# Time Will Tell: The Distant Appeal of Promotion and Imminent Appeal of Prevention

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What types of products are preferred when the purchase is immediate versus off in the distant future? Three experiments address this question by examining the influence of temporal perspective on evaluations of regulatory-framed products. The results reveal that when a purchase is about to be made, consumers prefer prevention- (vs. promotion-) framed products—an effect that is driven by the pain anticipated from potentially failing one's looming purchasing goal. When a purchase is temporally distant, however, promotion- (vs. prevention-) framed products become more appealing—an effect that is driven by the anticipated pleasure from achieving one's distant purchasing goal. Implications for the psychology of self-regulation, anticipated affect, and willpower are discussed.

Time cools, time clarifies; no mood can be maintained quite unaltered through the course of hours. (Thomas Mann, *The Magic Mountain*, chap. 7)

I magine it is early in January, and you are just beginning to think about what to give your sweetheart for Valentine's Day. With time to spare, you entertain a number of grand ideas about the most romantic way to demonstrate your affection, contemplating the pleasure that would ensue from selecting the perfect gift. Now imagine if the calendar was to roll ahead to February 13, and you still had not bought a gift. How might your perspective change? With time closing in, the unpleasant possibility of waking up tomorrow morning empty-handed would probably weigh heavier on your mind than any grandiose notion of thrilling your sweetheart with the perfect present. With only 1 day

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to make the purchase, simply getting a gift that "isn't bad" is suddenly of paramount concern.

This research explores how consumers' psychology is altered over the course of time, whereby the basic principles of approach and avoidance shift in their importance and their impact on one's decisions. Although both time horizon and regulatory focus are key drivers of consumers' behavior, they have remained largely unexamined in consort. The current research addresses this gap by shedding light on such questions as When a purchase is imminent, does preventing an undesirable outcome (e.g., disappointing your spouse) become more appealing than promoting a desirable outcome (e.g., thrilling your spouse with the perfect gift)? In contrast, when there is still ample time to make the purchase, is achieving a desirable outcome more appealing than preventing an undesirable outcome? And if so, why?

Central to these questions is the consumption context. Thus, one contribution of this research is to underscore the fundamental impact of purchasing something now versus later. In so doing, we highlight an important antecedent to the growing literatures of regulatory focus and consumer psychology: temporal perspective. We show that it is not just the type of product or person that determines the persuasive influence of regulatory focus (e.g., Aaker and Lee 2001; Cesario, Grant, and Higgins 2004; Keller, Lee, and Sternthal 2006; Lee and Aaker 2004; Semin et al. 2005; Zhou and Pham 2004); the temporal frame of the purchase matters. Indeed, the persuasive power of a product's prevention benefits appears to be very different when, for example, the consumer is looking to buy an outfit to wear to an event that evening versus for an event that is still a month away. When a purchase is imminent, prevention benefits loom large, leading to a preference for prevention-framed products over promotion-framed products. Conversely, when the purchase is off in the future, promotion-framed products appeal more than prevention-framed products.

A second contribution is the identification of the underlying mechanisms linked to anticipated pleasure and pain. Thus, we hope to build from and add to the literature on anticipated affect by suggesting that the consideration of a purchase is significantly affected by either the concern that one's minimal goal may not be achieved or the hope that one's maximal goal may indeed be achieved. We show that, when a purchase is imminent, the advantage accrued to prevention-framed products is driven by heightened sensitivity to the pain anticipated from potentially not achieving one's goals. In contrast, when the purchase is in the more distant future, the advantage accrued to promotion-framed products is driven by the pleasure anticipated from potentially achieving one's goals. Next, we draw on research on time and goals to develop our conceptual model and hypotheses.

# TIME, GOALS, AND CONSUMER PSYCHOLOGY

The role of temporal perspective in shaping consumers' evaluations of future purchases is the primary focus of the current research. Long of interest to consumer researchers, "time" has been operationalized in a variety of ways and has been used to refer to a range of concepts. Much of the work has focused on the effects of time pressure during judgment and decision making (e.g., Ben Zur and Breznitz 1981), the role of temporal focus on forecasting affective reactions to future events (e.g., Buehler and McFarland 2001), the impact of waiting time on choice (e.g., Leclerc, Schmitt, and Dube 1995), the impact of time-interval descriptions on consumers' discount rates (LeBoeuf 2006), and the valuation of outcomes to be realized at some point in the future (Loewenstein 1987). Despite this significant literature, scant research has examined the role of temporal perspective on goal-based consumer behavior. Addressing this gap, we draw on psychological findings from two domains of research to formulate our hypotheses: regulatory focus (Higgins 1997, 2000) and temporal orientation (e.g., Gilovich, Kerr, and Medvec 1993; Liberman and Trope 1998; Savitsky et al. 1998; Trope and Liberman 2000, 2003).

Regulatory focus theory identifies two basic motivational orientations that individuals adopt during goal striving: promotion focus (which involves sensitivity to the presence or absence of positive outcomes) and prevention focus (which involves sensitivity to the presence or absence of negative outcomes). Whereas promotion centers on goals associated with the advancement and achievement of aspirations and ideals (i.e., standards one hopes to meet), prevention centers on goals associated with security and obligations (i.e., standards one needs to meet). Thus, promotion and prevention orientations operate in very different ways. The hopes and aspirations associated with promotion focus function like maximal goals, whereas the duties and obligations associations

ated with prevention focus function more like minimal goals (Idson, Liberman, and Higgins 2000). In consumption contexts, product claims can be framed to induce either promotion- or prevention-focused purchasing goals, offering the product as a means to achieve that particular goal. For instance, promotion-framed claims highlight maximal goals (e.g., to buy something fabulous or to get a great deal) and offer the product as a means to attain that positive outcome. In contrast, prevention-framed claims highlight minimal goals (e.g., to not make a bad purchase or to not get ripped off) and offer the product as a means to prevent that negative outcome.

