

How Salary Receipt Affects Consumers' Regulatory Motivations and Product Preferences

In this article, the authors find that consumers' preferences change as a function of their temporal distance from the receipt of their last salary. The authors propose and test that when consumers have just received their salary ("the near-salary condition"), they exhibit promotion motivations in their product preferences. However, they exhibit prevention motivations in their product preferences when significant time has elapsed since their last salary receipt ("the far-from-salary condition"). The authors collected data from two longitudinal studies to validate these findings and to test the underlying process. Using actual purchase behavior and collecting product preference during a one-month period, the authors show that consumers' product preferences change in response to temporal distance from their last salary receipt. The findings suggest to managers that the best time to promote products or messages with a promotion appeal is near to consumers' last salary receipt and that the best time to promote products or messages with a prevention appeal is far from consumers' last salary receipt.

Keywords: regulatory focus, salary receipt, cyclical preferences, promotion focus, prevention focus, motivation

Consider the following situation: John is evaluating two equally priced fitness programs. The first program emphasizes physical activity to improve healthfulness, and the second focuses on reducing the intake of unhealthful foods to improve healthfulness. Which program is John likely to prefer, given that both options are priced the same? We suggest that John's preference is likely to depend on *when* the question is presented to him. Specifically, we propose that his preference, at the moment he faces the choice, will be determined by whether he has just received his salary or significant time has elapsed since his salary receipt. If John has just received his salary, he is likely to prefer the first option; conversely, if a lot of time has elapsed since he received his salary, he is likely to prefer the second option.

John's preferences are not driven merely by liquidity constraints, because the price of both options is the same and the only difference is the elapsed time since his last salary receipt. Why should John's preference vary with changes in temporal distance from last salary receipt? Drawing on the notion of regulatory focus motivations, we suggest that when consumers are temporally near to their last salary receipt, they display motivations that are promo-

tion oriented and prefer products with promotion attributes (e.g., the first fitness program, which emphasizes physical activity to attain better health). However, as they temporally move away from salary receipt (i.e., when significant time has elapsed since the last salary receipt), their motivations become more prevention oriented, and they prefer products with prevention attributes (e.g., the second fitness program, which focuses on reducing the intake of unhealthful foods to prevent loss of health). In summary, we show that the elapsed time since last salary receipt engenders different regulatory focus motivations that influence consumer preferences.

We suggest that the shift between promotion and prevention motivation, as a function of temporal distance from the last salary receipt, occurs because consumers can achieve satisfaction either by aspiring to attain more or by striving to avoid losses. The receipt of salary provides people with a sense that they have the required means to pursue their aspirations, creating a motivational state of promotion. Conversely, if people are temporally far from their last salary receipt, the most salient way to attain satisfaction and happiness is by maintaining what they have, creating a motivational state of prevention. Therefore, distance from last salary receipt creates promotion or prevention motivations and consequently influences consumer preferences. For the purposes of this article, we use the term "near salary" to define the period when a person has just received his or her salary. Similarly, we use the term "far from salary" to define the period when many days have elapsed since salary receipt. In addition, we define "salary receipt" as the actual receipt of salary, not anticipated receipt. That is, a person who is a couple of days away from the next (anticipated) salary receipt is not in the near-salary condition, but a person for whom a couple of days has elapsed

Himanshu Mishra is David Eccles Emerging Scholar and Assistant Professor of Marketing (e-mail: himanshu.mishra@utah.edu), and Arul Mishra is David Eccles Emerging Scholar and Assistant Professor of Marketing (e-mail: arul.mishra@utah.edu), David Eccles School of Business, University of Utah. Dhananjay Nayakankuppam is Associate Professor of Marketing and Henry B. Tippie Research Fellow, Tippie College of Business, University of Iowa (e-mail: dhananjay-nayakankuppam@uiowa.edu). The authors thank Promothesh Chatterjee for his feedback on a previous draft of the article and Ata Jami for his help in data collection. They also thank the three anonymous *JM* reviewers for their helpful comments and suggestions.

since salary receipt is. We use these two terms throughout to maintain consistency.¹

Both economics and marketing literature allude to the importance of income in understanding consumer preferences and consumption patterns. Economic theories support the idea that current consumption patterns are largely dependent on current earnings and vary with changes in them (Campbell and Mankiw 1991; Carbone and Hey 2004). Marketing researchers acknowledge the influence of changes in income on consumer preferences and devise segmentation schemes consistent with these changes. However, most existing theories adopt a relatively long-term perspective when considering consumer preferences. We hypothesize that consumer preferences can change cyclically as a function of temporal distance from last salary receipt.

In the next section, we briefly discuss the findings of regulatory focus theory that are relevant to the current research, paying particular attention to findings on regulatory fit. We then connect these findings to our conceptualization, present the hypotheses, and discuss alternative accounts. Finally, we test the proposed hypotheses across two longitudinal studies.

Theoretical Development and Conceptualization

Literature Review

Regulatory focus theory posits that people can achieve satisfaction by adopting either an accomplishment-oriented, promotion-focused strategy or a security-oriented, prevention-focused strategy (Higgins 1997, 1998; Pham and Higgins 2005). Although both promotion- and prevention-focused strategies are goal-attainment strategies, they are distinct because a promotion focus involves sensitivity to the presence or absence of positive outcomes (emphasizing advancement, attainment, and accomplishment), while a prevention focus involves sensitivity to the presence or absence of negative outcomes (emphasizing caution and protection) (Pennington and Roese 2003). Similarly, Liberman and colleagues (1999) observe that in situations involving a choice between the status quo (a conservative option) and a new course of action (a more risky option), promotion-focused people tend to choose the new course of action, while prevention-focused people tend to choose the status quo. Although both motivations are said to coexist within a person, one or the other may be chronically or temporarily more accessible. To make regulatory motivations temporarily more accessible, people can be primed with a promotion (prevention) focus by asking them to think about their aspirations (duties). People whose aspirations are made accessible become eager to capture as many opportunities as possible, while those whose “oughts” are made more accessible become interested in protecting themselves from potential threats (Pham and Avnet 2004).

