to activate states of prevention (Proposition 1.3). In both cases, there should be a motivation to move from the current state toward the desired state (e.g., a desire for a new car). However, if the motivation arises from a change in the desired state (e.g., a new car for a new job), the movement should be experienced as advancement, activating a promotion focus. In contrast, if the desire arises from a
change in the actual state (e.g., a new car to replace a broken-down car), the movement should be experienced as correcting a problem, activating a prevention focus. The implications of this distinction are currently being investigated. Propositions 2 and 3 highlight an important recent development of regulatory focus theory: In addition to exerting \textit{exogenous} influences on consumer decision making, regulatory focus can also be \textit{endogenously} determined by various aspects of this decision making process (see Zhou and Pham 2004).

\textbf{Information search}

Once a problem has been recognized, a search for information is assumed to follow. Consumers’ information search can be characterized along several dimensions (e.g., Bettman 1979; Hoyer and MacInnis 2003): (a) the extensiveness of the search; (b) the direction of the search, internal or external; (c) the type of information searched; and (d) the structure of the search, which can be alternative-based or attribute-based, and global or local. Our propositions with respect to these four dimensions of information search are summarized in Table 2.2.

[Insert Table 2.2 about here]

\textit{Extensiveness of search}

The effects of regulatory focus on the extensiveness of search should depend on how this extensiveness is operationalized. If the extensiveness of search is defined in terms of sheer amount of information searched or amount of effort devoted to searching, there should be no systematic difference between promotion and prevention. Amount of information searched and search effort depend primarily on the consumer’s level of
involvement (motivation intensity) with the decision and their level of knowledge about the product category involved (e.g., Beatty and Smith 1987; Brucks 1985). To the extent that regulatory focus is theoretically independent of motivation intensity and expertise, promotion- and prevention-oriented individuals should devote comparable amounts of effort to search and search for comparable amounts of information (Proposition 2.1). Although this proposition remains to be tested, indirect support for this prediction comes from the finding that, in persuasion settings, activation of promotion and prevention produces similar depths of processing (Pham and Avnet 2004; Avnet and Pham 2004).

However, if extensiveness of search is defined in terms of how many alternatives or options are considered, search should be more extensive under promotion than under prevention (Proposition 2.1). Individuals with a promotion focus should not want to overlook options or “miss hits.” In contrast, individuals with a prevention focus should want to consider only as many options as are necessary for the task at hand, since adding unnecessary options increases the chance of making mistakes. Previous studies have shown that more alternatives are indeed generated and considered when people have a promotion focus than when they have a prevention focus (e.g., Crowe and Higgins 1997; Liberman et al. 2001; Friedman and Förster 2001).

*Internal versus external search*

Search for information can be internal and based on the consumer’s knowledge and memory, or external and directed to the environment. Pham and Avnet (2004) recently hypothesized that promotion-focused consumers will engage in relatively more internal search than prevention-focused consumers, whereas prevention-focused consumers
will engage in relatively more external search than promotion-focused consumers (Proposition 2.3). This hypothesis was based on the finding that promotion triggers a more eager form of exploration, whereas prevention triggers a more vigilant form of exploration (e.g., Crowe and Higgins 1997). Eagerness should theoretically encourage the reliance on heuristic modes of judgment (see Förster et al. 2003), which include the reliance on internal knowledge structures (Pham and Avnet 2004). In contrast, vigilance should encourage scrutiny of the environment and thus the reliance on external information (e.g., Bless et al. 1996; Förster et al. 2000).

**Content of information searched**

Because promotion is characterized by a strategy of approaching matches to the desired end-state, it should foster a preferential search for positive (rather than negative) signals about the available options. In contrast, because prevention is characterized by a strategy of avoiding mismatches to the desired end-state, it should foster a search for negative (rather than positive) signals about the options (Proposition 2.4). Consistent with this prediction, Pham and Avnet (2004) recently found that, in persuasion, promotion-focused consumers were more influenced by positive affective cues (an attractive ad execution) than by negative affective cues (an unattractive ad execution). In contrast, prevention-focused consumers were more influenced by negative substantive information (weak product claims) than by positive substantive information (strong product claims).

Promotion should also foster a preferential search for attribute information related to advancements and accomplishments, whereas prevention should foster a preferential
search for attribute information related to security and protection (Proposition 2.5). The results of a study by Safer (1998; see Higgins 2002) are consistent with this prediction. Participants instructed to imagine that they wanted to purchase a computer were provided a list of 24 questions they could ask about the computer: 8 about innovative features (e.g., how creative or advanced it was), 8 about reliability features (e.g., its ability to prevent system crashes or other problems), and 8 about neutral features (e.g., total weight of the unit). Participants were asked to select those 10 questions whose answers would be most helpful in making their purchase decision. As predicted, participants with a stronger promotion focus were more likely to seek information concerning innovation than reliability, whereas the reverse was true for participants with a stronger prevention focus.

*Alternative versus attribute-based search*

A major tenet of decision research is that information search may be structured either in terms of alternatives (e.g., different brands) or in terms of attributes of the alternatives (see Payne, Bettman, and Johnson 1993; Bettman, Luce, and Payne 1998). We propose that, under promotion, information search will concentrate on seeking information about additional alternatives while holding the number of attributes constant; under prevention, information search will concentrate on seeking information about additional attributes while holding the number of alternatives constant (Proposition 2.6). This prediction is based on the thesis that promotion is mostly geared toward identifying and capturing opportunities, whereas prevention is mostly geared toward avoiding mistakes (see Crowe and Higgins 1997). One’s ability to identify opportunities obviously
increases when more alternatives are considered. However, one’s ability to avoid mistakes is more likely to increase when more information about each alternative is considered.

Global versus local search

Information can be searched in a global, “big picture” manner or in a more local, detail-oriented manner. A global search tends to proceed in a “top-down” fashion, whereas a local search tends to proceed in a “bottom-level,” serial fashion. We propose that under promotion information search will be more global and proceed in a top-down manner, whereas under prevention information search will be more local and proceed in a bottom-level, serial manner (Proposition 2.7). For example, we predict that promotion-focused patrons in a restaurant would tend to examine the food menu by first scanning the menu’s main categories (appetizers vs. entrees), then searching for possible subcategories within each main category (e.g., meat vs. fish within entrees), and then look for specific dishes within the selected subcategory (e.g., sole meuniere within fish). Prevention-focused patrons would instead tend to proceed by scanning the menu serially at the specific dish level (e.g., first dish under appetizers, second dish under appetizer, etc.). Although this proposition remains to be tested, indirect support for this prediction was recently obtained in a study by Förster and Higgins (2004). Participants were presented with composite stimuli consisting of large letters made up of small letters. They were asked to respond as quickly as possible to a target letter (e.g., H) that appeared either at the global level (e.g., a large H made of small T’s) or at the local level (e.g., a large T made of small H’s). Individuals with a promotion focus were found
to respond more quickly at the global level than at the local level, whereas the reverse was true for individuals with a prevention focus.