Research on temporal construal provides a foundation for our hypotheses of how the temporal proximity of an upcoming purchase influences consumers' perceptions of selfregulatory-framed products. For example, research on temporal construal theory indicates that as events draw nearer in time, individuals eschew abstract representations of their goals in favor of more concrete, task-specific representations—allowing for effective reactions to the situational context (Trope and Liberman 2000, 2003). Relatedly, temporal proximity heightens individuals' sensitivity to potential impediments and the possibility of negative outcomes (Liberman and Trope 1998). For instance, as events draw near, concerns of desirability (e.g., "Why should I strive to accomplish this goal?") give way to concerns of feasibility (e.g., "How can I go about accomplishing this goal?"; Vallacher and Wegner 1989). Thus, what might seem attractive off in the future may lose its gleam when it requires immediate action (Zauberman and Lynch 2005). Also, as events draw near, negative information gains in overall salience (Eyal et al. 2004; Losco and Epstein 1974; Shelley 1994), and individuals often become less optimistic about fulfilling their goals (Gilovich et al. 1993; Nisan 1972; Sanna 1999; Savitsky et al. 1998; Shepperd, Ouellette, and Fernandez 1996).

These interconnected temporal shifts have important implications with respect to consumers' reactions to regulatory-framed products. Specifically, as a purchase decision nears in time, consumers are confronted with the unsettling reality that they might fail to achieve their purchasing goal. Past work on regulatory focus indicates that the pain from failing to achieve a prevention-focused (or minimal) goal is more intense than the pain associated with failing to achieve a promotion-focused (or maximal) goal (Idson et al. 2000). As such, we predict that for consumers facing a proximal purchase, a product offering the security of preventing a negative outcome (i.e., a prevention-framed product) will appeal more than a product offering the hope of achieving a positive outcome (i.e., a promotion-framed product). That is, we hypothesize that the anticipated pain from goal failure will drive consumers' attraction to prevention-framed products (vs. promotion-framed products) when the purchase is near. In contrast, this preference for prevention should not occur when a purchase is off in the more distant future—when consumers are still optimistic about fulfilling their purchasing goals. Because the pleasure of achieving a promotionfocused (or maximal) goal tends to be greater than the pleasure of achieving a prevention-focused (or minimal) goal (Idson et al. 2000; Liberman, Idson, and Higgins 2005), we predict that promotion-framed products will appeal more than prevention-framed products when the purchase is in the more distant future.

A critical aspect of these hypotheses is that they focus on consumers' assessments of products that differ in their regulatory framing, not on individuals' own regulatory focus. Past work has examined individuals' self-reports of their regulatory focus over time with respect to personal goals (Pennington and Roese 2003), providing evidence for temporal shifts in the prevalence of promotion- and prevention-focused concerns. Thus, the core idea that self-regulatory focus itself changes over time is not new. In contrast to this previous work, however, we examine whether the cognitive and motivational dynamics associated with temporal proximity influence the type of product information that appeals to consumers as the purchase event approaches (rather than examining the motivational state or predominant regulatory focus of consumers over time).

This distinction is important because attitudinal and behavioral intent measures may provide a unique window into the psychology of consumers facing imminent decisions, a perspective that differs from that which emerged from direct attempts to solicit motivational orientation from respondents. Past work using direct self-reports of motivational strivings found no evidence for a pronounced prevention-focused motivational orientation among individuals facing proximal events (Pennington and Roese 2003). Yet the diverse temporal findings discussed above indicate that temporal immediacy is related to a number of psychological phenomena consistent with prevention focus (e.g., vigilance toward negative information). The current work explores the possibility that an underlying concern with prevention among individuals facing a proximal goal will be detected when allowed to surface through subtle product preferences.

We hypothesize that changing sensitivity to failing a future purchasing goal will distinguish the relative appeal of prevention- and promotion-framed products when the purchase is in the near versus distant future. Specifically, anticipated pain from goal failure in a proximal purchase will make prevention frames more appealing than promotion frames. In contrast, anticipated pleasure from goal achievement in a distant purchase will make promotion frames more appealing than prevention frames. More formally:

**H1a:** When a purchase is temporally proximal, prevention-framed (vs. promotion-framed) products will be more appealing.

**H1b:** When a purchase is temporally distant, promotion-framed (vs. prevention-framed) products will be more appealing.

**H2a:** When a purchase is proximal, the anticipated pain from failing to fulfill one's purchasing goal

will drive the appeal of prevention-framed over promotion-framed products.

**H2b:** When a purchase is distant, the anticipated pleasure from fulfilling one's purchasing goal will drive the appeal of promotion-framed over prevention-framed products.

Three experiments were conducted to test these hypotheses. To test hypothesis 1, experiment 1 examines the influence of a temporal perspective on consumers' attitudes toward prevention-framed versus promotion-framed product claims. We extend this finding by showing that the same effect persists when the dependent variable is willingness to pay (experiment 2) and purchase intent (experiment 3) and when temporal perspective is operationalized via a subjective (rather than an objective) manipulation (experiment 3). The final study also illuminates the hypothesized mechanism underlying the effect (hypothesis 2).

# THE CAR EXPERIMENT 1: TIME AND THE APPEAL OF PROMOTION-VERSUS PREVENTION-FRAMED PRODUCT CLAIMS

Experiment 1 examined whether the temporal immediacy of a purchase event would differentially affect consumers' attitudes toward prevention- versus promotion-framed product claims. We hypothesized that attitudes toward a prevention-framed (vs. promotion-framed) product message would be more favorable when the time to purchase was near but that a promotion-framed (vs. prevention-framed) product message would be more favorable when the time to purchase was far.

#### Method

One hundred and thirty-one students from the University of Chicago (46% male; mean age = 21) participated in exchange for a cash payment of \$5. Participants were randomly assigned to one of the four conditions composing the 2 (temporal perspective: proximal vs. distant)  $\times$  2 (regulatory frame: prevention vs. promotion) between-subjects design.

All participants were asked to imagine that they were currently using a service named Auto-Select.com to shop for an automobile. Auto-Select.com was described as a service in which participating car dealers could contact registered users directly (via e-mail) with specific information about their offerings. Participants were told that they would be asked to evaluate messages e-mailed from the dealers. Participants' temporal perspective was manipulated with the following instructions, "You plan to actually make a purchase during a special event planned on the website one month [two days] from today. Imagine that it is now one month [two days] before the sales event and, therefore, your final purchase decision."