Regulatory focus theory has produced findings on regulatory fit that are relevant to the current research. Regula-

tory fit suggests that whenever there is a fit between a person's motivations and the task (e.g., product choice), the person experiences a subjective feeling of “rightness” that is used as a diagnostic aid (Aaker and Lee 2001, 2006; Avnet and Higgins 2006; Higgins 2000; Kruglanski 2006). The regulatory fit principle predicts that outcomes consistent with a person's self-regulatory motivation (regulatory fit) are considered relatively more important than outcomes that are inconsistent with the motivation (regulatory nonfit) (Chernev 2004a; Higgins 2000). A match between a person's motivation and a task can lead to regulatory fit, while a mismatch results in nonfit (i.e., the regulatory fit literature views fit or nonfit as dichotomous stages; see Aaker and Lee 2001; Higgins 2000). Regulatory fit can have a profound influence on how people react to persuasive messages or assess product attributes.

Research has shown that an independent self-view is related to goals of achievement and success (promotion focus), while an interdependent self-view is related to goals of obligation and responsibility (prevention focus) (Lee, Aaker, and Gardner 2000). Subsequent research has demonstrated that participants whose independent self-view has been activated are more persuaded by promotion-focused advertising messages (e.g., grape juice enhances energy levels) while participants whose interdependent self-view has been activated are more persuaded by prevention-focused advertising messages (e.g., grape juice reduces the risk of heart disease). Because of regulatory fit, matching message information with an accessible self-view leads to greater evaluations and persuasion (Aaker and Lee 2001).

In a product purchase context, product claims can be framed to achieve either a promotion- or a prevention-focused goal, offering the product as a means to achieve that specific goal. Products with promotion-focused attributes are offered as a means to achieve a promotion-focused goal, while products with prevention-focused attributes are presented to achieve prevention-focused goals (Mogilner, Aaker, and Pennington 2008). In one study, Zhou and Pham (2004) find that participants whose promotion motivations are made more accessible prefer products with promotion-focused attributes (grape juice promoting high energy, toothpaste with whitening ability, and chocolate cake high on the promotion attribute of taste), while participants whose prevention motivations are made more accessible prefer products with prevention-focused attributes (grape juice reducing the chance of heart disease, toothpaste with cavity prevention, fruit salad high on the prevention attribute of health).

Conceptualization

Drawing from these findings on regulatory focus, we suggest that salary receipt, a regular and important event in most people's lives, is accompanied by a feeling of liquidity because of the availability of funds.² Such a feeling induces

¹Although we used a continuous measure to estimate a person's temporal distance from last salary receipt, for ease of exposition, we use the terms “near salary” and “far from salary.”

²Note that we distinguish between felt liquidity (a feeling of having resources that make a person aspiration oriented) and actual liquidity (we call this the “liquidity-alone account” and define it as disposable income—this is related to purchasing power).

a promotion focus in people, making them emphasize aspirations, gains, and desires. However, as people move away from their salary receipt, this promotion focus decreases as a result of resource depletion and makes people relatively more prevention focused. That is, instead of striving to achieve more, they try to avoid losses and maintain what they already have (Chernev 2004b; Liberman et al. 1999).

Therefore, in the near-salary condition, people are more likely to prefer products with promotion-focused attributes (e.g., toothpaste with whitening ability) because they perceive a regulatory fit between their promotion-focused aspirations and the promotion-focused product attributes. In the far-from-salary condition, people are likely to prefer products with prevention-focused attributes (e.g., toothpaste with cavity protection), again because of the regulatory fit between their loss-avoiding prevention motivations and the product attributes. Therefore, we propose the following hypotheses:

H₁: As people move temporally away from salary receipt, they are more likely to prefer products with prevention-focused attributes than those with promotion-focused attributes.

H₂: As people move temporally away from salary receipt, their promotion motivation reduces and their prevention motivation increases.

In Study 1, we use the choice of “aspired” versus “ought” products, as observed from people’s actual shopping behavior, to test H₁. We also measure participants’ regulatory motivations to test H₂. In Study 2, we test H₁ using preference for products with promotion- versus prevention-focused attributes.

We tie in the findings with research on mental accounting, which suggests that people create different mental accounts to compartmentalize their consumption activities. Thaler (1985, 1999) suggests that this creation of mental accounts makes it easier for people to allocate resources for different activities or to achieve different goals. It also allows people to resolve conflicting goals and categorize their purchase and consumption activities (Siemens 2007). Connecting work on mental accounting to regulatory motivations, Zhou and Pham (2004) demonstrate that people rely on two mental accounts—one based on promotion motivations and the other based on prevention motivations—to resolve financial decisions. A promotion account would encourage investment in stocks, while a prevention account would encourage investment in bonds. In a similar vein, it can be argued that even for consumption decisions, people might have two mental accounts—a promotion-based account that is more influential in the near-salary condition and a prevention-based account that is activated in the far-from-salary condition. We acknowledge that temporal distance from last salary receipt may engender different mental accounts such that consumers adopt promotional accounts near to their salary receipt and prevention accounts far from their salary receipt. However, such an explanation is consistent with our view that regulatory focus drives the adoption of these mental accounts.