**Consideration set formation**

Based on an initial gathering of information, consumers are assumed to narrow down the available set of options to a subset called the consideration set, that is, the set of alternatives that “the consumer considers seriously when making a purchase and/or consumption decision” (Hauser and Wernerfelt 1990: 393). Alternatives enter the consideration set based on two factors: (a) their goal-satisfying properties, and (b) their salience or accessibility at the time of the decision (Shocker et al. 1991). Consideration sets can be characterized by their size, by their composition, and by the process by which they are generated. Our propositions about the effects of regulatory focus on consideration set formation are summarized in Table 2.3.

[Insert Table 2.3 about here]

**Set size**

Consideration sets have been found to contain typically between three and seven alternatives across a broad range of product categories (see Hauser and Wernerfelt 1990). Consistent with Propositions 2.2 and 2.6, we hypothesize that the consideration sets of promotion-oriented consumers will generally be larger than those of prevention-oriented consumers (Proposition 3.1). Again, this is because promotion activates goals of maximizing hits and minimizing misses (errors of omission), which favors the consideration of a larger set of alternatives. In contrast, prevention emphasizes necessity and activates goals of maximizing correct rejection and minimizing false
alarms (errors of commission), which favors the consideration of a smaller set of alternatives, mostly those perceived to be necessary.

**Set composition**

We also propose that the composition of the consideration set will differ under promotion versus prevention. Holding the size of the set constant, the consideration sets of promotion-oriented consumers will be more heterogeneous (exhibit greater variety) than those of prevention-oriented consumers (Proposition 3.2). The concern for maximizing opportunities that characterizes promotion has been found to trigger a more explorative mode of processing (e.g., Friedman and Förster 2001). This explorative mode of processing should favor the consideration of a more diverse set of options, which increases the chance of positive discovery. In contrast, a concern for minimizing mistakes should favor the consideration of a more homogeneous set of options, which reduces uncertainty. Consistent with this proposition, it has been found that, in problem solving, promotion-oriented individuals exhibit greater creativity than prevention-oriented individuals (Friedman and Förster 2001). More direct support for this proposition comes from a recent study by Chowdhury (2004) who showed that, in gift-giving, consumers with a promotion focus have more heterogeneous consideration sets than consumers with a prevention focus.

**Set construction process**

We propose that regulatory focus will also influence the process by which consideration sets are formed. Whereas promotion-oriented consumers are expected to form
consideration sets through the gradual inclusion of alternatives, prevention-oriented consumers are expected to form consideration sets through the gradual exclusion of alternatives (Proposition 3.3). This proposition follows directly from the approach versus avoidance strategies associated with promotion and prevention. Although the proposition still awaits formal empirical testing, it is consistent with recent findings from Shah et al. (2004) who observed that promotion-focused individuals exhibit a positive in-group bias (i.e., greater inclusion of in-group members), whereas prevention-focused individuals exhibit a negative out-group bias (i.e., greater exclusion of out-group members).

Promotion- and prevention-focused consumers would also be expected to follow different rules to include or exclude alternatives from the consideration set. Two choice rules are often mentioned with respect to how consumers narrow down the number of alternatives to a more manageable set (see Bettman 1979). The conjunctive rule consists in setting minimum cutoff values for all attributes and eliminating every alternative that fails to pass any of these cutoffs. This rule is conservative and weighs negative information more heavily. The disjunctive rule consists in setting more ambitious cutoffs for all attributes and accepting every alternative that exceeds any of these cutoffs. This rule is more aggressive and weighs positive information more heavily. We propose that under promotion, the screening of alternative for further consideration is more likely to be based on a disjunctive rule, whereas under prevention, this screening is more likely to be based on a conjunctive rule (Proposition 3.4). Although this prediction has not been tested directly, Brockner et al. (2002) found that individuals who are successful in promotion self-regulation—as evidenced by a
congruence between their ideal and actual selves—are more accurate in estimating the probabilities of disjunctive events, whereas individuals who are successful in prevention self-regulation—as evidenced by a congruence between their ought and actual selves—are more accurate in estimating the probabilities of conjunctive events.

**Evaluation of alternatives**

Once a consideration set has been generated, a formal evaluation of the considered alternatives is expected to follow. During this evaluation stage, consumers are assumed to examine information about the attributes of the alternatives and integrate this information into summary evaluations of the alternatives. Of the six stages of the classic consumer decision making process, it is the evaluation stage that has received the most attention from consumer researchers interested in regulatory focus theory (although most of this work has been on persuasion as opposed to true decision making). We propose that regulatory focus influences both the type of evaluative content that consumers are sensitive to and the type of evaluation strategy that they follow. We also propose that promotion and prevention may also be activated endogenously by the alternative being evaluated (Zhou and Pham 2004). Our propositions are summarized in Table 2.4.

[Insert Table 2.4 about here]

**Sensitivity to evaluative content**

A variety of findings indicate the existence of a basic matching principle in how target objects are evaluated under different regulatory foci. Attribute information seems to carry a greater weight on how the option is evaluated when the content of this
information is compatible with the person’s regulatory focus than when it is incompatible. As a result, objects that are attractive (unattractive) on attribute dimensions that are consistent with promotion are evaluated more positively (negatively) when promotion is activated than when prevention is activated. Similarly, objects that are attractive (unattractive) on attribute dimensions that are consistent with prevention are evaluated more positively (negatively) when prevention is activated than when promotion is activated (Proposition 4.1). This well-documented phenomenon has been observed for various kinds of compatibility between type of information and regulatory focus. For example, attribute information related to hedonic and aspirational benefits (e.g., luxury, sensory gratification, aesthetic) carries a greater weight under promotion than under prevention, whereas attribute information related to utilitarian and necessary features (e.g., safety, protection) carries a greater weight under prevention than under promotion (Proposition 4.1.a).² Consistent with this proposition, Safer (1998; cited in Higgins 2002) found that in choices between (a) products that score high on luxury dimensions but average on protection dimensions (e.g., a car with plush leather seats and regular brakes) and (b) products that score high on protection dimensions but average on luxury dimensions (e.g., a car with anti-locking brakes and regular fabric seats), promotion-focused individuals tended to choose the former, whereas prevention-focused individuals tended to choose the latter. Similarly, Aaker and Lee (2001) found that a fruit juice advertised in terms of energy benefits was evaluated more favorably by individuals with independent selves (who are more promotion-focused) than by individuals with interdependent selves (who are more prevention-focused); on the other hand, a fruit juice advertised in terms of cancer prevention benefits was evaluated more

²See Khan et al. (this volume) for a review of research on hedonic versus utilitarian consumption.
favorably by individuals with interdependent selves than by individuals with independent selves. Wang and Lee (2004) have obtained similar results when promotion and prevention are primed directly as opposed to indirectly through respondents’ self views.