Next, participants read a purported e-mail message from the dealer that was either promotion framed or prevention framed. Drawing on both early work on self-discrepancy theory (e.g., Higgins 1987) and the later articulation of regulatory focus theory (e.g., Higgins 1997), the regulatory focus of the message was manipulated by framing the same basic product claims (pertaining to price, features, etc.) in terms of ideal standards and the presence of positive outcomes (promotion condition) or in terms of required standards and the absence of negative outcomes (prevention condition). The text of the promotion [prevention] message was as follows:

Thank you for your interest in our dealership. We realize that as a prospective buyer, you have an idea of what you want [need] in an automobile—and you desire the very best [and you do not want to settle for less]. Our dealership has years of experience in meeting customers' dreams [expectations]. We pride ourselves in providing our customers with select model styles that are always cutting edge [never behind the times]. And there are loads of extra features [And no skimping on features]—you will only find fully stocked [will not find trimmed down] packages here. Plus there is the satisfaction of getting a good deal [of never paying too much].

Attitudes toward the product message were assessed using three seven-point semantic differential scales (bad/good, negative/positive, and unfavorable/favorable;  $\alpha=.88$ ). To check temporal perspective, participants indicated when they imagined that they were going to buy the vehicle (1 = very soon; 7 = far off in the future). To determine whether participants processed the message content pertaining to promotion versus prevention, participants were asked the extent to which the message emphasized getting a model that is not behind the times (prevention item) and getting extra features (promotion item) on seven-point scales (1 = not at all; 7 = very much). Upon completion of the questionnaire participants were debriefed and dismissed.

### Results

Analyses of the manipulation checks revealed that both the temporal and regulatory framing manipulations were successful. First, to examine the effectiveness of the temporal perspective manipulation, a 2 (temporal perspective) × 2 (regulatory frame) ANOVA was conducted on when participants imagined they were going to make the purchase. As expected, the results revealed only a main effect (F(1, 127) = 7.41, p < .01), whereby participants in the proximal conditions (M = 2.79) reported more imminent purchase times than did those in the distant condition (M = 3.54). Next, to check whether the participants processed the regulatory-framed message content, a  $2 \times 2$ ANOVA was conducted on the prevention measure. As anticipated, only a main effect of regulatory frame was found  $(M_{\text{prev}} = 5.89 \text{ vs. } M_{\text{prom}} = 5.33; F(1, 127) = 6.71, p =$ .01). Similarly, the  $2 \times 2$  ANOVA run on the promotion item yielded only a main effect of regulatory frame  $(M_{prom} =$ 5.38 vs.  $M_{\text{prev}} = 4.46$ ; F(1, 127) = 14.13, p < .001).

To test hypothesis 1, the 2 (temporal perspective)  $\times$  2

(regulatory frame) ANOVA was run on participants' attitudes toward the product message; the results yielded only a significant interaction effect (F(1, 127) = 12.73, p = .001). As predicted, follow-up contrasts showed a difference in the proximal conditions (when the purchasing decision needed to be made in 2 days), whereby participants had more favorable attitudes toward the prevention-framed message (M = 5.41) than the promotion-framed message (M = 4.76; F(1, 127) = 5.40, p < .05). In the distant conditions (when participants still had a full month to make the purchasing decision), evaluations of the promotion-framed message (M = 5.63) were more favorable than evaluations of the prevention-framed message (M = 4.87; F(1, 127) = 7.40, p < .01).

These results support the prediction that prevention-framed product claims appeal more than promotion-framed product claims in the context of proximal purchases (hypothesis 1a) and that promotion-framed product claims appeal more than prevention-framed product claims in the context of distant purchases (hypothesis 1b). The question remains, however: Does the appeal of regulatory-framed product claims extend to the appeal of the products themselves? Experiment 2 addresses this question by incorporating a dependent measure that gauges consumers' valuation of the advertised product (i.e., participants' willingness to pay).

# THE VACATION EXPERIMENT 2: TIME AND THE WILLINGNESS TO PAY FOR PROMOTION- VERSUS PREVENTION-FRAMED PRODUCTS

Experiment 2 was conducted to test whether the demonstrated effect on consumers' attitudes toward product messages would generalize to the more actionable dependent variable: consumers' willingness to pay for the product. Specifically, would consumers be willing to pay more for a product framed by prevention concerns than for a product framed by promotion concerns when the purchase is temporally near? And conversely, would consumers be willing to pay more for a product framed by promotion concerns than for a product framed by prevention concerns when the purchase is temporally distant?

#### Method

One hundred and one students (72% male; mean age = 24) who remained on the campus of Stanford University during the summer months participated in the experiment in exchange for a \$5 cash payment. The participants were randomly assigned to one of the four conditions composing the 2 (temporal perspective: proximal vs. distant) × 2 (regulatory frame: prevention vs. promotion) between-subjects design.

With approximately 1 month of summer remaining before the fall quarter began, participants were told to consider going on a vacation to Europe. To manipulate temporal perspective, the participants were told either that the

vacation would be a "last minute summer vacation" or that it would be a "vacation over winter break." All participants were then presented with an advertisement for a fictitious online service, PriceAlerts.com, through which they could purchase an airplane ticket for their vacation. The advertisement explained the service to be one in which customers entered their desired destination and the dates they would like to leave and return. Then over the next 24 hours, the service would search for the cheapest ticket available and e-mail the ticket information to the customer. The regulatory framing of the advertisement was manipulated in the taglines, which described the purchase outcome as either the absence of negative experiences (prevention) or the presence of positive experiences (promotion). The prevention-framed advertisement read, "Don't get stuck at home!" and "Don't get ripped off!" In contrast, the promotion-framed advertisement read, "Give yourself a memorable vacation!" and "Get the best deals!"

Having viewed the e-mailed advertisement, participants were asked to write the dollar amount for how much they would be willing to pay for a ticket through the service. To check temporal perspective, participants were asked, "How much time do you feel is left before the vacation?" (1 = very little time; 7 = a lot of time). To determine whether participants processed the ad content pertaining to promotion versus prevention frames, participants were asked how much the ad made them think about attaining something positive (promotion item) and how much the ad made them think about avoiding something negative (prevention item; 1 = not at all; 7 = very much). Upon completing the survey, participants were debriefed, paid, and thanked.