In the next section, we present an alternative account that could potentially explain our findings. We discuss this

account and then present the findings from two studies that test the efficacy of the proposed regulatory focus-based account and the alternative account.

Liquidity-Alone Account

Prior research has demonstrated that household expenditures rise and fall between paychecks in correlation with the household’s increasing and decreasing wealth (Huffman and Barenstein 2005). On the basis of this research, it can be argued that when consumers are in the near-salary condition, they have more money (liquidity) and thus can indulge in the purchase of expensive products. Conversely, when they are in the far-from-salary condition, they have less money and thus must purchase inexpensive products. In summary, the liquidity-alone account proposes that the preference for different products in the near-salary and far-from-salary conditions is entirely driven by available money and that there is no role for regulatory focus motivations.

To test the efficacy of the liquidity-alone account and to gain support for the regulatory focus-based account, we adopted a two-pronged approach across the two longitudinal studies. First, to address the concern that liquidity alone is sufficient and that regulatory motivations have no role, the products used in Study 2 varied only in one attribute description that mapped onto regulatory focus. They were explicitly described as identical in the other aspects of price and volume (toothpaste with whitening [promotion] or toothpaste with cavity protection [prevention], both of which cost \$4.25). Although the liquidity-alone account predicts that people buy expensive products when they are near to their salary receipt and buy inexpensive products when they are far from their salary receipt, it does not make any predictions about what kind of attributes people would prefer if price were held constant. Conversely, the regulatory focus-based account predicts that even if the prices of the products are identical and only their promotion or prevention attributes differ, people’s preferences would change accordingly.

Second, we propose that temporal distance from last salary receipt engenders a particular regulatory focus that alters product preferences. Specifically, we suggest that in the near-salary condition, people are more promotion focused, but when time has elapsed since last salary receipt, their motivation becomes more prevention focused. In Study 1, we measure regulatory motivations over time to demonstrate that these motivations change as a function of temporal distance from salary. Moreover, we test whether these regulatory motivations mediate the influence of temporal distance from last salary receipt on product preferences. Such a pattern of results would render the liquidity-alone account less plausible because the liquidity-alone account neither predicts changes in regulatory focus motivations as a person moves from being temporally near to salary receipt to being away from salary receipt nor predicts that these changes can mediate people’s preferences.

In summary, we do not contest that salary receipt influences perceptions of liquidity. Instead, we argue that the liquidity-alone account cannot predict the pattern of results that we propose. We suggest that perceived liquidity can have more subtle and powerful influences through the

changes it engenders in regulatory focus, such that identically priced products that differ only in their regulatory focus attributes will hold a different appeal at different temporal distances from salary receipt. To test the proposed regulatory focus–based account and the alternative account, we conducted two longitudinal studies.

Study 1: Demonstration in Actual Purchase Behavior

Study 1 had several objectives. First, we wanted to test the proposed effect (H_1) with actual product purchase behavior, so we collected product purchase information from the participants. Second, to test H_2 , we measured changes in participants' regulatory motivations (using a regulatory focus scale) to observe whether these motivations changed as people moved temporally away from their last salary receipt. The third objective was to observe whether the regulatory motivations engendered by temporal distance from last salary receipt, as measured through the regulatory focus scale, mediated consumer preferences for promotion-focused versus prevention-focused products. Demonstrating that changing regulatory motivations predict product preference would support the regulatory focus–based account and discount the liquidity-alone account.

Method

We divided each of the two longitudinal studies into two phases. The first phase was largely similar for both studies; we describe this next. We refer back to this procedure in Study 2. Data were collected during a one-month period, and study months did not correspond with calendar months. Only participants who had regular employment took part in the two longitudinal studies.

The first phase was conducted using computers. Participants completed a few filler tasks that recorded their opinions on several products and advertisements. Embedded in the filler tasks were questions about when and how many times a month participants received their salaries (monthly, bimonthly, and weekly). Data on the dates of salary receipts enabled us to calculate a temporal distance from last salary receipt for every day a participant was taking part in the study. Because participants could be paid over different periods, the distances were represented as a percentage measure. Thus, someone paid monthly was 25% away from salary receipt seven days after getting paid, and someone paid bimonthly was 50% away from salary receipt seven days after getting paid. We also collected data on when participants paid their largest bills in terms of dollars (e.g., rent, car payments, credit card installments), and we used this to calculate temporal distance from bill payment. We measured temporal distance from bill payment to examine whether this financial transaction had any influence on product preference and found that it did not have a significant influence in either of the two studies.

Sixty-one regularly employed participants from a large southwestern university took part in Study 1 in exchange for two course credits (average age was 24 years, 30% were women, 41.4% were married). For the second phase of Study 1, participants completed a questionnaire each time

they came back from any shopping trip for the next 30 days. The shopping trip could be to the local mall, the grocery store, or a retail store (e.g., Wal-Mart). The study provided us with a longitudinal measure of the products the participants bought during that time. At the end of each week, participants left that week's completed questionnaire in a mailbox in the marketing department; this ensured that they filled out the questionnaires regularly. Each participant was assigned a unique respondent number to preserve the anonymity of their responses.

Measures

We obtained three kinds of measures from the participants after each of their shopping trips. First, participants were asked to categorize the items they bought into two categories—items they aspired to buy and items they felt they ought to buy. Participants were instructed that if they bought a product because they aspired to buy it for pleasure, advancement, and happiness, they should list it in the “aspired” category (conceptually, a promotion-focused purchase). Conversely, if a product was one they felt they ought to buy to fulfill duties and responsibilities, they should list it in the “ought” category (conceptually, a prevention-focused purchase).