Regulatory focus theory (Higgins 1997, 1998) also predicts that information related to gains and non-gains should carry a greater weight under promotion than under prevention, whereas information related to losses and nonlosses should carry a greater weight under prevention than under promotion (Proposition 4.1.b). Shah, Higgins, and Friedman (1998) found, for instance, that promotion-oriented individuals were more motivated by incentives framed in terms of gains and nongains, whereas promotion-oriented individuals were more motivated by incentives framed in terms of losses and nonlosses. Zhou and Pham (2004) recently found that financial products associated with promotion (e.g., individual stocks in brokerage accounts) are evaluated with higher sensitivity to potential gains and lower sensitivity to potential losses, whereas financial products associated with prevention (e.g., mutual funds in retirement accounts) are evaluated with higher sensitivity to potential losses and lower sensitivity to potential gains. Similarly, Lee and Aaker (2004) recently found that advertising taglines framed in terms of gains (“Get Energized!”) resulted in more favorable attitudes when the rest of the ad was written in promotion terms (stressing the energy benefits of drinking grape juice) than when the rest of the ad was written in prevention terms (stressing the cancer reduction benefits of drinking grape juice). Taglines framed in loss terms (“Don’t Miss Out on Getting Energized!”) resulted in more favorable attitudes when the rest of the ad was written in prevention terms than when the rest of the ad was written in promotion terms.
Regulatory focus theory would also predict that, under promotion, information related to eagerness should be more influential and persuasive than information related to vigilance, whereas, under prevention, information related to vigilance should be more influential and persuasive than information related to eagerness (Proposition 4.1.c). Consistent with this prediction, Cesario et al. (2004) found that a persuasion message advocating a new public education policy was more effective when promotion-oriented participants received an eagerness-framed message than a vigilance-framed message, whereas the opposite was true for prevention-oriented participants. Similarly, Spiegel et al. (2004) found that promotion-focused individuals were more likely to complete a task when given means framed in terms of eagerness than when given means framed in terms of vigilance. In contrast, prevention-focused individuals were more likely to complete the task when given means framed in terms of vigilance than when given means framed in terms of eagerness.

Two types of mechanisms have been proposed to account for the regulatory “compatibility” phenomenon described in Proposition 4.1 (and Propositions 4.1.a, 4.1.b, and 4.1.c). First, it could be that a state of promotion or prevention raises attention to information that is compatible with this state and increases the weight that this information receives during judgment integration. If the weight of regulatory-focus-compatible information increases in judgment, options that are attractive on compatible dimensions will naturally be evaluated more favorably. Consistent with this explanation, Aaker and Lee (2001) found that, following exposure to a promotional message, respondents had better memory for information that was consistent with their state of regulatory focus than for information that was inconsistent with this state. Wang and Lee
(2004) similarly found that promotion- or prevention-focused individuals spent more time processing information that was compatible with their state than information that was not compatible. Finally, Pham and Avnet (2004) found that information compatible with the regulatory state was perceived to be more diagnostic than information that was not compatible.

An alternative explanation is that a match between the information and the person’s regulatory state—a situation called regulatory fit—creates a subjective experience of “feeling right” that is then used as information to make evaluations (Higgins 2000, 2002). Cesario et al. (2004) recently tested this explanation in a persuasion context. They hypothesized that, for a promotion-focused person, a message framed in eager terms would feel more “right” than a message framed in vigilant terms. Conversely, for a prevention-focused person, a message framed in vigilant terms would feel more “right” than a message framed in eager terms. These feelings of rightness would then be interpreted as meaning that the message is persuasive or that the person agrees with the message’s position. Consistent with this hypothesis, Cesario et al. (2004) found that regulatory fit indeed increased the perceived persuasiveness of messages compared to situations of non-fit. They additionally found that this effect disappeared when the actual source of the feelings was made salient before message exposure. This latter finding supports the idea that the phenomenon is driven by a misattribution of the feelings of rightness to the object being evaluated (see Schwarz and Clore 1983). Lee and Aaker (2004) recently obtained similar results with different operationalizations of regulatory fit. We shall return to this notion of regulatory fit in our discussion of post-decisional processes.
Evaluation strategy

We also predict that regulatory focus will influence the strategy that consumers use to evaluate options. Specifically, we propose that under promotion, consumers will tend to rely on more heuristic modes of evaluation; whereas, under prevention, consumers will tend to rely on more systematic modes of evaluation (Proposition 4.2). Consistent with this proposition, Förster et al. (2003) found that promotion-oriented individuals tended to perform tasks with greater speed and lower accuracy, whereas prevention-oriented individuals tended to perform the same task with lower speed but greater accuracy. This is presumably because promotion induces eagerness in task performance, whereas prevention induces vigilance.

A major heuristic of evaluation is to rely on one’s feelings, as in the “How-do-I-feel-about-it?” heuristic (Schwarz and Clore 1983, 1996; Pham 1998, 2004). Pham and Avnet (2004) recently hypothesized that promotion would increase the reliance on affective feelings toward the alternatives (especially promotion-consistent feelings), whereas prevention would increase the reliance on substantive information about the alternatives (Proposition 4.3). This is because promotion and eagerness encourage reliance on heuristic modes of judgment (Proposition 4.4) and internal information (see Proposition 2.3); in contrast, prevention and vigilance encourage the use of systematic modes of judgment and external information. Consistent with this hypothesis, Pham and Avnet (2004) found that, in an advertising setting, the priming of ideals increases the influence of the ad’s aesthetic on brand attitudes, whereas the priming of oughts increases the influence of the ad’s claim strength. In subsequent studies, they
additionally found that the same phenomenon occurs in impression formation and in decision making, even when the feelings toward the target are manipulated incidentally through a mood induction. It appears that the activation of promotion makes people believe—correctly or incorrectly—that their feelings are diagnostic. It should be noted, however, that in the Pham and Avnet studies, affective feelings were mostly of the promotion kind (e.g., attractiveness of an ad, charisma of a person, etc.) An interesting avenue for future research would be to investigate how regulatory focus moderates reliance on affective feelings of a prevention kind (e.g., feelings of anxiety vs. relief). According to regulatory focus theory, affective feelings of a prevention kind should be weighted more heavily under prevention than under promotion, which would represent an important boundary condition of the Pham and Avnet findings. It has been found, for instance, that a promotion focus produces quicker evaluations of how happy or sad an object makes people feel, whereas a prevention focus produces quicker evaluations of how relaxed or nervous an object makes people feel (Shah and Higgins 2001).

We also predict that promotion will foster greater reliance on personal preferences and private attitudes, whereas prevention will foster greater reliance on group preferences and social norms (Proposition 4.4). Although this prediction has yet to be tested explicitly, it is consistent with the finding that promotion tends to be associated with independent self-representations, whereas prevention tends to be associated with interdependent self-representations (Lee et al. 2000). It is also consistent with the finding that the priming of avoidance motivation increases the endorsement of proverbs stressing the importance of balance and equity in social relations (Briley and Wyer 2002). Furthermore, ideals (which tend to trigger promotion)
involve aspirations that are often personal, whereas oughts (which tend to trigger prevention) involve duties, obligations, and responsibilities that generally are interpersonal.