### Results

Analyses of the manipulation checks revealed that both the temporal and regulatory framing manipulations were successful. First, to test the effectiveness of the temporal perspective manipulation, a 2 (temporal perspective) × 2 (regulatory frame) ANOVA was run on participants' perceptions of the remaining time before the purchase. The results revealed only a main effect (F(1,98) = 11.63, p <.001), whereby participants in the proximal conditions (M = 3.78) reported feeling that there was less time left before their purchase than did those in the distant conditions (M = 4.82). To check whether the participants processed the regulatory framing of the messages, we ran a  $2 \times 2$ ANOVA on the prevention item. As anticipated, only a main effect of regulatory frame was found (F(1,95) = 6.59,p < .05), whereby participants in the prevention-framed conditions (M = 3.85) reported that the ad made them think more about avoiding something negative than did participants in the promotion-framed conditions (M = 2.98). Similarly, the  $2 \times 2$  ANOVA run on the promotion item yielded only a main effect of regulatory frame (F(1,96) = 4.21,p < .05), whereby participants in the promotion-framed conditions (M = 4.49) reported that the ad made them think more about attaining something positive than did participants in the prevention-framed conditions (M = 3.85).

To test the main hypotheses, the 2 (temporal perspective)  $\times$  2 (regulatory frame) ANOVA was conducted on participants' willingness to pay. The results yielded only a significant interaction effect (F(1,97)=8.27, p<.01). As hypothesized, follow-up contrasts showed that when the purchasing decision needed to be made soon (for a last-minute summer vacation), participants were willing to pay more for the prevention-framed vacation (M=\$672.27) than for the promotion-framed vacation (M=\$493.59; F(1,97)=3.96, p<.05). However, when there was still plenty of time to make the purchasing decision (for a vacation over winter break), participants were willing to pay more for a promotion-framed vacation (M=\$580.67) than they were for a prevention-framed vacation (M=\$580.67) than they were for a prevention-framed vacation (M=\$415.30; F(1,97)=4.38, p<.05).

Thus, when the future purchase was proximal, prevention-framed products were more appealing than promotion-framed products, whereas the converse held true when the future purchase was distant. Thus, the results of experiments 1 and 2 provide converging evidence for the hypothesized change in the relative value of prevention- and promotion-framed products over the timeline of a future purchase.

What remains empirically elusive, however, is the mechanism underlying the effects. One key difference between considering a purchase now versus off in the distance is the salience of potential failure versus success in achieving one's purchasing goal. We argue that consumers facing an imminent decision are confronted with the negative possibility of failing to fulfill their purchasing goal. Because the failure of minimal goals (which consumers need to satisfy) is more painful than the failure of maximal goals (which consumers want to satisfy; Idson et al. 2000), consumers should be more attracted to prevention-framed products that highlight attaining minimal goals than to promotion-framed products that highlight attaining maximal goals. That is, driven by the anticipated pain from failing their looming purchasing goal, consumers should be particularly motivated to buy products that prevent these negative outcomes.

When the purchase is still far off in the future, however, consumers are likely to be fairly optimistic about succeeding and less concerned with the possibility of goal failure (Monga and Houston 2006). Because the achievement of maximal goals is more pleasurable than the achievement of minimal goals, we posit that consumers are more attracted to promotion-framed claims that highlight attaining maximal goals than to prevention-framed claims that highlight attaining minimal goals. Inspired by the anticipated pleasure from achieving a distant purchasing goal, consumers should then be more motivated to buy products that offer these positive outcomes. Thus, in experiment 3, we examine whether anticipated pain from purchasing goal failure and anticipated pleasure derived from purchasing goal success may underlie the effects documented in experiments 1 and 2.

## THE SHOPPING TRIP EXPERIMENT 3: THE UNDERLYING MECHANISM OF ANTICIPATED PAIN VERSUS PLEASURE

The objective of experiment 3 was threefold. Our first objective was to test the hypothesized mechanism of anticipated pain from goal failure with respect to proximal purchases and anticipated pleasure from goal fulfillment with respect to distant purchases. We also explored two alternative mechanisms that may underlie our effects (cognitive construal and fluency).

Second, we wanted to gain greater confidence that these effects are not dependent upon specific time parameters (e.g., 1 week vs. 1 month) but rather are driven by subjective perceptions of temporal proximity versus distance. Thus, we held the actual amount of time before the purchase constant and manipulated perceptions of the purchase as being either near or far—thereby reducing potential confounds associated with specific objective time differences.

Third, rather than framing product messages in terms of promotion versus prevention, as in our previous two experiments, we directly manipulated the regulatory focus of participants' self-generated purchasing goals and then measured their intent to actually purchase products that would satisfy their goals. This shift in methodology allowed us to test whether consumers are more motivated to purchase a prevention-framed product than a promotion-framed product when the purchase is soon and whether consumers are more motivated to purchase a promotion-framed product than a prevention-framed product when the purchase is off in the future. In addition to establishing the generalizability of the regulatory framing effects, the direct solicitation of promotion versus prevention consumption goals enabled us to tap into participants' feelings of anticipated pleasure from potential goal fulfillment and anticipated pain from potential goal failure.

#### Method

Eighty-nine Stanford University students (41% male; mean age = 21) were recruited to participate in a shopping study in exchange for a cash payment of \$5. Participants were randomly assigned to one of the four conditions composing the 2 (temporal perspective: proximal vs. distant)  $\times$  2 (regulatory frame: prevention vs. promotion) between-subjects design.

All participants were instructed to think of a product that they planned to purchase in approximately 2 weeks. Perceptions of temporal proximity were manipulated through nuanced differences in the instructions. In the proximal conditions, participants completed a survey labeled "Short-Term Shopping" with an introduction that read, "We are interested in purchases that you plan to make right away." They subsequently were instructed to identify a product that they planned to purchase "relatively soon . . . in only two weeks time." In the distant conditions, participants completed a survey labeled "Long-Term Shopping" that read, "We are

interested in purchases that you do not plan to make right away," instructing them to list a product that they intended to purchase "later on . . . in two full weeks." To manipulate the regulatory focus of participants' purchasing goals, they were asked either to think of a product that would help bring about a desirable outcome (promotion) or to think of a product that would help prevent an undesirable outcome (prevention).