Second, participants filled out a six-item regulatory focus scale that we adapted from previous research (Kruglanski et al. 2000; Lockwood, Jordan, and Kunda 2002). The scale mapped onto the regulatory motivations the participants felt each time they filled out the questionnaire (for the scale items, see Table 1). The scale helped us understand how the regulatory motivations changed as a function of temporal distance from last salary receipt.

Third, participants were asked whether they found the aspired products to be more expensive than the ought products for each of their shopping trips. We used this measure to investigate whether participants' preferences for aspired versus ought products were driven by cost differences—that is, whether participants bought aspired products in the near-salary condition because they perceived these products as more expensive and, thus, more affordable when they had just received their salary and whether participants bought

TABLE 1
Six Item Regulatory Focus Scale: Study 1

–4	—	—	—	—	—	4
Strongly disagree						Strongly agree
1. Right now, I feel I should pay more attention to my duties and obligations, even at the expense of my aspirations.						
2. I think it is important to avoid making mistakes, even if it means not acting on possible but risky gains.						
3. I think preserving what one has is more important in life than gaining more.						
4. I think it is very important to pursue one's hopes and dreams at all costs.						
5. One should be willing to stake everything one has in order to pursue one's desire.						
6. I would regret missed opportunities more than actions I take that were mistakes in hindsight.						

ought products in the far-from-salary condition because they considered these products less expensive and, thus, more affordable when they were feeling resource depleted.

Results

We used a hierarchical linear modeling (HLM) procedure to analyze the data. The HLM procedure is useful when lower-level units are nested within higher-level units. In the studies we report herein, participants responded to questions several times during a one-month period, so from the standpoint of HLM, each response occasion served as a lower-level unit (Level 1) that was nested within each individual participant (Level 2).

Purchase of aspired and ought products. We formed an index to calculate aspired products as a proportion of total products purchased at each shopping trip:

$$\text{Proportion of aspired products} = \frac{\text{number of aspired products}}{(\text{number of aspired products} + \text{number of ought products})}.$$

A higher proportion of aspired products indicated a greater promotion motivation.

The use of elapsed time since last salary receipt as an explanatory variable revealed a significant main effect for temporal distance from last salary receipt on the proportion of aspired products ($b = -.2$, $t(147) = -2.37$, $p < .02$). The negative regression coefficient suggests that as the temporal distance from last salary receipt increased, participants' purchase of aspired products decreased, consistent with the notion of a decline in preference for promotion-focused products and in support of H_1 . Although the average shopping basket was large enough to consider proportion of aspired products a continuous measure, it could still be argued that these data should be viewed as count data. To address this concern, we reanalyzed the data using a Poisson link function. The analyses yielded substantially similar results. We found a significant, negative coefficient for salary distance ($b = -1.9$, $t = 4.76$, $p < .0001$).

There was no influence of bill distance on the purchase of aspired products. This finding argues against the liquidity-alone account because paying bills would reduce liquidity and thus influence ability to buy products.

Temporal changes in regulatory focus. We rescaled and averaged participants' responses to the six-item scale (Cronbach's $\alpha = .76$) to form a single index that reflected their relative promotion focus. Subsequently, we again used HLM analyses to examine the influence of temporal distance from last salary receipt on changes in relative promotion focus.

The addition of temporal distance from last salary receipt as an explanatory variable revealed a significant main effect for temporal distance from last salary receipt on promotion focus ($t(145) = -2.64$, $p < .009$). The regression coefficient on temporal distance from last salary receipt was negative ($b = -.76$), which suggests that as the temporal distance from last salary receipt increased, promotion focus decreased. This finding provides support for H_2 .

Notably, the influence of temporal distance from last salary receipt on the proportion of desired products purchased was marginally mediated by the measured promotion focus (Sobel test statistics = -1.76 , $p = .07$). To obtain Sobel test statistics, we ran two analyses. First, we estimated the influence of temporal distance from last salary receipt on measured promotion focus. Second, we estimated the joint influence of temporal distance from last salary receipt and measured promotion focus on the proportion of aspired products (this did not include the interaction term). This analysis yielded the following: $b_{\text{temporal distance from last salary receipt}} = -.17$, $t(144) = -1.99$, $p < .04$, and $b_{\text{promotion focus}} = .04$, $t(144) = 2.27$, $p < .02$. The mediation analysis lends credence to the notion that the liquidity-alone explanation cannot account for the changes in people's preferences. Instead, the influence of temporal distance from last salary receipt on people's preferences is mediated through changes in regulatory focus.

Are aspired products perceived as more expensive than ought products? Note that when participants were asked whether they found the aspired products to be more expensive than the ought products, 52.4% said yes, and 47.6% said no ($\chi^2(1) = .43$, $p > .5$). Moreover, distance from last salary receipt did not influence whether participants perceived aspired products as more expensive than ought products ($t(125) = .68$, $p = .49$).

Discussion

Study 1 tested the proposed regulatory-based account in the context of actual product purchase. The results indicated that as temporal distance from last salary receipt increased, the proportion of aspired products decreased, in support of H_1 . By using a direct measure of regulatory motivations over time, the study demonstrates that as temporal distance from last salary receipt increases, promotion motivation declines, in support of H_2 . Note that the regulatory motivations mediated the purchase of aspired products, demonstrating that the temporal distance from last salary receipt affects product preferences through changes in regulatory motivations. The mediation by regulatory motivations also provides evidence that liquidity alone cannot explain product preferences.