_Endogenous activation of promotion and prevention_

As formalized in Propositions 4.1-4.4, states of promotion versus preventions are expected to exert _exogenous_ influences on consumers’ preferences for differential content of attribute information about the alternatives. Zhou and Pham (2004) recently proposed that, during evaluation, states of promotion and prevention may also be _endogenously_ activated by the alternatives themselves (Proposition 4.5). As mentioned previously, they found that in investment decisions certain financial products such as individual stocks in trading accounts were evaluated with greater sensitivity to gains and lower sensitivity to losses (a pattern of evaluation consistent with a promotion focus), whereas other financial products such as mutual funds in a retirement account were evaluated with greater sensitivity to losses and lower sensitivity to gains (a pattern of evaluation consistent with a prevention focus). In another experiment, they found that the mere act of evaluating financial products labeled either as “individual stocks in a trading account” or as “mutual funds in a retirement account” was sufficient to trigger distinct promotion or prevention tendencies that carried over to subsequent decisions in totally unrelated domains. These findings suggest that the types of financial products may actually dictate the criteria and goals that investors use to make their decisions. According to standard finance theory, however, it should be the investor’s goals and criteria that dictate how they evaluate investment alternatives, not the reverse. Zhou
and Pham (2004) observe that their findings imply a “means-dictate-the-ends” phenomenon that has important implications, not just for investment decisions, but for decision research in general.

**Choice**

The evaluation of the alternatives is assumed to culminate in the choice of one alternative. This choice process can be characterized by (a) the rules that are used to arrive at the chosen alternative; (b) the decision maker’s preference for the status quo, default option, or choice-deferral; (c) the decision maker’s attitude toward risk; and (d) the decision maker’s sensitivity to the context of choice and preference for variety. Our propositions about the effects of regulatory focus on choice are summarized in Table 2.5.

[Insert Table 2.5 about here]

**Choice rules**

As mentioned previously, in consideration set formation promotion should encourage a process of inclusion, whereas prevention should encourage a process of exclusion (see Proposition 3.3). In addition, promotion should encourage the reliance on a disjunctive rule, whereas prevention should encourage the reliance on a conjunctive rule (see Proposition 3.4). The same motivational forces that underlie these predictions with regard to consideration set formation should exert similar influences once the consideration set is formed and shape the choice process *within* the consideration set. We therefore propose that, within the consideration set, choice will tend to be guided by a process of selection or acceptance under promotion and by a process of elimination.
or rejection under prevention (Proposition 5.1). We also propose that, within the consideration set, promotion will encourage the reliance on a disjunctive rule and prevention will encourage the reliance on a conjunctive rule (Proposition 5.2).

The conjunctive and disjunctive rules assume no ordering of the attributes in terms of their importance. However, attributes often have different importance for the consumer. Two well-known choice rules capitalize on the different importance attached to different attributes (see Bettman 1979). Under the lexicographic rule, the consumer first compares the options on the most important attribute and chooses the option with the highest score on this attribute. In case of a tie, the process is then repeated with the second most important attribute, and so on until only one option remains. Under an elimination-by-aspect-type rule (see Tversky 1972), the alternatives are also assessed based on the most important attribute, but are eliminated if they fail to meet a certain cut-off. If multiple alternatives clear the first screening, they are then assessed based on the second most important attribute, and so on until one alternative remains. We propose that promotion will encourage the reliance on a lexicographic rule, whereas prevention will encourage the reliance on an elimination-by-aspect-type rule (Proposition 5.3). Again, this is because promotion is oriented toward the fulfillment of aspirations and maximal goals, whereas prevention is oriented toward the avoidance of mistakes and fulfillment of minimal goals.

*Status quo, default, and choice deferral*

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3 In Tversky’s (1972) original formulation of the elimination-by-aspect heuristic, the order in which the attributes are examined is probabilistic (with the probability of examination proportional to the relative weight of each attribute) rather than being strictly determined by the weight of each attribute. We describe a deterministic version of the heuristic for clarity of exposition.
Consumer decision making often involves a choice between the status quo and a new option. Regulatory focus theory predicts that, given such choices, promotion-oriented consumers will tend to favor the new option, whereas prevention-oriented consumers will tend to favor the status quo (Proposition 5.4). This is because a promotion focus is generally associated with an openness to change, whereas a prevention focus is generally associated with a preference toward stability. Liberman, et al. (1999) tested this prediction using an endowment-effect paradigm. In this paradigm, participants are typically given one object, the “endowed” option, and offered an opportunity to exchange it against another object of comparable monetary value. It is generally found that, whichever object people are initially endowed with, they are reluctant to exchange it for another object of comparable value. Liberman et al. (1999) found that the priming of prevention magnified the endowment effect (making participants even more reluctant to exchange the product they were endowed with), whereas the priming of promotion removed the endowment effect (making participants indifferent between the product they were endowed with and the other product).

Closely related to the notion of status quo is the notion of “default,” that is, an option that is selected unless the decision maker actively rejects it. A large body of evidence shows that, in choices where there is a default option, the default generally receives a disproportionate share of the choices (e.g., Johnson and Goldstein 2003). Multiple explanations have been offered for this phenomenon. Acceptance of the default may reflect sheer inertia, as opting out of a default requires extra effort (e.g., Madrian and Shea 2001). The phenomenon may also reflect greater anticipated regret from rejecting the default due to counterfactual thinking (e.g., Kahneman and Miller 1986).
The setting of the default may additionally be seen as having information value (e.g., “It must be the option most people prefer.”). We propose that, in choices involving a default option, prevention-oriented consumers will be more likely to choose the default than promotion-oriented consumers (Proposition 5.5). Again, this is because promotion is generally characterized by a greater openness to change and greater willingness to take risks, whereas prevention is generally characterized by a preference for stability and lower willingness to take risks. Moreover, the default option may be interpreted as reflecting some social norm (e.g., “This is what I am expected to choose.”), which should increase its appeal to prevention-focused individuals (see Propositions 1.2 and 4.4).

Also related to the notion of status quo is the notion of choice-deferral. Sometimes, consumers simply elect to postpone choice, which some have called a preference for the no-choice option (e.g., Dhar 1997). We predict that compared to promotion-oriented consumers, prevention-oriented consumers will be more likely to defer choice and elect non-choice options (Proposition 5.6). Again, this is because promotion-oriented consumers should be more open to capturing opportunities and taking chances, whereas prevention-oriented consumers should be more concerned about avoiding mistakes.

**Risk-taking**

We propose that, in choice, promotion will generally—but not always (as discussed further below)—trigger greater risk taking, whereas prevention will generally—but not always—trigger greater risk aversion (Proposition 5.7.1). As discussed by Zhou and
Pham (2004), two sets of mechanisms contribute to this phenomenon. First, as already mentioned, promotion is characterized by eagerness, which usually translates into greater openness to risk, whereas prevention is characterized by vigilance, which usually translates into lesser openness to risk (Higgins 1997, 1998). This tendency was apparent in the previously mentioned finding that in signal detection tasks promotion-focused participants exhibit a risky bias, whereas prevention-focused participants exhibit a conservative bias (Crowe and Higgins 1997). This tendency also transpired in the finding that promotion-oriented individuals tend to perform tasks with greater speed and lower accuracy, whereas prevention-oriented individuals tend to perform the same tasks with lower speed but greater accuracy (Fürster et al. 2003).