After recording the name of a product and specifying the goal that the product would help them fulfill, participants were asked (1) how painful it would be to not fulfill their purchasing goal (1 = not at all painful; 7 = very painful) and (2) how pleasurable it would be to fulfill their purchasing goal (1 = not at all pleasurable; 7 = very pleasurable). Based on the assumption that it is more painful to not fulfill a minimal goal than to not fulfill a maximal goal (Idson et al. 2000), the first measure allowed us to gauge whether a potential relinquishment to minimal goal fulfillment underlies the import of prevention-framed purchasing under time constraints. And, because it is more pleasurable to fulfill a maximal goal than to fulfill a minimal goal, the second measure was designed to gauge participants' hope of maximal goal fulfillment for seemingly distant purchases.

We also included measures for two alternative mechanisms that might play a role in the effect: (1) cognitive construal: "To what extent are you thinking about *how* you are going to bring about this outcome?" and "To what extent are you thinking about *why* you want to bring about this outcome?" (1 = not at all; 7 = very much; Trope and Liberman 2003) and (2) fluency: "How easy was it to think of a product that you are planning on buying soon [later on] and that will help bring about a desirable outcome [help prevent an undesirable outcome]?" (1 = not at all easy; 7 = very easy; Lee and Aaker 2004).

Finally, to measure participants' motivation to follow through on purchasing their prevention-framed or promotion-framed product, participants were asked how likely they were to actually carry out the purchase (1 = not all likely; 7 = very likely) and how important it was for them to make the purchase (1 = not at all important; 7 = very important). Responses were averaged to create an index of purchase intent  $(\alpha = .77)$ . To control for potential noise across conditions, participants were asked to indicate the cost of the purchase. As a check for temporal perspective, participants were asked to circle the number of days (from 1 to 30) until the purchase was to be made. Upon completing the questionnaire, participants were debriefed, paid, and thanked.

#### Results

Manipulation Checks. To check the temporal perspective manipulation, an overall 2 (temporal perspective)  $\times$  2 (regulatory frame) ANOVA was conducted. As hoped, there was only a main effect for temporal perspective (F(1,95) = 7.76, p < .01), whereby participants in the proximal conditions expected to make the purchase sooner (M = 10.05 days) than did participants in the distant con-

ditions (M = 14.95 days). No differences emerged across conditions in the cost of the products that participants generated (F's < 1.00); the overall average price was \$62.86.

Hypothesis Testing. To test hypothesis 1, a 2 (temporal perspective)  $\times$  2 (regulatory frame) ANOVA was run, revealing only a significant interaction for purchase intent (F(1,95) = 10.99, p = .001). As predicted, follow-up contrasts showed that when the purchase was perceived to be soon, participants expressed higher purchase intent for prevention-framed products (M = 6.07) than for promotion-framed products (M = 5.14; F(1,95) = 5.26, p < .05). Conversely, participants who perceived the purchase to be temporally distant expressed higher purchase intent for promotion-framed products (M = 5.72) than for prevention-framed products (M = 4.92; F(1,95) = 5.92, p < .05). See table 1 for a summary of all experimental results.

The Psychology Underlying Proximal and Distant Purchases. The results of the three studies document support for hypothesis 1a, whereby prevention-framed products appeal more than promotion-framed products under time constraints. We delve further into this effect by examining whether it is driven by differential sensitivity to the pain from failing to achieve one's purchasing goal. Specifically, we hypothesized that when the purchase is imminent consumers are confronted with the possibility that they will not achieve their goal. Since failing the minimal goal associated with a prevention-framed purchase should be more painful than failing the maximal goal associated with a promotionframed purchase, the anticipated pain associated with failing a minimal purchasing goal should become a particularly motivating concern—thereby driving the appeal of prevention- (vs. promotion-) framed products. This process should not be at play when considering distant purchases, when the possibility of a goal failure is a lesser concern.

To test this mechanism, a 2 (temporal perspective) × 2 (regulatory frame) ANOVA was conducted on anticipated pain from failing to fulfill the purchasing goal. A main effect

of regulatory frame resulted (F(1,95) = 4.43, p < .05), with participants anticipating greater pain from a failed prevention-framed purchase (M = 3.75) than a failed promotionframed purchase (M = 3.13). The results also yielded an interaction (F(1,95) = 3.88, p = .05). Follow-up contrasts revealed that prevention-framed purchases elicited greater anticipated pain from goal failure than did promotionframed purchases when the purchase was near  $(M_{prev} =$  $4.00, M_{\text{prom}} = 2.50; F(1,95) = 6.94, p = .01).$  When the purchase was far, there was no such difference  $(M_{prev} =$ 3.57,  $M_{\text{prom}} = 3.52$ ; F(1,95) = .01, NS); concerns about goal failure did not appear to be particularly salient in either distant condition. These results suggest that when a purchase is imminent, the anticipated pain from not achieving a minimal prevention-oriented goal is greater than the anticipated pain from not achieving a maximal promotion-oriented goal.

As a more direct test of process, we conducted two sets of mediation analyses with anticipated pain as the mediator (Baron and Kenny 1986). We focused first on participants facing a proximal purchase: (1) purchase intent was regressed on regulatory frame ( $\beta = .41, t = 2.75, p < .01$ ), (2) anticipated pain from purchasing goal failure was regressed on regulatory frame ( $\beta = .42$ , t = 2.82, p < .01), (3) purchase intent was regressed on the anticipated pain from failing to fulfill one's purchasing goal ( $\beta = .46$ , t = 3.15, p < .01), and (4) purchase intent was regressed on both the regulatory frame of the product and the anticipated pain from goal failure. As expected, the effect of regulatory frame became insignificant ( $\beta = .26$ , t = 1.70, p = .10), whereas the effect of anticipated pain from goal failure remained significant ( $\beta = .35$ , t = 2.22, p < .05; Sobel z = 2.10, p < .05). The second set of analyses was conducted on participants facing a distant purchase. However, since anticipated pain was unrelated to the regulatory frame of the product  $(\beta = .01, t = .10, NS)$ , one of the four necessary conditions of mediation was not satisfied. Together these results suggest that only when a purchase is imminent does the anticipated pain from purchasing goal failure drive consumers' pref-