We conducted Study 2 to provide further evidence for the regulatory focus-based account by priming regulatory motivations. As we suggested previously, regulatory motivations can be made accessible temporarily through a priming manipulation. Consider a person who has just received his or her salary (near-salary condition) and is presented with a product that has promotion-focused attributes. Literature on regulatory fit would suggest that this scenario will result in a "subjective feeling of rightness," or a fit between the person's promotion motivations and the product's promotion-focused attributes, which will increase preference for the product. Existing literature on regulatory fit defines it as dichotomous stages in which either fit or nonfit occurs; it does not define regulatory fit to be a continuum of low, medium, or high fit (Aaker and Lee 2001; Higgins 2000). Therefore, trying to enhance promotion motivations further with a promotion prime will not further

increase regulatory fit. Therefore, we expect that near-salary-condition participants will demonstrate a similar preference for promotion-focused products both when promotion motivations are not accessible (i.e., the control condition) and when promotion motivations are made accessible (i.e., promotion-primed condition). However, prevention-primed participants should display less preference for promotion-focused products even when they are near to salary receipt (i.e., the prevention prime should counter the influence of being near to salary receipt and make participants more prevention oriented even in the near-salary condition because of regulatory nonfit).

Using the same rationale, we predict that participants in the far-from-salary control condition will show a similar preference for products with prevention-focused attributes as participants in the far-from-salary condition with an accessible prevention focus. Again, we predict this because the regulatory fit caused by salary-induced prevention motivations and products with prevention attributes cannot be enhanced further by making prevention motivations more accessible by priming. However, even when promotion-primed participants are far from salary receipt, they should display less of a preference for products with prevention-focused attributes. Formally,

H₃: In the near-salary (far-from-salary) condition, people with accessible promotion (prevention) motivations will display preferences similar to people in the control condition; however, their preferences will be significantly different from people with accessible prevention (promotion) motivations.

To test H₃, we manipulated regulatory motivations with a priming mechanism in Study 2.

Study 2: Priming Regulatory Motivations

Pretests

The products used in Study 2 were based on the results of a pretest. In the pretest, participants were primed with either a promotion focus (they were asked to write down two current and two past hopes, aspirations, and dreams) or a prevention focus (they were asked to write about two current and two past duties, obligations, and responsibilities) (Pham and Avnet 2004). Next, they indicated their preference between two brands in various product categories that were described with either prevention or promotion attributes but were identical in the other aspects of price and volume. Brands that were preferred by promotion-primed (prevention-primed) participants were classified as promotion-focused (prevention-focused) brands. Promotion (prevention) brands selected for the final studies were those that received the most extreme preference by promotion-primed (prevention-primed) participants.

Furthermore, we conducted a separate test with 36 participants to ensure that the two brands were deemed to be similar in terms of their value and importance of the attributes. Participants were shown the different product categories with the two brands that differed only on their regulatory attributes. The two brands were described as either

promotion or prevention focused (for a detailed description of the product attributes, see Table 2). Participants rated the attributes of the two brands as being of equal value (importance) or not on a 1–9 scale. A rating of 1 indicated that Brand A's attributes had more value (importance), 5 indicated equal value (importance), and 9 indicated that Brand B's attributes had more value (importance). The results revealed no statistically significant differences in terms of attribute value or importance for the two brands in each of the product categories tested. The detailed results appear in Table 2, along with the product descriptions.

Main Study

Study 2 primed participants with promotion or prevention motivations or assigned them to a control condition. We designed the study to achieve three main objectives. First, we wanted to provide further support for H₁, which predicted that as people move away from their last salary receipt, their preferences for products with promotion-focused attributes decrease. The inclusion of a control condition provided an ideal means of testing H₁ and observing changing preferences as participants moved from being near to their salary receipt to being far from their salary receipt. Second, including a control condition in this study provided us with a way to test H₃. In line with the rationale for H₃ and using regulatory fit theory, we expect that participants in the near-salary control condition and the near-salary promotion-primed condition will demonstrate similar preferences for promotion-focused products. However, even when prevention-primed participants are near to their salary receipt, they should display less preferences for promotion-focused products (i.e., the prevention prime should counter the influence of being near to salary receipt and make participants more prevention oriented even in the near-salary condition because of regulatory nonfit). Third, and using a similar reasoning based on regulatory fit, we predict that participants in the far-from-salary control condition will show similar preferences as participants in the far-from-salary prevention-primed condition for products with prevention-focused attributes. However, even when promotion-primed participants are far from their salary receipt, they should display a lesser preference for products with prevention-focused attributes. To summarize, we predict that the promotion- and prevention-primed conditions will have a shallower slope than the control condition because the promotion prime results in participants displaying a promotion motivation even when they are far from their salary receipt, which attenuates the influence of being far from their salary receipt. Similarly, a prevention prime makes them prevention oriented even when they are in the near-salary condition, which attenuates the influence of being near to their salary receipt.

Method. One hundred fifty-two regularly employed participants enrolled in an introductory marketing course at a large southwestern university took part in the month-long study to earn two course credits (mean age was 23.88 years, 32.24% were women, 49.31% were married). The first session was conducted exactly as in Study 1: Participants provided information about salary receipt and other demo-