According to Zhou and Pham (2004), a second mechanism lies in promotion and prevention’s differential attention to gains and losses. In many domains, options (e.g., surgery) with greater potential upsides (e.g., complete riddance of medical condition) also present greater potential downsides (e.g., life-threatening complications), whereas options (e.g., continuous medication) with smaller potential downsides (e.g., few side-effects) are also those with smaller potential upsides (e.g., symptoms relief without complete cure). In a choice between (a) a risky alternative with greater upsides and greater downsides and (b) a conservative alternative with smaller downsides and smaller upsides, promotion focusing on positive outcomes would favor the risky option, whereas prevention focusing on negative outcomes would favor the conservative option.

In a recent test of Proposition 5.7.1, Zhou and Pham (2004) asked participants to assess their willingness to invest a sum of money in a risky business venture. In one
condition, the money was to be withdrawn from a financial account associated with promotion (a brokerage account). In the other condition, the money was to be withdrawn from a financial account associated with prevention (a retirement account). As predicted, participants were more willing to invest (i.e., risk their money) if the money came from the promotion-oriented brokerage account than if the money came from the prevention-oriented retirement account. In another study, Zhou and Pham (2004) primed participants into promotion versus prevention by having them proofread a text and solve anagrams under either eager approach instructions or vigilant avoidance instructions. Participants were then asked to allocate a sum of money between shares of an individual stock (a more risky option) and shares of a mutual fund (a less risky option). As predicted, participants who were primed in terms of promotion allocated relatively more money to the individual stock than participants who were primed in terms of prevention. (Other results indicate that these effects cannot be accounted for by standard economic and finance principles.) Similarly, Raghunathan et al. (2004) recently observed that, when given a choice between (a) going out with a good friend the evening before an exam (a higher-risk/higher-reward option) and (b) staying at home to study (a lower-risk/lower-reward option), participants whose ideals were primed leaned toward the evening with the friend, whereas participants whose oughts were primed leaned toward the evening studying.

Although promotion generally entails greater risk-seeking and prevention generally entails greater-risk aversion (Proposition 5.7.1), this relationship ceases to hold in certain situations recently identified by Zhou (2002; cited in Zhou and Pham 2004). Specifically, in a choice between a modest but certain gain and a greater but
uncertain gain, promotion-oriented individuals will tend to favor the former and thus exhibit relative risk-aversion (Proposition 5.7.2). In a choice between a modest but certain loss and a greater but uncertain loss, prevention-oriented individuals will tend to favor the latter and thus exhibit relative risk-seeking (Proposition 5.7.3). In one experiment (Zhou 2002), respondents who had been primed with promotion or prevention were asked to imagine that they had achieved some moderate “paper” (unrealized) gains on the stock market. They were then presented with two options: (a) selling their shares now to realize their capital gains, or (b) holding on to their shares for a chance of even greater gains but at the risk of the stock returning to its original price (i.e., to miss out on a gain). Note that, in this scenario, the riskier option (b) is no longer a clear “achieving gains-seizing opportunities” option. In fact, the less risky option (a) could be construed as being more consistent with the achievement of gains and the seizing of opportunities. Thus, failure to choose (a) could be construed as an error of omission. As expected, in this scenario, respondents who were primed with promotion were more likely to choose the less risky option (a) (i.e., were more risk-averse) than respondents who were primed with prevention. In another experiment (Zhou 2002), respondents who had also been primed with promotion or prevention were asked to imagine that they had incurred some moderate paper losses on the stock market. They had two options: (a) sell their shares and realize their capital loss, or (b) hold on to their shares for a chance of breaking even but at the risk of incurring even greater losses. Again, in this scenario, the less risky option (a) is no longer a clear “prevent losses” option. In fact, the more risky option (b), with its chance of breaking even, could be construed as being more consistent with the avoidance of losses. In this case, choosing
(a) and realizing one’s losses could be construed as an error of commission. As expected, in this scenario, respondents who were primed with prevention were more likely to choose the more risky option (b) (i.e., were more risk-seeking) than respondents who were primed with promotion.

Therefore, under certain conditions, promotion and prevention can be meaningfully dissociated from risk-seeking and risk-aversion. Reversal of the typical pattern of risk-seeking under promotion and risk-aversion under prevention is most likely in loss domains. Specifically, we propose that if the current state is highly undesirable, prevention-focused individuals will be more likely to pursue riskier options that could remove (or “subtract”) the undesirable state— thereby exhibiting in effect greater risk-seeking behavior—than promotion-focused individuals (Proposition 5.7.4). This is because prevention-focused individuals would consider it a mistake to remain in the current state, and feel it necessary to choose the riskier option. Note that such seemingly risk-seeking choices under prevention would arise not because prevention-focused individuals really want to take risks, but rather because they see it as a necessity to “correctly reject” the option that would prolong the negative state with greater certainty.

*Context effects and variety seeking*

A growing body of evidence indicates that consumer choice is determined not only by the attributes of the options but also by the context in which the options are presented. Two particular aspects of the choice context have received a great deal of attention. The asymmetric-dominance or “attraction” effect refers to the tendency of an option A
that dominates another option B to benefit disproportionately from the introduction of B in the choice set relative to other options that do not dominate B (Huber et al. 1982).\(^4\)

Although various accounts have been offered for this phenomenon (see, e.g., Huber et al. 1982; Ratneshwar et al. 1987), a major explanation seems to be that the presence of a dominance relationship can be quite seductive as a choice heuristic (e.g., Simonson 1989). We propose that, compared to the activation of prevention, the activation of promotion will magnify the asymmetric dominance effect (Proposition 5.8). This is because a dominance relation in a choice set can be seen as an opportunity to be seized and not to be missed, which should be especially attractive to eager consumers. In contrast, vigilant consumers may be more wary of using a mere dominance relation as a basis of choice (see also P16).