TABLE 1
SUMMARY OF RESULTS ACROSS EXPERIMENTS: OUTCOME VARIABLES AND PROCESS MEASURES

	Near		Far	
	Prevention	Promotion	Prevention	Promotion
Experiment 1 (attitude toward the ad)	5.41 <sup>a</sup> (.95) n = 32	4.76 <sup>a,c</sup> (1.08) n = 34	4.87 <sup>b</sup> (1.43) n = 33	$5.63^{\text{b,c}} \text{ (.95)}$ n = 32
Experiment 2 (willingness to pay)	$672.27^{a,c} (385.59)$ $n = 22$	$493.59^{a} (232.02)$ $n = 22$	415.30 <sup>b,c</sup> (210.71) $n = 27$	$580.67^{\text{b}} (332.04)$ n = 30
Experiment 3 (purchase intention)	$6.07^{a,c}$ (.82) n = 22	$5.14^{a} (1.30)$ $n = 18$	$4.92^{\text{b,c}} (1.54)$ n = 30	$5.72^{b} (1.24)$ n = 29
Experiment 3 process measures:				
Pleasure from goal fulfillment	5.55 (1.74)	5.22 (1.26)	4.90° (1.92)	5.83° (.93)
Pain from goal failure	4.00° (1.90)	2.50° (1.34)	3.57 (2.01)	3.52 (1.70)
Cognitive construal: how	4.36a (1.71)	3.22ª (1.52)	3.80 (1.69)	3.59 (1.74)
Cognitive construal: why	3.68 (1.94)	3.00 (1.53)	4.27 (1.96)	3.41 (1.59)
Fluency	5.50° (1.82)	4.78 (1.77)	4.50° (1.83)	5.04 (1.75)

Note.—Numbers in parentheses represent standard deviations. Means with the same superscripts are significantly different at the  $p \le .05$  significance level.

erences between prevention- and promotion-framed purchases (hypothesis 2a).

We also hypothesized that because the pleasure of achieving a maximal goal tends to be greater than the pleasure of achieving a minimal goal, anticipated pleasure should drive the preference for promotion-framed versus preventionframed products in distant conditions—when consumers are still optimistic about fulfilling their purchasing goals (Monga and Houston 2006). To test this hypothesis, we replicated the  $2 \times 2$  ANOVA on anticipated pleasure from achieving the purchasing goal and found the predicted interaction effect (F(1,95) = 3.98, p < .05). Follow-up contrasts showed that when the purchase was off in the distance, promotion-framed purchases (M = 5.83) elicited greater anticipated pleasure from goal achievement than did preventionframed purchases (M = 4.90; F(1.95) = 5.44, p < .05). However, when the purchase was near, the difference was not significant  $(M_{prom} = 5.22, M_{prev} = 5.55; F(1,95) =$ .44, NS). These results suggest that when the purchase is perceived as far off in the distance, consumers allow themselves to entertain thoughts about attaining maximal promotion-oriented goals.

To more directly test the hypothesized role of anticipated pleasure when considering distant purchases, we again conducted two sets of mediation analyses with anticipated pleasure as the mediator. First, among participants facing a distant purchase, (1) purchase intent was regressed on regulatory frame ( $\beta = -.28$ , t = -2.22, p < .05), (2) anticipated pleasure from achieving their purchasing goals was regressed on regulatory frame ( $\beta = -.30$ , t = -2.35, p < .05), (3) purchase intent was regressed on the anticipated pleasure from fulfilling one's purchasing goal ( $\beta = .44$ , t = 3.73, p < .001), and (4) purchase intent was regressed on both the regulatory frame of the product and anticipated pleasure from goal achievement. Suggestive of mediation, regulatory frame reduced in significance ( $\beta = -.17$ , t =-1.33, p > .10), whereas the effect of anticipated pleasure remained significant ( $\beta = .39$ , t = 3.19, p < .05; Sobel z = -1.96, p = .05). In contrast, this pattern of results was not found in conditions where participants faced a proximal purchase. That is, anticipated pleasure from goal achievement was related neither to the regulatory frame of the purchase ( $\beta = .11$ , t = .66, NS) nor to purchase intent ( $\beta =$ .25, t = 1.58, NS). These results suggest that when the purchase is perceived to be far off in the future, anticipated pleasure from goal fulfillment underlies consumers' preferences between promotion- and prevention-framed purchases (hypothesis 2b).

In sum, our findings demonstrate that prevention-framed (vs. promotion-framed) products appeal more in the context of proximal purchases and that the converse is true for distant purchases. The underlying reason appears to be the evocation of (a) the negative consequences of not fulfilling one's minimal purchasing goals in the near future, which can be better addressed by purchasing a prevention- (vs. promotion-) framed product, and (b) the positive consequences from fulfilling one's maximal goals in the far future,

which can be better addressed by purchasing a promotion-(vs. prevention-) framed product.

#### GENERAL DISCUSSION

The results of three experiments show that the temporal perspective of a purchase interacts with the regulatory frame of the purchase in fundamental ways. Consumers faced with an immediate purchasing decision are willing to pay more for a product advertised as a means to prevent a negative outcome than for a product advertised as a means to promote a positive outcome (vacation experiment 2). This imminent allure of prevention extends to the message itself (car experiment 1) and is driven by the pain anticipated from goal failure (shopping trip experiment 3). Faced with an imminent purchase, consumers are confronted with the possibility that they may not fulfill their purchasing goal. Prevention frames note this possibility of a negative outcome and offer the product as a means to avoid it. Thus, under a time constraint, consumers are more motivated to purchase a product that helps achieve the minimal goal of preventing a negative outcome than they are to purchase a product that helps achieve the maximal goal of promoting a positive outcome. When a purchase is temporally proximal, a product that is "not bad" might, therefore, appeal more than a product that is "good."