TABLE 2
Description of Products Used in Study 2

Week	Product	Brand A	Brand B	t-Test ^a for Difference Between Brand A and Brand B	
				Value t(36)	Importance t(36)
1	Study lamp (both study lamps cost \$9)	Provides light that soothes and protects the eyes (prevention)	Has aesthetic value that enhances the room décor (promotion)	-.59***	-.65***
	Cereals (both cereals cost \$4.50)	Has healthful raisin bran (prevention)	Has tasty honey-flavored rolled oats (promotion)	-.51***	-.05***
2	Mouthwash (both brands of mouthwash cost \$5.65)	Provides tartar protection (prevention)	Provides fresh breath (promotion)	.38***	-.08***
	Car polish (both car polish cost \$7)	Gives the car a shining, glossy look (promotion)	Prevents car paint from chipping (prevention)	1.11**	1.37*
3	Hand soap (both hand soaps cost \$3.50)	Has antibacterial agents to prevent infection (prevention)	Has shea butter to keep skin soft (promotion)	-1.33*	-1.49*
	Laundry detergent (both laundry detergents cost \$9.50)	Makes clothes soft and fresh smelling (promotion)	Increases the life of clothes (prevention)	.32***	1.14**
4	Snacks (both snacks cost \$4.50)	Chocolate cake (promotion)	Fruit salad (prevention)	.21***	.74**
	Sunscreen lotion (both sunscreen lotions cost \$9)	Protects skin from ultraviolet rays (prevention)	Gives the skin a smooth, glowing look (promotion)	-1.59*	-1.46*

* $p > .1$.

** $p > .25$.

*** $p > .5$.

^aT-test assesses whether value or importance ratings between Brand A and Brand B were significantly different from the scale midpoint (i.e., 5).

graphic variables. At the end of the first phase of Study 2, participants were given a large envelope that contained four small sealed envelopes and the instructions to complete the second phase of the study. They were told that we were interested in studying consumers' buying patterns, so we would be collecting information about their product preferences for a month. During the second phase, participants opened the appropriate envelope for each week. Each of the four small envelopes contained a questionnaire that participants completed each week, and each of the four questionnaires contained two parts. The first part consisted of the priming manipulation, and the second part consisted of product preference measures. At the end of each week, for four weeks, the participants left that week's completed questionnaire in a mailbox in the marketing department. Participants were asked to return the questionnaires at the end of each week to ensure that they filled out the questionnaires regularly. Each participant was assigned a unique respondent number that was written on all questionnaires and envelopes to ensure the anonymity of their responses.

The first part of the questionnaire primed participants with either promotion- or prevention-focused motivations. One group of participants was primed with a promotion focus in the first and second weeks and with a prevention focus in the third and fourth weeks. A second group of participants was primed with a promotion focus in the third

and fourth weeks and with a prevention focus in the first and second weeks. A third group was not primed and acted as a control group. In line with prior work (e.g., Pham and Avnet 2004), participants assigned to the promotion prime were asked to think about their past hopes, aspirations, and dreams and to describe two of them. Then, they were asked to think about their current hopes, aspirations, and dreams and to describe two of them. Participants assigned to the prevention prime were first asked to think about their past duties, responsibilities, and obligations and to describe two of them. Then, they were asked to think of their current duties, responsibilities, and obligations and to describe two of them.

Measures. The second part of each questionnaire contained information about products and elicited participants' preferences for each product (for a description of the product categories, see Table 2). As we discussed previously, the products were selected on the basis of a pretest. Participants returned one envelope at the end of each week for a period of four weeks. Participants provided responses four times over the next four weeks, assessing their relative preference for products that had either a promotion- or a prevention-focused attribute. Each week, participants were presented with two product categories consisting of two brands that varied only in promotion- or prevention-focused attributes. Participants indicated their preference between the brands

on a nine-point scale (1 = “high preference for Brand A,” and 9 = “high preference for Brand B”). We counterbalanced the promotion and prevention attributes for the two brands and reverse-coded them appropriately for the analysis. We conducted a lucky draw at the end of each week. Thus, four “lucky winners” received their preferred brands from the two product categories.

Participants indicated their preference between a promotion-focused and a prevention-focused brand for each product category. We then averaged the preferences across the two product categories each week. This average value served as the dependent variable, such that a higher value indicated a promotion-focused preference and a lower value indicated a prevention-focused preference.

Results and discussion. We ran a series of hierarchical linear models, using preference for promotion- versus prevention-focused products as the dependent variable and temporal distance from last salary receipt and the priming manipulation as the independent variables. A main effect emerged for distance from last salary receipt ($b = -2.1$, $F(1, 936) = 66.65$, $p < .0001$). The main effect for salary distance was due to the decline in preference for promotion-focused products as temporal distance from salary increased, in support of H_1 . A main effect for the priming manipulation also emerged ($F(2, 89) = 16.8$, $p < .0001$). The main effect for the priming manipulation was due to promotion-primed participants showing a greater preference for promotion-focused products ($M = 5.2$) than the control group ($M = 4.6$; $t(89) = 2.64$, $p < .01$) and the control group having a greater preference for promotion-focused products than the prevention-primed group ($M = 4.2$; $t(89) = 2.3$, $p < .02$). However, note that these main effects were qualified by a salary distance \times priming manipulation interaction ($F(2, 934) = 7.25$, $p < .001$). We graph the nature of this interaction in Figure 1.

Decomposing this interaction revealed several noteworthy patterns. We find a significant influence of salary distance on product preference for each of the conditions (for promotion-primed participants, $b = -1.29$, $t(153) = -2.41$, $p < .01$; for prevention-primed participants, $b = -1.91$, $t(169) = -3.22$, $p < .001$; and for control condition partici-

pants, $b = -3.36$, $F(1, 330) = 63.76$, $p < .0001$). The pattern of preference was the same; participants in each of the three conditions preferred products with promotion-focused attributes more in the near-salary condition than in the far-from-salary condition.

Consistent with the regulatory fit theory and H_3 , we received support for the regulatory focus-based account; the promotion-primed participants and the control group were similar in the near-salary condition ($t(115) = 1.12$, $p > .25$), but they differed in the far-from-salary condition ($t(122) = -4.7$, $p < .001$), while the prevention-primed participants and the control group were similar in the far-from-salary condition ($t(121) = -1.11$, $p > .26$), but they differed in the near-salary condition ($t(109) = 3.06$, $p < .001$).