Another well-known context effect is the compromise effect. This effect refers to the tendency of an option to gain a disproportionate share of the market when presented as a middle-of-the-road, compromise option relative to other options in the choice set (Simonson 1989). According to Simonson (1989), compromise alternatives tend to be appealing because they are easy to justify as a choice. Simonson and Tversky (1992) suggest that compromise options are also appealing because they present fewer disadvantages compared to more extreme options (i.e., options that are excellent on some dimensions but poor on other dimensions). We propose that, compared to the activation of promotion, the activation of prevention will magnify the compromise effect (Proposition 5.9). As suggested by Simonson and Tversky (1992), the attractiveness of compromise options lies in part in the fact that they avoid the disadvantages of the more extreme options. Choosing the compromise option can thus

\(^4\) An option A is said to “dominate” another option B if A is superior to B on every choice-relevant dimension.
be seen as a form of vigilance, which should be magnified by the activation of prevention. Extreme options (i.e., options that excel on some dimensions but are poor on others), on the other hand, should be relatively more appealing to eager individuals who tend to weigh positive attributes more strongly than negative attributes. Moreover, compromises are more consistent with collectivist norms of decision making (Briley et al. 2000), norms that have stronger association with prevention than with promotion (see Lee et al. 2000). Consistent with Proposition 5.9, Briley et al. (2000) found that the compromise effect is indeed more pronounced in collectivist cultures (which tend to be more prevention-oriented) than in individualist cultures (which tend to be more promotion-oriented). Briley and Wyer (2002) also found that the priming of avoidance motivation increases preference for compromise options. The relation between regulatory focus theory and the attraction and compromise effects is currently being investigated in related work by Kivetz and Leavav.

When the choice involves the simultaneous selection of multiple items (e.g., ordering multiple articles of clothing from a catalog) or occurs on a repeated basis (e.g., buying groceries every Saturday), other items selected may become part of the choice context. A substantial amount of evidence suggests that consumer choice often reflects a search for variety. That is, consumers often seem motivated to diversify their choices (for a review, see Kahn and Ratner, this volume). We propose that, in choice, variety seeking will be more pronounced under promotion than under prevention (Proposition 5.10; see also Proposition 3.2). This is because, as mentioned previously, promotion-oriented individuals are generally more open to change (see Proposition 5.4) and more willing to take risks (see Proposition 5.7.1). For promotion-oriented individuals, variety
offers a way of capturing additional opportunities. Failure to do so would be an error of omission. In contrast, prevention-oriented individuals are more likely to see variety as a potential mistake and possible error of commission. (The safer option would be to consistently choose the most preferred alternative). Although this prediction remains to be tested explicitly, it is consistent with the previously mentioned finding that in gift giving, more diverse alternatives are considered under promotion than under prevention (Chowdhury 2004).

**Post-choice processes**

According to standard consumer theory, the final stage of the consumer decision making process is a post-choice assessment of the decision. As summarized in Table 2.6, we propose that differences in regulatory focus will influence (a) the intensity of consumers’ satisfaction/dissatisfaction with desirable/undesirable outcomes, (b) the type of emotion experienced in response to desirable or undesirable outcomes, (c) the nature of any post-decisional dissonance, and (d) the satisfaction with the decision making process independent of its outcome.

[Insert Table 2.6 about here]

**Satisfaction/dissatisfaction intensity**

Decisions that produce desirable outcomes (successes) will obviously result in greater satisfaction and lesser dissatisfaction than decisions that produce undesirable outcomes (failures). Holding the desirability of the outcome constant, the intensity of the satisfaction or dissatisfaction may differ, depending on the consumer’s regulatory focus. This difference arises from the types of goals that are associated with promotion and
with prevention. Again, promotion is usually associated with ideals (hopes, wishes, and aspirations), whereas prevention is usually associated with oughts (duties, responsibilities, and obligations). Because ideals are standards that the person hopes to attain, they tend to function like maximal goals. In contrast, because oughts are standards that the person has to meet, they tend to function like minimal goals (Brendl and Higgins 1996). Success in attaining a maximal goal should provide more intense pleasure than success in attaining a minimal goal, but failure to attain a minimal goal should provide more intense pain than failure to attain a maximal goal (Idson et al. 2000). Therefore, satisfaction from desirable outcomes should be more intense under promotion than under prevention, whereas dissatisfaction from undesirable outcomes should be more intense under prevention than under promotion (Proposition 6.1).

Consistent with this prediction, Idson et al. (2000) found that pleasure from a positive outcome was more intense if the outcome was framed as a gain (a promotion success) than if it was framed as a non-loss (a prevention success). Pain from a negative outcome was more intense if the outcome was framed as a loss (a prevention failure) than if it was framed as a non-gain (a promotion failure).

**Emotional responses to decision outcomes**

Decision outcomes trigger not only summary judgments of satisfaction or dissatisfaction but also a variety of emotional responses (e.g., Westbrook and Oliver 1991). Consumers’ emotional responses to decision successes and failures should be qualitatively different under promotion than under prevention. Under promotion, decision successes should result in greater elation-related emotions (e.g., joy, cheerfulness,
happiness), whereas decision failures should result in greater dejection-related emotions (e.g., sadness, disappointment, discouragement) (Proposition 6.2.1). Under prevention, decision successes should result in greater quiescence-related emotions (e.g., relief, calm, relaxation), whereas decision failures should result in greater agitation-related emotions (e.g., anxiety, tension, nervousness) (Proposition 6.2.2). These propositions emanate directly from self-discrepancy theory (Higgins 1987) and have been documented in numerous studies (e.g., Higgins et al. 1997; Idson et al. 2000).

Post-decisional dissonance and regret

After a consumer has made a decision, the possibility that it could be the wrong decision can be source of emotional discomfort for the consumer. This discomfort may range from mild dissonance on account of the uncertainty as to whether the chosen alternative was in fact the right choice (e.g., when the outcome is still unknown), to acute regret from the conviction that the selected option was indeed the wrong choice (e.g., when the outcome is known).\(^5\) The arousal of dissonance or regret is likely to be different under promotion versus prevention. As mentioned previously, eager, promotion-focused individuals tend to be more concerned with errors of omission, whereas vigilant, prevention-focused individuals tend to be more concerned with errors of commission (e.g., Crowe and Higgins 1997). We therefore propose that promotion-focused consumers will be more likely to experience post-decisional dissonance and

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\(^5\) Like disappointment, regret is an unpleasant emotion that arises from counterfactual comparisons between “what is” and “what could have been.” In disappointment what is being compared is the undesirable (disappointing) actual outcome with what this outcome could have been (the aspiration or standard). In regret what is being compared is the chosen course of action (or inaction) with what this course could have been (see Zeelenberg et al. 1998).
regret in relation to errors of omission (e.g., failing to buy a product while it was on sale), whereas prevention-focused consumers will be more likely to experience post-decisional dissonance and regret in relation to errors of commission (e.g., buying a product that was not really needed; see Proposition 6.3). Consistent with this prediction, Roese et al. (1999) found that failures of promotion (e.g., failing to fulfill a romantic interest) tend to trigger additive counterfactuals that mutate inactions (e.g., “I should have asked her out.”), whereas failures of prevention (e.g., inadvertently causing some food poisoning), tend to trigger subtractive counterfactuals that mutate actions (e.g., “I should not have given her that sandwich.”). Similarly, Camacho et al. (2003) found that chronically promotion-oriented individuals experience stronger guilt following sins of omission (e.g., not offering help to a person in need) than following sins of commission (e.g., taking advantage of a friend), whereas the reverse was true for chronically prevention-oriented individuals.