The opposite effect, however, emerges when the purchase is perceived to be off in the distant future. When there is still ample time before the purchasing decision, consumers report to be willing to pay more for a product that is advertised as a means toward the best possible outcome (vacation experiment 2), and they find such messages more appealing than ones offering the security of preventing possible negative outcomes (car experiment 1). Underlying this effect appears to be the anticipated pleasure from achieving their purchasing goal (shopping trip experiment 3). In other words, when a purchase is still far off in the distance, consumers' perceptions of what is possible are not limited by the temporally imminent reality. Instead, achievement of the purchasing goal is perceived to be likely and thus aspirations toward maximal goals worthwhile. Therefore, when a purchase is still far off in the future, a product that is "good" will likely appeal more than a product that is merely "not bad."

## Considering Cognitive Construal and Fluency

Although our results reveal anticipated pleasure/pain to underlie the basic effect, two alternative mechanisms may also be at play. The first is cognitive construal. Indeed, accumulating research shows that consumers cognitively represent purchases in distinct ways depending on whether the purchase is proximal or distant. Proximal purchases are viewed more concretely (e.g., how to make the purchase), whereas distant purchases are viewed more abstractly (e.g., why to make the purchase; Trope and Liberman 2000, 2003). Might these distinct construal patterns also play a causal role in our regulatory framing effects (e.g., Forster and Hig-

gins 2005; Higgins 2000; Semin et al. 2005)? We address this possibility by including measures of cognitive construal in experiment 3. However, responses to these measures of low- and high-level construal did not vary across the four conditions (see table 1 for means), thereby casting doubt on this explanation.

A note of caution however: theoretically, these cognitive processes could be operating in parallel to our observed effects (e.g., Chandran and Menon 2004; Keller et al. 2006), even if they do not appear to be the source of the effects.<sup>1</sup> Further, "temporal distance" is an elusive construct to define and to empirically examine. The current research focuses on the subjective experience of temporal distance, and, admittedly, changes in cognitive construal are a fundamental part of this experience (Trope and Liberman 2003). So, although the changing sensitivity to anticipated pleasure/pain from a failed or successful purchase (documented in experiment 3) represents a direct cause for the observed pattern of consumer preferences, temporal construal is expected to be one of a host of cognitive and motivational antecedents that focus consumers on the potential for failure versus success as they approach a future purchase.

A second possible mechanism is fluency, wherein the sensation of "feeling right" from the ease of processing a message that fits the individual's goal gets attributed to the message's claim (e.g., Cesario et al. 2004; Higgins 2000; Lee and Aaker 2004). A fluency account of our effect would assert that temporal proximity to a purchase makes consumers prevention focused, thereby making a prevention-framed message easier to process and potentially more appealing. In turn, temporal distance might induce a promotion focus, thereby making promotion-framed messages easier to process and thus more appealing. To empirically assess this possibility, participants in experiment 3 were also asked how easy it was to think of a product that they were planning on buying soon [later on] and that would help bring about a desirable outcome [help prevent an undesirable outcome]. A marginal interaction effect (p < .10) and insignificant contrasts (F's < 1; see table 1 for means) suggest that fluency does not directly drive the effect of time on motivations to pursue regulatory-framed purchases.

#### Means toward a Goal

Our findings contribute to prior research examining the relationship between temporal perspective and goals. Past work has examined changes in the intensity of self-reported goals to achieve positive outcomes versus to prevent negative outcomes as an event draws closer in time (Pennington and Roese 2003). Our research asks a related but methodologically and conceptually distinct question: How does time affect the appeal of products framed as a means to fulfill one's goals?

This distinct question sheds new light on extant findings relating time and goals. For example, students' articulation of their goals pertaining to an upcoming midterm exam provided evidence to suggest that promotion focus (a) predominates over prevention focus for distant events but (b) declines in strength over time—such that there is no difference in strength between promotion focus and prevention focus for proximal events (Pennington and Roese 2003). Yet, other empirical findings point to a possible relationship between temporal proximity and prevention focus (e.g., Gilovich et al. 1993; Liberman and Trope 1998; Losco and Epstein 1974). The current pattern of findings offers one potential reason for this apparent disconnect. It may be that temporal immediacy indeed activates prevention on a basic psychological level; however, individuals may not be able or willing to acknowledge this motivational orientation in the moment. Thus, unlike Pennington and Roese's self-report measures of motivational orientation, our methods allowed a preference for prevention to surface through product evaluations and behavioral intent. This finding, therefore, highlights both the unique processes involved in consumer judgments as well as the need to empirically reevaluate the relationship between regulatory focus and temporal perspective using more subtle measures.

Importantly, our findings do not appear to be unduly influenced by incidental differences in the stimuli used across research paradigms. In fact, to align our stimulus context to that examined by Pennington and Roese (2003), we conducted an additional study among students facing midterm exams. We presented participants with an advertisement for a one-on-one tutoring service that would help prepare them for their midterms, which were framed as near ("soon, only one week away") or far ("later on, still a full week away"). Further, the service was either prevention framed ("Don't do poorly in any class!") or promotion framed ("Ace every class!"). In line with the findings in our three experiments, temporal perspective interacted with the appeal of the promotion- versus prevention-framed service (F(1,96) =8.66, p < .01). When midterms were perceived as near, students found the prevention-framed service to be more appealing than the promotion-framed service ( $M_{prev} = 3.98$ ,  $M_{\text{prom}} = 3.21$ ; F(1,96) = 6.69, p = .01). When midterms were perceived as far, students found the promotion-framed service to be marginally more appealing than the preventionframed service  $(M_{prom} = 4.14, M_{prev} = 3.48; F(1,96) =$ 2.94, p < .10). Thus, moving beyond prior findings of temporal goal shifts, we demonstrate a unique and robust effect whereby consumers are drawn to products that offer a means to (a) prevent a possible negative outcome when the event is near and (b) promote a positive outcome when the event is off in the distance.

¹We conducted two ancillary studies in which we manipulated cognitive construal directly in lieu of temporal distance, producing a pattern of results similar to those reported here. For example, in one study we manipulated cognitive construal by asking participants to either think about how to make a purchase or think about why to make a purchase. We found that individuals who focused on the low-level thought of how they were going to make a purchase favored a prevention-framed ad over a promotion-framed ad and the converse for those focused on the high-level thought of why they were going to make a purchase. However, although this pattern of effects suggests that cognitive construal plays a similar role as temporal construal in the persuasive impact of regulatory-framed products, we did not find cognitive construal to play a mediating role in our studies.