The results of Study 2 provide support for H_1 and H_3 . Because the products were exactly the same in terms of price and volume and differed only in their attribute description, the results do not support the liquidity-alone account. Studies 1 and 2 demonstrate the role of regulatory motivations, engendered by temporal distance from last salary receipt, in product preference.

As we mentioned previously, the two brands in each product category differed only on the promotion and prevention dimension. To rule out the liquidity-alone account, we kept the price of the brand pairs identical. However, an alternative account could argue that the brand pairs differed on a necessity/luxury dimension and that being near to (far from) last salary receipt drives preference for luxuries (necessities). To rule out this account, we conducted a test. We randomly assigned 50 participants to one of two groups. We used eight product categories across the four weeks of Study 2. Each product category consisted of a brand pair (Brand A and Brand B), giving us a total of 16 brands. We divided the 16 brands so that the first group of participants saw the description of 8 brands and the second group saw descriptions of the remaining 8 brands. Each group saw only one brand of each product category (i.e., if the first group saw Brand A of car polish, the second group saw Brand B of car polish). The groups were asked to rate the brands on a seven-point bipolar scale. We counterbalanced the scale such that for half the participants, a rating of 1 indicated necessity, and for the other half, it indicated luxury. The results of the test appear in Table 3. The results indicated that each brand pair in a product category was considered in a similar manner along the necessity/luxury scale. That is, each brand pair was considered more of a luxury or more of a necessity; there was no significant difference along this dimension for any of the pairs, which allowed us to rule out the alternative account of necessity/luxury. The findings are in line with prior research that has demonstrated that regulatory motivations are a means to achieve a goal. People can use a promotion or a prevention method to do so. Therefore, two products that are both considered necessities can have different regulatory attributes. For example, toothpaste as a product category is considered a necessity; however, a cavity protection attribute maps onto a prevention focus, while a whitening attribute maps on to a promotion focus.

FIGURE 1
Influence of Priming Promotion and Prevention Focus: Study 2

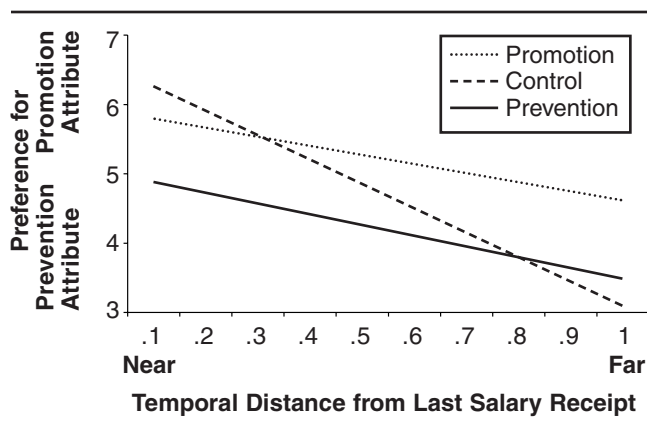


TABLE 3
Differences Along the Necessity/Luxury Dimension in Study 2

Product	Prevention	Promotion	t-Test [t(50)]
Study lamp (both study lamps cost \$9)	Provides light that soothes and protects the eyes (M = 4.69)	Has aesthetic value that enhances the room decor (M = 4.76)	-.15***
Cereals (both cereals cost \$4.50)	Has healthful raisin bran (M = 4.11)	Has tasty honey-flavored rolled oats (M = 4)	.25***
Mouthwash (both brands of mouthwash cost \$5.65)	Provides tartar protection (M = 4.3)	Provides fresh breath (M = 4.03)	.69**
Car polish (both car polish cost \$7)	Prevents car paint from chipping (M = 4.42)	Gives the car a shining, glossy look (M = 4.69)	-.47***
Hand soap (both hand soaps cost \$3.50)	Has antibacterial agents to prevent infection (M = 3.46)	Has shea butter to keep skin soft (M = 4.07)	-1.18*
Laundry detergent (both laundry detergents cost \$9.50)	Increases the life of clothes (M = 3.69)	Makes clothes soft and fresh smelling (M = 3.69)	.01***
Snacks (both snacks cost \$4.50)	Fruit salad (M = 4.61)	Chocolate cake (M = 5.19)	-1.1**
Sunscreen lotion (both sunscreen lotions cost \$9)	Protects skin from ultraviolet rays (M = 4.07)	Gives the skin a smooth, glowing look (M = 3.5)	1.02**

* $p > .1$.

** $p > .25$.

*** $p > .5$.

General Discussion

Understanding consumer preferences is significant when designing marketing strategies and tactics. This article suggests that consumer preferences can change as a function of temporal distance from last salary receipt and demonstrates that changing preferences are due to changing regulatory motivations. Consumers in the near-salary condition display behavior consistent with a promotion focus, while consumers in the far-from-salary condition display behavior consistent with a prevention focus. We tested the phenomenon and the underlying process across two longitudinal studies.

The studies only recruited participants who were employed and received a regular salary. To observe the effect in actual purchase behavior, in Study 1, we asked participants to categorize their actual purchases into “aspired” and “ought” categories after every shopping trip. The results indicated that participants bought more aspired products in the near-salary condition and more ought products in the far-from-salary condition. In addition, the regulatory focus scale recorded the decreasing level of promotion focus as participants moved temporally away from last salary receipt. Study 2 primed participants with either a promotion or a prevention motivation. It demonstrated how primed motivations can interact with the influence of temporal distance from last salary receipt on product preferences. The findings have several implications for managers, researchers, and consumers.