The rationale behind Proposition 6.3 yields another related prediction. In many choice situations, each alternative possesses both strong (positive) and weak (negative) attributes. We propose that, after making such choices, promotion-oriented consumers will experience greater dissonance from the positive attributes of the rejected alternatives (which would be perceived as non-gains or forsaken “hits”). In contrast, prevention-oriented consumers will experience greater dissonance from the negative attributes of the chosen alternative (which would be perceived as losses or failures to correctly reject) (Proposition 6.4).

*Process-based satisfaction*
In a recent extension of regulatory focus theory, Higgins (2000, 2002) proposed the value-from-fit hypothesis. This hypothesis holds that people derive value (or “utility”) not only from the outcomes of the choices they make, but also from the process by which those choices are made. Specifically, the hypothesis states that the value that a person will derive from a choice—holding the outcome of the choice constant—will be greater if the choice is made in a manner that is consistent with the person’s regulatory orientation (a situation called regulatory fit) than if the choice is made in a manner that is inconsistent with this person’s regulatory orientation (a situation called regulatory non-fit). To test this hypothesis, Higgins et al. (2003) recently asked chronically promotion-focused participants and chronically prevention-focused participants to make a choice between an inexpensive disposable pen and a university-branded coffee mug. The products were chosen such that virtually all participants would choose the much more desirable coffee mug (i.e., such that decision outcome would be constant). Half of the participants were asked to make the choice by considering what they would gain by choosing one product or the other (an eager strategy). The other half were asked to make the choice by considering what they would lose by choosing one product or the other (a vigilant strategy). As predicted, participants assigned a substantially greater monetary value to the mug when their choice strategy matched their chronic regulatory focus (when promotion-focused participants used an eager strategy and when prevention-focused participants used a vigilant strategy) than when their choice strategy did not match their chronic regulatory focus (when promotion-focused participants used a vigilant strategy and prevention-focused participants used an eager strategy).

Additional studies indicate that the phenomenon arises because a regulatory fit
produces a phenomenal experience of “feeling right” that is misattributed to the chosen alternative (Camacho et al. 2003; Cesario et al. 2004; Higgins et al. 2003). The process appears to be similar to the one posited by the affect-as-information model (Schwarz and Clore 1983, 1996; Pham 1998, 2004), except that the misattributed feelings are not typical emotional feelings of pleasantness, but metacognitive feelings of “being right” (see Cesario et al. 2004). We therefore propose that, holding the outcome of the decision constant, satisfaction with the decision will be greater if the choice was based on a process that fit the consumer’s regulatory focus than if it was based on a process that did not fit the consumer’s regulatory focus (Proposition 6.5).  

Concluding Remarks

For much of the past 30 years, consumer researchers have focused primarily on a cognitive analysis of consumer decision making (see Bettman et al. 1998 for a review). This work has generated numerous insights on how various cognitive factors—factors such as accessibility, diagnosticity, availability, congruency, commensurability, representativeness, and so on—influence consumers’ decisions. Yet, however interesting and rigorous this body of work may be, one must not forget that consumer decision making—and human cognition in general—do not operate in a motivational vacuum. Recent work has shown that consumer decision making is influenced by a variety of motivational factors besides purely cognitive processes. For instance, decision processes have been shown to depend on the instrumental versus experiential nature of consumers’ motives (e.g., Pham 1998), their need to justify the choice (e.g.,

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6 Note that the value-from-fit hypothesis is not restricted to fit to promotion versus prevention. Regulatory fit produces similar effects with other types of regulatory orientations (see, e.g., Avnet and Higgins 2003).
Simonson 1989), their need to respect personal rules (Amir et al., this volume), their desire to diversify their consumption (Kahn and Ratner, this volume), and their desire to shape their self-image (Khan et al., this volume).

Studying consumer decision making from a motivational perspective does raise a major challenge, however. Assuming that the field is past describing motivation simply in terms of its intensity (see, e.g., the vast amount of research on “involvement”), the range of decision-relevant motives or goals—that is, the range of outcomes that the consumer seeks to achieve through the decision—is almost unlimited. Regulatory focus theory presents a significant advantage in this respect. Unlike most other theories of motivation, the theory is not cast in terms of desired outcomes—desired outcomes that can be almost infinitely diverse (e.g., choice accuracy, impression management, ego-defense, terror management, dissonance reduction, achievement motivation, etc.)—but in terms of strategic inclinations for attaining these outcomes, which are classified into two basic categories, promotion- and prevention-focused. Studying consumer decision making along these two types of strategic inclinations offers the epistemological advantage of parsimony.

We would like to offer two final suggestions. First, our organization of the predictions along well-defined stages of the decision making process is mostly a matter of convenience. One should not forget that in reality consumer decision making is inherently dynamic, and not purely linear. For example, as we have noted, not only can regulatory focus exert exogenous influences on decision making, it can also be determined endogenously by the decision-making process itself (see Zhou & Pham, 2004). Therefore, analyzing the dynamics of promotion and prevention throughout the
decision-making process would be an important extension of the ideas presented in this chapter. Second, although most of our predictions were cast as basic ("main") effects of promotion and prevention, many of these effects are likely to be qualified by meaningful contingencies (see, e.g., Propositions 5.7.1, 5.7.2, 5.7.3). Identifying these contingencies via further research would be important as well. Nevertheless, as indicated by the number of theoretical propositions advanced in this chapter, we believe that the basic distinction between promotion-eagerness and prevention-vigilance offers great potential for the study of motivated consumer decision making. Whether the propositions we offer in this chapter will withstand future empirical verification, only the future can tell. On our part, we have guarded optimism that they will.

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References


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Zhou, R., and Pham, M. T. (2004). Promotion and prevention across mental accounts:
Table 2.1 Regulatory focus and problem recognition

| Proposition 1.1* | Under promotion, consumers will pay relatively more attention to the desired state than to the actual state, and experience problem recognition as a need to be met. Under prevention, consumers will pay relatively more attention to the actual state than to the desired state, and experience problem recognition as a problem to be resolved. |
| Proposition 1.2 | Discrepancies between actual states and desired ideals will trigger a promotion focus in decision making, whereas discrepancies between actual states and desired oughts will trigger a prevention focus. |
| Proposition 1.3* | Holding the desired end-state constant, problem recognition that arises from a change in the desired state will trigger promotion, whereas problem recognition that arises from a change in the current state will trigger prevention. |

Note: Propositions that are yet to be tested empirically are denoted with a *. 
Table 2.2 Regulatory focus and information search

| Proposition 2.1* | Promotion- and prevention-oriented individuals should devote comparable amounts of effort to information search and will search for comparable amounts of information. |
| Proposition 2.2 | The number of alternatives or options searched will be greater under promotion than under prevention. |
| Proposition 2.3* | Under promotion, information search will be relatively more internal, whereas under prevention, information search will be relatively more external. |
| Proposition 2.4 | Under promotion, information search will tend to focus on positive signals about the available options, whereas under prevention, information search will tend to focus on negative signals. |
| Proposition 2.5 | Promotion will foster a preferential search for attribute information related to advancement and accomplishments, whereas prevention will foster a preferential search for attribute information related to security and protection. |
| Proposition 2.6* | Under promotion, information search will concentrate on seeking information about additional alternatives while holding the number of attributes constant; under prevention, information search will concentrate on seeking information about additional attributes while holding the number of alternatives constant. |
| Proposition 2.7* | Under promotion, information will be searched in a more global and “top-down” manner; under prevention information will be searched in a more local and “bottom-level,” serial manner. |
**Table 2.3 Regulatory focus and consideration set formation**