# Self-Regulation, Anticipated Affect, and Willpower

Several insights fall from the findings. For example, consumers seem to use purchasing as a means of self-regulation. Through purchasing, consumers have opportunities both to promote desirable outcomes (e.g., looking good, feeling healthy, and being entertained) as well as to prevent undesirable outcomes (e.g., looking bad, feeling unhealthy, and being bored). However, by examining consumers' purchasing strategies with respect to time, we find that even though consumers may plan to purchase to promote positive outcomes, their purchases are more consistent with preventing negative outcomes once the actual purchase is upon them. In this light, time appears to affect what consumers perceive to be possible, making their purchasing behavior reflect their gambling behavior wherein losses loom larger than gains (e.g., Kahneman and Tversky 1979).

Also, by examining consumers' preferences pertaining to purchases that will take place now versus later (rather than consumers' preferences to purchase now versus later; Frederick, Loewenstein, and O'Donoghue 2002), this research offers further understanding of the critical role of anticipated pleasure and pain in decision making. Whereas prior research found the duration and severity of anticipated affect to influence decisions (Loewenstein 1987), this research shows the temporal context of a purchasing decision to influence which anticipated affect (i.e., pleasure or pain) becomes a driving factor. This finding is particularly interesting in light of recent evidence suggesting that anticipated pleasure and anticipated pain are associated with distinct circuitry in the brain (Bechara et al. 1996; Kuhnen and Knutson 2005) and are associated with the processing of different product attributes (i.e., quality vs. price; Knutson et al. 2007). Our findings imply that in addition to altering the preferences between regulatory-framed products, temporal distance to a purchase might also influence brain activity and alter what product attributes will weigh more heavily in purchasing decisions.

Finally, these findings speak to recent work on impulse buying and willpower. Much research shows that in the heat of an impulsive act (e.g., eating a piece of chocolate cake), people no longer focus on longer-term rational goals (e.g., to lose weight) but fall prey to short-term hedonic desires (e.g., to enjoy the chocolate; Shiv and Fedorikhin 1999). The current research highlights the possibility that the dynamics between maximal goals (e.g., to be svelte) and minimal goals (e.g., to not look fat) may also play a role in such behavioral patterns. Off in the distance, consumers may focus on the desire to be svelte, anticipating the pleasure from being slender. However, when the choice is immediately upon them, the more minimal goal of not looking fat seems more attainable. Thus, the anticipated pleasure associated with being svelte may begin to wane, and the anticipated pain associated with becoming fat may start to feel particularly threatening. Future research is needed to examine the interplay between processes driven by heart versus mind and those associated with (a) the anticipated pleasure of potentially achieving one's goals and (b) the anticipated pain of not achieving those goals.

#### Directions for Future Research

The reported effects were robust across dependent variables (e.g., attitudes toward the appeal, willingness to pay, and purchase intent), product categories (e.g., cars, vacations, and small purchases), and operationalizations of regulatory focus and temporal perspective. Despite the effects' apparent generalizability, moderating conditions undoubtedly exist. Boundary effects imposed by cultural contexts are one promising domain to explore, particularly given the sparseness of the work on culture and time. Some of the limited work on this topic has shown that relative to consumers from other cultures (e.g., East Asia), Anglo-American consumers tend to be more focused on the short term (Chen, Ng, and Rao 2005). Therefore, if this work were to be explored in cultures with norms that establish longerterm orientations, a very different set of effects may result. For example, the persuasive power of prevention-framed claims in the near future may diminish if long-term-oriented consumers are considering a purchase.

In this research, we focused on the effects of temporal proximity to future purchases, but would the effects persist with respect to temporal proximity to future consumption? Worthy of further exploration is the potential theoretical distinction between consumption time and purchase time. To illustrate, Zhou and Pham (2004) found that financial products, which were more related to distant consumption (e.g., retirement accounts) than to near-term consumption (e.g., trading accounts), were associated with prevention focus. Although the researchers did not evoke principles of temporal perspective in their theorizing (principles of compatibility were put forth to account for the results), their findings raise the question of whether there are situations in which distant consumption may become associated with prevention focus. Are there conditions where the current findings are conceptually reversed, whereby prevention benefits become increasingly attractive in the distant future and promotion benefits become increasingly attractive in the near future?

Future work is also needed to explore the impact of the interactive effects of time and goals on more basic measures (e.g., response time and brain activity). For example, the current findings have implications for marketers looking to capture consumers' attention. With consumers searching for means to satisfy their changing goals, certain taglines are likely to be more catching. For example, when purchases are imminent, such as gifts for a previously ignored but fast-approaching holiday, prevention-framed product claims (e.g., "Don't Disappoint") are likely to stand out. In contrast, when the purchasing event is unconstrained by time, promotion-framed claims (e.g., "The Perfect Choice") are more likely to attract attention. Relatedly, because the same time span can be framed as either short or long (shopping trip experiment 3), advertisements for products or services that

are inherently prevention oriented (e.g., insurance) would benefit from limiting the perceived amount of time left before the purchase. To illustrate, the negative consequences of not going to the dentist (e.g., cavities) should be framed as an imminent rather than a future concern in order to increase consumers' motivation to pursue preventative dental care (Chandran and Menon 2004).

Finally, this work underscores the importance of exploring the role of time in consumer psychology by examining the effect of temporal distance (i.e., near vs. far) on consumers' attitudes. But how might consumers' attitudes be affected by considering the amount of time spent on a purchase? A nascent research stream suggests that spending time (vs. spending money) on a product or activity is viewed as personally involving and self-expressive (Reed, Aquino, and Levy 2007). Thus, considering one's own temporal (vs. monetary) investments can shift one's attitudes toward a previous purchase (e.g., iPod; Theriault and Aaker 2007). By examining time as an emotionally laden resource (rather than examining time as a contextual factor), this new research stream augments the current work in highlighting the fundamental impact of time on consumer psychology.

In conclusion, the current research identifies an approach to studying the significance of time in understanding consumer psychology. Although our current research questions were confined to evaluations of regulatory frames, it is our hope that we have only scratched the surface of the potential range of consumer behaviors that may be better understood by examining temporal dynamics.

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