Managerial Implications

The knowledge that temporal distance from last salary receipt engenders different motivations can help managers tailor their marketing efforts to initiate promotion-focused activities when consumers are near to their salary receipt and prevention-focused activities when consumers are far from their salary receipt. The findings could be used to

determine the type of products that could be promoted at different times of the month. Prior research on regulatory focus theory has suggested that products that fulfill promotion goals lead to consumer delight by emphasizing promotion emotions of cheerfulness and excitement, while products that fulfill prevention goals increase consumer satisfaction by emphasizing prevention emotions of confidence and security (Chitturi, Raghunathan, and Mahajan 2008). Thus, we would expect consumers who are temporally near to their salary receipt (promotion focus) to be interested in product options that appeal to promotion emotions and consumers who are far from their salary receipt (prevention focus) to be interested in product options that appeal to prevention emotions.

Several strategic implications emerge for new product launches. When considering a recently launched product, consumers face a purchase decision that is relatively more risky and involves less product knowledge (Rogers 1995). Prior research on regulatory focus theory has suggested that promotion-focused consumers are more likely to own new or very new products (Herzenstein, Posavac, and Brakus 2007). On the basis of our findings, we predict that it would be more effective to launch new products at the beginning of the month, presumably when people are near to receiving their paycheck and are promotion focused, rather than at the end of the month, when people are presumably prevention focused.

Companies with loyalty programs award points to consumers who are part of such programs (e.g., frequent-flier miles, credit card reward points). These points are similar to monetary gains because they can be used to acquire various products and services. Because companies have complete information about consumers' point balance, they can offer products with promotion appeal to consumers who have just received points and products with prevention appeal to consumers for whom significant time has elapsed since receiving points and whose balance might have depleted.

Brand switching (Bucklin, Russell, and Srinivasan 1998) and customer retention (Gupta, Lehman, and Stuart 2004; Lewis 2004) have been studied extensively in marketing. Different sales promotion methods are employed to achieve two distinct objectives: (1) to retain the existing consumers (retention) and (2) to attract consumers who are using some other brand (recruitment or brand switching). Considering that promotion-focused consumers seek more change while prevention-focused consumers prefer avoiding losses, the current findings suggest that companies should focus on recruitment in the near-salary condition and on retaining consumers in the far-from-salary condition.

The data also indicate that it might be useful to adjust promotion strategies according to the kind of benefit being offered. Products that offer promotion-oriented benefits (whitening toothpaste) might gain more from being advertised to consumers who have just received their salary, while products that offer prevention-oriented benefits (cavity-prevention toothpaste) might be better advertised to consumers for whom time has elapsed since last salary receipt.

Theoretical Implications

The findings of this research have several theoretical implications. First, unlike many previous studies that have demonstrated the influence of regulatory motivations in a lab setting in which participants were primed with promotion and prevention motivations, we show that contextual factors, such as salary receipt, can engender promotion motivations and influence real consumer purchases. Specially, in Study 1, we study people's actual purchases to show the influence of last salary receipt on regulatory motivations. Second, the discussion of whether preferences are retrieved or constructed has been ongoing for several years (Simonson 2008). The current research contributes to this discussion by demonstrating that preferences are constructed every salary cycle. People change their preferences for products on the basis of contextual cues, such as salary receipt, rather than on the basis of their deeply held preferences. Third, economic theories support the idea that current consumption patterns are largely dependent on current earnings and vary with changes in them (Campbell and Mankiw 1991; Carbone and Hey 2004). The findings contribute to this area by demonstrating that not only do earnings influence consumption but they also influence product preferences (even for similarly priced products). Especially in the current economic downturn, there should be a more pronounced effect of last salary receipt on preferences manifested through regulatory motivation because there is less likely to be a financial cushion, making people more dependent on the next paycheck.

Consumer Implications

The article has implications for consumer well-being. The findings suggest that consumers have more achievement-oriented promotion strategies when they are in the near-salary phase, while they tend to prefer loss-avoiding prevention strategies in the far-from-salary phase. Therefore, consumers can devise optimal strategies that can help increase their well-being. For example, consumers can experience greater subjective well-being because of regulatory fit by purchasing products with attributes that fit the motivations engendered due to temporal distance from salary receipt. Moreover, they can make new plans and try out new options when they are temporally near to their last salary receipt but stick to tried-and-tested options when they are in the far-from-salary phase. The findings of this research hold implications for employee welfare. Because organizations are aware when their employees are paid, they can design health care plan appeals that reflect either a promotion or a prevention appeal—for example, offering employees services of an exercise consultant (more promotion oriented) when they are near to their salary receipt and a preventive health checkup (more prevention oriented) when they are far from their salary receipt.

Limitations and Future Research Directions

In the two studies reported in this article, we manipulated or measured regulatory focus motivations to gather support for a regulatory focus-based explanation of product preferences. However, we were not able to manipulate salary receipt because of logistical constraints and thus were confined to measuring it from participants' responses. Future studies could try to manipulate the timing and amount of salary participants receive to gather further insight into the process. Moreover, we concentrated on product choice and preference in this article. Future studies could explore other behaviors affected by temporal changes in salary receipt that are influenced by changes in regulatory motivations. Although we measured temporal distance from bill receipts, we did not find any influence on product preferences for the product categories we used. Further research should delve into the influence of bill receipt and also the type of bills that could influence preferences. It would be worthwhile for studies to explore the influence of other regularly occurring events on people's regulatory motivations. Moving away from manipulating motivations in a lab setting would demonstrate the implications and relevance of regulatory motivation to consumers. For example, future studies might consider the aspiration-oriented motives that people are likely to hold during the holiday season or the more avoidance-oriented motives people are likely to hold during tax periods.

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