<table>
<thead>
<tr>
<th>Proposition 3.1*</th>
<th>The consideration set of promotion-oriented consumers will generally be larger than the one of prevention-oriented consumers.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposition 3.2</td>
<td>Holding the size of the set constant, the consideration set of promotion-oriented consumers will be more heterogeneous than the one of prevention-oriented consumers.</td>
</tr>
<tr>
<td>Proposition 3.3*</td>
<td>Under promotion, consideration sets will tend to be formed through the gradual inclusion of alternatives, whereas under prevention, consideration sets will tend to be formed through the gradual exclusion of alternatives.</td>
</tr>
<tr>
<td>Proposition 3.4*</td>
<td>Under promotion, the screening of alternatives for further consideration is more likely to be based on a disjunctive rule; under prevention, this screening is more likely to be based on a conjunctive rule.</td>
</tr>
</tbody>
</table>
Table 2.4 Regulatory focus and evaluation of alternatives

| Proposition 4.1 | Alternatives that are attractive (unattractive) on promotion-consistent dimensions will be evaluated more favorably (unfavorably) when promotion is activated than when prevention is activated. Similarly, alternatives that are attractive (unattractive) on prevention-consistent dimensions will be evaluated more favorably (unfavorably) when prevention is activated than when promotion is activated.  
(a) Attribute information related to hedonic and aspirational benefits (e.g., luxury, sensory gratification, aesthetic) carries a greater weight under promotion than under prevention, whereas attribute information related to utilitarian and necessary features (e.g., safety, protection) carries a greater weight under prevention than under promotion.  
(b) Information related to gains versus non-gains will carry a greater weight under promotion than under prevention, whereas information related to losses versus nonlosses will carry a greater weight under prevention than under promotion.  
(c) Information related to eagerness will be more influential and persuasive under promotion than under prevention, whereas information related to vigilance will be more influential and persuasive under prevention than under promotion. |
| Proposition 4.2* | Under promotion, consumers will tend to rely on more heuristic modes of evaluation; under prevention, consumers will tend to rely on more systematic modes of evaluation. |
| Proposition 4.3 | Promotion will increase the reliance on affect toward the alternatives (especially promotion-consistent affect), whereas prevention will increase the reliance on substantive information about the alternatives. |
| Proposition 4.4* | Promotion will foster greater reliance on personal preferences and private attitudes, whereas prevention will foster greater reliance on group preferences and social norms. |
| Proposition 4.5 | During evaluation of the alternatives, states of promotion and prevention may be endogenously activated by the alternatives themselves. |
**Table 2.5 Regulatory focus and choice**

| Proposition 5.1* | Under promotion, choice within the consideration set will be guided by a process of selection or acceptance, whereas under prevention, choice within the consideration set will be guided by a process of elimination or rejection. |
| Proposition 5.2* | Within the consideration set, promotion will encourage the reliance on a disjunctive rule, whereas prevention will encourage the reliance on a conjunctive rule. |
| Proposition 5.3* | Promotion will encourage the reliance on a lexicographic rule of choice, whereas prevention will encourage the reliance on an elimination-by-aspect-type rule. |
| Proposition 5.4 | In choices between the status quo and a new option, promotion will increase preference for the new option, whereas prevention will increase preference for the status quo. |
| Proposition 5.5* | In choices involving a default option, prevention-oriented consumers will be more likely to choose the default than promotion-oriented consumers. |
| Proposition 5.6* | Prevention-oriented consumers are more likely to defer choice or prefer no-choice options than promotion-oriented consumers. |
| Proposition 5.7.1 | Promotion will generally trigger greater risk taking in choice, whereas prevention will generally trigger greater risk aversion. |
| Proposition 5.7.2 | In choices between a modest but certain gain and a greater but uncertain gain, promotion-oriented consumers will tend to favor the former and exhibit relative risk-aversion. |
| Proposition 5.7.3 | In choices between a modest but certain loss and a greater but uncertain loss, prevention-oriented consumers will tend to favor the latter and exhibit relative risk-seeking. |
| Proposition 5.7.4 | If the current state is highly undesirable, prevention-focused individuals will be more likely to pursue “riskier” options that could remove the undesirable state than promotion-focused individuals. |
Table 2.5 (continued): Regulatory focus and choice

| Proposition 5.8* | The “attraction” effect will be stronger among promotion-focused consumers than among prevention-focused consumer. |
| Proposition 5.9 | The “compromise” effect will be stronger among prevention-focused consumers than among promotion-focused consumer. |
| Proposition 5.10* | Variety seeking will be more pronounced among promotion-oriented consumers than among prevention-oriented consumers. |
| Proposition 6.1* | Satisfaction from desirable outcomes should be more intense under promotion than under prevention, whereas dissatisfaction from undesirable outcomes should be more intense under prevention than under promotion. |
| Proposition 6.2.1 | Under promotion, decision successes should result in greater cheerfulness-related emotions (e.g., joy, happiness), whereas decision failures should result in greater dejection-related emotions (e.g., sadness, disappointment). |
| Proposition 6.2.2 | Under prevention, decision successes should result in greater quiescence-related emotions (e.g., relief, relaxation), whereas decision failures should result in greater agitation-related emotions (e.g., anxiety, nervousness). |
| Proposition 6.3* | Promotion-focused consumers will be more likely to experience post-decisional dissonance and regret about errors of omission, whereas prevention-focused consumers will be more likely to experience post-decisional dissonance and regret about errors of commission. |
| Proposition 6.4* | In choices where each alternative possesses both strong (positive) and weak (negative) attributes, promotion-oriented consumers will experience greater dissonance from the positive attributes of the rejected alternatives, whereas prevention-oriented consumers will experience greater dissonance from the negative attributes of the chosen alternatives. |
| Proposition 6.5* | Holding outcome constant, satisfaction with the decision will be greater if the choice was based on a process that fit the consumer’s regulatory focus than if it was based on a process that did not fit the consumer’s regulatory focus. |
Figure 2.1 A stylized model of consumer decision making

- **Problem Recognition**
  Experience, Endogenous Activation

- **Information Search**
  Extent, Internal vs. External, Content, Attribute- vs. Alternative-based, Global vs. Local

- **Consideration Set Formation**
  Size, Composition, Construction Process

- **Evaluation of Alternatives**
  Sensitivity to Content, Strategy, Endogenous Activation

- **Choice**
  Rules, Status quo/Default/Deferral, Risk-taking, Context Effects/Variety Seeking

- **Post-Choice Processes**
  Satisfaction/Dissatisfaction Intensity, Emotional Responses, Dissonance/Regret, Process-Satisfaction